REPORT DOCUMENTATION PAGE	Form Approved OMB No. 0704-0188

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1. REPORT DATE *(DD-MM-YYYY)*	2. REPORT TYPE	3. DATES COVERED *(From - To)*
25 January 2010	Final	July 2009 through January 2010

4. TITLE AND SUBTITLE	5a. CONTRACT NUMBER
Facility-Wide Groundwater Monitoring Program Report on the July 2009 Sampling Event Ravenna Army Ammunition Plant Ravenna, Ohio	W912QR-04-D-0036
	5b. GRANT NUMBER NA
	5c. PROGRAM ELEMENT NUMBER NA
6. AUTHOR(S) Miller, John, M. - Environmental Quality Management, Inc.	5d. PROJECT NUMBER NA
	5e. TASK NUMBER 0006
	5f. WORK UNIT NUMBER NA

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)	8. PERFORMING ORGANIZATION REPORT NUMBER
Environmental Quality Management, Inc 1800 Carillon Boulevard Cincinnati, Ohio 45240	NA
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)	10. SPONSOR/MONITOR'S ACRONYM(S) USACE
US Army Corps of Engineers 600 Dr. Martin Luther King Jr. Place Louisville, KY 40202-2232	11. SPONSOR/MONITOR'S REPORT NUMBER(S) NA

12. DISTRIBUTION/AVAILABILITY STATEMENT

No Limitations

13. SUPPLEMENTARY NOTES

None

14. ABSTRACT

This document presents a summary of the facility-wide groundwater monitoring conducted in July 2009. Included in the report are:

- Summary of the groundwater elevations and water level measurements taken for each of the wells sampled.
- Analytical summary tables presenting the analytes detected above the method detection limit for this monitoring event.
- QA/QC and data verification reports for the event.

15. SUBJECT TERMS

Facility-wide, groundwater wells, monitoring, RVAAP, July 2009

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE			John M. Miller
None	None	None	SAR	2,441	19b. TELEPHONE NUMBER *(Include area code)* 513-825-7500

FINAL
FACILITY-WIDE GROUNDWATER MONITORING PROGRAM

REPORT ON THE JULY 2009 SAMPLING EVENT

RAVENNA ARMY AMMUNITION PLANT,
RAVENNA, OHIO

MARC Contract Number W912QR-04-D-0036
Delivery Order 0006

Prepared for

U.S. Army Corps of Engineers
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Prepared by

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January 25, 2010

FWGWMP July 2009 Final Sampling Event Report
Distribution List

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Ohio EPA – Ohio EPA Twinsburg Office
OHARNG – RTLS/ENV – Ohio Army National Guard Ravenna Training and Logistics Site/Environmental
RVAAP – Ravenna Army Ammunition Plant
USACE – U.S. Army Corps of Engineers
USAEC – U.S. Army Environmental Center
NGB – National Guard Bureau
EQM – Environmental Quality Management, Inc.

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Plate 3 Potentiometric Surface of Bedrock – Homewood and Sharon Aquifer (January 2009)

LIST OF GENERAL ACRONYMS

ADR	Automatic Data Review
AOC	Area of Concern
BRAC	U.S. Army Base Realignment and Closure Office
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
DOD	Department of Defense
EQM	Environmental Quality Management, Inc.
EPA	Environmental Protection Agency
FWGWMP	Facility-Wide Groundwater Monitoring Plan
FWGWMPP	Facility-Wide Groundwater Monitoring Program Plan
FWSAP	Facility-Wide Sampling and Analysis Plan
GOCO	Government Owned, Contractor Operated
IDW	Investigative Derived Waste
IRP	Installation Restoration Program
LCS	Laboratory Control Sample
LCG	Louisville Chemistry Guidelines
MARC	Multiple Award Remediation Contract
MCL	Maximum Contaminant List
MDL	Method Detection Limit
MS/MSD	Matrix spike/matrix spike duplicate
NGB	National Guard Bureau
OHARNG	Ohio Army National Guard
PCB	Polychlorinated biphenyl
PQL	Practical Quantitation Limit
PRG	Preliminary Remediation Goal
QA	Quality Assurance
QAPP	Quality Assurance Project Plan
QC	Quality Control
RCRA	Resource Conservation and Recovery Act
RI	Remedial Investigation
RVAAP	Ravenna Army Ammunition Plant
SRC	Site Related Contaminant
SVOC	Semi-volatile Organic Compound
TAL	Target Analyte List
TOC	Top of Casing
USACE	U.S. Army Corps of Engineers
USP&FO	United States Property and Fiscal Officer
VOC	Volatile Organic Compound

LIST OF AREA OF CONCERN ACRONYMS

B12	Building 1200
BKG	Background
CBL	C-Block
CBP	Central Burn Pits
CP	Cobbs Pond
DA2	Demolition Area #2
EBG	Erie Burning Grounds
FBQ	Fuze and Booster Quarry
LNW	Landfill North of Winklepeck
LL	Load Line
MBS	Mustard Burial Site
NACA	National Advisory Committee for Aeronautics
NTA	NACA Test Area
RQL	Ramsdell Quarry Landfill
WBG	Winklepeck Burning Grounds

SECTION 1

INTRODUCTION

1.1 Facility Description

Past Department of Defense (DOD) activities at the Ravenna Army Ammunition Plant (RVAAP) date to 1940 and include the manufacturing, loading, handling and storage of military explosives and ammunition. Until 1999, the RVAAP was identified as a 21,419-acre installation. The property boundary was resurveyed by the Ohio Army National Guard (OHARNG) over a two year period from 2002 and 2003 and the actual total acreage of the property was found to be 21,683.289 acres. As of February 2006, a total of 20,403 acres of the former 21,683 acre RVAAP have been transferred to the United States Property and Fiscal Officer (USP&FO) for Ohio for use by the OHARNG as a military training site. The current RVAAP consists of 1,280 acres in several distinct parcels scattered throughout the confines of the OHARNG Camp Ravenna Joint Military Training Center (Camp Ravenna). The RVAAP and Camp Ravenna are collocated on contiguous parcels of property and the Camp Ravenna perimeter fence completely encloses the remaining parcels of the RVAAP. Camp Ravenna is in northeastern Ohio within Portage and Trumbull Counties, approximately 4.8 kilometers (3 miles) east-northeast of the city of Ravenna and approximately 1.6 kilometers (1 mile) northwest of the city of Newton Falls (Figure 1-1). The RVAAP portions of the property are solely located within Portage County. Camp Ravenna (inclusive of the RVAAP) is a parcel of property approximately 17.7 kilometers (11 miles) long and 5.6 kilometers (3.5 miles) wide bounded by State Route 5, the Michael J. Kirwan Reservoir, and the CSX System Railroad on the south; Garret, McCormick, and Berry roads on the west; the Norfolk Southern Railroad on the north; and State Route 534 on the east (see Figures 1-1 and 1-2). Camp Ravenna is surrounded by several communities: Windham on the north; Garrettsville 9.6 kilometers (6 miles) to the northwest; Newton Falls 1.6 kilometers (1 mile) to the southeast; Charlestown to the southwest; and Wayland 4.8 kilometers (3 miles) to the south. When the RVAAP was operational Camp Ravenna did not exist and the entire 21,683-acre parcel was a government-owned, contractor-operated (GOCO) industrial facility. The RVAAP Installation Restoration Program (IRP) encompasses investigation and cleanup of past activities over the entire 21,683 acres of the former RVAAP and therefore references to the RVAAP in this document are considered to be inclusive of the historical extent of the RVAAP, which is inclusive of the combined acreages of the current Camp Ravenna and RVAAP, unless otherwise specifically stated.

1.2 Project Description

1.2.1 Historical Monitoring

In 2004 the U.S. Army and the Ohio EPA finalized the Facility-Wide Groundwater

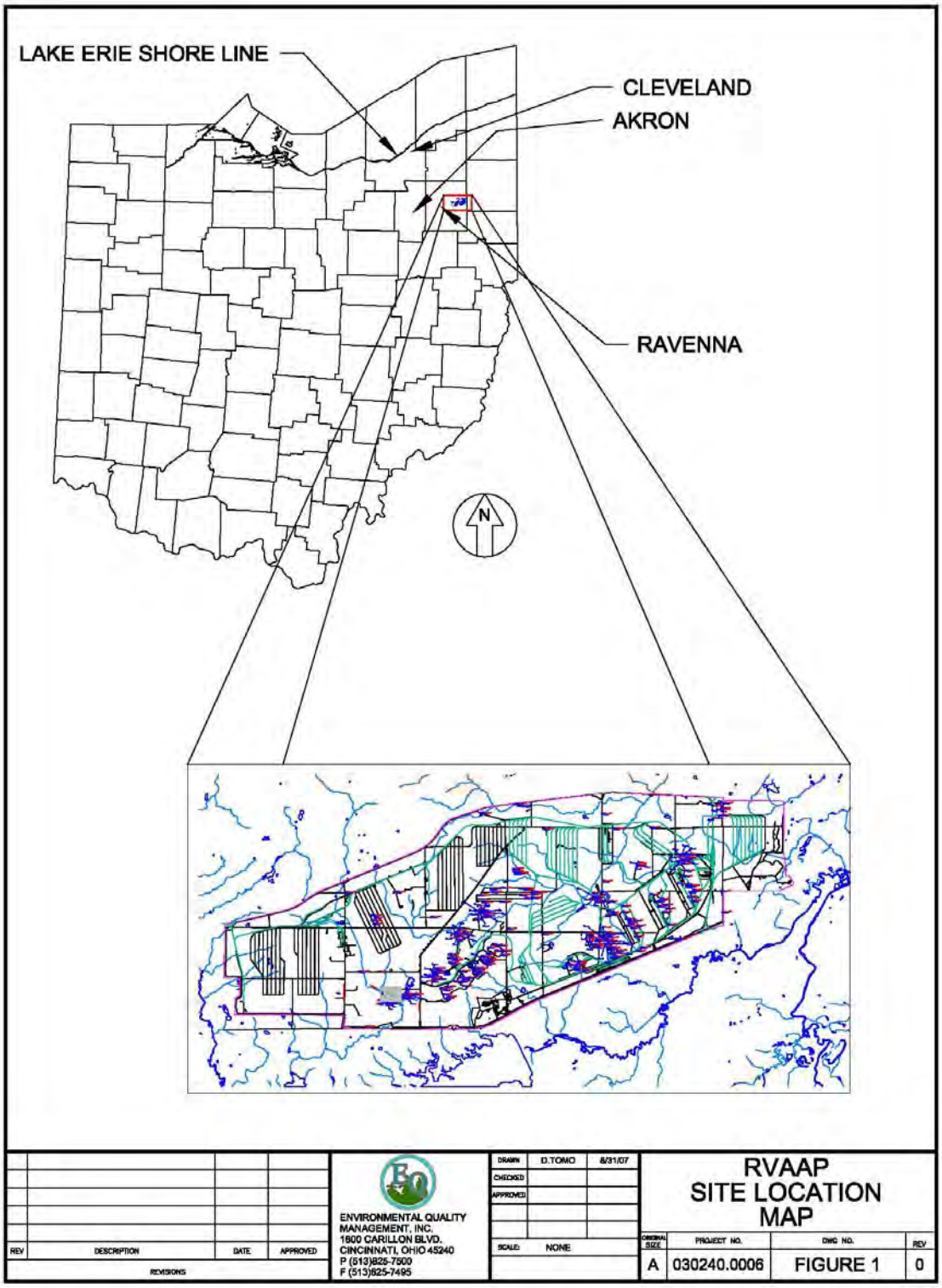

Fig. 1-1 General Location Map

Fig 1-2 RVAAP Facility Map

Monitoring Program (FWGWMP) Plan which details the requirements of the program. The FWGWMP was initiated in 2005 with three consecutive quarters of FWGWMP well sampling. Quarterly sampling has continued through the current monitoring event. The initial FWGWMP wells identified for monitoring were sampled once every quarter, with the exception of the 5 Resource Conservation and Recovery Act (RCRA) wells that include Ramsdell Quarry Landfill (RQL) wells RQLmw-007, -008, and -009, and two Demolition (DA) Area 2 wells, DA2mw-DETmw-003 and DETmw-004. The RQL and DA2 wells are sampled twice a year, during the second (April) and fourth (October) sampling events.

Details of the program design and requirements are contained in the *RVAAP Facility-Wide Groundwater Monitoring Program Plan*, Portage Environmental, September 2004. This document contains the Facility-Wide Sampling and Analysis Plan (FWSAP), Site Safety and Health Plan, and Quality Assurance Project Plan addenda that pertain to the proposed work. Additional details pertaining to performance of field and laboratory activities are contained in the *RVAAP Facility-Wide Sampling and Analysis Plan/Quality Assurance Project Plan (FWSAP)*, SAIC, March 2001. As detailed in the FWGWMPP, the initial monitoring program consisted of the sampling of 36 wells specified in Table 4-1 of the FWGWMPP. Fourteen of these wells are "Background Wells"; the remainder are wells situated at various Areas of Concern (AOCs) at RVAAP. The first sampling event for this project was conducted in April 2005. The results of the previous FWGWMP sampling events are presented in the reports referenced in Section 4 of this report. The final assessment monitoring event for the initial well sampling and analysis was completed in October 2007.

1.2.2 Current Monitoring

On October 22, 2007 the United State Army Corps of Engineers (USACE) submitted to the Ohio Environmental Protection Agency (EPA) the *Draft Proposal to Update the Facility-Wide Ground Water Monitoring Program* (USACE October 2007) at the Ravenna Army Ammunition Plant. This proposal presented recommendations for modifications to the FWGWMP, the Director's Final Findings and Orders, and the Conceptual Plan in Appendix F of the Findings and Orders as presented below.

Section 3.1.2.2 of the FWGWMP Plan establishes a protocol for adding and removing wells from the FWGWMP: "Future wells installed as part of individual AOC investigations conducted under the ongoing Comprehensive Environmental Response Compensation and Liability Act (CERCLA) process at RVAAP will be evaluated for incorporation into the FWGWMP upon completion of at least four quarterly groundwater sampling events to be conducted as part of the Remedial Investigation (RI) phase at each AOC. The frequency of the initial sampling events may be other than quarterly if agreed upon by the Army and Ohio EPA". Based on this protocol the USACE notified the Ohio EPA on December 12, 2007 that the wells to be sampled would be changed effective with the January 2008 monitoring event. The Ohio EPA provided concurrence with this change in an email dated January 8, 2008. The Ohio EPA was notified of an additional change on February 27, 2008 increasing the number of wells to be sampled for the April

2008 event. The Ohio EPA was notified on March 21, 2008 that the number of FWGWMP wells to be sampled in April 2008 (and the July 2008, October 2008, and January 2009 events) would be increased to 132 plus the 5 RCRA wells sampled semi-annually (in order to complete 4 quarters of sampling for each of the 132 wells). Copies of this correspondence are presented in Appendix A.

Beginning with the April 2009 sampling event the remaining wells on the list contained in the *Draft Proposal to Update the Facility-Wide Ground Water Monitoring Program* (USACE October 2007) were sampled. The list of FWGWMP wells monitored for the July 2009 event is presented in Appendix B.

1.3 Scope of Work for the July 2009 Sampling Event

Environmental Quality Management, Inc. (EQM) has been contracted (MARC Contract Number W912QR-04-D-0036) by the Louisville District USACE to conduct the FWGWMP monitoring program beginning in April 2007. The objective of this project is to continue quarterly monitoring under the RVAAP Facility-Wide Groundwater Monitoring Program. The following tasks were performed during the July 2009 sampling event in accordance with specifications contained in the FWGWMPP, the FWSAP, and the Scope of Work written by the USACE:

- Performed groundwater sampling at the 46 wells identified in Appendix B. .
- Performed laboratory analysis for the collected samples.
- Verified, validated and reduced the laboratory analytical data produced for the event (exclusive of the quality assurance samples analyzed by RTI).
- Prepared the Investigative Derived Waste (IDW) Characterization and Disposal Report for the IDW collected during monitoring activities.
- Prepared and submitted the quarterly monitoring report for the sampling event.

1.4 Report Presentation

This report presents the results of the July 2009 sampling event. The report is structured in the following way:

- Section 1.0 – Introduction.
- Section 2.0 – Description of Project Activities. This section describes project-specific details not contained in the FWSAP and FWGWMPP on how the tasks described above were performed.
- Section 3.0 – Results of Investigation. The results of the sampling event are summarized, groundwater elevation measurements, analytical results, data verification/validation information.
- Section 4.0 – Summary of Results
- Section 5.0 – References.

The appendices contain the following items:

- Appendix A - Correspondence Documenting the Change in Wells to be Sampled in 2008-2009.
- Appendix B – List of Wells Sampled During the July 2009 Event.
- Appendix C – Water Level Measurements/Field Log Book and Purge Records/Daily Quality Control Reports.
- Appendix D – Data Verification Reports/Laboratory Data Sheets.
- Appendix E – Investigation-Derived Waste (IDW) Characterization and Disposal Plans.
- Appendix F – Reporting Limits that Currently Do Not Meet the RVAAP Quality Assurance Project Plan (QAPP) Practical Quantitation Limits (PQLs) and/or Region 9 Preliminary Remediation Goals (PRGs).
- Appendix G – Correspondence & Comment/Response Table

The report is contained in 3 volumes:

- Volume 1 presents the main text and Appendices A-D.
- Volume 2 presents the Appendix D analytical data sheets/validation reports.
- Volume 3 presents Appendices D-F and the plates.

SECTION 2

PROJECT ACTIVITIES

2.1 Groundwater Level Monitoring

Depth to water from the top of the inner casing was measured in the 46 FWGWMP wells during July 13-14, 2009. Water level measurements were taken with a Herron Dipper-T water-level indicator. The depth to the bottom of the well from the top of the inner casing was also measured with the electronic water level indicator.

The results of the groundwater level monitoring for the FWGWMP wells sampled during this monitoring event are presented in Section 3.1 and Appendix C. The monitoring well location map, identified as Plate 1, is included with this report. Potentiometric maps created from groundwater measurements from all RVAAP monitoring wells in January 2009 are presented on Plates 2 and 3. The potentiometric maps were generated from the January 2009 water level measurements taken from all 237 facility wells. These maps are updated on a yearly basis. The water levels from the quarterly events are not included in these plates. The potentiometric maps will be updated again after the January 2010 water level measurement event.

2.2 Groundwater Sampling

All identified wells were sampled July 13-16, 2009. Wells were sampled using micropurge techniques in accordance with the specifications contained in the FWGWMPP and FWSAP. The wells were micropurged until certain groundwater parameters (i.e., temperature, specific conductivity, pH, and dissolved oxygen) had stabilized. The groundwater parameters were measured using a Horiba U-22 with flow cells or equivalent**.** Groundwater parameter measurements obtained during micropurging are presented in Appendix C.

Groundwater samples were collected with bladder pump micropurge equipment. Equipment and sampling details are contained in Appendix C. Groundwater samples were collected in laboratory supplied containers and stored in iced coolers for shipment in accordance with FWSAP and FWGWMPP specifications. All coolers were received by the laboratory at temperatures within the prescribed limits of the FWGWMP.

2.3 Laboratory Analysis

Laboratory analyses on all primary samples and associated quality control samples were performed by TestAmerica Laboratories. Table 2-1 presents the analytical methods used to analyze the groundwater samples.

Table 2-1 Analytical Methods

CONSTITUENTS	METHOD[1]
Polychlorinated Biphenyls (PCBs)	GC Semivolatile Organics (8082)
Pesticides	GC Semivolatile Organics (8081A)
Base/Neutrals and Acids (SVOCs)	GC/MS Semivolatile Organic (8270C)
Volatile Organic (VOCs)	GC/MS Volatile Organics (8260B)
Nitroguanidine (Propellants)	Organic Compounds by UV/HPLC (8330 modified)
Nitroaromatics & Nitramines: (Explosives)	GC Semivolatile Organics Explosives (8330)
Nitrocellulose as N (Propellant)	General Chemistry (353.2 modified)[2]
Cyanide, (Total)	General Chemistry (9012A)
Metals (Magnesium, Manganese, Barium, Nickel, Potassium, Silver, Sodium, Vanadium, Chromium, Calcium, Cobalt, Copper, Arsenic, Lead, Selenium)	Inductively Coupled Plasma (6010B)
Metals (Antimony, Iron, Beryllium, Thallium, Zinc, Cadmium, Aluminum)	Inductively Coupled Plasma Mass Spectrometry (6020)
Metals (Mercury)	(7470A, Cold Vapor) - Liquid
Perchlorates	Method 6860

1 = USEPA SW846
2 = EPA Methods for Chemical Analysis of Water and Waste

All groundwater samples were analyzed for one or more of the following parameters: explosives, propellants (nitrocellulose and nitroguanidine), cyanide, volatile organic compounds (VOCs), semi-volatile compounds (SVOCs), target analyte list (TAL) metals (filtered), pesticides, polychlorinated biphenyls (PCBs), and perchlorates.

Quality control (QC) samples were collected from the following wells:

LL7mw-006 – Duplicate sample	LL7mw-003 – MS/MSD
LL8mw-005 – Duplicate sample	Ll8mw-002 – MS/MSD
LL9mw-004 – Duplicate sample	LL9mw-003 – MS/MSD
LL10mw-006 - Duplicate sample	LL10mw-004 – MS/MSD
LL11mw-010 – Duplicate sample	LL11mw-004 – MS/MSD

All samples were picked up from the facility and delivered to the laboratory in iced coolers by a TestAmerica courier under proper chain-of-custody procedures (Appendix D). Laboratory analyses on all quality assurance (QA) samples were performed by RTI Laboratories in Livonia Michigan. Five QA samples were collected for this sampling event from the same wells where the duplicate samples were collected with the exception of LL7mw-006. A split QA sample was originally collected from LL7mw-006 but was received at the laboratory out of the acceptable temperature range (the sample temperatures were >10° C). After consulting with the USACE chemist it was decided not

to analyze those samples. An additional split sample was then collected from ASYmw-008).

All QA samples were shipped in iced coolers via overnight delivery service under proper chain-of-custody procedures.

Table 2-2 presents the QA Table summary for all samples collected for the July 2009 monitoring event. This table presents in tabular form all analyses and associated QA/QC. The Daily Quality Control Reports are presented in Appendix C.

Laboratory results are summarized in Section 3.2. Laboratory data sheets, including QA/QC information are contained in Appendix D.

2.4 Data Verification/Validation

Data from TestAmerica were verified in accordance with project specifications by EQM chemists Angye Dragotta, and Eric Corbin using the Automatic Data Review (ADR) program. Data validation/verification is summarized in Section 3.3. The Data Verification/Validation Summary Reports are presented in Appendix D.

2.5 Investigation Derived Waste

Investigation Derived Waste (IDW) Reports were prepared for both the sampling event and the redevelopment activities discussed in section 3. Purge water was collected at each well location in 5-gallon buckets and transferred to 55-gallon drums located inside Building 1036. No more than four gallons were purged from any well. Instruments and equipment were decontaminated after purging and sampling each monitoring well. Decontamination fluids were collected in separate, AOC-designated 55-gallon drum stored inside Building 1036. Pending analysis of the monitoring well samples, IDW fluids will be stored in the 55-gallon drums until the IDW Report is approved. The IDW will then be disposed of in accordance with FWSAP requirements. The IDW Reports are presented in Appendix E.

Table 2-2 QA Table for July 2009 Sampling Event

	Contractor Laboratory							Government Laboratory		Requested Laboratory Analysis					
Sample Locations	Primary Lab Sample ID	Date	Sample Type	Assoc. QC Dup Number	Assoc. QC Rinsate Number	Assoc. QC Trip Blank Number	MS / MSD	QA Lab Sample ID	Assoc. QC Trip Blank Number	VOCs	SVOCs	Explosives & Propellants	Pesticides / PCBs	Metals / Cyanide	Perchlorate
LL6mw-005	FWGLL6mw-005C-1367-GW/GF	07/13/09	GW		EQUIPRinse1-1423	FWGTeam2-Trip				X	X	X	X	X	X
LL6mw-006	FWGLL6mw-006C-1368-GW/GF	07/13/09	GW		EQUIPRinse1-1423	FWGTeam3-Trip				X	X	X	X	X	X
LL6mw-007	FWGLL6mw-007C-1369-GW/GF	07/13/09	GW		EQUIPRinse1-1423	FWGTeam1-Trip				X	X	X	X	X	X
LL7mw-001	FWGLL7mw-001C-1370-GW/GF	07/13/09	GW		EQUIPRinse1-1423	FWGTeam1-Trip				X	X	X	X	X	X
LL7mw-002	FWGLL7mw-002C-1371-GW/GF	07/13/09	GW		EQUIPRinse1-1423	FWGTeam2-Trip				X	X	X	X	X	X
LL7mw-003	FWGLL7mw-003C-1372-GW/GF	07/13/09	GW		EQUIPRinse1-1423	FWGTeam1-Trip	Yes			X	X	X	X	X	X
LL7mw-004	FWGLL7mw-004C-1373-GW/GF	07/13/09	GW		EQUIPRinse1-1423	FWGTeam2-Trip				X	X	X	X	X	X
LL7mw-005	FWGLL7mw-005C-1374-GW/GF	07/13/09	GW		EQUIPRinse1-1423	FWGTeam3-Trip				X	X	X	X	X	X
LL7mw-006	FWGLL7mw-006C-1375-GW/GF	07/13/09	GW	DUP1-1413	EQUIPRinse1-1423	FWGTeam2-Trip			Trip Blank	X	X	X	X	X	X
LL10mw-001	FWGLL10mw-001C-1389-GW/GF	07/14/09	GW		EQUIPRinse2-1424	FWGTeam2-Trip				X	X	X	X	X	X
LL10mw-002	FWGLL10mw-002C-1390-GW/GF	07/14/09	GW		EQUIPRinse2-1424	FWGTeam1-Trip				X	X	X	X	X	X
LL10mw-003	FWGLL10mw-003C-1391-GW/GF	07/14/09	GW		EQUIPRinse2-1424	FWGTeam1-Trip				X	X	X	X	X	X
LL8mw-001	FWGLL8mw-001C-1376-GW/GF	07/14/09	GW		EQUIPRinse2-1424	FWGTeam1-Trip				X	X	X	X	X	X
LL8mw-002	FWGLL8mw-002C-1377-GW/GF	07/14/09	GW		EQUIPRinse2-1424	FWGTeam1-Trip	Yes			X	X	X	X	X	X
LL8mw-003	FWGLL8mw-003C-1378-GW/GF	07/14/09	GW		EQUIPRinse2-1424	FWGTeam3-Trip				X	X	X	X	X	X
LL8mw-004	FWGLL8mw-004C-1379-GW/GF	07/14/09	GW		EQUIPRinse2-1424	FWGTeam3-Trip				X	X	X	X	X	X
LL8mw-005	FWGLL8mw-005C-1380-GW/GF	07/14/09	GW	DUP2-1414	EQUIPRinse2-1424	FWGTeam2-Trip		FWGLL8mw-005C-1419S-GW/GF	TripBlank	X	X	X	X	X	X
LL8mw-006	FWGLL8mw-006C-1381-GW/GF	07/14/09	GW		EQUIPRinse2-1424	FWGTeam2-Trip				X	X	X	X	X	X
LL9mw-001	FWGLL9mw-001C-1382-GW/GF	07/14/09	GW		EQUIPRinse2-1424	FWGTeam1-Trip				X	X	X	X	X	X
LL9mw-002	FWGLL9mw-002C-1383-GW/GF	07/14/09	GW		EQUIPRinse2-1424	FWGTeam3-Trip				X	X	X	X	X	X
LL9mw-003	FWGLL9mw-003C-1384-GW/GF	07/14/09	GW		EQUIPRinse2-1424	FWGTeam1-Trip	Yes			X	X	X	X	X	X
LL9mw-004	FWGLL9mw-004C-1385-GW/GF	07/14/09	GW	DUP3-1415	EQUIPRinse2-1424	FWGTeam2-Trip		FWGLL9mw-004C-1420S-GW/GF	TripBlank	X	X	X	X	X	X
LL9mw-005	FWGLL9mw-005C-1386-GW/GF	07/14/09	GW		EQUIPRinse2-1424	FWGTeam3-Trip				X	X	X	X	X	X
LL9mw-006	FWGLL9mw-006C-1387-GW/GF	07/14/09	GW		EQUIPRinse2-1424	FWGTeam2-Trip				X	X	X	X	X	X
LL9mw-007	FWGLL9mw-007C-1388-GW/GF	07/14/09	GW		EQUIPRinse2-1424	FWGTeam3-Trip				X	X	X	X	X	X
ASYmw-001	FWGASYmw-001C-1403-GW/GF	07/15/09	GW		EQUIPRinse3-1425	FWGTeam2-Trip				X	X	X	X	X	X
ASYmw-002	FWGASYmw-002C-1404-GW/GF	07/15/09	GW		EQUIPRinse3-1425	FWGTeam2-Trip				X	X	X	X	X	X
ASYmw-003	FWGASYmw-003C-1405-GW/GF	07/15/09	GW		EQUIPRinse3-1425	FWGTeam1-Trip				X	X	X	X	X	X
ASYmw-004	FWGASYmw-004C-1406-GW/GF	07/15/09	GW		EQUIPRinse3-1425	FWGTeam1-Trip				X	X	X	X	X	X
ASYmw-005	FWGASYmw-005C-1407-GW/GF	07/15/09	GW		EQUIPRinse3-1425	FWGTeam3-Trip				X	X	X	X	X	X
LL10mw-004	FWGLL10mw-004C-1392-GW/GF	07/15/09	GW		EQUIPRinse3-1425	FWGTeam1-Trip	Yes			X	X	X	X	X	X
LL10mw-005	FWGLL10mw-005C-1393-GW/GF	07/15/09	GW		EQUIPRinse3-1425	FWGTeam1-Trip				X	X	X	X	X	X
LL10mw-006	FWGLL10mw-006C-1394-GW/GF	07/15/09	GW	DUP4-1416	EQUIPRinse3-1425	FWGTeam2-Trip		FWGLL10mw-006C-1421S-GW/GF	TripBlank	X	X	X	X	X	X
LL11mw-001	FWGLL11mw-001C-1395-GW/GF	07/15/09	GW		EQUIPRinse3-1425	FWGTeam3-Trip				X	X	X	X	X	X
LL11mw-003	FWGLL11mw-003C-1396-GW/GF	07/15/09	GW		EQUIPRinse3-1425	FWGTeam3-Trip				X	X	X	X	X	X
LL11mw-004	FWGLL11mw-004C-1397-GW/GF	07/15/09	GW		EQUIPRinse3-1425	FWGTeam1-Trip	Yes			X	X	X	X	X	X
LL11mw-005	FWGLL11mw-005C-1398-GW/GF	07/15/09	GW		EQUIPRinse3-1425	FWGTeam3-Trip				X	X	X	X	X	X
LL11mw-006	FWGLL11mw-006C-1399-GW/GF	07/15/09	GW		EQUIPRinse3-1425	FWGTeam1-Trip				X	X	X	X	X	X
LL11mw-008	FWGLL11mw-008C-1400-GW/GF	07/15/09	GW		EQUIPRinse3-1425	FWGTeam3-Trip				X	X	X	X	X	X
LL11mw-009	FWGLL11mw-009C-1401-GW/GF	07/15/09	GW		EQUIPRinse3-1425	FWGTeam3-Trip				X	X	X	X	X	X
LL11mw-010	FWGLL11mw-010C-1402-GW/GF	07/15/09	GW	DUP5-1417	EQUIPRinse3-1425	FWGTeam2-Trip		FWGLL11mw-010C-1422S-GW/GF	TripBlank	X	X	X	X	X	X
ASYmw-006	FWGASYmw-006C-1408-GW/GF	07/16/09	GW		EQUIPRinse4-1426	FWGTeam1-Trip				X	X	X	X	X	X
ASYmw-007	FWGASYmw-007C-1409-GW/GF	07/16/09	GW		EQUIPRinse4-1426	FWGTeam1-Trip				X	X	X	X	X	X
ASYmw-008	FWGASYmw-008C-1410-GW/GF	07/16/09	GW		EQUIPRinse4-1426	FWGTeam3-Trip		FWGASYmw-008C-1418S-GW/GF*	Trip Blank	X	X	X	X	X	X
ASYmw-009	FWGASYmw-009C-1411-GW/GF	07/16/09	GW		EQUIPRinse4-1426	FWGTeam2-Trip				X	X	X	X	X	X
ASYmw-010	FWGASYmw-010C-1412-GW/GF	07/16/09	GW		EQUIPRinse4-1426	FWGTeam2-Trip				X	X	X	X	X	X

*Split -1418 re-collected on a different parent due to temperature non-conformance upon receipt of original split samples at laboratory.

SECTION 3

RESULTS

3.1 Groundwater Elevations

Groundwater elevations for the 46 FWGWMP monitoring wells were obtained on July 13-14, 2009 as described in Section 2.1. The groundwater elevations for the FWGWMP wells are presented in Table 3-1. The monitoring well location map, identified as Plate 1, is included with this report. Facility-wide groundwater potentiometric maps (Plates 2, and 3) based on all RVAAP groundwater measurements taken during the January 2009 event are also included in this report.

3.1.1 Sediment Accumulation

EQM has reviewed the historical sediment accumulation footages and the description of bottom for the wells currently being sampled. Based on this evaluation the following wells were redeveloped during the June 16-17, 2009 timeframe:

ASYmw-001	ASYmw-003	LL12mw-113
LL12mw-243	LL12mw-244	LL12mw-245
LL6mw-004	LL7mw-002	LL7mw-003
LL7mw-004	LL7mw-005	LL8mw-002
LL8mw-003	LL8mw-004	LL9mw-004
LL9mw-007	B12mw-010	

Redevelopment activities included surging and pumping using a surge block, and a centrifugal and/or submersible pump. This was performed to remove fines accumulating as sediment in the bottom well cap. Each well was developed by at least two methods (surge and pump) with the attempt to reach stability of hydraulic conditions according to the *Technical Guidance Manual for Hydraulic Investigations and Groundwater Monitoring OEPA*, February 1995. The results of the redevelopment activities are presented in Table 3-2. The following summarizes the results of the redevelopment activities:

- Six wells were redeveloped to remove significant (>0.10 feet) sediment from the bottom of the wells. Of these five of them were redeveloped to depths equal to or greater than the reported construction depth (LL8mw-002, LL12mw-243, LL12mw-244, LL12mw-245, and LL12mw-113). The other well (LL7mw-002) was redeveloped and was reported to have a hard bottom, but the current (post redevelopment) depth of the well was 0.66 feet shallower than the reported construction depth (this issue is discussed below).

- Three of the wells were redeveloped with no significant change in the well depth measurement, and with reported hard bottoms. These three wells (LL7mw-003, LL8mw-003, and ASYmw-003 were also reported within <0.1 foot of the reported construction depth at the time of redevelopment. The January 2009 readings for depth to bottom for these wells appear to be anomalous (incorrect readings) when compared to the redevelopment as well as historical measurements.
- The remaining eight wells (LL7mw-004, LL7mw-005, LL8mw-004, LL6mw-004, ASYmw-001, LL9mw-007, LL9mw-004 and B12mw-010) were also redeveloped with no significant change in the well depth measurement, and with reported hard bottoms. These wells were all however 0.07 to 0.35 feet shallower than the reported construction depth. Based on the lack of sediment removed, and the reported hard bottom of the wells, EQM believes there is no significant sediment accumulation in those wells.
- As described in Table 3-2 the LL12 wells all had purged water during the redevelopment activities that was described as grey-colored slurry. None of these wells cleared with redevelopment even after having reached or exceeded the reported construction depths. Additionally, LL12mw-113 had 5.3 feet of sediment removed during redevelopment activities in June 2009 (indicating -0.1 feet of sediment). When the well was re-measured in July 2009 the well depth indicated that 3.08 feet of sediment was present in the well. It appears that the clay solids penetrating the well screen have infiltrated back into the well. Despite the apparent sediment accumulation in LL12mw-113 there is still sufficient well screen open to the formation to allow collection of a sample directly from the formation. EQM will continue to monitor the sediment accumulation in LL12mw-113 as well as other LL12 wells in order to determine that there is sufficient screen interval in order to obtain a representative sample.

As noted in Table 3-1 several other wells indicated sediment accumulation of greater than 0.2 feet (e.g., LL11mw-001 at 2.71 feet). Redevelopment of these wells is scheduled for September 2009. EQM will provide a complete list of wells targeted for redevelopment to the Ohio EPA prior to conducting filed activities.

It should be noted that in order to minimize turbid samples, low flow purging and sampling techniques are used. The pumps are suspended at least one foot above the bottom of the well to avoid agitation of the sediment potentially accumulating in the well sump. EQM will continue to monitor any high turbidity readings and make a determination for future redevelopment and other evaluation of any affected wells.

Table 3-1 July 2009 FWGMP Monitoring Well Measurements

Well	Monitoring Zone	Top of Casing (TOC) Elevation[a] (ft)	2008 4th Quarter Groundwater Elevation (Oct/2008) (ft)	2009 1st Quarter Groundwater Elevation (Jan/2009) (ft)	2009 2nd Quarter Groundwater Elevation (Apr/2009) (ft)	2009 3rd Quarter Groundwater Elevation (Jul/2009) (ft)	Depth to Water (ft below TOC) Jul/2009	Reported Construction Depth from TOC[a] (ft)	Jul/2009 Measured Depth from TOC (ft)	Jul/2009 Sediment Accumulation (ft)	Jul/2009 Description of Bottom
Loadline 6											
LL6mw-005	Homewood	1120.47	NM	1,108.61	1,110.58	1,107.82	12.65	22.5	22.24	0.26	Hard
LL6mw-006	Unconsolidated	1124.37	NM	1,109.15	1,113.03	1,109.82	14.55	17	17.76	-0.76	Hard
LL6mw-007	Homewood	1115.62	NM	1,110.12	1,113.33	1,108.11	7.51	19.5	19.31	0.19	Hard
Loadline 7											
LL7mw-001	Homewood	1129.64	NM	1,109.29	1,111.55	1,108.66	20.98	32.2	33.06	-0.86	Hard
LL7mw-002	Homewood	1129.55	NM	1,113.93	1,116.57	1,111.97	17.58	27.8	27.20	0.60	Hard
LL7mw-003	Homewood	1120.84	NM	1,109.61	1,111.72	1,108.81	12.03	33.6	33.53	0.07	Hard
LL7mw-004	Homewood	1126.32	NM	1,111.57	1,113.52	1,110.75	15.57	32.5	32.20	0.30	Hard
LL7mw-005	Homewood	1135.87	NM	1,114.23	1,116.34	1,113.52	22.35	30.6	30.29	0.31	Hard
LL7mw-006	Homewood	1123.56	NM	1,113.18	1,115.04	1,111.55	12.01	30.4	30.27	0.13	Hard
Loadline 8											
LL8mw-001	Unconsolidated	1121.46	NM	1,110.01	1,113.54	1,109.52	11.94	26.8	27.46	-0.66	Medium
LL8mw-002	Unconsolidated	1124.51	NM	1,106.24	1,109.76	1,105.78	18.73	32.8	32.59	0.21	Hard
LL8mw-003	Unconsolidated	1119.05	NM	1,106.36	1,109.85	1,105.88	13.17	23.3	23.00	0.30	Hard
LL8mw-004	Unconsolidated	1115.75	NM	1,104.88	1,108.06	1,104.26	11.49	23	22.69	0.31	Hard
LL8mw-005	Homewood	1115.73	NM	1,101.95	1,106.15	1,101.94	13.79	27.2	27.09	0.11	Hard
LL8mw-006	Homewood	1117.17	NM	1,097.47	1,100.08	1,096.97	20.20	26.8	27.02	-0.22	Hard
Loadline 9											
LL9mw-001	Homewood	1134.62	NM	1,119.61	1,123.11	1,118.23	16.39	23.3	23.29	0.01	Hard
LL9mw-002	Homewood	1127.30	NM	1,116.61	1,113.43	1,113.49	13.81	22.4	22.69	-0.29	Hard
LL9mw-003	Homewood	1135.76	NM	1,124.33	1,128.47	1,122.32	13.44	23.8	24.15	-0.35	Hard
LL9mw-004	Homewood	1131.83	NM	1,110.62	1,111.08	1,110.72	21.11	34.9	34.64	0.26	Hard
LL9mw-005	Homewood	1130.93	NM	1,114.83	1,124.00	1,113.61	17.32	23.3	23.42	-0.12	Hard
LL9mw-006	Homewood	1129.88	NM	1,110.96	1,111.76	1,110.13	19.75	28.9	28.79	0.11	Hard
LL9mw-007	Homewood	1119.99	NM	1,110.69	1,103.91	1,109.85	10.14	18.5	18.15	0.35	Hard
Loadline 10											
LL10mw-001	Homewood	1132.77	NM	1,107.67	1,110.61	1,108.28	24.49	29.8	29.50	0.30	Hard
LL10mw-002	Homewood	1127.13	NM	1,109.33	1,113.04	1,108.93	18.20	29.7	29.78	-0.08	Hard
LL10mw-003	Homewood	1130.28	NM	1,109.33	1,113.06	1,108.77	21.51	28.9	28.49	0.41	Hard
LL10mw-004	Homewood	1122.39	NM	1,108.97	1,113.39	1,108.44	13.95	33.8	33.49	0.31	Hard
LL10mw-005	Homewood	1125.67	NM	1,109.92	1,113.48	1,109.48	16.19	29.3	29.21	0.09	Hard
LL10mw-006	Unconsolidated	1123.83	NM	1,111.64	1,114.38	1,110.63	13.20	26.1	26.69	-0.59	Hard

Table 3-1 July 2009 FWGMP Monitoring Well Measurements

Well	Monitoring Zone	Top of Casing (TOC) Elevation[a] (ft)	2008 4th Quarter Groundwater Elevation (Oct/2008) (ft)	2009 1st Quarter Groundwater Elevation (Jan/2009) (ft)	2009 2nd Quarter Groundwater Elevation (Apr/2009) (ft)	2009 3rd Quarter Groundwater Elevation (Jul/2009) (ft)	Depth to Water (ft below TOC) Jul/2009	Reported Construction Depth from TOC[a] (ft)	Jul/2009 Measured Depth from TOC (ft)	Jul/2009 Sediment Accumulation (ft)	Jul/2009 Description of Bottom
Loadline 11											
LL11mw-001	Unconsolidated	1100.16	NM	1,091.45	1,092.44	1,089.06	11.10	24.1	21.39	2.71	Medium
LL11mw-003	Unconsolidated	1088.48	NM	1,087.78	1,087.98	1,085.39	3.09	15.9	16.04	-0.14	Hard
LL11mw-004	Unconsolidated	1084.72	NM	1,084.32	1,084.63	1,082.08	2.64	16.2	16.12	0.08	Hard
LL11mw-005	Unconsolidated	1079.40	NM	1,073.00	1,075.63	1,070.52	8.88	16	16.38	-0.38	Hard
LL11mw-006	Unconsolidated	1086.50	NM	1,083.01	1,085.08	1,080.48	6.02	15.5	15.68	-0.18	Hard
LL11mw-008	Unconsolidated	1087.74	NM	1,084.06	1,087.05	1,083.72	4.02	15.4	15.67	-0.27	Hard
LL11mw-009	Unconsolidated	1091.54	NM	NM	1,089.52	1,086.93	4.61	16.6	19.48	-2.88	Hard
LL11mw-010	Unconsolidated	1082.68	NM	1,078.95	1,079.68	1,077.06	5.62	23.4	23.40	0.00	Hard
Atlas Scrap Yard											
ASYmw-001	Sharon	981.13	NM	NM	970.52	968.89	12.24	23.7	23.10	0.60	Hard
ASYmw-002	Sharon	985.24	NM	NM	974.86	970.61	14.63	22.7	22.87	-0.17	Hard
ASYmw-003	Sharon	982.21	NM	NM	970.89	969.01	13.2	23.5	23.45	0.05	Hard
ASYmw-004	Sharon	979.66	NM	NM	971.41	969.88	9.78	29.6	29.76	-0.16	Hard
ASYmw-005	Sharon	979.8	NM	NM	973.03	971.57	8.23	26.2	27.10	-0.90	Hard
ASYmw-006	Sharon	983.01	NM	NM	969.96	968.77	14.24	28.8	28.86	-0.06	Hard
ASYmw-007	Unconsolidated	984.16	NM	NM	969.64	968.91	15.25	28.8	28.87	-0.07	Hard
ASYmw-008	Unconsolidated	978.85	NM	NM	974.64	974.75	4.1	27.7	27.25	0.45	Soft
ASYmw-009	Sharon	982.7	NM	NM	971.73	969.65	13.05	24.3	24.45	-0.15	Medium
ASYmw-010	Unconsolidated	981.05	NM	NM	969.72	968.63	12.42	29.8	31.06	-1.26	Hard

Based on recent redevelopment activites and the condition of the bottom of the well, the higlighted sediment accumulation numbers are inaccuarate and there is no sediment accumulationat the well sump.

a = Elevations are in feet above mean sea level (amsl)

NM = New wells added to the sampling schedule, not measured in all quarters

Table 3-2. June 2009 Redevelopment Results

Well ID	Reported Construction Depth (ft)	January 2009 Well Depth Measurement (ft)	June 2009 Well Depth Measurement Pre-Redevelopment (ft)	June 2009 Well Depth Measurement Post-Redevelopment (ft)	July 2009 Well Depth Measurement (ft)	October 2007 Well Depth Measurement (ft)	Current Description of Bottom/Comments
LL7mw-002	27.80	27.14	26.92	27.14	27.20	27.28	Hard
LL7mw-003	33.60	33.32	33.67	33.67	33.53	33.64	Hard
LL7mw-004	32.50	32.17	32.17	32.17	32.20	32.34	Hard
LL7mw-005	30.60	30.31	30.47	30.47	30.29	30.44	Hard
LL8mw-003	23.30	22.95	22.95	22.95	23.00	23.13	Hard
LL8mw-002	32.80	32.53	32.68	32.78	32.59	32.66	Hard
LL8mw-004	23.00	22.60	22.63	22.66	22.69	22.74	Hard
LL6mw-004	25.10	24.50	24.45	24.45	Not measured	24.61	Hard
LL12mw-244	32.10	29.34	29.17	32.77	32.65	31.67	Hard. Development water was a slurry-like mixture containing grey clay. Water did not clear during redevelopment activities.
LL12mw-243	25.70	24.65	24.53	25.86	25.69	25.8	Hard. Development water was a slurry-like mixture containing grey clay. Water did not clear during redevelopment activities.
LL12mw-245	30.50	29.98	29.94	30.43	30.28	30.45	Hard. Development water was a slurry-like mixture containing grey clay. Water did not clear during redevelopment activities.
LL12mw-113	25.00	19.62	19.80	25.10	21.92	20.43	Hard. Development water was a slurry-like mixture containing grey clay. Water did not clear during redevelopment activities.
ASYmw-001	23.70	23.05	23.20	23.20	23.10	23.18	Hard
ASYmw-003	23.50	22.90	23.41	23.42	23.45	23.52	Hard
LL9mw-007	18.50	18.06	18.08	18.08	18.15	18.23	Hard
LL9mw-004	34.90	34.62	34.59	34.60	34.64	34.74	Hard
B12mw-010	23.20	22.82	22.76	22.76	Not measured	22.92	Hard

3.1.2 Groundwater pH

Groundwater pH values of less than 5 have been noted in several wells over the past two sampling events. EQM has reviewed the historical purge records for these wells. The pH readings are presented below for these wells. The low pH in some of the wells could be indicative of groundwater contamination, however a full evaluation of the conditions at these wells will be conducted once all of the wells have been sampled.

pH Levels for Selected Wells

Well ID	January 2009 pH Range	April 2009 pH Range	July 2009 pH Range
LL11mw-005	5.09 – 5.76	4.91 - 4.97	4.52 – 4.62
LL6mw-007	7.85 – 8.05	4.12 - 4.13	6.34 – 7.39
LL9mw-006	4.6 – 5.21	4.73 – 6.61	4.30 – 5.57
LL7mw-006	5.20 – 5.40	5.37 – 5.60	4.69 – 4.75
LL9mw-007	4.8 – 5.6	5.74 - 8.31	4.78 – 5.28
LL9mw-002	4.9 – 5.1	5.0 – 5.05	4.75 – 4.87

3.2 Summary of Analytical Results

Summaries of laboratory analytical results are presented in Tables 3-3, 3-4, 3-6, 3-7, 3-8 and 3-9. Appendix D presents the Laboratory Data Sheets**.** A brief summary of the detected compounds and elements are presented in the following sub-sections. The data presented in the tables are the validated and verified data. Data verification and validation is discussed in Section 3.3 and Appendix D. While reviewing the summary of analytical results please note the following:

- The screening levels referenced in the analytical summary tables are the 40 CFR Part 141 National Primary Drinking Water Regulations, Maximum Contaminant Levels (MCLs); and the Region 9 Preliminary Remediation Goals (PRGs) for tap water. MCLs are referenced as the screening criteria (for constituents not having an MCL, the Region 9 PRG is used). Also used as screening levels for metals are the RVAAP Facility-Wide Background Criteria referenced in Table 3-5.

- As discussed in Section 3.3, under the data validation process data are qualified by EQM's validator following the guidelines and qualifier requirements set forth by the FWSAP, QAPP and the current Louisville Chemistry Guidelines (LCG) (i.e., data are either accepted or requalified per the requirements of the LCG). This results in the flags designated by EQM sometimes differing from those in the laboratory data sheets. The flags designated by the validator override any laboratory flagging of the data by the laboratory. For a complete explanation of the data qualifiers used for each constituent refer to Section 3.3 and to the Data Verification Summary Reports found in Appendix D.

- For purposes of consistency, all detected concentrations that are elevated above both the method detection limit (MDL) and the above referenced screening levels are called out in the following text. In the tables, the compounds and elements that were detected above the method detection limit are presented in bold numbers. This includes constituents flagged as estimated.

- Several analytical methods used to analyze a number of explosives, VOCs, metals, SVOCs, and pesticides currently do not meet the RVAAP QAPP reporting limits or Region 9 preliminary remediation goals (PRGs). Tables listing the reporting limits that currently do not meet the RVAAP QAPP PQLs and/or Region 9 PRG levels are presented in Appendix F.

3.2.1 Explosives and Propellants

Explosive and propellant compound analytical results are summarized in Table 3-3. The following compounds were detected at concentrations above the method detection limits:

- 1,3,5-Trinitrobenzene – LL6mw-005 (0.035 μg/L J B), LL7mw-001 (0.034 μg/L J B), LL7mw-002 (0.044 μg/L J B), LL7mw-003 (0.041 μg/L J B), LL7mw-004 (0.049 μg/L J B), LL7mw-006 0.033 μg/L J B), LL8mw-001 (0.031 μg/L J B), LL8mw-002 (0.037 μg/L J B), LL8mw-005 (0.04r4 μg/L J B), LL8mw-006 (0.043 μg/L J B), LL9mw-002 (0.039 μg/L J B), LL9mw-004 (0.031 μg/L J B), LLmw-005 (0.037 μg/L J B), LL9mw-006 (0.037 μg/L J B), LL9mw-007 (0.044 μg/L J B), LL10mw-001 (0.039 μg/L J B), LL10mw-006 (0.035 μg/L J B), LL11mw-010 (0.040 μg/L J). There is no MCL for 1,3,5-Trinitrobenzene. The Region 9 PRG is 1,100 μg/L.

Note that method blanks associated with many of these samples had contamination for 1,3,5-Trinitrobenzene less than the method reporting limit (MRL). The low level detections (i.e. < RL) in these samples are therefore attributed to low level laboratory contamination and were flagged with a B qualifier.

- HMX – LL7mw-006 (0.058 μg/L). There is no MCL for HMX. The Region 9 PRG is 1,800 μg/L.

- Nitrobenzene – LL10mw-001 (0.073 μg/L J), LL11mw-009 (0.077 μg/L J), ASYmw-005 (0.053 μg/L J), ASYmw-008 (0.084 μg/L J). There is no MCL for Nitrobenzene. The Region 9 PRG is 3.4 μg/L.

- Nitrocellulose – LL7mw-005 (0.12 μg/L J), LL9mw-003 (0.13 μg/L J B). There is no MCL or Region 9 PRG for Nitrocellulose.

- RDX – LL17mw-006 (0.57 μg/L). There is no MCL for RDX. The Region 9 PRG is 0.61 μg/L.

As shown in Table 3-3, no explosives/propellants were detected at levels above the Region 9 PRGs during the July 2009 event.

Table 3-3 FWGWMP July 2009 Explosive and Propellant Analytical Results

Station ID				LL6mw-005	LL6mw-006	LL6mw-007	LL7mw-001	LL7mw-002	LL7mw-003	LL7mw-004
Sample ID		MCL	Region 9 PRG	FWGLL6mw-005C-1367-GW	FWGLL6mw-006C-1368-GW	FWGLL6mw-007C-1369-GW	FWGLL7mw-001C-1370-GW	FWGLL7mw-002C-1371-GW	FWGLL7mw-003C-1372-GW	FWGLL7mw-004C-1373-GW
Date Collected				7/13/2009	7/13/2009	7/13/2009	7/13/2009	7/13/2009	7/13/2009	7/13/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
1,3,5-Trinitrobenzene	µg/L	NS	1100	**0.035 JB**	0.10 U	0.097 U	**0.034 JB**	**0.044 JB**	**0.041 JB**	**0.049 JB**
1,3-Dinitrobenzene	µg/L	NS	3.6	0.11 U	0.10 U	0.097 U	0.096 U	0.10 U	0.096 U	0.10 U
2,4,6-Trinitrolouene	µg/L	NS	2.2	0.11 U	0.10 U	0.097 U	0.096 U	0.10 U	0.096 U	0.10 U
2,4-Dinitrotoluene	µg/L	NS	73	0.11 U	0.10 U	0.097 U	0.096 U	0.10 U	0.096 U	0.10 U
2,6-Dinitrotoluene	µg/L	NS	36	0.11 U	0.10 U	0.097 U	0.096 U	0.10 U	0.096 U	0.10 U
2-Amino-4,6-dinitrotoluene	µg/L	NS	NS	0.11 U	0.10 U	0.097 U	0.096 U	0.10 U	0.096 U	0.10 U
2-Nitrotoluene	µg/L	NS	0.049	0.53 U	0.50 U	0.48 U	0.48 U	0.50 U	0.48 U	0.52 U
3-Nitrotoluene	µg/L	NS	120	0.53 U	0.50 U	0.48 U	0.48 U	0.50 U	0.48 U	0.52 U
4-Amino-2,6-Dinitrotoluene	µg/L	NS	NS	0.11 U	0.10 U	0.097 U	0.096 U	0.10 U	0.096 U	0.10 U
4-Nitrotoluene	µg/L	NS	0.66	0.53 U	0.50 U	0.48 U	0.48 U	0.50 U	0.48 U	0.52 U
HMX	µg/L	NS	1800	0.11 U	0.10 U	0.097 U	0.096 U	0.10 U	0.096 U	0.10 U
Nitrobenzene	µg/L	NS	3.4	0.11 U	0.10 U	0.097 U	0.096 U	0.10 U	0.096 U	0.10 U
Nitrocellulose	mg/L	NS	NS	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Nitroglycerin	µg/L	NS	4.8	0.69 U	0.65 U	0.63 U	0.62 U	0.65 U	0.62 U	0.67 U
Nitroguanidine	µg/L	NS	NS	20 U	20 U	20 U	20 U	20 U	20 U	20 U
PETN	µg/L	NS	NS	0.69 U	0.65 U	0.63 U	0.62 U	0.65 U	0.62 U	0.67 U
RDX	µg/L	NS	0.61	0.11 U	0.10 U	0.097 U	0.096 U	0.10 U	0.096 U	0.10 U
Tetryl	µg/L	NS	360	0.11 U	0.10 U	0.097 U	0.096 U	0.10 U	0.096 U	0.10 U

Notes:
NS = no standard
Bold = detected compound above the MDL
N/A = Not Analyzed

Table 3-3 FWGWMP July 2009 Explosive and Propellant Analytical Results

Station ID				LL7mw-005	LL7mw-006	LL8mw-001	LL8mw-002	LL8mw-003	LL8mw-004	LL8mw-005
Sample ID		MCL	Region 9 PRG	FWGLL7mw-005C-1374-GW	FWGLL7mw-006C-1375-GW	FWGLL8mw-001C-1376-GW	FWGLL8mw-002C-1377-GW	FWGLL8mw-003C-1378-GW	FWGLL8mw-004C-1379-GW	FWGLL8mw-005C-1380-GW
Date Collected				7/13/2009	7/13/2009	7/14/2009	7/14/2009	7/14/2009	7/14/2009	7/14/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
1,3,5-Trinitrobenzene	µg/L	NS	1100	0.099 U	**0.038 JB**	**0.031 JB**	**0.037 JB**	0.096 U	0.097 U	**0.044 JB**
1,3-Dinitrobenzene	µg/L	NS	3.6	0.099 U	0.096 U	0.097 U	0.098 U	0.096 U	0.097 U	0.11 U
2,4,6-Trinitrolouene	µg/L	NS	2.2	0.099 U	0.096 U	0.097 U	0.098 U	0.096 U	0.097 U	0.11 U
2,4-Dinitrotoluene	µg/L	NS	73	0.099 U	0.096 U	0.097 U	0.098 U	0.096 U	0.097 U	0.11 U
2,6-Dinitrotoluene	µg/L	NS	36	0.099 U	0.096 U	0.097 U	0.098 U	0.096 U	0.097 U	0.11 U
2-Amino-4,6-dinitrotoluene	µg/L	NS	NS	0.099 U	0.096 U	0.097 U	0.098 U	0.096 U	0.097 U	0.11 U
2-Nitrotoluene	µg/L	NS	0.049	0.50 U	0.48 U	0.48 U	0.49 U	0.48 U	0.48 U	0.54 U
3-Nitrotoluene	µg/L	NS	120	0.50 U	0.48 U	0.48 U	0.49 U	0.48 U	0.48 U	0.54 U
4-Amino-2,6-Dinitrotoluene	µg/L	NS	NS	0.099 U	0.096 U	0.097 U	0.098 U	0.096 U	0.097 U	0.11 U
4-Nitrotoluene	µg/L	NS	0.66	0.50 U	0.48 U	0.48 U	0.49 U	0.48 U	0.48 U	0.54 U
HMX	µg/L	NS	1800	0.099 U	**0.058 J**	0.097 U	0.098 U	0.096 U	0.097 U	0.11 U
Nitrobenzene	µg/L	NS	3.4	0.099 U	0.096 U	0.097 U	0.098 U	0.096 U	0.097 U	0.11 U
Nitrocellulose	mg/L	NS	NS	**0.12 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Nitroglycerin	µg/L	NS	4.8	0.64 U	0.62 U	0.63 U	0.64 U	0.62 U	0.63 U	0.70 U
Nitroguanidine	µg/L	NS	NS	20 U	20 U	20 U	20 U	20 U	20 U	20 U
PETN	µg/L	NS	NS	0.64 U	0.62 U	0.63 U	0.64 U	0.62 U	0.63 U	0.70 U
RDX	µg/L	NS	0.61	0.099 U	**0.57**	0.097 U	0.098 U	0.096 U	0.097 U	0.11 U
Tetryl	µg/L	NS	360	0.099 U	0.096 U	0.097 U	0.098 U	0.096 U	0.097 U	0.11 U

Notes:
NS = no standard
Bold = detected compound above the MDL
N/A = Not Analyzed

Table 3-3 FWGWMP July 2009 Explosive and Propellant Analytical Results

Station ID				LL8mw-006	LL9mw-001	LL9mw-002	LL9mw-003	LL9mw-004	LL9mw-005	LL9mw-006
Sample ID		MCL	Region 9 PRG	FWGLL8mw-006C-1381-GW	FWGLL9mw-001C-1382-GW	FWGLL9mw-002C-1383-GW	FWGLL9mw-003C-1384-GW	FWGLL9mw-004C-1385-GW	FWGLL9mw-005C-1386-GW	FWGLL9mw-006C-1387-GW
Date Collected				7/14/2009	7/14/2009	7/14/2009	7/14/2009	7/14/2009	7/14/2009	7/14/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
1,3,5-Trinitrobenzene	µg/L	NS	1100	**0.043 JB**	0.096 U	**0.039 JB**	0.099 U	**0.031 JB**	**0.037 JB**	**0.037 JB**
1,3-Dinitrobenzene	µg/L	NS	3.6	0.11 U	0.096 U	0.10 U	0.099 U	0.097 U	0.096 U	0.11 U
2,4,6-Trinitrolouene	µg/L	NS	2.2	0.11 U	0.096 U	0.10 U	0.099 U	0.097 U	0.096 U	0.11 U
2,4-Dinitrotoluene	µg/L	NS	73	0.11 U	0.096 U	0.10 U	0.099 U	0.097 U	0.096 U	0.11 U
2,6-Dinitrotoluene	µg/L	NS	36	0.11 U	0.096 U	0.10 U	0.099 U	0.097 U	0.096 U	0.11 U
2-Amino-4,6-dinitrotoluene	µg/L	NS	NS	0.11 U	0.096 U	0.10 U	0.099 U	0.097 U	0.096 U	0.11 U
2-Nitrotoluene	µg/L	NS	0.049	0.53 U	0.48 U	0.50 U	0.50 U	0.48 U	0.48 U	0.54 U
3-Nitrotoluene	µg/L	NS	120	0.53 U	0.48 U	0.50 U	0.50 U	0.48 U	0.48 U	0.54 U
4-Amino-2,6-Dinitrotoluene	µg/L	NS	NS	0.11 U	0.096 U	0.10 U	0.099 U	0.097 U	0.096 U	0.11 U
4-Nitrotoluene	µg/L	NS	0.66	0.53 U	0.48 U	0.50 U	0.50 U	0.48 U	0.48 U	0.54 U
HMX	µg/L	NS	1800	0.11 U	0.096 U	0.10 U	0.099 U	0.097 U	0.096 U	0.11 U
Nitrobenzene	µg/L	NS	3.4	0.11 U	0.096 U	0.10 U	0.099 U	0.097 U	0.096 U	0.11 U
Nitrocellulose	mg/L	NS	NS	0.50 U	0.50 U	0.50 U	**0.13 J**	0.50 U	0.50 U	0.50 U
Nitroglycerin	µg/L	NS	4.8	0.69 U	0.62 U	0.66 U	0.64 U	0.63 U	0.62 U	0.70 U
Nitroguanidine	µg/L	NS	NS	20 U	20 U	20 U	20 U	20 U	20 U	20 U
PETN	µg/L	NS	NS	0.69 U	0.62 U	0.66 U	0.64 U	0.63 U	0.62 U	0.70 U
RDX	µg/L	NS	0.61	0.11 U	0.096 U	0.10 U	0.099 U	0.097 U	0.096 U	0.11 U
Tetryl	µg/L	NS	360	0.11 U	0.096 U	0.10 U	0.099 U	0.097 U	0.096 U	0.11 U

Notes:
NS = no standard
Bold = detected compound above the MDL
N/A = Not Analyzed

Table 3-3 FWGWMP July 2009 Explosive and Propellant Analytical Results

Station ID				LL9mw-007	LL10mw-001	LL10mw-002	LL10mw-003	LL10mw-004	LL10mw-005	LL10mw-006
Sample ID		MCL	Region 9 PRG	FWGLL9mw-007C-1388-GW	FWGLL10mw-001C-1389-GW	FWGLL10mw-002C-1390-GW	FWGLL10mw-003C-1391-GW	FWGLL10mw-004C-1392-GW	FWGLL10mw-005C-1393-GW	FWGLL10mw-006C-1394-GW
Date Collected				7/14/2009	7/14/2009	7/14/2009	7/14/2009	7/15/2009	7/15/2009	7/15/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
1,3,5-Trinitrobenzene	µg/L	NS	1100	**0.044 JB**	**0.039 JB**	0.096 U	0.098 U	0.099 U	0.099 U	**0.035 JB**
1,3-Dinitrobenzene	µg/L	NS	3.6	0.10 U	0.10 U	0.096 U	0.098 U	0.099 U	0.099 U	0.10 U
2,4,6-Trinitrolouene	µg/L	NS	2.2	0.10 U	0.10 U	0.096 U	0.098 U	0.099 U	0.099 U	0.10 U
2,4-Dinitrotoluene	µg/L	NS	73	0.10 U	0.10 U	0.096 U	0.098 U	0.099 U	0.099 U	0.10 U
2,6-Dinitrotoluene	µg/L	NS	36	0.10 U	0.10 U	0.096 U	0.098 U	0.099 U	0.099 U	0.10 U
2-Amino-4,6-dinitrotoluene	µg/L	NS	NS	0.10 U	0.10 U	0.096 U	0.098 U	0.099 U	0.099 U	0.10 U
2-Nitrotoluene	µg/L	NS	0.049	0.52 U	0.52 U	0.48 U	0.49 U	0.50 U	0.50 U	0.52 U
3-Nitrotoluene	µg/L	NS	120	0.52 U	0.52 U	0.48 U	0.49 U	0.50 U	0.50 U	0.52 U
4-Amino-2,6-Dinitrotoluene	µg/L	NS	NS	0.10 U	0.10 U	0.096 U	0.098 U	0.099 U	0.099 U	0.10 U
4-Nitrotoluene	µg/L	NS	0.66	0.52 U	0.52 U	0.48 U	0.49 U	0.50 U	0.50 U	0.52 U
HMX	µg/L	NS	1800	0.10 U	0.10 U	0.096 U	0.098 U	0.099 U	0.099 U	0.10 U
Nitrobenzene	µg/L	NS	3.4	0.10 U	**0.073 J**	0.096 U	0.098 U	0.099 U	0.099 U	0.10 U
Nitrocellulose	mg/L	NS	NS	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Nitroglycerin	µg/L	NS	4.8	0.67 U	0.68 U	0.62 U	0.64 U	0.64 U	0.64 U	0.68 U
Nitroguanidine	µg/L	NS	NS	20 U	20 U	20 U	20 U	20 U	20 U	20 U
PETN	µg/L	NS	NS	0.67 U	0.68 U	0.62 U	0.64 U	0.64 U	0.64 U	0.68 U
RDX	µg/L	NS	0.61	0.10 U	0.10 U	0.096 U	0.098 U	0.099 U	0.099 U	0.10 U
Tetryl	µg/L	NS	360	0.10 U	0.10 U	0.096 U	0.098 U	0.099 U	0.099 U	0.10 U

Notes:
NS = no standard
Bold = detected compound above the MDL
N/A = Not Analyzed

Table 3-3 FWGWMP July 2009 Explosive and Propellant Analytical Results

Station ID				LL11mw-001	LL11mw-003	LL11mw-004	LL11mw-005	LL11mw-006	LL11mw-008
Sample ID		MCL	Region 9 PRG	FWGLL11mw-001C-1395-GW	FWGLL11mw-003C-1396-GW	FWGLL11mw-004C-1397-GW	FWGLL11mw-005C-1398-GW	FWGLL11mw-006C-1399-GW	FWGLL11mw-008C-1400-GW
Date Collected				7/15/2009	7/15/2009	7/15/2009	7/15/2009	7/15/2009	7/15/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units								
1,3,5-Trinitrobenzene	µg/L	NS	1100	0.097 U	0.096 U	0.10 U	0.097 U	0.096 U	0.10 U
1,3-Dinitrobenzene	µg/L	NS	3.6	0.097 U	0.096 U	0.10 U	0.097 U	0.096 U	0.10 U
2,4,6-Trinitrolouene	µg/L	NS	2.2	0.097 U	0.096 U	0.10 U	0.097 U	0.096 U	0.10 U
2,4-Dinitrotoluene	µg/L	NS	73	0.097 U	0.096 U	0.10 U	0.097 U	0.096 U	0.10 U
2,6-Dinitrotoluene	µg/L	NS	36	0.097 U	0.096 U	0.10 U	0.097 U	0.096 U	0.10 U
2-Amino-4,6-dinitrotoluene	µg/L	NS	NS	0.097 U	0.096 U	0.10 U	0.097 U	0.096 U	0.10 U
2-Nitrotoluene	µg/L	NS	0.049	0.48 U	0.48 U	0.50 U	0.48 U	0.48 U	0.51 U
3-Nitrotoluene	µg/L	NS	120	0.48 U	0.48 U	0.50 U	0.48 U	0.48 U	0.51 U
4-Amino-2,6-Dinitrotoluene	µg/L	NS	NS	0.097 U	0.096 U	0.10 U	0.097 U	0.096 U	0.10 U
4-Nitrotoluene	µg/L	NS	0.66	0.48 U	0.48 U	0.50 U	0.48 U	0.48 U	0.51 U
HMX	µg/L	NS	1800	0.097 U	0.096 U	0.10 U	0.097 U	0.096 U	0.10 U
Nitrobenzene	µg/L	NS	3.4	0.097 U	0.096 U	0.10 U	0.097 U	0.096 U	0.10 U
Nitrocellulose	mg/L	NS	NS	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Nitroglycerin	µg/L	NS	4.8	0.63 U	0.62 U	0.65 U	0.63 U	0.62 U	0.66 U
Nitroguanidine	µg/L	NS	NS	20 U	20 U	20 U	20 U	20 U	20 U
PETN	µg/L	NS	NS	0.63 U	0.62 U	0.65 U	0.63 U	0.62 U	0.66 U
RDX	µg/L	NS	0.61	0.097 U	0.096 U	0.10 U	0.097 U	0.096 U	0.10 U
Tetryl	µg/L	NS	360	0.097 U	0.096 U	0.10 U	0.097 U	0.096 U	0.10 U

Notes:
NS = no standard
Bold = detected compound above the MDL
N/A = Not Analyzed

Table 3-3 FWGWMP July 2009 Explosive and Propellant Analytical Results

Station ID				LL11mw-009	LL11mw-010	ASYmw-001	ASYmw-002	ASYmw-003	ASYmw-004
Sample ID		MCL	Region 9 PRG	FWGLL11mw-009C-1401-GW	FWGLL11mw-010C-1402-GW	FWGASYmw-001C-1403-GW	FWGASYmw-002C-1404-GW	FWGASYmw-003C-1405-GW	FWGASYmw-004C-1406-GW
Date Collected				7/15/2009	7/15/2009	7/15/2009	7/15/2009	7/15/2009	7/15/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units								
1,3,5-Trinitrobenzene	µg/L	NS	1100	0.096 U	**0.040 JB**	0.097 U	0.096 U	0.096 U	0.096 U
1,3-Dinitrobenzene	µg/L	NS	3.6	0.096 U	0.12 U	0.097 U	0.096 U	0.096 U	0.096 U
2,4,6-Trinitrolouene	µg/L	NS	2.2	0.096 U	0.12 U	0.097 U	0.096 U	0.096 U	0.096 U
2,4-Dinitrotoluene	µg/L	NS	73	0.096 U	0.12 U	0.097 U	0.096 U	0.096 U	0.096 U
2,6-Dinitrotoluene	µg/L	NS	36	0.096 U	0.12 U	0.097 U	0.096 U	0.096 U	0.096 U
2-Amino-4,6-dinitrotoluene	µg/L	NS	NS	0.096 U	0.12 U	0.097 U	0.096 U	0.096 U	0.096 U
2-Nitrotoluene	µg/L	NS	0.049	0.48 U	0.58 U	0.48 U	0.48 U	0.48 U	0.48 U
3-Nitrotoluene	µg/L	NS	120	0.48 U	0.58 U	0.48 U	0.48 U	0.48 U	0.48 U
4-Amino-2,6-Dinitrotoluene	µg/L	NS	NS	0.096 U	0.12 U	0.097 U	0.096 U	0.096 U	0.096 U
4-Nitrotoluene	µg/L	NS	0.66	0.48 U	0.58 U	0.48 U	0.48 U	0.48 U	0.48 U
HMX	µg/L	NS	1800	0.096 U	0.12 U	0.097 U	0.096 U	0.096 U	0.096 U
Nitrobenzene	µg/L	NS	3.4	0.096 U	**0.077 J**	0.097 U	0.096 U	0.096 U	0.096 U
Nitrocellulose	mg/L	NS	NS	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Nitroglycerin	µg/L	NS	4.8	0.62 U	0.76 U	0.63 U	0.62 U	0.62 U	0.62 U
Nitroguanidine	µg/L	NS	NS	20 U	20 U	20 U	20 U	20 U	20 U
PETN	µg/L	NS	NS	0.62 U	0.76 U	0.63 U	0.62 U	0.62 U	0.62 U
RDX	µg/L	NS	0.61	0.096 U	0.12 U	0.097 U	0.096 U	0.096 U	0.096 U
Tetryl	µg/L	NS	360	0.096 U	0.12 U	0.097 U	0.096 U	0.096 U	0.096 U

Notes:
NS = no standard
Bold = detected compound above the MDL
N/A = Not Analyzed

Table 3-3 FWGWMP July 2009 Explosive and Propellant Analytical Results

Station ID				ASYmw-005	ASYmw-006	ASYmw-007	ASYmw-008	ASYmw-009	ASYmw-010
Sample ID		MCL	Region 9 PRG	FWGASYmw-005C-1407-GW	FWGASYmw-006C-1408-GW	FWGASYmw-007C-1409-GW	FWGASYmw-008C-1410-GW	FWGASYmw-009C-1411-GW	FWGASYmw-010C-1412-GW
Date Collected				7/15/2009	7/16/2009	7/16/2009	7/16/2009	7/16/2009	7/16/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units								
1,3,5-Trinitrobenzene	µg/L	NS	1100	0.097 U	0.097 U	0.10 U	0.097 U	0.096 U	0.099 U
1,3-Dinitrobenzene	µg/L	NS	3.6	0.097 U	0.097 U	0.10 U	0.097 U	0.096 U	0.099 U
2,4,6-Trinitrolouene	µg/L	NS	2.2	0.097 U	0.097 U	0.10 U	0.097 U	0.096 U	0.099 U
2,4-Dinitrotoluene	µg/L	NS	73	0.097 U	0.097 U	0.10 U	0.097 U	0.096 U	0.099 U
2,6-Dinitrotoluene	µg/L	NS	36	0.097 U	0.097 U	0.10 U	0.097 U	0.096 U	0.099 U
2-Amino-4,6-dinitrotoluene	µg/L	NS	NS	0.097 U	0.097 U	0.10 U	0.097 U	0.096 U	0.099 U
2-Nitrotoluene	µg/L	NS	0.049	0.48 U	0.48 U	0.51 U	0.48 U	0.48 U	0.50 U
3-Nitrotoluene	µg/L	NS	120	0.48 U	0.48 U	0.51 U	0.48 U	0.48 U	0.50 U
4-Amino-2,6-Dinitrotoluene	µg/L	NS	NS	0.097 U	0.097 U	0.10 U	0.097 U	0.096 U	0.099 U
4-Nitrotoluene	µg/L	NS	0.66	0.48 U	0.48 U	0.51 U	0.48 U	0.48 U	0.50 U
HMX	µg/L	NS	1800	0.097 U	0.097 U	0.10 U	0.097 U	0.096 U	0.099 U
Nitrobenzene	µg/L	NS	3.4	**0.053 J**	0.097 U	0.10 U	**0.084 J**	0.096 U	0.099 U
Nitrocellulose	mg/L	NS	NS	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Nitroglycerin	µg/L	NS	4.8	0.63 U	0.63 U	0.66 U	0.63 U	0.62 U	0.64 U
Nitroguanidine	µg/L	NS	NS	20 U	20 U	20 U	20 U	20 U	20 U
PETN	µg/L	NS	NS	0.63 U	0.63 U	0.66 U	0.63 U	0.62 U	0.64 U
RDX	µg/L	NS	0.61	0.097 U	0.097 U	0.10 U	0.097 U	0.096 U	0.099 U
Tetryl	µg/L	NS	360	0.097 U	0.097 U	0.10 U	0.097 U	0.096 U	0.099 U

Notes:
NS = no standard
Bold = detected compound above the MDL
N/A = Not Analyzed

Table 3-3 FWGWMP July 2009 Explosive and Propellant Analytical Results

Data Qualifiers

Data qualifier flags are used in an effort to describe the quality of each piece of data for each constituent. These flags are letter codes appended to the numerical data. The following data qualifiers are specified in the USACE Louisville Chemistry Guidelines (LCG). For a complete explanation of qualifiers used for each constituent please refer to the Data Verification Summaries in Appendix D.

U- The analyte was analyzed for but not detected. The numerical value preceding the U is the associated reporting limit.

J- The identification of the analyte is acceptable, but the quality assurance criteria indicate that the quantitative values may be outside the normal expected range of precision (i.e., the quantitative value is estimated). Examples include:

- Results detected above the laboratory MDL but less than the laboratory reporting limit.
- MS/MSD percent recoveries outside the acceptance criteria.
- Laboratory control sample (LCS) percent recoveries outside acceptance criteria.

R- Data are considered to be rejected and shall not be used. This flag denotes the failure of quality control criteria such that it cannot be determined if the analyte is present or absent from the sample [e.g., the method reporting limit (MRL) verification standard was below quality control guidelines; associated sample results that were non-detect are unusable].

UJ- This flag is a combination of the U and J qualifiers which indicate that the analyte is not present. The reported value is considered to be an estimated reporting limit (RL).

B- The B flag is used for both organic and inorganic analyses when the analyte is found in the method blank or any of the field blanks. This designation overrides the Contract Laboratory Program (CLP) “B” designation when used by the laboratory as an estimated value for inorganics.

3.2.2 Inorganic Elements

Inorganic elements analytical results are presented in Table 3-4. The inorganics detected in the samples included: aluminum, antimony, arsenic, barium, cadmium, calcium, cobalt, iron, magnesium, manganese, nickel, potassium, sodium, vanadium, and zinc. The inorganic elements that were detected were compared to facility-wide background levels, and against elements that are considered as essential nutrients to determine if they are to be considered as Site Related Contaminants (SRCs). Calcium, magnesium, iron, potassium, and sodium were eliminated as potential SRCs because they are considered as essential nutrients. Site-specific background levels for inorganic elements are presented in Table 3-5. The inorganic elements that were detected were compared to the appropriate background criteria to determine if they were SRCs. The following inorganic elements were detected above the method detection limits and the background levels reported in Table 3-5:

Aluminum

- Bedrock Zone –LL6mw-005 (143 μg/L), LL9mw-006 (24.0 μg/L J). The Groundwater Bedrock Zone Background Criteria (filtered) is 0 μg/L.
- Unconsolidated Zone – LL6mw-006 (195 μg/L) LL8mw-003 (25.9 μg/L J), LL10mw-006 (21.2 μg/L J), LL11mw-005 (66.2 μg/L), LL11mw-010 (59.0 μg/L. The Groundwater Unconsolidated Zone Background Criteria (filtered) is 0 μg/L.
  There MCL for aluminum is 200 μg/L. The Region 9 PRG is 36,000 μg/L.

Antimony

- Bedrock Zone – LL9mw-005 (2.8 μg/L J). The Groundwater Bedrock Zone Background Criteria (filtered) is 0 μg/L.
- Unconsolidated Zone – None. The Groundwater Unconsolidated Zone Background Criteria (filtered) is 0 μg/L.
  The MCL for antimony is 6 μg/L. The Region 9 PRG is 15 μg/L.

Arsenic

- Bedrock Zone – LL6mw-005 (45.2 μg/L), LL9mw-002 (4.2 μg/L J),ASYmw-003 (4.9 μg/L J), ASYmw-004 (19.0 μg/L).ASYmw-006 (15.2 μg/L). The Groundwater Bedrock Zone Background Criteria (filtered) is 0 μg/L.
- Unconsolidated Zone – ASYmw-008 (15.5 μg/L), ASYmw-010 (43.0 μg/L) The Groundwater Unconsolidated Zone Background Criteria (filtered) is 11.7 μg/L.
  The MCL for arsenic is 10 μg /L. The Region 9 PRG is 0.045 μg/L.

Cadmium

- Bedrock Zone: - LL6mw-007 (2.8 μg/L J), LL7mw-006 (0.31 μg/L J). The Groundwater Bedrock Zone Background Criteria (filtered) is 0 μg/L.
- Unconsolidated Zone: - LL6mw-006 (0.50 μg/L J), LL11mw-004 (3.2 μg/L). The Groundwater Unconsolidated Zone Background Criteria (filtered) is 0 μg/L.
  The MCL for cadmium is 5 μg/L. There Region 9 PRG is 18 μg/L.

Cobalt

- Bedrock Zone: - LL7mw-001 (6.0 μg/L), LL7mw-003 (5.2 μg/L J), LL7mw-004 (6.7 μg/L), LL7mw-005 (7.0 μg/L), LL7mw-006 (1.8 μg/L J), LL9mw-004 (5.1 μg/L J), LL9mw-006 (2.2 μg/L J), LL9mw-007 (6.5 μg/L).LL10mw-002 (3.9 μg/L J). The Groundwater Bedrock Zone Background Criteria (filtered) is 0 μg/L.
- Unconsolidated Zone: - None The Groundwater Unconsolidated Zone Background Criteria (filtered) is 0 μg/L.
  There is no MCL for cobalt. The Region 9 PRG is 730 μg/L.

Manganese

- Bedrock Zone: - LL7mw-003 (1,430 μg/L), LL7mw-005 (1,660 μg/L), LL8mw-005 (2,780 μg/L), LL9mw-004 (2,450 μg/L), LL10mw-002 (1,620 μg/L). The Groundwater Bedrock Zone Background Criteria (filtered) is 1,340 μg/L.
- Unconsolidated Zone: - LL11mw-010 (967 μg/L J). The Groundwater Unconsolidated Zone Background Criteria (filtered) is 1,020 μg/L.
  The MCL for Manganese is 50 μg/L. The Region 9 PRG is 880 μg/L.

Nickel

- Bedrock Zone: - None. The Groundwater Bedrock Zone Background Criteria (filtered) is 83.4 μg/L.
- Unconsolidated Zone: - LL11mw-005 (9.9 μg/L J). The Groundwater Unconsolidated Zone Background Criteria (filtered) is 0 μg/L.
  There is no MCL for Nickel. The Region 9 PRG is 730 μg/L.

Vanadium

- Bedrock Zone: - LL9mw-001 (1.1 μg/L J). The Groundwater Bedrock Zone Background Criteria (filtered) is 0 μg/L.
- Unconsolidated Zone: - None. The Groundwater Unconsolidated Zone Background Criteria (filtered) is 0 μg/L. There is no MCL for Vanadium. The Region 9 PRG is 36 μg/L.

Several inorganic compounds were detected at levels exceeding the MCLs and/or Region 9 PRGs. These included manganese, arsenic, cadmium, and iron for wells from all areas sampled. These compounds were also detected at concentrations exceeding the Facility-

Wide Background Criteria for many of the wells. Table 4-1 in Section 4 presents a summary of all inorganic compounds and the associated wells that had detections exceeding MCLs or Region 9 PRGs.

The facility-wide groundwater conditions are still being evaluated, including background levels for all inorganic compounds. This will also include an evaluation of arsenic, iron, and manganese related to exceedances of the MCLs. The elevated concentrations of the subject parameters will be evaluated with respect to Ravenna's Draft Facility-Wide Clean-Up Goals (CUGs). To date there have been no elevated concentrations of the subject parameters found in the groundwater which would pose an immediate threat to human health or the environment. The evaluation of elevated concentrations of COCs is ongoing and includes a geochemical study to better characterize the groundwater quality as it pertains to metals at the site. This study will be completed in 2010. Additionally, further sampling at various facility wells will be conducted in 2010 to further gauge the extent of any contamination in the groundwater.

Table 3-4 FWGWMP July 2009 Inorganics Analytical Results

Station ID				LL6mw-005	LL6mw-006	LL6mw-007	LL7mw-001	LL7mw-002	LL7mw-003	LL7mw-004
Sample ID		MCL	Region 9 PRG	FWGLL6mw-005C-1367-GF	FWGLL6mw-006C-1368-GF	FWGLL6mw-007C-1369-GF	FWGLL7mw-001C-1370-GF	FWGLL7mw-002C-1371-GF	FWGLL7mw-003C-1372-GF	FWGLL7mw-004C-1373-GF
Date Collected				7/13/2009	7/13/2009	7/13/2009	7/13/2009	7/13/2009	7/13/2009	7/13/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
Aluminum	µg/L	200	36000	**143**	**195**	50.0 U	50.0 U	50.0 U	50.0 U	50.0 U
Antimony	µg/L	6	15	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Arsenic	µg/L	10	0.045	**45.2**	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Barium	µg/L	2000	2600	**71.3**	**20.1**	**14.7**	**20.5**	**62.6**	**48.1**	**39.8**
Beryllium	µg/L	4	73	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cadmium	µg/L	5	18	0.50 U	**0.50**	**2.8**	0.50 U	**0.18 J**	0.50 U	0.50 U
Calcium	µg/L	NS	NS	**78500**	**71800**	**54600**	**37200**	**34500**	**15900**	**8160**
Chromium	µg/L	100	110	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cobalt	µg/L	NS	730	5.0 U	5.0 U	5.0 U	**6.0**	5.0 U	**5.2**	**6.7**
Copper	µg/L	1300	1500	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cyanide	mg/L	0.2	0.73	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Iron	µg/L	300	11000	**2520**	**174**	50.0 U	**7850**	50.0 U	**20200**	**19000**
Lead	µg/L	15	NS	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Magnesium	µg/L	NS	NS	**24600**	**27900**	**22400**	**12300**	**7040**	**5630**	**6110**
Manganese	µg/L	50	880	**583**	**97.6**	**395**	**454**	**32.4**	**1430**	**1240**
Mercury	µg/L	2	11	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	µg/L	NS	730	10.0 U	10.0 U	10.0 U	**8.8 J**	**4.2 J**	**6.1 J**	**7.4 J**
Potassium	µg/L	NS	NS	**1060 J**	**1300 J**	**1160 J**	**921 J**	**1820 J**	**1190 J**	**1240 J**
Selenium	µg/L	50	180	5.8 U	4.3 UJ	5.0 U	5.0 U	5.0 U	5.3 U	5.0 U
Silver	µg/L	100	180	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Sodium	µg/L	NS	NS	**8770**	**6620**	**7940**	**5680**	**2280**	**5610**	**14500**
Thallium	µg/L	2	2.4	1.0 U	1.0 U	1.0 U	0.18 UJ	1.0 U	1.0 U	1.0 U
Vanadium	µg/L	NS	36	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Zinc	µg/L	5000	11000	**3.2 JB**	**5.1 JB**	**3.7 JB**	**53.9 J**	**8.1 JB**	**16.2 JB**	**16.8 JB**

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-4 FWGWMP July 2009 Inorganics Analytical Results

Station ID				LL7mw-005	LL7mw-006	LL8mw-001	LL8mw-002	LL8mw-003	LL8mw-004	LL8mw-005	LL8mw-006
Sample ID		MCL	Region 9 PRG	FWGLL7mw-005C-1374-GF	FWGLL7mw-006C-1375-GF	FWGLL8mw-001C-1376-GF	FWGLL8mw-002C-1377-GF	FWGLL8mw-003C-1378-GF	FWGLL8mw-004C-1379-GF	FWGLL8mw-005C-1380-GF	FWGLL8mw-006C-1381-GF
Date Collected				7/13/2009	7/13/2009	7/14/2009	7/14/2009	7/14/2009	7/14/2009	7/14/2009	7/14/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
Aluminum	µg/L	200	36000	50.0 U	50.0 U	50.0 U	50.0 U	**25.9 J**	50.0 U	50.0 U	26.8 UJ
Antimony	µg/L	6	15	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Arsenic	µg/L	10	0.045	5.0 U	5.0 U	5.0 U	**5.6**	**3.5 J**	5.0 U	5.0 U	5.0 U
Barium	µg/L	2000	2600	**151**	**16.7**	**34.2**	**40.9**	**24.9**	**12.9**	**11.0**	**16.2**
Beryllium	µg/L	4	73	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cadmium	µg/L	5	18	0.50 U	**0.31 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Calcium	µg/L	NS	NS	**7010**	**8680**	**93600**	**102000**	**136000**	**84100**	**64400**	**73600**
Chromium	µg/L	100	110	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cobalt	µg/L	NS	730	**7.0**	**1.8 J**	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Copper	µg/L	1300	1500	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cyanide	mg/L	0.2	0.73	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Iron	µg/L	300	11000	50.0 U	**2210**	82.3 U	**3320**	**422**	50.0 U	**760**	50.0 U
Lead	µg/L	15	NS	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Magnesium	µg/L	NS	NS	**3750**	**5560**	**50800**	**40800**	**50300**	**40800**	**22000**	**29800**
Manganese	µg/L	50	880	**1660**	**1280**	**192**	**344**	**389**	**45.7**	**2780**	**5.2 J**
Mercury	µg/L	2	11	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	µg/L	NS	730	**8.8 J**	**8.5 J**	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Potassium	µg/L	NS	NS	**992 J**	**856 J**	**1750 J**	**2420 J**	**3230 J**	**1170 J**	718 UJB	**1560 J**
Selenium	µg/L	50	180	5.0 U	5.0 U	4.8 UJB	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Silver	µg/L	100	180	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Sodium	µg/L	NS	NS	**3070**	**7550**	**49900**	**31100**	**46500**	**24200**	**11300**	**4610**
Thallium	µg/L	2	2.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vanadium	µg/L	NS	36	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Zinc	µg/L	5000	11000	**11.4 JB**	**14.0 JB**	**4.5 JB**	10.0 U	**3.9 JB**	**5.4 JB**	**2.9 JB**	**5.6 JB**

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-4 FWGWMP July 2009 Inorganics Analytical Results

Station ID				LL9mw-001	LL9mw-002	LL9mw-003	LL9mw-004	LL9mw-005	LL9mw-006	LL9mw-007	LL10mw-001
Sample ID		MCL	Region 9 PRG	FWGLL9mw-001C-1382-GF	FWGLL9mw-002C-1383-GF	FWGLL9mw-003C-1384-GF	FWGLL9mw-004C-1385-GF	FWGLL9mw-005C-1386-GF	FWGLL9mw-006C-1387-GF	FWGLL9mw-007C-1388-GF	FWGLL10mw-001C-1389-GF
Date Collected				7/14/2009	7/14/2009	7/14/2009	7/14/2009	7/14/2009	7/14/2009	7/14/2009	7/14/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
Aluminum	µg/L	200	36000	50.0 U	**103**	50.0 U	50.0 U	50.0 U	**24.0 J**	50.0 U	50.0 U
Antimony	µg/L	6	15	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Arsenic	µg/L	10	0.045	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Barium	µg/L	2000	2600	**11.6**	**4.2 J**	**13.9**	**28.8**	**2.8 J**	**55.7**	**12.3**	**2.3 J**
Beryllium	µg/L	4	73	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cadmium	µg/L	5	18	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Calcium	µg/L	NS	NS	**46100**	**17300**	**27300**	**12400**	**11200**	**4360**	**10400**	**74800**
Chromium	µg/L	100	110	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cobalt	µg/L	NS	730	5.0 U	5.0 U	5.0 U	**5.1**	5.0 U	**2.2 J**	**6.5**	5.0 U
Copper	µg/L	1300	1500	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cyanide	mg/L	0.2	0.73	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Iron	µg/L	300	11000	50.0 U	50.0 U	50.0 U	**10600**	50.0 U	**1480**	**7300**	50.0 U
Lead	µg/L	15	NS	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Magnesium	µg/L	NS	NS	**13100**	**7030**	**6790**	**10600**	**4910**	**5200**	**6470**	**27400**
Manganese	µg/L	50	880	**0.68 J**	**52.6**	**20.4**	**2450**	**1.8 J**	**371**	**800**	**1.5 J**
Mercury	µg/L	2	11	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	µg/L	NS	730	10.0 U	**13.1**	10.0 U	**5.7 J**	10.0 U	**10.1**	**15.6**	10.0 U
Potassium	µg/L	NS	NS	**963 J**	**1330 J**	**2680 J**	741 UJB	717 UJB	**1230 J**	**1330 J**	**1030 J**
Selenium	µg/L	50	180	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Silver	µg/L	100	180	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Sodium	µg/L	NS	NS	**3390**	**2050**	**3770**	**4130**	**3430**	**1840**	**2730**	**7860**
Thallium	µg/L	2	2.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vanadium	µg/L	NS	36	**1.1 J**	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Zinc	µg/L	5000	11000	**2.5 JB**	**5.5 JB**	**7.3 JB**	**15.9 JB**	**31.0 JB**	**12.7 JB**	**28.6 JB**	10.0 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-4 FWGWMP July 2009 Inorganics Analytical Results

Station ID				LL10mw-002	LL10mw-003	LL10mw-004	LL10mw-005	LL10mw-006	LL11mw-001	LL11mw-003	LL11mw-004
Sample ID		MCL	Region 9 PRG	FWGLL10mw-002C-1390-GF	FWGLL10mw-003C-1391-GF	FWGLL10mw-004C-1392-GF	FWGLL10mw-005C-1393-GF	FWGLL10mw-006C-1394-GF	FWGLL11mw-001C-1395-GF	FWGLL11mw-003C-1396-GF	FWGLL11mw-004C-1397-GF
Date Collected				7/14/2009	7/14/2009	7/15/2009	7/15/2009	7/15/2009	7/15/2009	7/15/2009	7/15/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
Aluminum	µg/L	200	36000	50.0 U	50.0 U	50.0 U	50.0 U	**21.2 J**	50.0 U	50.0 U	50.0 U
Antimony	µg/L	6	15	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Arsenic	µg/L	10	0.045	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Barium	µg/L	2000	2600	**59.9**	**2.6 J**	**3.1 J**	**4.2 J**	**12.5**	**27.4**	**29.5**	**57.6**
Beryllium	µg/L	4	73	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cadmium	µg/L	5	18	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**3.2**
Calcium	µg/L	NS	NS	**25000**	**53200**	**64600**	**64000**	**18200**	**81400**	**104000**	**81600**
Chromium	µg/L	100	110	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cobalt	µg/L	NS	730	**3.9 J**	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Copper	µg/L	1300	1500	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cyanide	mg/L	0.2	0.73	0.010 U	0.010 U	0.010 UJ	0.010 UJ	0.010 UJ	0.010 UJ	0.010 UJ	0.010 UJ
Iron	µg/L	300	11000	**5800**	50.0 U	50.0 U	50.0 U	50.0 U	50.0 U	68.8 UJ	**157 J**
Lead	µg/L	15	NS	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Magnesium	µg/L	NS	NS	**8140**	**15500**	**18900**	**14800**	**7070**	**27800**	**31000**	**27000**
Manganese	µg/L	50	880	**1620**	10.0 U	**9.7 J**	**5.6 J**	**1.6 J**	**575**	**690**	**609**
Mercury	µg/L	2	11	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	µg/L	NS	730	**6.5 J**	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Potassium	µg/L	NS	NS	**950 J**	676 UJB	673 UJB	684 UJB	**940 J**	**818 J**	**1030 J**	**1140 J**
Selenium	µg/L	50	180	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Silver	µg/L	100	180	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Sodium	µg/L	NS	NS	**10300**	**9950**	**4150**	**3520**	**2620**	**17900**	**10700**	**13000**
Thallium	µg/L	2	2.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vanadium	µg/L	NS	36	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Zinc	µg/L	5000	11000	8.9 UJ	**2.6 JB**	**5.3 JB**	**2.6 JB**	**3.3 JB**	**2.4 JB**	**19.5 JB**	**36.9 J**

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-4 FWGWMP July 2009 Inorganics Analytical Results

Station ID				LL11mw-005	LL11mw-006	LL11mw-008	LL11mw-009	LL11mw-010	ASYmw-001	ASYmw-002	ASYmw-003
Sample ID		MCL	Region 9 PRG	FWGLL11mw-005C-1398-GF	FWGLL11mw-006C-1399-GF	FWGLL11mw-008C-1400-GF	FWGLL11mw-009C-1401-GF	FWGLL11mw-010C-1402-GF	FWGASYmw-001C-1403-GF	FWGASYmw-002C-1404-GF	FWGASYmw-003C-1405-GF
Date Collected				7/15/2009	7/15/2009	7/15/2009	7/15/2009	7/15/2009	7/15/2009	7/15/2009	7/15/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
Aluminum	µg/L	200	36000	**66.2**	50.0 U	50.0 U	50.0 U	**59.0**	50.0 U	50.0 U	50.0 U
Antimony	µg/L	6	15	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Arsenic	µg/L	10	0.045	5.0 U	5.0 U	5.0 U	5.0 U	**5.8**	5.0 U	5.0 U	**4.9 J**
Barium	µg/L	2000	2600	**29.7**	**22.4**	**32.0**	**75.2**	**96.3**	**14.4**	**8.6 J**	**19.8**
Beryllium	µg/L	4	73	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cadmium	µg/L	5	18	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Calcium	µg/L	NS	NS	**8580**	**76300**	**111000**	**84400**	**80200**	**121000**	**78700**	**200000**
Chromium	µg/L	100	110	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cobalt	µg/L	NS	730	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Copper	µg/L	1300	1500	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cyanide	mg/L	0.2	0.73	0.010 UJ	0.010 UJ	0.010 UJ	0.010 UJ	0.010 UJ	0.010 UJ	0.010 UJ	0.010 UJ
Iron	µg/L	300	11000	50.0 UJ	50.0 U	50.0 U	50.0 U	**1420 J**	**300 J**	50.0 U	**2420 J**
Lead	µg/L	15	NS	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Magnesium	µg/L	NS	NS	**4410**	**15600**	**31700**	**27700**	**31500**	**38500**	**16700**	**69900**
Manganese	µg/L	50	880	**35.6**	**0.56 J**	**37.7**	**804**	**967 J**	**895**	**3.9 J**	**532**
Mercury	µg/L	2	11	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	µg/L	NS	730	**9.9 J**	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Potassium	µg/L	NS	NS	545 UJB	656 UJ	**878 J**	**954 J**	**1380 J**	**1090 J**	590 UJB	**1490 J**
Selenium	µg/L	50	180	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Silver	µg/L	100	180	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Sodium	µg/L	NS	NS	**2550**	**6800**	**5390**	**12400**	**17900**	**5980**	**2580**	**27300**
Thallium	µg/L	2	2.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vanadium	µg/L	NS	36	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Zinc	µg/L	5000	11000	**17.0 JB**	**5.1 JB**	10.0 U	10.0 U	**7.8 JB**	**20.4 JB**	10.0 U	**2.6 JB**

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-4 FWGWMP July 2009 Inorganics Analytical Results

Station ID				ASYmw-004	ASYmw-005	ASYmw-006	ASYmw-007	ASYmw-008	ASYmw-009	ASYmw-010
Sample ID		MCL	Region 9 PRG	FWGASYmw-004C-1406-GF	FWGASYmw-005C-1407-GF	FWGASYmw-006C-1408-GF	FWGASYmw-007C-1409-GF	FWGASYmw-008C-1410-GF	FWGASYmw-009C-1411-GF	FWGASYmw-010C-1412-GF
Date Collected				7/15/2009	7/15/2009	7/16/2009	7/16/2009	7/16/2009	7/16/2009	7/16/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
Aluminum	µg/L	200	36000	50.0 U	50.0 U	50.0 U	50.0 U	50.0 U	50.0 U	50.0 U
Antimony	µg/L	6	15	2.0 U	2.0 U	2.0 U	2.0 U	0.32 UJ	2.0 U	2.0 U
Arsenic	µg/L	10	0.045	**19.0**	5.0 U	**15.2**	5.0 U	**15.5**	5.0 U	**43.0**
Barium	µg/L	2000	2600	**10.6**	**27.6**	**13.5**	**20.4**	**17.7**	**24.1**	**52.9**
Beryllium	µg/L	4	73	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cadmium	µg/L	5	18	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Calcium	µg/L	NS	NS	**139000**	**149000**	**113000**	**134000**	**201000**	**196000**	**112000**
Chromium	µg/L	100	110	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cobalt	µg/L	NS	730	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Copper	µg/L	1300	1500	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cyanide	mg/L	0.2	0.73	0.010 UJ	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Iron	µg/L	300	11000	**1760 J**	50.0 U	**1250**	**160**	**357**	50.0 U	**2250**
Lead	µg/L	15	NS	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Magnesium	µg/L	NS	NS	**70200**	**43700**	**70700**	**52900**	**94200**	**72600**	**90600**
Manganese	µg/L	50	880	**200**	**194**	**167**	**186**	**136**	**596**	**96.8**
Mercury	µg/L	2	11	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	µg/L	NS	730	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Potassium	µg/L	NS	NS	**4150 J**	**2080 J**	**2930 J**	**1290 J**	**4290 J**	**1760 J**	**2720 J**
Selenium	µg/L	50	180	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Silver	µg/L	100	180	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Sodium	µg/L	NS	NS	**46400**	**41300**	**38200**	**37100**	**37400**	**23600**	**48300**
Thallium	µg/L	2	2.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vanadium	µg/L	NS	36	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Zinc	µg/L	5000	11000	**4.6 JB**	**2.7 JB**	**4.3 JB**	**6.2 JB**	**3.8 JB**	**3.5 JB**	**5.5 JB**

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-4 FWGWMP July 2009 Inorganics Analytical Results

Data Qualifiers

Data qualifier flags are used in an effort to describe the quality of each piece of data for each constituent. These flags are letter codes appended to the numerical data. The following data qualifiers are specified in the USACE Louisville Chemistry Guidelines (LCG). For a complete explanation of qualifiers used for each constituent please refer to the Data Verification Summaries in Appendix D.

U- The analyte was analyzed for but not detected. The numerical value preceding the U is the associated reporting limit.

J- The identification of the analyte is acceptable, but the quality assurance criteria indicate that the quantitative values may be outside the normal expected range of precision (i.e., the quantitative value is estimated). Examples include:

- Results detected above the laboratory MDL but less than the laboratory reporting limit.
- MS/MSD percent recoveries outside the acceptance criteria.
- Laboratory control sample (LCS) percent recoveries outside acceptance criteria.

R- Data are considered to be rejected and shall not be used. This flag denotes the failure of quality control criteria such that it cannot be determined if the analyte is present or absent from the sample [e.g., the method reporting limit (MRL) verification standard was below quality control guidelines; associated sample results that were non-detect are unusable].

UJ- This flag is a combination of the U and J qualifiers which indicate that the analyte is not present. The reported value is considered to be an estimated reporting limit (RL).

B- The B flag is used for both organic and inorganic analyses when the analyte is found in the method blank or any of the field blanks. This designation overrides the Contract Laboratory Program (CLP) “B” designation when used by the laboratory as an estimated value for inorganics.

Table 3-5 RVAAP Facility-wide Background Criteria, (SAIC, 2001b)

Media Units	Surface Soil mg/kg	Subsurface Soil mg/kg	Sediment mg/kg	Surface Water ug/L	Groundwater Bedrock Zone Filtered ug/L	Groundwater Bedrock Zone Unfiltered ug/L	Groundwater Unconsolidated Zone Filtered ug/L	Groundwater Unconsolidated Unfiltered ug/L
Analyte								
Cyanide	0	0	0	0	0	0	0	0
Aluminum	17700	19500	13900	3370	0	9410	0	0
Antimony	0.96	0.96	0	0	0	0	0	0
Arsenic	15.4	19.8	19.5	3.2	0	19.1	11.7	11.7
Barium	88.4	124	123	47.5	256	241	82.1	82.1
Beryllium	0.88	0.88	0.38	0	0	0	0	0
Cadmium	0	0	0	0	0	0	0	0
Calcium	15800	35500	5510	41400	53100	48200	115000	115000
Chromium	17.4	27.2	18.1	0	0	19.5	7.3	7.3
Cobalt	10.4	23.2	9.1	0	0	0	0	0
Copper	17.7	32.3	27.6	7.9	0	17	0	0
Iron	23100	35200	28200	2560	1430	21500	279	279
Lead	26.1	19.1	27.4	0	0	23	0	0
Magnesium	3030	8790	2760	10800	15000	13700	43300	43300
Manganese	1450	3030	1950	391	1340	1260	1020	1020
Mercury	0.036	0.044	0.059	0	0	0	0	0
Nickel	21.1	60.7	17.7	0	83.4	85.3	0	0
Potassium	927	3350	1950	3170	5770	6060	2890	2890
Selenium	104	105	107	0	0	0	0	0
Silver	0	0	0	0	0	0	0	0
Sodium	123	145	112	21300	51400	49700	45700	45700
Thallium	0	0.91	0.89	0	0	0	0	0
Vanadium	31.1	37.6	26.1	0	0	15.5	0	0
Zinc	61.8	93.3	532	42	52.3	193	60.9	60.9

3.2.3 Volatile Organic Compounds (VOCs)

VOC analytical results are summarized in Table 3-6. The following VOCs were detected above the MDL for this sampling event.

- Acetone – LL11mw-005 (1.2 μg/L J B). There is no MCL for acetone. The Region 9 PRG is 5,500 μg/L.

- Chloroform – LL10mw-001 (0.22 μg/L J), LL10mw-003 (0.29 μg/L J). There is no MCL for chloroform. The Region 9 PRG is 0.17.

- Chloromethane – LL11mw-008 (0.69 μg/L J). There is no MCL for chloromethane. The Region 9 PRG is 160 μg/L.

- 1,1-Dichloroethane – LL7mw-001 (2.9 μg/L). There is no MCL for 1,1-dichloroethane. The Region 9 PRG is 810 μg/L.

- 1,1-Dichloroethene – LL7mw-001 (6.4 μg/L). The MCL for 1,1-dichlorethene is 7 μg/L. The Region 9 PRG is 340 μg/L.

- Carbon Tetrachloride – LL10mw-001 (1.3 μg/L), LL10mw-003 (2.4 μg/L). The MCL for carbon tetrachloride is 5 μg/L. The Region 9 PRG is 0.17 μg/L.

- 1,1,1-Trichloroethane – LL7mw-001 (10 μg/L J). There is no MCL for 1,1,1-trichloroethane. The Region 9 PRG is 3,200 μg/L.

- Tetrachloroethene – LL11mw-009 (3.8 μg/L). The MCL for tetrachloroethene is 5 μg/L. The Region 9 PRG is 0.1 μg/L.

As shown in Table 3-6, the only VOCs detected at levels above the MCLs or Region 9 PRGs during the July 2009 event were:

- Chloroform at a concentration exceeding the Region 9 PRG of 0.17 μg/L [LL10mw-001 (0.22 μg/L J) and LL10mw-003 (0.29 μg/L J)].

- Carbon Tetrachloride at a concentration exceeding the Region 9 PRG of 0.17 μg/L [LL10mw-001 (1.3 μg/L) and LL10mw-003 (2.5 μg/L)].

- Tetrachloroethene at a concentration exceeding the Region 9 PRG of 0.1 μg/L [LL11mw-009 (3.8 μg/L)].

3.2.4 Semivolatile Organic Compounds (SVOCs)

SVOC analytical results are summarized in Table 3-7. The following SVOCs were detected above the MDL for this sampling event. Note that 2,4-Dinitrotoluene and 2,6-

Dinitrotoluene are analyzed and reported under both SW-846 Methods 8330 (explosives and propellants and 8270 (SVOCs).

- Benzoic Acid – ASYmw-005 (12 µg/L). There is no MCL or benzoic acid. The Region 9 PRG is 150,000 µg/L.

- Bis(2-Ethylhexyl)phthalate –LL6mw-007 (1.1 µg/L J B), LL7mw-001 (3.6 µg/L J B), LL7mw-003 (3.3 µg/L J B), LL7mw-004 (1.2 µg/L J B), LL7mw-005 (1.3 µg/L J B), LL7mw-006 (1.4 µg/L J B), LL8mw-001 (2.9 µg/L J B), LL8mw-002 (1.5 µg/L J B), LL8mw-003 (4.3 µg/L J B), LL8mw-004 (2.9 µg/L J B), LL8mw-006 (0.83 µg/L J B), LL9mw-001 (1.2 µg/L J B), LL9mw-002 (1.0 µg/L J B), LL9mw-003 (1.8 µg/L J B), LL9mw-004 (0.94 µg/L J B), LL9mw-005 (1.2 µg/L J B), LL9mw-006 (0.95 µg/L J B), LL9mw-007 (4.1 µg/L J B), LL10mw-001 (1.8 µg/L J B), LL10mw-002 (4.0 µg/L J B), LL10mw-003 (0.83 µg/L J B), LL10mw-004 (2.2 µg/L J B), LL10mw-005 (3.5 µg/L J B), LL10mw-006 (0.98 µg/L J B), LL11mw-001 (1.1 µg/L J B), LL11mw-003 (1.2 µg/L J B), LL11mw-004 (1.3 µg/L J), LL11mw-005 (1.0 µg/L J B), LL11mw-006 (2.9 µg/L J B), LL11mw-008 (3.5 µg/L J B), LL11mw-009 (5.9 µg/L J B), LL11mw-010 (1.1 µg/L J B), ASYmw-001 (1.1 µg/L J B), ASYmw-002 (1.3 µg/L J B), ASYmw-003 (1.5 µg/L J B), ASYmw-004 (1.6 µg/L J B), ASYmw-005 (1.9 µg/L J B), ASYmw-006 (1.7 µg/L J B), ASYmw-007 (1.1 µg/L J B), ASYmw-008 (1.1 µg/L J B), ASYmw-009 (2.2 µg/L J B), ASYmw-010 (2.8 µg/L J B). There is no MCL for Bis(2-Ethylhexyl)phthalate. The Region 9 PRG is 4.8 µg/L.

Note that method blanks associated with many of these samples had contamination for bis(2-ethylhexyl)phthalate below 1/2 the method reporting limit (MRL). The low level detections (i.e. < RL) in these samples are therefore attributed to low level laboratory contamination and were flagged with a B qualifier.

As shown in Table 3-7 the only SVOC detected at levels above the Region 9 PRGs was bis(2-Ethylhexyl)phthalate at the following well:

- LL11mw-009 (5.9 µg/L J B). The Region 9 PRG is 4.8 µg/L.

3.2.5 Pesticides and Polychlorinated Biphenyls (PCBs)

Pesticides and PCBs analytical results are summarized in Table 3-8. The following pesticides and PCBs were detected above the MDL for this sampling event.

- beta-BHC – LL7mw-004 (0.022 µg/L J), LL7mw-006 (0.017 µg/L J), LL8mw-003 (0.015 µg/L J), LL8mw-004 (0.0099 µg/L J), LL8mw-015 µg/L J), LL9mw-003 (0.014 µg/L J), LL9mw-004 (0.013 µg/L J), LL9mw-005 (0.0088 µg/L J), LL9mw-006 (0.15 µg/L J), LL9mw-007 (0.016 µg/L J), LL10mw-001 (0.015 µg/L J), LL11mw-009 (0.029 µg/L J), ASYmw-008 (0.019 µg/L J), ASYmw-009

(0.016 μg/LJ). There is no MCL for beta-BHC. The Region 9 PRG is 0.037 μg/L.

As shown in Table 3-8 no pesticides/PCBs were detected at levels above the Region 9 PRGs.

3.2.6 Perchlorates

The perchlorate analytical results are summarized in Table 3-9. The following wells had perchlorate detected above the MDL for this sampling event.

ASYmw-001 (0.022 μg/L J)
ASYmw-002 (0.064 μg/L)
ASYmw-003 (0.024 μg/L J)
ASYmw-0040.021 μg/L)
ASYmw-005 (0.060 μg/L)
ASYmw-006 (0.022 μg/L J)
ASYmw-007 (0.039 μg/L J)
ASYmw-008 (0.031 μg/L J)
ASYmw-009 (0.024 μg/L J)
ASYmw-010 (0.028 μg/L J)
LL6mw-005 (0.022 μg/L J)
LL6mw-006 (0.027 μg/L J)
LL6mw-006 (0.096 μg/L)
LL7mw-001 (0.017 μg/L J)
LL7mw-002 (0.11 μg/L)
LL7mw-003 (0.0090 μg/L J)
LL7mw-004 (0.023 μg/L J)
LL7mw-005 (0.023 μg/L J)
LL7mw-006 (0.031 μg/L)
LL8mw-001 (0.019 μg/L J)
LL8mw-002 (0.025 μg/L J)
LL8mw-003 (0.019 μg/L J)
LL8mw-004 (0.013 μg/L J)
LL8mw-006 (0.050 μg/L)
LL9mw-001 (0.081 μg/L)
LL9mw-002 (0.092 μg/L)
LL9mw-003 (0.095 μg/L)
LL9mw-005 (0.044 μg/L J)
LL9mw-006 (0.051 μg/L)
LL9mw-007 (0.025 μg/L J)
LL10mw-001 (0.069 μg/L)
LL10mw-002 (0.014 μg/L J)
LL10mw-003 (0.075 μg/L)
LL10mw-005 (0.052 μg/L)
LL10mw-006 (0.054 μg/L)
LL11mw-001 (0.019 μg/L J)
LL11mw-003 (0.019 μg/L J)
LL11mw-005 (0.045 μg/L J)
LL11mw-006 (0.17 μg/L)
LL11mw-008 (0.035 μg/L J)
LL11mw-009 (0.0089 μg/L)

None of detected perchlorate concentrations exceeded the Region 9 PRG of 3.6 μg/L for the July 2008 event. There is no MCL for perchlorate. On February 18, 2005, the USEPA established a Drinking Water Equivalent Level (DWEL) for perchlorate which is set at 24.5 μg/L.

Table 3-6 FWGWMP July 2009 VOCs Analytical Results

Station ID				LL6mw-005	LL6mw-006	LL6mw-007	LL7mw-001	LL7mw-002	LL7mw-003	LL7mw-004
Sample ID		MCL	Region 9 PRG	FWGLL6mw-005C-1367-GW	FWGLL6mw-006C-1368-GW	FWGLL6mw-007C-1369-GW	FWGLL7mw-001C-1370-GW	FWGLL7mw-002C-1371-GW	FWGLL7mw-003C-1372-GW	FWGLL7mw-004C-1373-GW
Date Collected				7/13/2009	7/13/2009	7/13/2009	7/13/2009	7/13/2009	7/13/2009	7/13/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
1,1,1-Trichloroethane	µg/L	NS	3200	1.0 U	1.0 U	1.0 U	**10**	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	NS	0.052	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	NS	0.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	NS	810	1.0 U	1.0 U	1.0 U	**2.9**	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene (total)	µg/L	7	340	1.0 U	1.0 U	1.0 U	**6.4**	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane	µg/L	NS	0.0056	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	5	0.12	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethene (total)	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	5	0.16	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	µg/L	NS	7000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	µg/L	NS	NS	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone	µg/L	NS	NS	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetone	µg/L	NS	5500	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Benzene	µg/L	5	0.35	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	NS	0.18	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	NS	8.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	µg/L	NS	8.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	NS	1000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	µg/L	5	0.17	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	NS	110	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	NS	4.6	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ
Chloroform	µg/L	NS	0.17	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	µg/L	NS	160	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ
cis-1,2-dichloroethene	µg/L	70	61	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	NS	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	NS	0.13	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	700	1300	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m&p-xylenes	µg/L	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methylene chloride	µg/L	NS	4.3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
o-xylene	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	100	1600	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	5	0.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1000	720	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Xylenes	µg/L	10000	210	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
trans-1,2-dichloroethene	µg/L	100	120	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	NS	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	5	0.028	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	2	0.02	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ

Notes:

NS = no standard

Bold = detected compound above the MDL

Table 3-6 FWGWMP July 2009 VOCs Analytical Results

Station ID				LL7mw-005	LL7mw-006	LL8mw-001	LL8mw-002	LL8mw-003	LL8mw-004	LL8mw-005	LL8mw-006
Sample ID		MCL	Region 9 PRG	FWGLL7mw-005C-1374-GW	FWGLL7mw-006C-1375-GW	FWGLL8mw-001C-1376-GW	FWGLL8mw-002C-1377-GW	FWGLL8mw-003C-1378-GW	FWGLL8mw-004C-1379-GW	FWGLL8mw-005C-1380-GW	FWGLL8mw-006C-1381-GW
Date Collected				7/13/2009	7/13/2009	7/14/2009	7/14/2009	7/14/2009	7/14/2009	7/14/2009	7/14/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
1,1,1-Trichloroethane	µg/L	NS	3200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	NS	0.052	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	NS	0.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	NS	810	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene (total)	µg/L	7	340	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane	µg/L	NS	0.0056	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	5	0.12	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethene (total)	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	5	0.16	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	µg/L	NS	7000	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	µg/L	NS	NS	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone	µg/L	NS	NS	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetone	µg/L	NS	5500	10 UJ	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	µg/L	5	0.35	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	NS	0.18	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	NS	8.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	µg/L	NS	8.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	NS	1000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	µg/L	5	0.17	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	NS	110	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	NS	4.6	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ
Chloroform	µg/L	NS	0.17	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	µg/L	NS	160	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ
cis-1,2-dichloroethene	µg/L	70	61	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	NS	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	NS	0.13	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	700	1300	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m&p-xylenes	µg/L	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methylene chloride	µg/L	NS	4.3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
o-xylene	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	100	1600	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	5	0.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1000	720	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Xylenes	µg/L	10000	210	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
trans-1,2-dichloroethene	µg/L	100	120	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	NS	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	5	0.028	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	2	0.02	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ

Notes:

NS = no standard

Bold = detected compound above the MDL

Table 3-6 FWGWMP July 2009 VOCs Analytical Results

Station ID				LL9mw-001	LL9mw-002	LL9mw-003	LL9mw-004	LL9mw-005	LL9mw-006	LL9mw-007	LL10mw-001
Sample ID		MCL	Region 9 PRG	FWGLL9mw-001C-1382-GW	FWGLL9mw-002C-1383-GW	FWGLL9mw-003C-1384-GW	FWGLL9mw-004C-1385-GW	FWGLL9mw-005C-1386-GW	FWGLL9mw-006C-1387-GW	FWGLL9mw-007C-1388-GW	FWGLL10mw-001C-1389-GW
Date Collected				7/14/2009	7/14/2009	7/14/2009	7/14/2009	7/14/2009	7/14/2009	7/14/2009	7/14/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
1,1,1-Trichloroethane	µg/L	NS	3200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	NS	0.052	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	NS	0.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	NS	810	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene (total)	µg/L	7	340	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane	µg/L	NS	0.0056	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	5	0.12	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethene (total)	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	5	0.16	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	µg/L	NS	7000	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	µg/L	NS	NS	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone	µg/L	NS	NS	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetone	µg/L	NS	5500	10 U	10 UJ	10 U	10 U	10 UJ	10 U	10 UJ	10 U
Benzene	µg/L	5	0.35	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	NS	0.18	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	NS	8.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	µg/L	NS	8.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	NS	1000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	µg/L	5	0.17	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.3**
Chlorobenzene	µg/L	NS	110	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	NS	4.6	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ
Chloroform	µg/L	NS	0.17	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.22 J**
Chloromethane	µg/L	NS	160	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ
cis-1,2-dichloroethene	µg/L	70	61	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	NS	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	NS	0.13	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	700	1300	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m&p-xylenes	µg/L	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methylene chloride	µg/L	NS	4.3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
o-xylene	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	100	1600	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	5	0.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1000	720	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Xylenes	µg/L	10000	210	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
trans-1,2-dichloroethene	µg/L	100	120	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	NS	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	5	0.028	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	2	0.02	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ

Notes:

NS = no standard

Bold = detected compound above the MDL

Table 3-6 FWGWMP July 2009 VOCs Analytical Results

Station ID				LL10mw-002	LL10mw-003	LL10mw-004	LL10mw-005	LL10mw-006	LL11mw-001	LL11mw-003	LL11mw-004
Sample ID		MCL	Region 9 PRG	FWGLL10mw-002C-1390-GW	FWGLL10mw-003C-1391-GW	FWGLL10mw-004C-1392-GW	FWGLL10mw-005C-1393-GW	FWGLL10mw-006C-1394-GW	FWGLL11mw-001C-1395-GW	FWGLL11mw-003C-1396-GW	FWGLL11mw-004C-1397-GW
Date Collected				7/14/2009	7/14/2009	7/15/2009	7/15/2009	7/15/2009	7/15/2009	7/15/2009	7/15/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
1,1,1-Trichloroethane	µg/L	NS	3200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	NS	0.052	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	NS	0.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	NS	810	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene (total)	µg/L	7	340	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane	µg/L	NS	0.0056	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	5	0.12	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethene (total)	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	5	0.16	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	µg/L	NS	7000	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	µg/L	NS	NS	10 U	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U
4-Methyl-2-pentanone	µg/L	NS	NS	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetone	µg/L	NS	5500	10 U	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U
Benzene	µg/L	5	0.35	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	NS	0.18	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	NS	8.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	µg/L	NS	8.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	NS	1000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
Carbon tetrachloride	µg/L	5	0.17	1.0 U	**2.4**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	NS	110	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	NS	4.6	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ
Chloroform	µg/L	NS	0.17	1.0 U	**0.29 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	µg/L	NS	160	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
cis-1,2-dichloroethene	µg/L	70	61	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	NS	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	NS	0.13	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	700	1300	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m&p-xylenes	µg/L	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methylene chloride	µg/L	NS	4.3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U
o-xylene	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	100	1600	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	5	0.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1000	720	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Xylenes	µg/L	10000	210	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
trans-1,2-dichloroethene	µg/L	100	120	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	NS	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	5	0.028	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	2	0.02	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 U	1.0 UJ	1.0 UJ

Notes:

NS = no standard

Bold = detected compound above the MDL

Table 3-6 FWGWMP July 2009 VOCs Analytical Results

Station ID				LL11mw-005	LL11mw-006	LL11mw-008	LL11mw-009	LL11mw-010	ASYmw-001	ASYmw-002	ASYmw-003
Sample ID		MCL	Region 9 PRG	FWGLL11mw-005C-1398-GW	FWGLL11mw-006C-1399-GW	FWGLL11mw-008C-1400-GW	FWGLL11mw-009C-1401-GW	FWGLL11mw-010C-1402-GW	FWGASYmw-001C-1403-GW	FWGASYmw-002C-1404-GW	FWGASYmw-003C-1405-GW
Date Collected				7/15/2009	7/15/2009	7/15/2009	7/15/2009	7/15/2009	7/15/2009	7/15/2009	7/15/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
1,1,1-Trichloroethane	µg/L	NS	3200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	NS	0.052	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	NS	0.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	NS	810	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene (total)	µg/L	7	340	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane	µg/L	NS	0.0056	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	5	0.12	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethene (total)	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	5	0.16	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	µg/L	NS	7000	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	µg/L	NS	NS	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone	µg/L	NS	NS	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetone	µg/L	NS	5500	**1.2 JB**	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	µg/L	5	0.35	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	NS	0.18	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	NS	8.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	µg/L	NS	8.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	NS	1000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	µg/L	5	0.17	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	NS	110	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	NS	4.6	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ
Chloroform	µg/L	NS	0.17	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	µg/L	NS	160	1.0 U	1.0 U	**0.69 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-dichloroethene	µg/L	70	61	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	NS	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	NS	0.13	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	700	1300	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m&p-xylenes	µg/L	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methylene chloride	µg/L	NS	4.3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
o-xylene	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	100	1600	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	5	0.1	1.0 U	1.0 U	1.0 U	**3.8**	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1000	720	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Xylenes	µg/L	10000	210	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
trans-1,2-dichloroethene	µg/L	100	120	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	NS	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	5	0.028	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	2	0.02	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ

Notes:

NS = no standard

Bold = detected compound above the MDL

Table 3-6 FWGWMP July 2009 VOCs Analytical Results

Station ID				ASYmw-004	ASYmw-005	ASYmw-006	ASYmw-007	ASYmw-008	ASYmw-009	ASYmw-010
Sample ID		MCL	Region 9 PRG	FWGASYmw-004C-1406-GW	FWGASYmw-005C-1407-GW	FWGASYmw-006C-1408-GW	FWGASYmw-007C-1409-GW	FWGASYmw-008C-1410-GW	FWGASYmw-009C-1411-GW	FWGASYmw-010C-1412-GW
Date Collected				7/15/2009	7/15/2009	7/16/2009	7/16/2009	7/16/2009	7/16/2009	7/16/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
1,1,1-Trichloroethane	µg/L	NS	3200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	NS	0.052	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	NS	0.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	NS	810	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene (total)	µg/L	7	340	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane	µg/L	NS	0.0056	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	5	0.12	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethene (total)	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	5	0.16	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	µg/L	NS	7000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	µg/L	NS	NS	10 U	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
4-Methyl-2-pentanone	µg/L	NS	NS	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetone	µg/L	NS	5500	10 U	10 UJ	10 U	10 U	10 U	10 U	10 U
Benzene	µg/L	5	0.35	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	NS	0.18	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	NS	8.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	µg/L	NS	8.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	NS	1000	1.0 U	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ
Carbon tetrachloride	µg/L	5	0.17	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	NS	110	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	NS	4.6	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ
Chloroform	µg/L	NS	0.17	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	µg/L	NS	160	1.0 U	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ
cis-1,2-dichloroethene	µg/L	70	61	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	NS	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	NS	0.13	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	700	1300	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m&p-xylenes	µg/L	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methylene chloride	µg/L	NS	4.3	2.0 U	2.0 UJ	2.0 UJ	2.0 UJ	2.0 UJ	2.0 UJ	2.0 UJ
o-xylene	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	100	1600	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	5	0.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1000	720	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Xylenes	µg/L	10000	210	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
trans-1,2-dichloroethene	µg/L	100	120	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	NS	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	5	0.028	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	2	0.02	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Notes:

NS = no standard

Bold = detected compound above the MDL

Table 3-6 FWGWMP July 2009 VOCs Analytical Results

Data Qualifiers

Data qualifier flags are used in an effort to describe the quality of each piece of data for each constituent. These flags are letter codes appended to the numerical data. The following data qualifiers are specified in the USACE Louisville Chemistry Guidelines (LCG). For a complete explanation of qualifiers used for each constituent please refer to the Data Verification Summaries in Appendix D.

U- The analyte was analyzed for but not detected. The numerical value preceding the U is the associated reporting limit.

J- The identification of the analyte is acceptable, but the quality assurance criteria indicate that the quantitative values may be outside the normal expected range of precision (i.e., the quantitative value is estimated). Examples include:

- Results detected above the laboratory MDL but less than the laboratory reporting limit.
- MS/MSD percent recoveries outside the acceptance criteria.
- Laboratory control sample (LCS) percent recoveries outside acceptance criteria.

R- Data are considered to be rejected and shall not be used. This flag denotes the failure of quality control criteria such that it cannot be determined if the analyte is present or absent from the sample [e.g., the method reporting limit (MRL) verification standard was below quality control guidelines; associated sample results that were non-detect are unusable].

UJ- This flag is a combination of the U and J qualifiers which indicate that the analyte is not present. The reported value is considered to be an estimated reporting limit (RL).

B- The B flag is used for both organic and inorganic analyses when the analyte is found in the method blank or any of the field blanks. This designation overrides the Contract Laboratory Program (CLP) “B” designation when used by the laboratory as an estimated value for inorganics.

Table 3-7 FWGWMP July 2009 SVOCs Analytical Results

Station ID				LL6mw-005	LL6mw-006	LL6mw-007	LL7mw-001	LL7mw-002	LL7mw-003
Sample ID		MCL	Region 9 PRG	FWGLL6mw-005C-1367-GW	FWGLL6mw-006C-1368-GW	FWGLL6mw-007C-1369-GW	FWGLL7mw-001C-1370-GW	FWGLL7mw-002C-1371-GW	FWGLL7mw-003C-1372-GW
Date Collected				7/13/2009	7/13/2009	7/13/2009	7/13/2009	7/13/2009	7/13/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units								
1,2,4-Trichlorobenzene	µg/L	NS	7.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	NS	370	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	NS	180	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	NS	0.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,2-oxybis (1-chloropropane)	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4,5-Trichlorophenol	µg/L	NS	3600	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	NS	3.6	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	NS	110	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2,4-Dimethylphenol	µg/L	NS	730	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2,4-Dinitrophenol	µg/L	NS	73	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
2,4-Dinitrotoluene	µg/L	NS	73	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dinitrotoluene	µg/L	NS	36	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chloronaphthalene	µg/L	NS	490	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorophenol	µg/L	NS	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Methylnaphthalene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
2-Methylphenol	µg/L	NS	1800	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitroaniline	µg/L	NS	110	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Nitrophenol	µg/L	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
3,3'-Dichlorobenzidine	µg/L	NS	0.15	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3-Nitroaniline	µg/L	NS	3.2	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4,6-Dinitro-2-methylphenol	µg/L	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Bromophenyl phenyl ether	µg/L	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chloro-3-methylphenol	µg/L	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chloroaniline	µg/L	NS	150	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chlorophenyl phenyl ether	µg/L	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Methylphenol	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Nitroanaline	µg/L	NS	3.2	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Nitrophenol	µg/L	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acenaphthene	µg/L	NS	370	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Acenaphthylene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Anthracene	µg/L	NS	1800	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(a)anthracene	µg/L	NS	0.092	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(a)pyrene	µg/L	0.2	0.0092	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(b)fluoranthene	µg/L	NS	0.092	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(g,h,i)perylene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Table 3-7 FWGWMP July 2009 SVOCs Analytical Results

Station ID				LL6mw-005	LL6mw-006	LL6mw-007	LL7mw-001	LL7mw-002	LL7mw-003
Sample ID		MCL	Region 9 PRG	FWGLL6mw-005C-1367-GW	FWGLL6mw-006C-1368-GW	FWGLL6mw-007C-1369-GW	FWGLL7mw-001C-1370-GW	FWGLL7mw-002C-1371-GW	FWGLL7mw-003C-1372-GW
Date Collected				7/13/2009	7/13/2009	7/13/2009	7/13/2009	7/13/2009	7/13/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units								
Benzo(k)fluoranthene	µg/L	NS	0.92	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzoic acid	µg/L	NS	150000	10 U	10 U	10 U	10 U	10 U	10 U
Benzyl alcohol	µg/L	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Chloroethoxy)methane	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Chloroethyl) ether	µg/L	NS	0.001	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Ethylhexyl) phthalate	µg/L	NS	4.8	10 U	10 U	**1.1 JB**	**3.6 JB**	**5.8 JB**	**3.3 JB**
Butyl benzyl phthalate	µg/L	NS	7300	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbazole	µg/L	NS	3.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chrysene	µg/L	NS	9.2	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Dibenzo(a,h)anthracene	µg/L	NS	0.0093	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Dibenzofuran	µg/L	NS	12	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Diethyl phthalate	µg/L	NS	29,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dimethyl phthalate	µg/L	NS	360000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-butyl phthalate	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-octyl phthalate	µg/L	NS	1500	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Fluoranthene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Fluorene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Hexachlorobenzene	µg/L	1	0.042	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Hexachlorobutadiene	µg/L	NS	0.86	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorocyclopentadiene	µg/L	50	220	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane	µg/L	NS	4.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Indeno(1,2,3-cd)pyrene	µg/L	NS	0.092	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Isophorone	µg/L	NS	71	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	µg/L	NS	6.2	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nitrobenzene	µg/L	NS	3.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitroso-di-n-propylamine	µg/L	NS	9600	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitrosodiphenylamine	µg/L	NS	14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	1	0.56	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Phenanthrene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Phenol	µg/L	NS	11000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pyrene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-7 FWGWMP July 2009 SVOCs Analytical Results

Station ID				LL7mw-004	LL7mw-005	LL7mw-006	LL8mw-001	LL8mw-002	LL8mw-003	LL8mw-004
Sample ID		MCL	Region 9 PRG	FWGLL7mw-004C-1373-GW	FWGLL7mw-005C-1374-GW	FWGLL7mw-006C-1375-GW	FWGLL8mw-001C-1376-GW	FWGLL8mw-002C-1377-GW	FWGLL8mw-003C-1378-GW	FWGLL8mw-004C-1379-GW
Date Collected				7/13/2009	7/13/2009	7/13/2009	7/14/2009	7/14/2009	7/14/2009	7/14/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
1,2,4-Trichlorobenzene	µg/L	NS	7.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	NS	370	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	NS	180	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	NS	0.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,2-oxybis (1-chloropropane)	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4,5-Trichlorophenol	µg/L	NS	3600	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	NS	3.6	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	NS	110	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2,4-Dimethylphenol	µg/L	NS	730	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2,4-Dinitrophenol	µg/L	NS	73	5.0 UJ	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dinitrotoluene	µg/L	NS	73	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dinitrotoluene	µg/L	NS	36	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chloronaphthalene	µg/L	NS	490	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorophenol	µg/L	NS	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Methylnaphthalene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
2-Methylphenol	µg/L	NS	1800	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitroaniline	µg/L	NS	110	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Nitrophenol	µg/L	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
3,3'-Dichlorobenzidine	µg/L	NS	0.15	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3-Nitroaniline	µg/L	NS	3.2	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4,6-Dinitro-2-methylphenol	µg/L	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Bromophenyl phenyl ether	µg/L	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chloro-3-methylphenol	µg/L	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chloroaniline	µg/L	NS	150	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chlorophenyl phenyl ether	µg/L	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Methylphenol	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Nitroanaline	µg/L	NS	3.2	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Nitrophenol	µg/L	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acenaphthene	µg/L	NS	370	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Acenaphthylene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Anthracene	µg/L	NS	1800	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(a)anthracene	µg/L	NS	0.092	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(a)pyrene	µg/L	0.2	0.0092	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(b)fluoranthene	µg/L	NS	0.092	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(g,h,i)perylene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Table 3-7 FWGWMP July 2009 SVOCs Analytical Results

Station ID				LL7mw-004	LL7mw-005	LL7mw-006	LL8mw-001	LL8mw-002	LL8mw-003	LL8mw-004
Sample ID		MCL	Region 9 PRG	FWGLL7mw-004C-1373-GW	FWGLL7mw-005C-1374-GW	FWGLL7mw-006C-1375-GW	FWGLL8mw-001C-1376-GW	FWGLL8mw-002C-1377-GW	FWGLL8mw-003C-1378-GW	FWGLL8mw-004C-1379-GW
Date Collected				7/13/2009	7/13/2009	7/13/2009	7/14/2009	7/14/2009	7/14/2009	7/14/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
Benzo(k)fluoranthene	µg/L	NS	0.92	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzoic acid	µg/L	NS	150000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzyl alcohol	µg/L	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Chloroethoxy)methane	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Chloroethyl) ether	µg/L	NS	0.001	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Ethylhexyl) phthalate	µg/L	NS	4.8	**1.2 JB**	**1.3 JB**	**1.4 JB**	**2.9 JB**	**1.5 JB**	**4.3 JB**	**2.9 JB**
Butyl benzyl phthalate	µg/L	NS	7300	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbazole	µg/L	NS	3.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chrysene	µg/L	NS	9.2	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Dibenzo(a,h)anthracene	µg/L	NS	0.0093	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Dibenzofuran	µg/L	NS	12	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Diethyl phthalate	µg/L	NS	29,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dimethyl phthalate	µg/L	NS	360000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-butyl phthalate	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-octyl phthalate	µg/L	NS	1500	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Fluoranthene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Fluorene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Hexachlorobenzene	µg/L	1	0.042	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Hexachlorobutadiene	µg/L	NS	0.86	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorocyclopentadiene	µg/L	50	220	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane	µg/L	NS	4.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Indeno(1,2,3-cd)pyrene	µg/L	NS	0.092	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Isophorone	µg/L	NS	71	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	µg/L	NS	6.2	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nitrobenzene	µg/L	NS	3.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitroso-di-n-propylamine	µg/L	NS	9600	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitrosodiphenylamine	µg/L	NS	14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	1	0.56	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Phenanthrene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Phenol	µg/L	NS	11000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pyrene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-7 FWGWMP July 2009 SVOCs Analytical Results

Station ID				LL8mw-005	LL8mw-006	LL9mw-001	LL9mw-002	LL9mw-003	LL9mw-004	LL9mw-005
Sample ID		MCL	Region 9 PRG	FWGLL8mw-005C-1380-GW	FWGLL8mw-006C-1381-GW	FWGLL9mw-001C-1382-GW	FWGLL9mw-002C-1383-GW	FWGLL9mw-003C-1384-GW	FWGLL9mw-004C-1385-GW	FWGLL9mw-005C-1386-GW
Date Collected				7/14/2009	7/14/2009	7/14/2009	7/14/2009	7/14/2009	7/14/2009	7/14/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
1,2,4-Trichlorobenzene	µg/L	NS	7.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	NS	370	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	NS	180	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	NS	0.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,2-oxybis (1-chloropropane)	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4,5-Trichlorophenol	µg/L	NS	3600	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	NS	3.6	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	NS	110	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2,4-Dimethylphenol	µg/L	NS	730	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2,4-Dinitrophenol	µg/L	NS	73	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dinitrotoluene	µg/L	NS	73	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dinitrotoluene	µg/L	NS	36	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chloronaphthalene	µg/L	NS	490	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorophenol	µg/L	NS	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Methylnaphthalene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
2-Methylphenol	µg/L	NS	1800	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitroaniline	µg/L	NS	110	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Nitrophenol	µg/L	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
3,3'-Dichlorobenzidine	µg/L	NS	0.15	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3-Nitroaniline	µg/L	NS	3.2	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4,6-Dinitro-2-methylphenol	µg/L	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Bromophenyl phenyl ether	µg/L	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chloro-3-methylphenol	µg/L	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chloroaniline	µg/L	NS	150	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chlorophenyl phenyl ether	µg/L	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Methylphenol	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Nitroanaline	µg/L	NS	3.2	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Nitrophenol	µg/L	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acenaphthene	µg/L	NS	370	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Acenaphthylene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Anthracene	µg/L	NS	1800	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(a)anthracene	µg/L	NS	0.092	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(a)pyrene	µg/L	0.2	0.0092	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(b)fluoranthene	µg/L	NS	0.092	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(g,h,i)perylene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Table 3-7 FWGWMP July 2009 SVOCs Analytical Results

Station ID				LL8mw-005	LL8mw-006	LL9mw-001	LL9mw-002	LL9mw-003	LL9mw-004	LL9mw-005
Sample ID		MCL	Region 9 PRG	FWGLL8mw-005C-1380-GW	FWGLL8mw-006C-1381-GW	FWGLL9mw-001C-1382-GW	FWGLL9mw-002C-1383-GW	FWGLL9mw-003C-1384-GW	FWGLL9mw-004C-1385-GW	FWGLL9mw-005C-1386-GW
Date Collected				7/14/2009	7/14/2009	7/14/2009	7/14/2009	7/14/2009	7/14/2009	7/14/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
Benzo(k)fluoranthene	µg/L	NS	0.92	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzoic acid	µg/L	NS	150000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzyl alcohol	µg/L	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Chloroethoxy)methane	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Chloroethyl) ether	µg/L	NS	0.001	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Ethylhexyl) phthalate	µg/L	NS	4.8	10 U	**0.83 JB**	**1.2 JB**	**1.0 JB**	**1.8 JB**	**0.94 JB**	**1.2 JB**
Butyl benzyl phthalate	µg/L	NS	7300	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbazole	µg/L	NS	3.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chrysene	µg/L	NS	9.2	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Dibenzo(a,h)anthracene	µg/L	NS	0.0093	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Dibenzofuran	µg/L	NS	12	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Diethyl phthalate	µg/L	NS	29,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dimethyl phthalate	µg/L	NS	360000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-butyl phthalate	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-octyl phthalate	µg/L	NS	1500	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Fluoranthene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Fluorene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Hexachlorobenzene	µg/L	1	0.042	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Hexachlorobutadiene	µg/L	NS	0.86	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorocyclopentadiene	µg/L	50	220	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane	µg/L	NS	4.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Indeno(1,2,3-cd)pyrene	µg/L	NS	0.092	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Isophorone	µg/L	NS	71	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	µg/L	NS	6.2	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nitrobenzene	µg/L	NS	3.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitroso-di-n-propylamine	µg/L	NS	9600	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitrosodiphenylamine	µg/L	NS	14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	1	0.56	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Phenanthrene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Phenol	µg/L	NS	11000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pyrene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-7 FWGWMP July 2009 SVOCs Analytical Results

Station ID				LL9mw-006	LL9mw-007	LL10mw-001	LL10mw-002	LL10mw-003	LL10mw-004	LL10mw-005
Sample ID		MCL	Region 9 PRG	FWGLL9mw-006C-1387-GW	FWGLL9mw-007C-1388-GW	FWGLL10mw-001C-1389-GW	FWGLL10mw-002C-1390-GW	FWGLL10mw-003C-1391-GW	FWGLL10mw-004C-1392-GW	FWGLL10mw-005C-1393-GW
Date Collected				7/14/2009	7/14/2009	7/14/2009	7/14/2009	7/14/2009	7/15/2009	7/15/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
1,2,4-Trichlorobenzene	µg/L	NS	7.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	NS	370	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	NS	180	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	NS	0.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,2-oxybis (1-chloropropane)	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4,5-Trichlorophenol	µg/L	NS	3600	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	NS	3.6	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	NS	110	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2,4-Dimethylphenol	µg/L	NS	730	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2,4-Dinitrophenol	µg/L	NS	73	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dinitrotoluene	µg/L	NS	73	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dinitrotoluene	µg/L	NS	36	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chloronaphthalene	µg/L	NS	490	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorophenol	µg/L	NS	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Methylnaphthalene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
2-Methylphenol	µg/L	NS	1800	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitroaniline	µg/L	NS	110	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Nitrophenol	µg/L	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
3,3'-Dichlorobenzidine	µg/L	NS	0.15	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3-Nitroaniline	µg/L	NS	3.2	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4,6-Dinitro-2-methylphenol	µg/L	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Bromophenyl phenyl ether	µg/L	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chloro-3-methylphenol	µg/L	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chloroaniline	µg/L	NS	150	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chlorophenyl phenyl ether	µg/L	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Methylphenol	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Nitroanaline	µg/L	NS	3.2	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Nitrophenol	µg/L	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acenaphthene	µg/L	NS	370	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Acenaphthylene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Anthracene	µg/L	NS	1800	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(a)anthracene	µg/L	NS	0.092	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(a)pyrene	µg/L	0.2	0.0092	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(b)fluoranthene	µg/L	NS	0.092	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(g,h,i)perylene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Table 3-7 FWGWMP July 2009 SVOCs Analytical Results

Station ID				LL9mw-006	LL9mw-007	LL10mw-001	LL10mw-002	LL10mw-003	LL10mw-004	LL10mw-005
Sample ID		MCL	Region 9 PRG	FWGLL9mw-006C-1387-GW	FWGLL9mw-007C-1388-GW	FWGLL10mw-001C-1389-GW	FWGLL10mw-002C-1390-GW	FWGLL10mw-003C-1391-GW	FWGLL10mw-004C-1392-GW	FWGLL10mw-005C-1393-GW
Date Collected				7/14/2009	7/14/2009	7/14/2009	7/14/2009	7/14/2009	7/15/2009	7/15/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
Benzo(k)fluoranthene	µg/L	NS	0.92	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzoic acid	µg/L	NS	150000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzyl alcohol	µg/L	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Chloroethoxy)methane	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Chloroethyl) ether	µg/L	NS	0.001	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Ethylhexyl) phthalate	µg/L	NS	4.8	**0.95 JB**	**4.1 JB**	**1.8 JB**	**4.0 JB**	**0.83 JB**	**2.2 JB**	**3.5 JB**
Butyl benzyl phthalate	µg/L	NS	7300	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbazole	µg/L	NS	3.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chrysene	µg/L	NS	9.2	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Dibenzo(a,h)anthracene	µg/L	NS	0.0093	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Dibenzofuran	µg/L	NS	12	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Diethyl phthalate	µg/L	NS	29,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dimethyl phthalate	µg/L	NS	360000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-butyl phthalate	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-octyl phthalate	µg/L	NS	1500	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Fluoranthene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Fluorene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Hexachlorobenzene	µg/L	1	0.042	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Hexachlorobutadiene	µg/L	NS	0.86	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorocyclopentadiene	µg/L	50	220	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane	µg/L	NS	4.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Indeno(1,2,3-cd)pyrene	µg/L	NS	0.092	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Isophorone	µg/L	NS	71	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	µg/L	NS	6.2	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nitrobenzene	µg/L	NS	3.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitroso-di-n-propylamine	µg/L	NS	9600	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitrosodiphenylamine	µg/L	NS	14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	1	0.56	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Phenanthrene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Phenol	µg/L	NS	11000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pyrene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-7 FWGWMP July 2009 SVOCs Analytical Results

Station ID				LL10mw-006	LL11mw-001	LL11mw-003	LL11mw-004	LL11mw-005	LL11mw-006	LL11mw-008
Sample ID		MCL	Region 9 PRG	FWGLL10mw-006C-1394-GW	FWGLL11mw-001C-1395-GW	FWGLL11mw-003C-1396-GW	FWGLL11mw-004C-1397-GW	FWGLL11mw-005C-1398-GW	FWGLL11mw-006C-1399-GW	FWGLL11mw-008C-1400-GW
Date Collected				7/15/2009	7/15/2009	7/15/2009	7/15/2009	7/15/2009	7/15/2009	7/15/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
1,2,4-Trichlorobenzene	µg/L	NS	7.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	NS	370	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	NS	180	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	NS	0.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,2-oxybis (1-chloropropane)	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4,5-Trichlorophenol	µg/L	NS	3600	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	NS	3.6	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	NS	110	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2,4-Dimethylphenol	µg/L	NS	730	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2,4-Dinitrophenol	µg/L	NS	73	5.0 U	5.0 U	5.0 R	5.0 U	5.0 R	5.0 R	5.0 U
2,4-Dinitrotoluene	µg/L	NS	73	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dinitrotoluene	µg/L	NS	36	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chloronaphthalene	µg/L	NS	490	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorophenol	µg/L	NS	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Methylnaphthalene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
2-Methylphenol	µg/L	NS	1800	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitroaniline	µg/L	NS	110	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Nitrophenol	µg/L	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
3,3'-Dichlorobenzidine	µg/L	NS	0.15	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3-Nitroaniline	µg/L	NS	3.2	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4,6-Dinitro-2-methylphenol	µg/L	NS	NS	5.0 U	5.0 U	5.0 R	5.0 U	5.0 R	5.0 R	5.0 U
4-Bromophenyl phenyl ether	µg/L	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chloro-3-methylphenol	µg/L	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chloroaniline	µg/L	NS	150	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chlorophenyl phenyl ether	µg/L	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Methylphenol	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Nitroanaline	µg/L	NS	3.2	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Nitrophenol	µg/L	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acenaphthene	µg/L	NS	370	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Acenaphthylene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Anthracene	µg/L	NS	1800	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(a)anthracene	µg/L	NS	0.092	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(a)pyrene	µg/L	0.2	0.0092	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(b)fluoranthene	µg/L	NS	0.092	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(g,h,i)perylene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Table 3-7 FWGWMP July 2009 SVOCs Analytical Results

Station ID				LL10mw-006	LL11mw-001	LL11mw-003	LL11mw-004	LL11mw-005	LL11mw-006	LL11mw-008
Sample ID		MCL	Region 9 PRG	FWGLL10mw-006C-1394-GW	FWGLL11mw-001C-1395-GW	FWGLL11mw-003C-1396-GW	FWGLL11mw-004C-1397-GW	FWGLL11mw-005C-1398-GW	FWGLL11mw-006C-1399-GW	FWGLL11mw-008C-1400-GW
Date Collected				7/15/2009	7/15/2009	7/15/2009	7/15/2009	7/15/2009	7/15/2009	7/15/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
Benzo(k)fluoranthene	µg/L	NS	0.92	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzoic acid	µg/L	NS	150000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzyl alcohol	µg/L	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Chloroethoxy)methane	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Chloroethyl) ether	µg/L	NS	0.001	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Ethylhexyl) phthalate	µg/L	NS	4.8	**0.98 JB**	**1.1 JB**	**1.2 JB**	**1.3 JB**	**1.0 JB**	**2.9 JB**	**3.5 JB**
Butyl benzyl phthalate	µg/L	NS	7300	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbazole	µg/L	NS	3.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chrysene	µg/L	NS	9.2	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Dibenzo(a,h)anthracene	µg/L	NS	0.0093	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Dibenzofuran	µg/L	NS	12	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Diethyl phthalate	µg/L	NS	29,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dimethyl phthalate	µg/L	NS	360000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-butyl phthalate	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-octyl phthalate	µg/L	NS	1500	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Fluoranthene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Fluorene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Hexachlorobenzene	µg/L	1	0.042	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Hexachlorobutadiene	µg/L	NS	0.86	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorocyclopentadiene	µg/L	50	220	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane	µg/L	NS	4.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Indeno(1,2,3-cd)pyrene	µg/L	NS	0.092	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Isophorone	µg/L	NS	71	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	µg/L	NS	6.2	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nitrobenzene	µg/L	NS	3.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitroso-di-n-propylamine	µg/L	NS	9600	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitrosodiphenylamine	µg/L	NS	14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	1	0.56	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Phenanthrene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Phenol	µg/L	NS	11000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pyrene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-7 FWGWMP July 2009 SVOCs Analytical Results

Station ID				LL11mw-009	LL11mw-010	ASYmw-001	ASYmw-002	ASYmw-003	ASYmw-004
Sample ID		MCL	Region 9 PRG	FWGLL11mw-009C-1401-GW	FWGLL11mw-010C-1402-GW	FWGASYmw-001C-1403-GW	FWGASYmw-002C-1404-GW	FWGASYmw-003C-1405-GW	FWGASYmw-004C-1406-GW
Date Collected				7/15/2009	7/15/2009	7/15/2009	7/15/2009	7/15/2009	7/15/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units								
1,2,4-Trichlorobenzene	µg/L	NS	7.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	NS	370	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	NS	180	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	NS	0.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,2-oxybis (1-chloropropane)	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4,5-Trichlorophenol	µg/L	NS	3600	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	NS	3.6	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	NS	110	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2,4-Dimethylphenol	µg/L	NS	730	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2,4-Dinitrophenol	µg/L	NS	73	5.0 R	5.0 R	5.0 R	5.0 R	5.0 U	5.0 U
2,4-Dinitrotoluene	µg/L	NS	73	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dinitrotoluene	µg/L	NS	36	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chloronaphthalene	µg/L	NS	490	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorophenol	µg/L	NS	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Methylnaphthalene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
2-Methylphenol	µg/L	NS	1800	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitroaniline	µg/L	NS	110	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Nitrophenol	µg/L	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
3,3'-Dichlorobenzidine	µg/L	NS	0.15	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3-Nitroaniline	µg/L	NS	3.2	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4,6-Dinitro-2-methylphenol	µg/L	NS	NS	5.0 R	5.0 R	5.0 R	5.0 R	5.0 U	5.0 U
4-Bromophenyl phenyl ether	µg/L	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chloro-3-methylphenol	µg/L	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chloroaniline	µg/L	NS	150	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chlorophenyl phenyl ether	µg/L	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Methylphenol	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Nitroanaline	µg/L	NS	3.2	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Nitrophenol	µg/L	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acenaphthene	µg/L	NS	370	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Acenaphthylene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Anthracene	µg/L	NS	1800	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(a)anthracene	µg/L	NS	0.092	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(a)pyrene	µg/L	0.2	0.0092	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(b)fluoranthene	µg/L	NS	0.092	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(g,h,i)perylene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Table 3-7 FWGWMP July 2009 SVOCs Analytical Results

Station ID				LL11mw-009	LL11mw-010	ASYmw-001	ASYmw-002	ASYmw-003	ASYmw-004
Sample ID		MCL	Region 9 PRG	FWGLL11mw-009C-1401-GW	FWGLL11mw-010C-1402-GW	FWGASYmw-001C-1403-GW	FWGASYmw-002C-1404-GW	FWGASYmw-003C-1405-GW	FWGASYmw-004C-1406-GW
Date Collected				7/15/2009	7/15/2009	7/15/2009	7/15/2009	7/15/2009	7/15/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units								
Benzo(k)fluoranthene	µg/L	NS	0.92	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzoic acid	µg/L	NS	150000	10 U	10 U	10 U	10 U	10 U	10 U
Benzyl alcohol	µg/L	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Chloroethoxy)methane	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Chloroethyl) ether	µg/L	NS	0.001	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Ethylhexyl) phthalate	µg/L	NS	4.8	**5.9 JB**	**1.1 JB**	**1.7 JB**	**1.3 JB**	**1.5 JB**	**1.4 JB**
Butyl benzyl phthalate	µg/L	NS	7300	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbazole	µg/L	NS	3.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chrysene	µg/L	NS	9.2	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Dibenzo(a,h)anthracene	µg/L	NS	0.0093	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Dibenzofuran	µg/L	NS	12	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Diethyl phthalate	µg/L	NS	29,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dimethyl phthalate	µg/L	NS	360000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-butyl phthalate	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-octyl phthalate	µg/L	NS	1500	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Fluoranthene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Fluorene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Hexachlorobenzene	µg/L	1	0.042	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Hexachlorobutadiene	µg/L	NS	0.86	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorocyclopentadiene	µg/L	50	220	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane	µg/L	NS	4.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Indeno(1,2,3-cd)pyrene	µg/L	NS	0.092	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Isophorone	µg/L	NS	71	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	µg/L	NS	6.2	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nitrobenzene	µg/L	NS	3.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitroso-di-n-propylamine	µg/L	NS	9600	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitrosodiphenylamine	µg/L	NS	14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	1	0.56	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Phenanthrene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Phenol	µg/L	NS	11000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pyrene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-7 FWGWMP July 2009 SVOCs Analytical Results

Station ID				ASYmw-005	ASYmw-006	ASYmw-007	ASYmw-008	ASYmw-009	ASYmw-010
Sample ID		MCL	Region 9 PRG	FWGASYmw-005C-1407-GW	FWGASYmw-006C-1408-GW	FWGASYmw-007C-1409-GW	FWGASYmw-008C-1410-GW	FWGASYmw-009C-1411-GW	FWGASYmw-010C-1412-GW
Date Collected				7/15/2009	7/16/2009	7/16/2009	7/16/2009	7/16/2009	7/16/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units								
1,2,4-Trichlorobenzene	µg/L	NS	7.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	NS	370	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	NS	180	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	NS	0.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,2-oxybis (1-chloropropane)	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4,5-Trichlorophenol	µg/L	NS	3600	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	NS	3.6	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	NS	110	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2,4-Dimethylphenol	µg/L	NS	730	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2,4-Dinitrophenol	µg/L	NS	73	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dinitrotoluene	µg/L	NS	73	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dinitrotoluene	µg/L	NS	36	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chloronaphthalene	µg/L	NS	490	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorophenol	µg/L	NS	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Methylnaphthalene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
2-Methylphenol	µg/L	NS	1800	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitroaniline	µg/L	NS	110	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Nitrophenol	µg/L	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
3,3'-Dichlorobenzidine	µg/L	NS	0.15	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3-Nitroaniline	µg/L	NS	3.2	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4,6-Dinitro-2-methylphenol	µg/L	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Bromophenyl phenyl ether	µg/L	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chloro-3-methylphenol	µg/L	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chloroaniline	µg/L	NS	150	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chlorophenyl phenyl ether	µg/L	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Methylphenol	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Nitroanaline	µg/L	NS	3.2	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Nitrophenol	µg/L	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acenaphthene	µg/L	NS	370	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Acenaphthylene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Anthracene	µg/L	NS	1800	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(a)anthracene	µg/L	NS	0.092	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(a)pyrene	µg/L	0.2	0.0092	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(b)fluoranthene	µg/L	NS	0.092	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(g,h,i)perylene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Table 3-7 FWGWMP July 2009 SVOCs Analytical Results

Station ID				ASYmw-005	ASYmw-006	ASYmw-007	ASYmw-008	ASYmw-009	ASYmw-010
Sample ID		MCL	Region 9 PRG	FWGASYmw-005C-1407-GW	FWGASYmw-006C-1408-GW	FWGASYmw-007C-1409-GW	FWGASYmw-008C-1410-GW	FWGASYmw-009C-1411-GW	FWGASYmw-010C-1412-GW
Date Collected				7/15/2009	7/16/2009	7/16/2009	7/16/2009	7/16/2009	7/16/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units								
Benzo(k)fluoranthene	µg/L	NS	0.92	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzoic acid	µg/L	NS	150000	**12**	10 U	10 U	10 U	10 U	10 U
Benzyl alcohol	µg/L	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Chloroethoxy)methane	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Chloroethyl) ether	µg/L	NS	0.001	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Ethylhexyl) phthalate	µg/L	NS	4.8	**1.9 JB**	**1.7 JB**	**1.1 JB**	**1.1 JB**	**2.2 JB**	**2.8 JB**
Butyl benzyl phthalate	µg/L	NS	7300	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbazole	µg/L	NS	3.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chrysene	µg/L	NS	9.2	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Dibenzo(a,h)anthracene	µg/L	NS	0.0093	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Dibenzofuran	µg/L	NS	12	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Diethyl phthalate	µg/L	NS	29,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dimethyl phthalate	µg/L	NS	360000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-butyl phthalate	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-octyl phthalate	µg/L	NS	1500	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Fluoranthene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Fluorene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Hexachlorobenzene	µg/L	1	0.042	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Hexachlorobutadiene	µg/L	NS	0.86	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorocyclopentadiene	µg/L	50	220	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane	µg/L	NS	4.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Indeno(1,2,3-cd)pyrene	µg/L	NS	0.092	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Isophorone	µg/L	NS	71	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	µg/L	NS	6.2	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nitrobenzene	µg/L	NS	3.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitroso-di-n-propylamine	µg/L	NS	9600	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitrosodiphenylamine	µg/L	NS	14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	1	0.56	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Phenanthrene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Phenol	µg/L	NS	11000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pyrene	µg/L	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-7 FWGWMP July 2009 SVOCs Analytical Results

Data Qualifiers

Data qualifier flags are used in an effort to describe the quality of each piece of data for each constituent. These flags are letter codes appended to the numerical data. The following data qualifiers are specified in the USACE Louisville Chemistry Guidelines (LCG). For a complete explanation of qualifiers used for each constituent please refer to the Data Verification Summaries in Appendix D.

U- The analyte was analyzed for but not detected. The numerical value preceding the U is the associated reporting limit.

J- The identification of the analyte is acceptable, but the quality assurance criteria indicate that the quantitative values may be outside the normal expected range of precision (i.e., the quantitative value is estimated). Examples include:

- Results detected above the laboratory MDL but less than the laboratory reporting limit.
- MS/MSD percent recoveries outside the acceptance criteria.
- Laboratory control sample (LCS) percent recoveries outside acceptance criteria.

R- Data are considered to be rejected and shall not be used. This flag denotes the failure of quality control criteria such that it cannot be determined if the analyte is present or absent from the sample [e.g., the method reporting limit (MRL) verification standard was below quality control guidelines; associated sample results that were non-detect are unusable].

UJ- This flag is a combination of the U and J qualifiers which indicate that the analyte is not present. The reported value is considered to be an estimated reporting limit (RL).

B- The B flag is used for both organic and inorganic analyses when the analyte is found in the method blank or any of the field blanks. This designation overrides the Contract Laboratory Program (CLP) “B” designation when used by the laboratory as an estimated value for inorganics.

Table 3-8 FWGWMP July 2009 Pesticides and PCBs Analytical Results

Station ID				LL6mw-005	LL6mw-006	LL6mw-007	LL7mw-001	LL7mw-002	LL7mw-003
Sample ID		MCL	Region 9 PRG	FWGLL6mw-005C-1367-GW	FWGLL6mw-006C-1368-GW	FWGLL6mw-007C-1369-GW	FWGLL7mw-001C-1370-GW	FWGLL7mw-002C-1371-GW	FWGLL7mw-003C-1372-GW
Date Collected				7/13/2009	7/13/2009	7/13/2009	7/13/2009	7/13/2009	7/13/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units								
4,4'-DDD	µg/L	NS	0.28	0.030 UJ	0.030 U	0.030 U	0.030 UJ	0.030 U	0.030 UJ
4,4'-DDE	µg/L	NS	0.2	0.030 UJ	0.030 U	0.030 U	0.030 UJ	0.030 U	0.030 UJ
4,4'-DDT	µg/L	NS	0.2	0.030 UJ	0.030 U	0.030 U	0.030 UJ	0.030 U	0.030 UJ
Aldrin	µg/L	NS	0.004	0.030 UJ	0.030 U	0.030 U	0.030 UJ	0.030 U	0.030 UJ
alpha-BHC	µg/L	NS	0.011	0.030 UJ	0.030 U	0.030 U	0.030 UJ	0.030 U	0.030 UJ
alpha-Chordane	µg/L	NS	NS	0.030 UJ	0.030 U	0.030 U	0.030 UJ	0.030 U	0.030 UJ
beta-BHC	µg/L	NS	0.037	0.030 UJ	0.030 U	0.030 U	0.030 UJ	**0.027 J**	0.030 UJ
delta-BHC	µg/L	NS	NS	0.030 UJ	0.030 U	0.030 U	0.030 UJ	0.030 U	0.030 UJ
Dieldrin	µg/L	NS	0.0042	0.030 UJ	0.030 U	0.030 U	0.030 UJ	0.030 U	0.030 UJ
Endosulfan I	µg/L	NS	0.022	0.025 UJ	0.025 U	0.025 U	0.025 UJ	0.025 U	0.025 UJ
Endosulfan II	µg/L	NS	0.022	0.025 UJ	0.025 U	0.025 U	0.025 UJ	0.025 U	0.025 UJ
Endosulfan sulfate	µg/L	NS	NS	0.030 UJ	0.030 U	0.030 U	0.030 UJ	0.030 U	0.030 UJ
Endrin	µg/L	2	11	0.030 UJ	0.030 U	0.030 U	0.030 UJ	0.030 U	0.030 UJ
Endrin aldehyde	µg/L	NS	11	0.030 UJ	0.030 U	0.030 U	0.030 UJ	0.030 U	0.030 UJ
Endrin ketone	µg/L	NS	NS	0.030 UJ	0.030 U	0.030 U	0.030 UJ	0.030 U	0.030 UJ
Gamma-BHC	µg/L	0.2	0.052	0.030 UJ	0.030 U	0.030 U	0.030 UJ	0.030 U	0.030 UJ
gamma-Chlordane	µg/L	NS	NS	0.030 UJ	0.030 U	0.030 U	0.030 UJ	0.030 U	0.030 UJ
Heptachlor	µg/L	0.4	0.015	0.030 UJ	0.030 U	0.030 U	0.030 UJ	0.030 U	0.030 UJ
Heptachlor epoxide	µg/L	0.2	0.0074	0.030 UJ	0.030 U	0.030 U	0.030 UJ	0.030 U	0.030 UJ
Methoxychlor	µg/L	40	180	0.10 UJ	0.10 U	0.10 U	0.10 UJ	0.10 U	0.10 UJ
Toxaphene	µg/L	3	0.061	2.0 UJ	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 UJ
PCB- 1016	µg/L	0.5	0.96	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ
PCB- 1221	µg/L	0.5	0.034	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ
PCB- 1232	µg/L	0.5	0.034	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ
PCB- 1242	µg/L	0.5	0.034	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ
PCB- 1248	µg/L	0.5	0.034	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ
PCB- 1254	µg/L	0.5	0.034	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ
PCB- 1260	µg/L	0.5	0.034	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-8 FWGWMP July 2009 Pesticides and PCBs Analytical Results

Station ID				LL7mw-004	LL7mw-005	LL7mw-006	LL8mw-001	LL8mw-002	LL8mw-003	LL8mw-004
Sample ID		MCL	Region 9 PRG	FWGLL7mw-004C-1373-GW	FWGLL7mw-005C-1374-GW	FWGLL7mw-006C-1375-GW	FWGLL8mw-001C-1376-GW	FWGLL8mw-002C-1377-GW	FWGLL8mw-003C-1378-GW	FWGLL8mw-004C-1379-GW
Date Collected				7/13/2009	7/13/2009	7/13/2009	7/14/2009	7/14/2009	7/14/2009	7/14/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
4,4'-DDD	µg/L	NS	0.28	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
4,4'-DDE	µg/L	NS	0.2	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
4,4'-DDT	µg/L	NS	0.2	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Aldrin	µg/L	NS	0.004	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
alpha-BHC	µg/L	NS	0.011	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
alpha-Chordane	µg/L	NS	NS	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
beta-BHC	µg/L	NS	0.037	**0.022 J**	0.030 UJ	**0.017 J**	0.030 UJ	0.030 UJ	**0.015 J**	**0.0099 J**
delta-BHC	µg/L	NS	NS	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Dieldrin	µg/L	NS	0.0042	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Endosulfan I	µg/L	NS	0.022	0.025 UJ	0.025 UJ	0.025 U	0.025 UJ	0.025 UJ	0.025 UJ	0.025 UJ
Endosulfan II	µg/L	NS	0.022	0.025 UJ	0.025 UJ	0.025 U	0.025 UJ	0.025 UJ	0.025 UJ	0.025 UJ
Endosulfan sulfate	µg/L	NS	NS	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Endrin	µg/L	2	11	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Endrin aldehyde	µg/L	NS	11	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Endrin ketone	µg/L	NS	NS	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Gamma-BHC	µg/L	0.2	0.052	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
gamma-Chlordane	µg/L	NS	NS	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Heptachlor	µg/L	0.4	0.015	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Heptachlor epoxide	µg/L	0.2	0.0074	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Methoxychlor	µg/L	40	180	0.10 UJ	0.10 UJ	0.10 U	0.10 UJ	0.10 UJ	0.10 UJ	0.10 UJ
Toxaphene	µg/L	3	0.061	2.0 UJ	2.0 UJ	2.0 U	2.0 UJ	2.0 UJ	2.0 UJ	2.0 UJ
PCB- 1016	µg/L	0.5	0.96	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
PCB- 1221	µg/L	0.5	0.034	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
PCB- 1232	µg/L	0.5	0.034	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
PCB- 1242	µg/L	0.5	0.034	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
PCB- 1248	µg/L	0.5	0.034	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
PCB- 1254	µg/L	0.5	0.034	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
PCB- 1260	µg/L	0.5	0.034	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-8 FWGWMP July 2009 Pesticides and PCBs Analytical Results

Station ID				LL8mw-005	LL8mw-006	LL9mw-001	LL9mw-002	LL9mw-003	LL9mw-004	LL9mw-005
Sample ID		MCL	Region 9 PRG	FWGLL8mw-005C-1380-GW	FWGLL8mw-006C-1381-GW	FWGLL9mw-001C-1382-GW	FWGLL9mw-002C-1383-GW	FWGLL9mw-003C-1384-GW	FWGLL9mw-004C-1385-GW	FWGLL9mw-005C-1386-GW
Date Collected				7/14/2009	7/14/2009	7/14/2009	7/14/2009	7/14/2009	7/14/2009	7/14/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
4,4'-DDD	µg/L	NS	0.28	0.030 UJ	0.030 UJ	0.030 U	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ
4,4'-DDE	µg/L	NS	0.2	0.030 UJ	0.030 UJ	0.030 U	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ
4,4'-DDT	µg/L	NS	0.2	0.030 UJ	0.030 UJ	0.030 U	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ
Aldrin	µg/L	NS	0.004	0.030 UJ	0.030 UJ	0.030 U	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ
alpha-BHC	µg/L	NS	0.011	0.030 UJ	0.030 UJ	0.030 U	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ
alpha-Chordane	µg/L	NS	NS	0.030 UJ	0.030 UJ	0.030 U	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ
beta-BHC	µg/L	NS	0.037	**0.015 J**	0.030 UJ	0.030 U	0.030 U	**0.014 J**	**0.013 J**	**0.0088 J**
delta-BHC	µg/L	NS	NS	0.030 UJ	0.030 UJ	0.030 U	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ
Dieldrin	µg/L	NS	0.0042	0.030 UJ	0.030 UJ	0.030 U	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ
Endosulfan I	µg/L	NS	0.022	0.025 UJ	0.025 UJ	0.025 U	0.025 U	0.025 UJ	0.025 UJ	0.025 UJ
Endosulfan II	µg/L	NS	0.022	0.025 UJ	0.025 UJ	0.025 U	0.025 U	0.025 UJ	0.025 UJ	0.025 UJ
Endosulfan sulfate	µg/L	NS	NS	0.030 UJ	0.030 UJ	0.030 U	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ
Endrin	µg/L	2	11	0.030 UJ	0.030 UJ	0.030 U	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ
Endrin aldehyde	µg/L	NS	11	0.030 UJ	0.030 UJ	0.030 U	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ
Endrin ketone	µg/L	NS	NS	0.030 UJ	0.030 UJ	0.030 U	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ
Gamma-BHC	µg/L	0.2	0.052	0.030 UJ	0.030 UJ	0.030 U	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ
gamma-Chlordane	µg/L	NS	NS	0.030 UJ	0.030 UJ	0.030 U	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ
Heptachlor	µg/L	0.4	0.015	0.030 UJ	0.030 UJ	0.030 U	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ
Heptachlor epoxide	µg/L	0.2	0.0074	0.030 UJ	0.030 UJ	0.030 U	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ
Methoxychlor	µg/L	40	180	0.10 UJ	0.10 UJ	0.10 U	0.10 U	0.10 UJ	0.10 UJ	0.10 UJ
Toxaphene	µg/L	3	0.061	2.0 UJ	2.0 UJ	2.0 U	2.0 U	2.0 UJ	2.0 UJ	2.0 UJ
PCB- 1016	µg/L	0.5	0.96	0.50 UJ	0.50 UJ	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U
PCB- 1221	µg/L	0.5	0.034	0.50 UJ	0.50 UJ	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U
PCB- 1232	µg/L	0.5	0.034	0.50 UJ	0.50 UJ	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U
PCB- 1242	µg/L	0.5	0.034	0.50 UJ	0.50 UJ	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U
PCB- 1248	µg/L	0.5	0.034	0.50 UJ	0.50 UJ	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U
PCB- 1254	µg/L	0.5	0.034	0.50 UJ	0.50 UJ	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U
PCB- 1260	µg/L	0.5	0.034	0.50 UJ	0.50 UJ	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-8 FWGWMP July 2009 Pesticides and PCBs Analytical Results

Station ID				LL9mw-006	LL9mw-007	LL10mw-001	LL10mw-002	LL10mw-003	LL10mw-004	LL10mw-005
Sample ID		MCL	Region 9 PRG	FWGLL9mw-006C-1387-GW	FWGLL9mw-007C-1388-GW	FWGLL10mw-001C-1389-GW	FWGLL10mw-002C-1390-GW	FWGLL10mw-003C-1391-GW	FWGLL10mw-004C-1392-GW	FWGLL10mw-005C-1393-GW
Date Collected				7/14/2009	7/14/2009	7/14/2009	7/14/2009	7/14/2009	7/15/2009	7/15/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
4,4'-DDD	µg/L	NS	0.28	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U
4,4'-DDE	µg/L	NS	0.2	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U
4,4'-DDT	µg/L	NS	0.2	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U
Aldrin	µg/L	NS	0.004	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U
alpha-BHC	µg/L	NS	0.011	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U
alpha-Chordane	µg/L	NS	NS	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U
beta-BHC	µg/L	NS	0.037	**0.15 J**	**0.016 J**	**0.015 J**	0.030 UJ	0.030 UJ	0.030 U	0.030 U
delta-BHC	µg/L	NS	NS	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U
Dieldrin	µg/L	NS	0.0042	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U
Endosulfan I	µg/L	NS	0.022	0.025 U	0.025 UJ	0.025 U	0.025 UJ	0.025 UJ	0.025 U	0.025 U
Endosulfan II	µg/L	NS	0.022	0.025 U	0.025 UJ	0.025 U	0.025 UJ	0.025 UJ	0.025 U	0.025 U
Endosulfan sulfate	µg/L	NS	NS	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U
Endrin	µg/L	2	11	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U
Endrin aldehyde	µg/L	NS	11	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U
Endrin ketone	µg/L	NS	NS	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U
Gamma-BHC	µg/L	0.2	0.052	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U
gamma-Chlordane	µg/L	NS	NS	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U
Heptachlor	µg/L	0.4	0.015	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U
Heptachlor epoxide	µg/L	0.2	0.0074	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U
Methoxychlor	µg/L	40	180	0.10 U	0.10 UJ	0.10 U	0.10 UJ	0.10 UJ	0.10 U	0.10 U
Toxaphene	µg/L	3	0.061	2.0 U	2.0 UJ	2.0 U	2.0 UJ	2.0 UJ	2.0 U	2.0 U
PCB- 1016	µg/L	0.5	0.96	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.50 U	0.50 U
PCB- 1221	µg/L	0.5	0.034	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.50 U	0.50 U
PCB- 1232	µg/L	0.5	0.034	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.50 U	0.50 U
PCB- 1242	µg/L	0.5	0.034	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.50 U	0.50 U
PCB- 1248	µg/L	0.5	0.034	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.50 U	0.50 U
PCB- 1254	µg/L	0.5	0.034	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.50 U	0.50 U
PCB- 1260	µg/L	0.5	0.034	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.50 U	0.50 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-8 FWGWMP July 2009 Pesticides and PCBs Analytical Results

Station ID				LL10mw-006	LL11mw-001	LL11mw-003	LL11mw-004	LL11mw-005	LL11mw-006	LL11mw-008
Sample ID		MCL	Region 9 PRG	FWGLL10mw-006C-1394-GW	FWGLL11mw-001C-1395-GW	FWGLL11mw-003C-1396-GW	FWGLL11mw-004C-1397-GW	FWGLL11mw-005C-1398-GW	FWGLL11mw-006C-1399-GW	FWGLL11mw-008C-1400-GW
Date Collected				7/15/2009	7/15/2009	7/15/2009	7/15/2009	7/15/2009	7/15/2009	7/15/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
4,4'-DDD	µg/L	NS	0.28	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ
4,4'-DDE	µg/L	NS	0.2	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ
4,4'-DDT	µg/L	NS	0.2	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ
Aldrin	µg/L	NS	0.004	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ
alpha-BHC	µg/L	NS	0.011	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ
alpha-Chordane	µg/L	NS	NS	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ
beta-BHC	µg/L	NS	0.037	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ
delta-BHC	µg/L	NS	NS	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ
Dieldrin	µg/L	NS	0.0042	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ
Endosulfan I	µg/L	NS	0.022	0.025 U	0.025 UJ	0.025 UJ	0.025 U	0.025 U	0.025 U	0.025 UJ
Endosulfan II	µg/L	NS	0.022	0.025 U	0.025 UJ	0.025 UJ	0.025 U	0.025 U	0.025 U	0.025 UJ
Endosulfan sulfate	µg/L	NS	NS	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ
Endrin	µg/L	2	11	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ
Endrin aldehyde	µg/L	NS	11	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ
Endrin ketone	µg/L	NS	NS	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ
Gamma-BHC	µg/L	0.2	0.052	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ
gamma-Chlordane	µg/L	NS	NS	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ
Heptachlor	µg/L	0.4	0.015	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ
Heptachlor epoxide	µg/L	0.2	0.0074	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ
Methoxychlor	µg/L	40	180	0.10 U	0.10 UJ	0.10 UJ	0.10 U	0.10 U	0.10 U	0.10 UJ
Toxaphene	µg/L	3	0.061	2.0 U	2.0 UJ	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 UJ
PCB- 1016	µg/L	0.5	0.96	0.50 U	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ
PCB- 1221	µg/L	0.5	0.034	0.50 U	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ
PCB- 1232	µg/L	0.5	0.034	0.50 U	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ
PCB- 1242	µg/L	0.5	0.034	0.50 U	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ
PCB- 1248	µg/L	0.5	0.034	0.50 U	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ
PCB- 1254	µg/L	0.5	0.034	0.50 U	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ
PCB- 1260	µg/L	0.5	0.034	0.50 U	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-8 FWGWMP July 2009 Pesticides and PCBs Analytical Results

Station ID				LL11mw-009	LL11mw-010	ASYmw-001	ASYmw-002	ASYmw-003	ASYmw-004	ASYmw-005
Sample ID		MCL	Region 9 PRG	FWGLL11mw-009C-1401-GW	FWGLL11mw-010C-1402-GW	FWGASYmw-001C-1403-GW	FWGASYmw-002C-1404-GW	FWGASYmw-003C-1405-GW	FWGASYmw-004C-1406-GW	FWGASYmw-005C-1407-GW
Date Collected				7/15/2009	7/15/2009	7/15/2009	7/15/2009	7/15/2009	7/15/2009	7/15/2009
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
4,4'-DDD	µg/L	NS	0.28	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
4,4'-DDE	µg/L	NS	0.2	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
4,4'-DDT	µg/L	NS	0.2	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Aldrin	µg/L	NS	0.004	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
alpha-BHC	µg/L	NS	0.011	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
alpha-Chordane	µg/L	NS	NS	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
beta-BHC	µg/L	NS	0.037	**0.029 J**	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
delta-BHC	µg/L	NS	NS	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Dieldrin	µg/L	NS	0.0042	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Endosulfan I	µg/L	NS	0.022	0.025 U	0.025 UJ	0.025 UJ	0.025 UJ	0.025 UJ	0.025 UJ	0.025 UJ
Endosulfan II	µg/L	NS	0.022	0.025 U	0.025 UJ	0.025 UJ	0.025 UJ	0.025 UJ	0.025 UJ	0.025 UJ
Endosulfan sulfate	µg/L	NS	NS	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Endrin	µg/L	2	11	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Endrin aldehyde	µg/L	NS	11	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Endrin ketone	µg/L	NS	NS	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Gamma-BHC	µg/L	0.2	0.052	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
gamma-Chlordane	µg/L	NS	NS	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Heptachlor	µg/L	0.4	0.015	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Heptachlor epoxide	µg/L	0.2	0.0074	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Methoxychlor	µg/L	40	180	0.10 U	0.10 UJ	0.10 UJ	0.10 UJ	0.10 UJ	0.10 UJ	0.10 UJ
Toxaphene	µg/L	3	0.061	2.0 U	2.0 UJ	2.0 UJ	2.0 UJ	2.0 UJ	2.0 UJ	2.0 UJ
PCB- 1016	µg/L	0.5	0.96	0.50 U	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 U
PCB- 1221	µg/L	0.5	0.034	0.50 U	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 U
PCB- 1232	µg/L	0.5	0.034	0.50 U	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 U
PCB- 1242	µg/L	0.5	0.034	0.50 U	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 U
PCB- 1248	µg/L	0.5	0.034	0.50 U	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 U
PCB- 1254	µg/L	0.5	0.034	0.50 U	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 U
PCB- 1260	µg/L	0.5	0.034	0.50 U	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-8 FWGWMP July 2009 Pesticides and PCBs Analytical Results

Station ID				ASYmw-006	ASYmw-007	ASYmw-008	ASYmw-009	ASYmw-010
Sample ID		MCL	Region 9 PRG	FWGASYmw-006C-1408-GW	FWGASYmw-007C-1409-GW	FWGASYmw-008C-1410-GW	FWGASYmw-009C-1411-GW	FWGASYmw-010C-1412-GW
Date Collected				7/16/2009	7/16/2009	7/16/2009	7/16/2009	7/16/2009
Sample Type				Grab	Grab	Grab	Grab	Grab
Analyte	Units							
4,4'-DDD	µg/L	NS	0.28	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
4,4'-DDE	µg/L	NS	0.2	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
4,4'-DDT	µg/L	NS	0.2	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Aldrin	µg/L	NS	0.004	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
alpha-BHC	µg/L	NS	0.011	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
alpha-Chordane	µg/L	NS	NS	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
beta-BHC	µg/L	NS	0.037	0.030 UJ	0.030 UJ	**0.019 J**	**0.016 J**	0.030 UJ
delta-BHC	µg/L	NS	NS	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Dieldrin	µg/L	NS	0.0042	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Endosulfan I	µg/L	NS	0.022	0.025 UJ	0.025 UJ	0.025 UJ	0.025 UJ	0.025 UJ
Endosulfan II	µg/L	NS	0.022	0.025 UJ	0.025 UJ	0.025 UJ	0.025 UJ	0.025 UJ
Endosulfan sulfate	µg/L	NS	NS	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Endrin	µg/L	2	11	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Endrin aldehyde	µg/L	NS	11	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Endrin ketone	µg/L	NS	NS	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Gamma-BHC	µg/L	0.2	0.052	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
gamma-Chlordane	µg/L	NS	NS	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Heptachlor	µg/L	0.4	0.015	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Heptachlor epoxide	µg/L	0.2	0.0074	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Methoxychlor	µg/L	40	180	0.10 UJ	0.10 UJ	0.10 UJ	0.10 UJ	0.10 UJ
Toxaphene	µg/L	3	0.061	2.0 UJ	2.0 UJ	2.0 UJ	2.0 UJ	2.0 UJ
PCB- 1016	µg/L	0.5	0.96	0.50 UJ	0.50 U	0.50 UJ	0.50 U	0.50 UJ
PCB- 1221	µg/L	0.5	0.034	0.50 UJ	0.50 U	0.50 UJ	0.50 U	0.50 UJ
PCB- 1232	µg/L	0.5	0.034	0.50 UJ	0.50 U	0.50 UJ	0.50 U	0.50 UJ
PCB- 1242	µg/L	0.5	0.034	0.50 UJ	0.50 U	0.50 UJ	0.50 U	0.50 UJ
PCB- 1248	µg/L	0.5	0.034	0.50 UJ	0.50 U	0.50 UJ	0.50 U	0.50 UJ
PCB- 1254	µg/L	0.5	0.034	0.50 UJ	0.50 U	0.50 UJ	0.50 U	0.50 UJ
PCB- 1260	µg/L	0.5	0.034	0.50 UJ	0.50 U	0.50 UJ	0.50 U	0.50 UJ

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-8 FWGWMP July 2009 Pesticide and PCBs Analytical Results

Data Qualifiers

Data qualifier flags are used in an effort to describe the quality of each piece of data for each constituent. These flags are letter codes appended to the numerical data. The following data qualifiers are specified in the USACE Louisville Chemistry Guidelines (LCG). For a complete explanation of qualifiers used for each constituent please refer to the Data Verification Summaries in Appendix D.

U- The analyte was analyzed for but not detected. The numerical value preceding the U is the associated reporting limit.

J- The identification of the analyte is acceptable, but the quality assurance criteria indicate that the quantitative values may be outside the normal expected range of precision (i.e., the quantitative value is estimated). Examples include:

- Results detected above the laboratory MDL but less than the laboratory reporting limit.
- MS/MSD percent recoveries outside the acceptance criteria.
- Laboratory control sample (LCS) percent recoveries outside acceptance criteria.

R- Data are considered to be rejected and shall not be used. This flag denotes the failure of quality control criteria such that it cannot be determined if the analyte is present or absent from the sample [e.g., the method reporting limit (MRL) verification standard was below quality control guidelines; associated sample results that were non-detect are unusable].

UJ- This flag is a combination of the U and J qualifiers which indicate that the analyte is not present. The reported value is considered to be an estimated reporting limit (RL).

B- The B flag is used for both organic and inorganic analyses when the analyte is found in the method blank or any of the field blanks. This designation overrides the Contract Laboratory Program (CLP) “B” designation when used by the laboratory as an estimated value for inorganics.

Table 3-9 FWGWMP July 2009 Perchlorate Analytical Results

Station ID	Sample ID	Date Collected	Perchlorate ug/L	
ASYmw-001C	FWGASYmw-001C-1403-GF	7/15/2009	**0.022**	**J**
ASYmw-002C	FWGASYmw-002C-1404-GF	7/15/2009	**0.064**	
ASYmw-003C	FWGASYmw-003C-1405-GF	7/15/2009	**0.024**	**J**
ASYmw-004C	FWGASYmw-004C-1406-GF	7/15/2009	**0.021**	**J**
ASYmw-005C	FWGASYmw-005C-1407-GF	7/15/2009	**0.060**	
ASYmw-006C	FWGASYmw-006C-1408-GF	7/16/2009	**0.022**	**J**
ASYmw-007C	FWGASYmw-007C-1409-GF	7/16/2009	**0.039**	**J**
ASYmw-008C	FWGASYmw-008C-1410-GF	7/16/2009	**0.031**	**J**
ASYmw-009C	FWGASYmw-009C-1411-GF	7/16/2009	**0.024**	**J**
ASYmw-010C	FWGASYmw-010C-1412-GF	7/16/2009	**0.028**	**J**
LL6mw-005C	FWGLL6mw-005C-1367-GF	7/13/2009	**0.022**	**J**
LL6mw-006C	FWGLL6mw-006C-1368-GF	7/13/2009	**0.027**	**J**
LL6mw-007C	FWGLL6mw-007C-1369-GF	7/13/2009	**0.096**	
LL7mw-001C	FWGLL7mw-001C-1370-GF	7/13/2009	**0.017**	**J**
LL7mw-002C	FWGLL7mw-002C-1371-GF	7/13/2009	**0.11**	
LL7mw-003C	FWGLL7mw-003C-1372-GF	7/13/2009	**0.0090**	**J**
LL7mw-004C	FWGLL7mw-004C-1373-GF	7/13/2009	**0.023**	**J**
LL7mw-005C	FWGLL7mw-005C-1374-GF	7/13/2009	**0.023**	**J**
LL7mw-006C	FWGLL7mw-006C-1375-GF	7/13/2009	**0.031**	**J**
LL8mw-001C	FWGLL8mw-001C-1376-GF	7/14/2009	**0.019**	**J**
LL8mw-002C	FWGLL8mw-002C-1377-GF	7/14/2009	**0.025**	**J**
LL8mw-003C	FWGLL8mw-003C-1378-GF	7/14/2009	**0.019**	**J**
LL8mw-004C	FWGLL8mw-004C-1379-GF	7/14/2009	**0.013**	**J**
LL8mw-005C	FWGLL8mw-005C-1380-GF	7/14/2009	0.050	U
LL8mw-006C	FWGLL8mw-006C-1381-GF	7/14/2009	**0.050**	
LL9mw-001C	FWGLL9mw-001C-1382-GF	7/14/2009	**0.081**	
LL9mw-002C	FWGLL9mw-002C-1383-GF	7/14/2009	**0.092**	
LL9mw-003C	FWGLL9mw-003C-1384-GF	7/14/2009	**0.095**	
LL9mw-004C	FWGLL9mw-004C-1385-GF	7/14/2009	0.050	U
LL9mw-005C	FWGLL9mw-005C-1386-GF	7/14/2009	**0.044**	**J**
LL9mw-006C	FWGLL9mw-006C-1387-GF	7/14/2009	**0.051**	
LL9mw-007C	FWGLL9mw-007C-1388-GF	7/14/2009	**0.025**	**J**
LL10mw-001C	FWGLL10mw-001C-1389-GF	7/14/2009	**0.069**	
LL10mw-002C	FWGLL10mw-002C-1390-GF	7/14/2009	**0.014**	**J**
LL10mw-003C	FWGLL10mw-003C-1391-GF	7/14/2009	**0.075**	
LL10mw-004C	FWGLL10mw-004C-1392-GF	7/15/2009	0.050	U
LL10mw-005C	FWGLL10mw-005C-1393-GF	7/15/2009	**0.052**	
LL10mw-006C	FWGLL10mw-006C-1394-GF	7/15/2009	**0.054**	
LL11mw-001C	FWGLL11mw-001C-1395-GF	7/15/2009	**0.019**	**J**
LL11mw-003C	FWGLL11mw-003C-1396-GF	7/15/2009	**0.019**	**J**
LL11mw-004C	FWGLL11mw-004C-1397-GF	7/15/2009	0.050	U
LL11mw-005C	FWGLL11mw-005C-1398-GF	7/15/2009	**0.045**	**J**
LL11mw-006C	FWGLL11mw-006C-1399-GF	7/15/2009	**0.17**	
LL11mw-008C	FWGLL11mw-008C-1400-GF	7/15/2009	**0.035**	**J**
LL11mw-009C	FWGLL11mw-009C-1401-GF	7/15/2009	**0.0089**	**J**
LL11mw-010C	FWGLL11mw-010C-1402-GF	7/15/2009	0.050	U

Notes:

All samples were collected as a grab sample.

Region 9 PRG for Perchlorate is 3.6 µg/L.

On February 18, 2005, the USEPA established a Drinking Water Equivalent Level (DWEL) for perchlorate which is set at 24.5 ug/L.

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-9 FWGWMP July 2009 Perchlorate Results

Data Qualifiers

Data qualifier flags are used in an effort to describe the quality of each piece of data for each constituent. These flags are letter codes appended to the numerical data. The following data qualifiers are specified in the USACE Louisville Chemistry Guidelines (LCG). For a complete explanation of qualifiers used for each constituent please refer to the Data Verification Summaries in Appendix D.

U- The analyte was analyzed for but not detected. The numerical value preceding the U is the associated reporting limit.

J- The identification of the analyte is acceptable, but the quality assurance criteria indicate that the quantitative values may be outside the normal expected range of precision (i.e., the quantitative value is estimated). Examples include:

- Results detected above the laboratory MDL but less than the laboratory reporting limit.
- MS/MSD percent recoveries outside the acceptance criteria.
- Laboratory control sample (LCS) percent recoveries outside acceptance criteria.

R- Data are considered to be rejected and shall not be used. This flag denotes the failure of quality control criteria such that it cannot be determined if the analyte is present or absent from the sample [e.g., the method reporting limit (MRL) verification standard was below quality control guidelines; associated sample results that were non-detect are unusable].

UJ- This flag is a combination of the U and J qualifiers which indicate that the analyte is not present. The reported value is considered to be an estimated reporting limit (RL).

B- The B flag is used for both organic and inorganic analyses when the analyte is found in the method blank or any of the field blanks. This designation overrides the Contract Laboratory Program (CLP) “B” designation when used by the laboratory as an estimated value for inorganics.

3.3 Data Verification/Validation

As discussed in Sections 2.3 and 3.2, all primary chemical data were generated by TestAmerica. RTI conducted the independent QC analysis (EQM does not however verify RTI data). A three step process is then conducted which involves the lab, the ADR data program, and a data validator performing the data verification and validation of the data. The First Step is where each lab analyzes the data and assigns a qualifier as necessary in full accordance with USEPA and Louisville Chemistry (LCG) guidelines.

The data verification and validation process is continued with Step Two; when the data validator verifies all data received from TestAmerica, and validates greater than 10% of the data by running the lab data through the ADR program. The USACE-supplied ADR program assigned qualifiers to the data as necessary consistent with the programmed criteria of the ADR software. The Third step is when the data validator then uses professional judgment to check the validity of the qualified data and either accepts, rejects, or re-qualifies the ADR results following strict LCG and USEPA guidelines.

After this three-step process has been completed, the resulting final ADR qualifiers may not match the original lab qualifiers which are presented on the laboratory data sheets. As a result of the data validation process, one or more of four possibilities listed occurs:

1. The lab assigns a B, J, or E to the data, and ADR and/or the data validator changes the qualifier to a J, UJ, U, B, or R.
2. The lab assigns no qualifier to the data, and ADR and/or the data validator assigns a J, UJ, U, B, or R to the data.
3. The lab assigns a B, J, or E to the data, and ADR and/or the data validator assigns no qualifier to the data.
4. The lab may assign a J qualifier or use no qualifier, and ADR and/or the data validator accepts the lab designation.

For the July 2009 Sampling Event Report, the laboratory data with laboratory derived qualifiers following USEPA and LGC criteria are presented in Appendix D. The verification reports for the data are also presented in Appendix D, which includes the definitions of the ADR qualifiers. The data presented in Tables 3-3, 3-4, 3-6, 3-7, 3-8 and 3-9 are the result of the data that has been subjected to the Three Step Process of verification and validation. These Tables display the final assigned data qualifier in accordance with ADR and LCG criteria.

Data qualifier flags are used in an effort to describe the quality of each piece of data for each constituent. These flags are letter codes appended to the numerical data. The following data qualifiers are specified in the USACE Louisville Chemistry Guidelines (LCG). For a complete explanation of qualifiers used for each constituent please refer to the Data Verification Summaries in Appendix D.

- U - The analyte was analyzed for but not detected. The numerical value preceding the U is the associated reporting limit.

- J - The identification of the analyte is acceptable, but the quality assurance criteria indicate that the quantitative values may be outside the normal expected range of precision (i.e., the quantitative value is estimated). Examples include:
  - Results detected above the laboratory MDL but less than the laboratory reporting limit.
  - MS/MSD percent recoveries outside the acceptance criteria.
  - Laboratory control sample (LCS) percent recoveries outside acceptance criteria.

- R - Data are considered to be rejected and shall not be used. This flag denotes the failure of quality control criteria such that it cannot be determined if the analyte is present or absent from the sample [e.g., the method reporting limit (MRL) verification standard was below quality control guidelines; associated sample results that were non-detect are unusable].

- UJ - This flag is a combination of the U and J qualifiers which indicate that the analyte is not present. The reported value is considered to be an estimated reporting limit (RL).

- B - The B flag is used for both organic and inorganic analyses when the analyte is found in the method blank or any of the field blanks. This designation overrides the Contract Laboratory Program (CLP) "B" designation when used by the laboratory as an estimated value for inorganics.

Forty-six wells were sampled during a four-day sampling event from July 13-16, 2009. During this event, twelve trip blanks were submitted for volatile organic analysis to TestAmerica.

Five field duplicates were collected during the four day period in order to assess the quality and consistency of sample collection. Project requirements of 10% field duplicates were met for this sampling event. In addition, five laboratory splits were collected and analyzed in order to assess the quality and consistency of the laboratory analysis. The project requirements of taking 10% laboratory splits were met for this sampling event. An equipment rinse blank was collected during each day of the sampling event.

For the July 2009 sampling event the following laboratory or field contamination at detections greater than ½ the method reporting limit (MRL) was reported for the field QA/QC samples.

A9G140103 / A9G140147 / A9G140154

FWGEQUIPRinse1-1423-GW

- 2-butanone was detected at 0.78ug/L, acetone at 5.9ug/L, benzene at 0.36ug/L, ethylbenzene at 0.32ug/L, methylene chloride at 2.8ug/L, o-xylene at 0.46ug/l, toluene at 1.9ug/L and total xylene at 1.8ug/L. No qualifications were made as

there were no detected concentrations of these contaminants in the associated field samples.

- Bis (2-Ethylhexyl) phthalate was detected at 1.9ug/L. bis (2-Ethylhexyl) phthalate results <10x contamination were qualified, “B”.
- Potassium was detected at 150ug/L and zinc at 3.4ug/L. All contaminants <5x contamination were qualified, “B”.

Trip Blanks

- Acetone was detected in all three trip blanks from 1.9ug/L to 2.6ug/L. Sample FWGEQUIPRinse1-1423-GW was qualified as estimated, “B”.

Method Blanks

- Bis (2-Ethylhexyl) phthalate was detected at 1.1ug/L. bis (2-Ethylhexyl) phthalate results <10x contamination were qualified, “B”.
- Potassium was detected at 153ug/L and zinc at 6.7ug/L. All potassium and zinc results <5x contamination were qualified, “B”.
- 1,3,5-Trinitrobenzene was detected in the method blank at 0.035ug/L. Detected 1,3,5-trinitrobenzene results <5x contamination were qualified, “B”.

A9G150104 / A9G150109 / A9G150112

FWGEQUIPRinse2-1424-GW

- Acetone was detected at 5.5ug/L and methylene chloride at 2.6ug/L. No qualifications were made as there were no detected concentrations of these contaminants in the associated field samples.
- Bis (2-Ethylhexyl) phthalate was detected at 2.3ug/L. bis (2-Ethylhexyl) phthalate results <10x contamination were qualified, “B”.
- Potassium was detected at 157ug/L, selenium at 4.6ug/L and zinc at 3.5ug/L. All detected potassium, selenium and zinc results <5x contamination were qualified, “B”.

Trip Blanks

- Acetone was detected in all three trip blanks from 2.1ug/L to 2.4ug/L. Sample FWGEQUIPRinse2-1424-GW was qualified, “B”.

Method Blanks

- Bis (2-Ethylhexyl) phthalate was detected at 1.4ug/L. bis (2-Ethylhexyl) phthalate results <10x contamination were qualified, “B”.
- Potassium was detected at 147ug/L and zinc at 8.8ug/L. All detected potassium and zinc results <5x contamination were qualified, “B”.
- 1,3,5-Trinitrobenzene was detected in the method blank at 0.049ug/L. Detected 1,3,5-trinitrobenzene results <5x contamination were qualified, “B”.

A9G160103 / A9G160107 / A9G160110

FWGEQUIPRinse3-1425-GW

- Acetone was detected at 6.9ug/L, 2-butanone at 0.79ug/L, benzene at 0.43ug/L, m & p-xylene at 0.76ug/L, methylene chloride at 3.0ug/L, o-xylene at 0.37ug/L, toluene at 1.2ug/L and total xylenes at 1.1ug/L. The acetone result for sample

FWGLL11mw-005c-1398-GW was qualified "B". No qualifications were made for the other rinse contaminants as there were no detected concentrations of these contaminants in the associated field samples.

- Zinc was detected at 2.5ug/L and potassium at 149ug/L. All detected zinc and potassium results <5x contamination were qualified, "B".

Trip Blanks

- Acetone was detected in all three trip blanks from 3.0ug/L to 3.2ug/L. Sample FWGEQUIPRinse3-1425-GW and FWGLL11mw-005c-1398-GW were qualified, "B".

Method Blanks

- Bis (2-Ethylhexyl) phthalate was detected at 1.4ug/L and 5.1ug/L. bis (2-Ethylhexyl) phthalate results <10x contamination were qualified, "B".
- Potassium was detected at 149ug/L and zinc at 6.8ug/L. All detected potassium and zinc results <5x contamination were qualified, "B".
- The method blank associated with batch 9201377 had detected methylene chloride at 0.38ug/L. The methylene chloride result for FWGEQUIPRinse3-1425-GW was qualified, "B".

A9G160256 / A9G160265 / A9G160271

FWGEQUIPRinse4-1426-GW

- Acetone was detected at 7.3ug/L, 2-butanone at 1.1ug/L and methylene chloride at 2.1ug/L. No qualifications were made as there were no detected concentrations of these contaminants in the associated field samples.
- Potassium was detected at 141ug/L. All detected potassium results <5x contamination were qualified, "B".
- Bis (2-Ethylhexyl) phthalate was detected at 0.85ug/L. bis (2-Ethylhexyl) phthalate results <10x contamination were qualified, "B"

Trip Blanks

- Acetone was detected in all three trip blanks from 2.4ug/L to 3.2ug/L. The acetone result for FWGEQUIPRinse4-1426-GW was qualified, "B", as the detected acetone concentration in the rinse blank was less than 10x trip blank contamination.

Method Blanks

- Bis (2-Ethylhexyl) phthalate was detected at 1.3ug/L. bis (2-Ethylhexyl) phthalate results <10x contamination were qualified, "B".
- Potassium was detected at 144ug/L and zinc at 5.0ug/L. All detected potassium and zinc results <5x contamination were qualified, "B".

For a discussion of method blank contamination please reference the Data Verification Reports and the Laboratory Case Narrative.

Laboratory analyses were performed in analytical batches of ≤ 20 in order to maximize efficiency and group quality control requirements. Method blanks and laboratory control samples were analyzed at a frequency of 1:20 (5%) samples, or in each analytical batch whichever was greater. Sufficient volume was provided to the laboratory in order to assess matrix spike analysis on project samples at a frequency of 1:10 (10%) samples. Matrix spike/matrix spike duplicate analysis was performed by the laboratory as batch quality control at a frequency of 1:10 (10%).

Field quality control and laboratory quality control results were evaluated as part of the verification assessment provided in Appendix D. Project requirements were met for the frequency and quality of these samples.

The initial calibration for explosives (Method 8330) on LC10, as presented by the laboratory, had incorporated a reanalyzed standard (STD3). While the laboratory analyzed an ICV following the first analysis of all the calibration standards, it was noted by EQM that the curve did not have a valid ICV following the re-analysis of STD 3. Since the laboratory reinjected STD3 because of problems associated with a target not required by this project, it was requested by EQM that the calibration with the initial analysis of STD 3 be used in the quantitation of the samples. The laboratory reprocessed the samples and submitted a revised data package for the reprocessed samples. EQM also requested a corrective action and the laboratory's corrective action response has been provided as part of the verification package.

Table 3-10 presents the percent, by analytical method, of data that was acceptable (based on data not rejected) for use. Data was rejected during this sampling and analysis event for a variety of reasons including MRL check failures as described in Appendix D. Under the requirements of the LCG this data is deemed unusable. This does not, however, have any negative effect on the usability of other parameters analyzed under the same method. Rejected data do call into question the interpretation of that particular data for a given monitoring event and it is important to correct any problems to prevent a reoccurrence for future sampling events. All methods met the 90% completion requirement.

All qualified data has been discussed in the Data Verification Reports contained in Appendix D. All other data meet the requirements specified in the USACE Louisville Guidance Document and the QAPP associated with this site. All qualified data performed by the data validator is further discussed in the Data Verification Reports contained in Appendix D.

Table 3-10. Percent of Acceptable Data

Analytical Method	Total Number of Analytes	Number of Rejects	Percent Completeness
353.2 Modified	55	0	100
6010B	825	0	100
6020	385	0	100
6860	55	0	100
7470A	55	0	100
8081A	1,155	0	100
8082	385	0	100
8260B	2,613	0	100
8270C	3,360	18	99.5
8330	880	0	100
9012A	55	0	100
8330 Modified	55	0	100
TOTAL	**10,148**	**18**	**99.9**

SECTION 4

SUMMARY OF RESULTS

Explosive and Propellant Compounds

As shown in Table 3-3, no explosives/propellants were detected at levels above the Region 9 PRGs during the July 2009 event.

Inorganic Elements

Several inorganic compounds were detected at levels exceeding the MCLs and/or Region 9 PRGs. These included manganese, arsenic, cadmium, and iron for wells from all areas sampled. These compounds were also detected at concentrations exceeding the Facility-Wide Background Criteria for many of the wells. Table 4-1 presents a summary of all inorganic compounds and the associated wells that had detections exceeding MCLs or Region 9 PRGs.

Volatile Organic Compounds

As shown in Table 3-6, the only VOCs detected at levels above the MCLs or Region 9 PRGs during the July 2009 event were:

- Chloroform at a concentration exceeding the Region 9 PRG of 0.17 μg/L [LL10mw-001 (0.22 μg/L J) and LL10mw-003 (0.29 μg/L J)].

- Carbon Tetrachloride at a concentration exceeding the Region 9 PRG of 0.17 μg/L [LL10mw-001 (1.3 μg/L) and LL10mw-003 (2.5 μg/L)].

- Tetrachloroethene at a concentration exceeding the Region 9 PRG of 0.1 μg/L [LL11mw-009 (3.8 μg/L)].

Semivolatile Organic Compounds

As shown in Table 3-7 the only SVOC detected at levels above the Region 9 PRGs was bis(2-Ethylhexyl)phthalate at the following well:

- LL11mw-009 (5.9 μg/L J B). The Region 9 PRG is 4.8 μg/L.

Pesticides and Polychlorinated Biphenyls (PCBs)

As shown in Table 3-7 no pesticides/PCBs were detected at levels above the Region 9 PRGs during the July 2009 event.

Table 4-1. Inorganic Elements Detected at Concentrations Exceeding the MCLs or Region 9 PRGs

Area	Well Number	Compound or Element Detected	Jul-09 Level (ug/L)		MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background Criteria (ug/L)
Load Line 6	LL6mw-005	Arsenic	**45.2**		10	0.045	0
		Iron	**2,520**		300	11,000	1,430
		Manganese	**583**		50	880	1,340
	LL6mw-007	Manganese	**395**		50	880	1,340
Load Line 7	LL7mw-001	Iron	**7,850**		300	11,000	1,430
		Manganese	**454**		50	880	1,340
	LL7mw-003	Iron	**20,200**		300	11,000	1,430
		Manganese	**1,430**		50	880	1,340
	LL7mw-004	Iron	**19,000**		300	11,000	1,430
		Manganese	**1,240**		50	880	1,340
	LL7mw-005	Manganese	**1,660**		50	880	1,340
	LL7mw-006	Manganese	**1,280**		50	880	1,340
		Iron	**2,210**		300	11,000	279
Load Line 8	LL8mw-002	Arsenic	**5.6**		10	0.045	11.7
		Manganese	**344**		50	880	1,020
		Iron	**3,320**		300	11,000	279
	LL8mw-003	Arsenic	**3.5**	J	10	0.045	11.7
		Manganese	**389**		50	880	1,020
		Iron	**422**		300	11,000	279
	LL8mw-005	Manganese	**2,780**		50	880	1,340
		Iron	**760**		300	11,000	1,430
Load Line 9	LL9mw-002	Manganese	**53**		50	880	1,340
	LL9mw-004	Manganese	**2,450**		50	880	1,340
		Iron	**10,600**		300	11,000	1,430
	LL9mw-006	Manganese	**371**		50	880	1,340
		Iron	**1,480**		300	11,000	1,430
	LL9mw-007	Manganese	**800**		50	880	1,340
		Iron	**7,300**		300	11,000	1,430
Load Line 10	LL10mw-002	Manganese	**1,620**		50	880	1,340
		Iron	**5,800**		300	11,000	1,430
Load Line 11	LL11mw-001	Manganese	**575**		50	880	1,020
	Ll11mw-003	Manganese	**690**		50	880	1,020
	LL11mw-004	Cadmium	**3.2**		5	18.000	0
		Manganese	**609**		50	880	1,020
	LL11mw-009	Manganese	**804**		50	880	1,020
	LL11mw-010	Arsenic	**5.8**		10	0.045	11.7
		Iron	**1,420**	J	300	11,000	279
		Manganese	**967**	J	50	880	1,020
Atlas Scrap Yard	ASYmw-001	Iron	**300**	J	300	11,000	1,430
		Manganese	**895**		50	880	1,340
	ASYmw-003	Arsenic	**4.9**	J	10	0.045	0.0
		Iron	**2,420**	J	300	11,000	1,430
		Manganese	**532**		50	880	1,340
	ASYmw-004	Iron	**1,760**	J	300	11,000	1,430
		Manganese	**200**	J	50	880	1,340
		Arsenic	**19**		10	0.045	0
	ASYmw-005	Manganese	**194**	J	50	880	1,340
	ASYmw-006	Iron	**1,250**		300	11,000	1,430
		Manganese	**167**		50	880	1,340
	ASYmw-007	Manganese	**186**		50	880	1,020
	ASYmw-008	Iron	**357**		300	11,000	279
		Manganese	**136**		50	880	1,020
		Arsenic	**16**		10	0.045	11.7
	ASYmw-009	Manganese	**596**		50	880	1,340
	ASYmw-010	Manganese	**96.8**		50	880	1020
		Iron	**2,250**		300	11,000	279

Notes:

J = estimated result. Results have been qualified "J" For more details refer to Data Verification/Validation Reports in Appendix D

B = the analyte is found in the method blank or any of the field blanks

SECTION 5

REFERENCES

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SpecPro, Inc., 2005a. *Facility-Wide Groundwater Monitoring Program Report on the April 2005 Sampling Event, Ravenna Training and Logistics Site / Ravenna Army Ammunition Plant, Ravenna, Ohio.*

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APPENDIX A

CORRESPONDENCE DOCUMENTING THE CHANGE IN WELLS TO BE SAMPLED IN 2008-2009

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, LOUISVILLE
CORPS OF ENGINEERS
P.O. BOX 59
LOUISVILLE, KENTUCKY 40201-0059

December 12, 2007

Engineering Division

Vicki Deppisch
Ohio Environmental Protection Agency
Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087

Dear Ms. Deppisch:

Re: Notification of Annual Sampling Schedule
Facility-wide Ground water Monitoring Program
Ravenna Army Ammunition Plant
Portage/Trumbull Counties, Ohio

This letter is to serve as notification that the United States Army Corps of Engineers (USACE) will be changing the sampling frequency of 36 of the existing Facility-wide Ground Water Monitoring Program (FWGWMP) wells from quarterly sampling to annual sampling. As we discussed yesterday, this change is in accordance with Section 4.2, Sampling Frequency, on page 4-5 of the September 2004 Facility-wide Ground Water Monitoring Program Plan (FWGWMPP), which states that the initial monitoring frequency for the FWGWMP wells will be three consecutive quarters, and then it will revert to annual sampling, except for the OD#2 and RQL wells, which will be sampled semi-annually. Our next sampling event for the 36 current FWGWMP wells will occur in October 2008.

During the January, April, and July 2008 sampling events, USACE will sample other monitoring wells that have only been sampled during the Remedial Investigations at Load Lines 1, 2, 3, 4, and 12. These wells are identified in the last column of Table 4 in the October 22, 2007 document entitled "Draft Proposal to Update the Facility-wide Ground Water Monitoring Program", where they are numbered "1" through "36". Throughout this process, USACE will continue to comply with the sampling frequency requirements for the Ramsdell Quarry Landfill and Open Demolition Area #2 wells.

We appreciate your assistance with this matter. Copies have been provided to Eileen Mohr and Bonnie Buthker of Ohio EPA, Glen Beckham, USACE (via email) and John Miller, EQM (via email) and Mark Krivanski USAEC (via email) and Katie Elgin, OHARNG RTLS (via email). Please call Rick Hockett at 502.315.6329 if you have any questions or comments regarding this matter.

Sincerely,

Richard B. Hockett, P.G.
Geologist, Environmental Branch
Louisville District

Subject: FW: FWGWMP modifications
From: "Hockett, Rick B LRL" <Rick.B.Hockett@usace.army.mil>
Date: Tue, 8 Jan 2008 14:10:27 -0500
To: "John Miller" <jmiller@eqm.com>

Oops! I meant to copy you on this.

Rick

-----Original Message-----
From: Hockett, Rick B LRL
Sent: Tuesday, January 08, 2008 2:08 PM
To: 'Vicki Deppisch'
Cc: 'Eileen Mohr'; Beckham, Glen LRL; Ries, Cynthia A LRL; Chanda, Thomas M LRL; 'Patterson, Mark C Mr CIV USA OSA'; 'Krivansky, Mark E USAEC'
Subject: FWGWMP modifications

Vicki:

Just got back from lunch and listened to your voice mail message regarding the proposed changes to the FWGWMP. Sounds good! To summarize:

1. New well sampling. It's okay to proceed with rotating the new wells into the January sampling event, and not sample the "old" wells - those which have been sampled quarterly since 2005. The new wells will be all of the non-FWGWMP wells from LL-1, LL-2, LL-3, LL-4, and all but one of the non-FWGWMP wells at LL-12.

2. Annual sampling on old wells. You would prefer to not perform annual sampling on the old wells in October 2008, because that would interrupt the quarterly sampling pattern on the new wells. I agree. We will do four consecutive sampling events on the new wells; January, April, July, and October 2008.

3. Sampling order selection criteria. You requested that we provide a description of how the 196 wells were ordered for sampling (per table 4 of the Draft Proposal to Update the FWGWMP). In a nutshell, I thought it made the most sense to do the major load lines first (LL-1, LL-2, LL-3, LL-4, and LL-12), and then follow that effort with the remaining wells. In order to simplify things for the sampling team, I kept all wells at each AOC together, so that the samplers will not be visiting sites all over the facility during each event. That approach also makes the ground water elevation measurements more useable, since all wells at a given AOC that is being sampled will be measured, and we'll get a good snapshot of the ground water flow conditions at that AOC. That's really about all there was to it - there's just not a lot more to base the sampling order on.

4. Perchlorate. You are not comfortable that the perchlorate sampling performed on the October 2008 ground water samples is sufficient to end the perchlorate sampling altogether. You suggested that we discuss a strategy for additional sampling. I suggest that each time we rotate a new group of wells through the four quarters of sampling, that we sample for perchlorate during one of those events. I would prefer that it not be the first event of the four, other than that, I think we should sample at the second, third, or forth quarterly event. Let's do each well once, and then evaluate the perchlorate data at the end of the sampling along with all of the other ground water quality data.

You didn't specifically mention it, but it's worth noting that we will continue to sample the five RCRA wells at RQL and ODA#2 on a semi-annual basis - no changes there at all.

Please let me know if any of this isn't correct.

Thanks.

Rick

Richard B. Hockett, P.G.
Environmental Branch
Louisville District
US Army Corps of Engineers

APPENDIX B

LIST OF WELLS SAMPLED DURING THE JULY 2009 EVENT

Wells Monitored During The July 2009 Event

Well ID	Location
LL6mw-005	Load Line 6
LL6mw-006	Load Line 6
LL6mw-007	Load Line 6
LL7mw-001	Load Line 7
LL7mw-002	Load Line 7
LL7mw-003	Load Line 7
LL7mw-004	Load Line 7
LL7mw-005	Load Line 7
LL7mw-006	Load Line 7
LL8mw-001	Load Line 8
LL8mw-002	Load Line 8
LL8mw-003	Load Line 8
LL8mw-004	Load Line 8
LL8mw-005	Load Line 8
LL8mw-006	Load Line 8
LL9mw-001	Load Line 8
LL9mw-002	Load Line 8
LL9mw-003	Load Line 8
LL9mw-004	Load Line 8
LL9mw-005	Load Line 8
LL9mw-006	Load Line 8
LL9mw-007	Load Line 8
LL10mw-001	Load Line 10
LL10mw-002	Load Line 10
LL10mw-003	Load Line 10
LL10mw-004	Load Line 10
LL10mw-005	Load Line 10
LL10mw-006	Load Line 10
LL11mw-001	Load Line 11
LL11mw-003	Load Line 11
LL11mw-004	Load Line 11
LL11mw-005	Load Line 11
LL11mw-006	Load Line 11
LL11mw-008	Load Line 11
LL11mw-009	Load Line 11
LL11mw-010	Load Line 11
ASYmw-001	Atlas Scrap Yard
ASYmw-002	Atlas Scrap Yard
ASYmw-003	Atlas Scrap Yard
ASYmw-004	Atlas Scrap Yard
ASYmw-005	Atlas Scrap Yard
ASYmw-006	Atlas Scrap Yard
ASYmw-007	Atlas Scrap Yard
ASYmw-008	Atlas Scrap Yard
ASYmw-009	Atlas Scrap Yard
ASYmw-010	Atlas Scrap Yard

APPENDIX C

WATER LEVEL MEASUREMENTS/FIELD LOG BOOK AND PURGE RECORDS/DAILY QUALITY CONTROL REPORTS

Signature Page

July 2009 FWGMP Monitoring Well Event
Field Personnel Abbreviations and Signatures Page

Field Personnel

Name	Affiliation	Initials
Colleen A. Lear	EQM	CAL
Erik Corbin	EQM	EC
Hilary Huber	EQM	HH
John Miller	EQM	JM
Phil Heikkila	EQM	PH
Sam Bugg	EQM	SB
Stephen Stuergon	EQM	SS

Project and Field Leads

Name, Title, Affiliation

John Miller, Project Manager / QC Check, EQM

Signature: _____

Colleen A. Lear, Field Manager / QC Check, EQM

Signature: _____

Erik Corbin, Sample Manager, EQM

Signature: _____

Comprehensive Water Level Table

COMPREHENSIVE WATER LEVEL MEASUREMENTS

RVAAP FACILITY-WIDE GROUNDWATER MONITORING PROGRAM

JULY 2009

Well Number		Location	Date	Time	Depth To Water*	Depth to Bottom	Description of bottom	Instrument/Serial Number
ASY	MW-001	Atlas Scrap Yard	7/14/2009	930	12.24	23.10	Hard	05767
ASY	MW-002	Atlas Scrap Yard	7/14/2009	935	14.63	22.87	Hard	05767
ASY	MW-003	Atlas Scrap Yard	7/14/2009	1020	13.20	23.45	Hard	05767
ASY	MW-004	Atlas Scrap Yard	7/14/2009	1000	9.78	29.76	Hard	05767
ASY	MW-005	Atlas Scrap Yard	7/14/2009	955	8.23	27.10	Hard	05767
ASY	MW-006	Atlas Scrap Yard	7/14/2009	1015	14.24	28.86	Hard	05767
ASY	MW-007	Atlas Scrap Yard	7/14/2009	940	15.25	28.87	Hard	05767
ASY	MW-008	Atlas Scrap Yard	7/14/2009	945	4.10	27.25	Soft	05767
ASY	MW-009	Atlas Scrap Yard	7/14/2009	1005	13.05	24.45	Medium	05767
ASY	MW-010	Atlas Scrap Yard	7/14/2009	1010	12.42	31.06	Hard	05767
LL10	MW-001	Loadline 10	7/13/2009	1430	24.49	29.50	Hard	05767
LL10	MW-002	Loadline 10	7/13/2009	1425	18.20	29.78	Hard	05767
LL10	MW-003	Loadline 10	7/13/2009	1440	21.51	28.49	Hard	05767
LL10	MW-004	Loadline 10	7/13/2009	1435	13.95	33.49	Hard	05767
LL10	MW-005	Loadline 10	7/13/2009	1420	16.19	29.21	Hard	05767
LL10	MW-006	Loadline 10	7/13/2009	1415	13.20	26.69	Hard	05767
LL11	MW-001	Loadline 11	7/13/2009	1445	11.10	21.39	Medium	05767
LL11	MW-003	Loadline 11	7/13/2009	1500	3.09	16.04	Hard	05767
LL11	MW-004	Loadline 11	7/13/2009	1505	2.64	16.12	Hard	05767
LL11	MW-005	Loadline 11	7/13/2009	1515	8.88	16.38	Hard	05767
LL11	MW-006	Loadline 11	7/13/2009	1520	6.02	15.68	Hard	05767
LL11	MW-008	Loadline 11	7/13/2009	1530	4.02	15.67	Hard	05767
LL11	MW-009	Loadline 11	7/13/2009	1450	4.61	19.48	Hard	05767
LL11	MW-010	Loadline 11	7/13/2009	1455	5.62	23.40	Hard	05767
LL6	MW-005	Loadline 6	7/13/2009	1210	12.65	22.24	Hard	05767
LL6	MW-006	Loadline 6	7/13/2009	1200	14.55	17.76	Hard	05767
LL6	MW-007	Loadline 6	7/13/2009	1225	7.51	19.31	Hard	05767

*All measurements from top of casing

COMPREHENSIVE WATER LEVEL MEASUREMENTS

RVAAP FACILITY-WIDE GROUNDWATER MONITORING PROGRAM

JULY 2009

Well Number		Location	Date	Time	Depth To Water*	Depth to Bottom	Description of bottom	Instrument/Serial Number
LL7	MW-001	Loadline 7	7/13/2009	1145	20.98	33.06	Hard	05767
LL7	MW-002	Loadline 7	7/13/2009	1135	17.58	27.20	Hard	05767
LL7	MW-003	Loadline 7	7/13/2009	1125	12.03	33.53	Hard	05767
LL7	MW-004	Loadline 7	7/13/2009	1140	15.57	32.20	Hard	05767
LL7	MW-005	Loadline 7	7/13/2009	1130	22.35	30.29	Hard	05767
LL7	MW-006	Loadline 7	7/13/2009	1120	12.01	30.27	Hard	05767
LL8	MW-001	Loadline 8	7/13/2009	1240	11.94	27.46	Medium	05767
LL8	MW-002	Loadline 8	7/13/2009	1250	18.73	32.59	Hard	05767
LL8	MW-003	Loadline 8	7/13/2009	1245	13.17	23.00	Hard	05767
LL8	MW-004	Loadline 8	7/13/2009	1255	11.49	22.69	Hard	05767
LL8	MW-005	Loadline 8	7/13/2009	1305	13.79	27.09	Hard	05767
LL8	MW-006	Loadline 8	7/13/2009	1300	20.20	27.02	Hard	05767
LL9	MW-001	Loadline 9	7/13/2009	1540	16.39	23.29	Hard	05767
LL9	MW-002	Loadline 9	7/13/2009	1610	13.81	22.69	Hard	05767
LL9	MW-003	Loadline 9	7/13/2009	1615	13.44	24.15	Hard	05767
LL9	MW-004	Loadline 9	7/13/2009	1545	21.11	34.64	Hard	05767
LL9	MW-005	Loadline 9	7/13/2009	1605	17.32	23.42	Hard	05767
LL9	MW-006	Loadline 9	7/13/2009	1550	19.75	28.79	Hard	05767
LL9	MW-007	Loadline 9	7/13/2009	1600	10.14	18.15	Hard	05767

*All measurements from top of casing

Logbook

Location RVAAP Date 7-13-09

Project / Client USACE . JM, CAL, SS, PH, EC, HH, SB

Qtrly Sampling July Event

1000 onsite, calibrations + prepare for the day of water levels + gw purge /sample event

1050 H+S briefing

1120 Start at LL6 + LL7

1730 partial crews back to 1036. prepare samples for lab. + split for fed exp tube

1800 Split to fex exp, clean up Lab pickup of samples.

1840 offsite

Location RVAAP Date 7/13/09

Project / Client USACE

Drum Log July Sampling Event

Drum ID	Area
EQM 2009-11	Decon Water
EQM 2009-12	Purge Water *
EQM 2009-13	Purge Water

* LL6, LL7, LL8, LL9, LL10 LL11 ASY

Location RVAAP Date 7-14-09

Project / Client USACE HH JM CAL PH SB EC SS

Qtrly Sampling Event

0730 ONSITE PREP FOR DAY
0800 LOAD, CALIBRATION
0820 H+S
0845 Start @ LL8
1200 Continue @ LL9
1500 Continue @ LL10
1630 partial crews to 1036 prepare samples for lab-review
1800 Send Split to fed exp.
1830 lab pickup, organizing for tomorrow
1900 OFFSITE

Location RVAAP Date 7-15-09

Project / Client USACE HH, CAL, SB, PH, EC, SS

Qtrly Sampling Event

0730 Onsite + prep for the day
0750 H+S briefing + calibrations LOAD
0820 Start @ LL11 + finish LL10
1100 all @ LL11 then
1400 all @ ASV
1600 partial crews to 1036 to prepare samples - review
1745 Send Split to fedexp organize for tomorrow
1800 LAB PICK UP.
1820 OFFSITE

Location RVAAP Date 7-16-09

Project / Client USACE

Qtrly Sample Event.

0730 Onsite Calibration + organize for the day

0750 H&S briefing

0810 Crews continue at ASY

1030 Partial Crews to 1036 to prep samples

1100 IDW Sampling for event and prepare the samples for fed exp.

1200 Clean facility & load for demob

1300 PARTIAL CREWS DEMOB + LAB PICK UP.

1400 OFFSITE

Location Date

Project / Client

intentionally left blank

Static Water Level Measurements

MONITOR WELL STATIC WATER LEVEL FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

FIELD BOOK#: 1 DATE: 7/13/2009

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
LL6mw-007	Loadline 6		OH1266	EC	16:39	7.54		0
	Cmt:Good,							
LL7mw-003	Loadline 7		OH1266	EC	11:49	12.03		0
	Cmt:Good,							
LL7mw-001	Loadline 7		OH1266	EC	14:24	20.96		0
	Cmt:Good,							

MONITOR WELL STATIC WATER LEVEL FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

FIELD BOOK#: 1 DATE: 7/13/2009

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
LL6mw-005	Loadline 6		OH02911	CAL	16:10	12.64		0
	Cmt:Good, cloudy orange, tagged bottom, 1600							
LL7mw-006	Loadline 7		OH02911	CAL	11:41	12.3		0
	Cmt:Good,							
LL7mw-004	Loadline 7		OH02911	CAL	13:36	15.6		0
	Cmt:Good,							
LL7mw-002	Loadline 7		OH02911	CAL	14:48	17.24		0
	Cmt:Good,							

MONITOR WELL STATIC WATER LEVEL FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

FIELD BOOK#: 1 DATE: 7/13/2009

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
LL6mw-006	Loadline 6		05769	SB	15:30	14.5		0
	Cmt:Good,							
LL7mw-005	Loadline 7		05769	SB	12:00	22.19		0
	Cmt:Good,							

MONITOR WELL STATIC WATER LEVEL FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

FIELD BOOK#: 1 DATE: 7/14/2009

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
LL10mw-003	Loadline 10		OH1266	EC	15:40	21.43		0
	Cmt:Good,							
LL10mw-002	Loadline 10		OH1266	EC	16:42	18.28		0
	Cmt:Good,							
LL8mw-001	Loadline 8		OH1266	EC	8:45	12.25		0
	Cmt:Good,							
LL8mw-002	Loadline 8		OH1266	EC	10:05	18.91		0
	Cmt:Good,							
LL9mw-001	Loadline 9		OH1266	EC	12:16	16.4		0
	Cmt:Good,							
LL9mw-003	Loadline 9		OH1266	EC	13:30	13.45		0
	Cmt:Good,							

MONITOR WELL STATIC WATER LEVEL FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

FIELD BOOK#: 1 DATE: 7/14/2009

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
LL10mw-001	Loadline 10		OH02911	CAL	15:05	24.5		0
	Cmt:Good,							
LL8mw-006	Loadline 8		OH02911	CAL	8:45	20.29		0
	Cmt:Good, tagged bottom, cloudy tan							
LL8mw-005	Loadline 8		OH02911	CAL	9:48	13.37		0
	Cmt:Good, tint tan							
LL9mw-004	Loadline 9		OH02911	CAL	11:54	21.29		0
	Cmt:Good, tint orange							
LL9mw-006	Loadline 9		OH02911	CAL	13:47	19.67		0
	Cmt:Good,							

MONITOR WELL STATIC WATER LEVEL FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

FIELD BOOK#: 1 DATE: 7/14/2009

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
LL8mw-003	Loadline 8		05767	SB	8:40	13.15		0
	Cmt:Good,							
LL8mw-004	Loadline 8		05767	SB	10:15	11.78		0
	Cmt:Good,							
LL9mw-007	Loadline 9		05767	SB	12:45	10.25		0
	Cmt:Good,							
LL9mw-002	Loadline 9		05767	SB	14:00	13.91		0
	Cmt:Good,							
LL9mw-005	Loadline 9		05767	SB	15:20	17.28		0
	Cmt:Good,							

MONITOR WELL STATIC WATER LEVEL FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

FIELD BOOK#: 1 DATE: 7/15/2009

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
ASYmw-003	Atlas Scrap		OH1266	EC	15:16	12.92		0
	Cmt:Good,							
ASYmw-004	Atlas Scrap		OH1266	EC	16:23	9.3		0
	Cmt:Good,							
LL10mw-004	Loadline 10		OH1266	EC	8:20	13.96		0
	Cmt:Good,							
LL10mw-005	Loadline 10		OH1266	EC	10:22	16.24		0
	Cmt:Good,							
LL11mw-004	Loadline 11		OH1266	EC	11:44	2.24		0
	Cmt:Good,							
LL11mw-006	Loadline 11		OH1266	EC	13:50	6.05		0
	Cmt:Good,							

MONITOR WELL STATIC WATER LEVEL FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

FIELD BOOK#: 1 DATE: 7/15/2009

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
ASYmw-001	Atlas Scrap		OH02911	CAL	13:37	12.2		0
	Cmt:Good, gray cloudy							
ASYmw-002	Atlas Scrap		OH02911	CAL	14:55	14.6		0
	Cmt:Good, GRAY CLOUDY							
LL10mw-006	Loadline 10		OH02911	CAL	8:25	13.19		0
	Cmt:Good,							
LL11mw-010	Loadline 11		OH02911	CAL	10:36	5.48		0
	Cmt:Good, lowered to 30ft							

MONITOR WELL STATIC WATER LEVEL FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

FIELD BOOK#: 1 DATE: 7/15/2009

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
ASYmw-005	Atlas Scrap		05767	SB	16:05	8.3356		0
	Cmt:Good,							
LL11mw-005	Loadline 11		05767	SB	8:25	8.91		0
	Cmt:Good,							
LL11mw-003	Loadline 11		05767	SB	10:00	2.85		0
	Cmt:Good,							
LL11mw-009	Loadline 11		05767	SB	11:30	4.55		0
	Cmt:Good,							
LL11mw-008	Loadline 11		05767	SB	12:55	3.75		0
	Cmt:Good,							
LL11mw-001	Loadline 11		05767	SB	14:15	11.25		0
	Cmt:Good,							

MONITOR WELL STATIC WATER LEVEL FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

FIELD BOOK#: 1 DATE: 7/16/2009

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
ASYmw-007	Atlas Scrap		OH1266	EC	8:23	14.91		0
	Cmt:Good,							
ASYmw-006	Atlas Scrap		OH1266	EC	9:59	13.91		0
	Cmt:Good,							

MONITOR WELL STATIC WATER LEVEL FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

FIELD BOOK#: 1 DATE: 7/16/2009

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
ASYmw-009	Atlas Scrap		OH02911	CAL	8:27	12.78		0
	Cmt:Good, tan cloudy							
ASYmw-010	Atlas Scrap		OH02911	CAL	9:27	12.38		0
	Cmt:Good, CLOUDY TAN-GRAY							

MONITOR WELL STATIC WATER LEVEL FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

FIELD BOOK#: 1 DATE: 7/16/2009

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
ASYmw-008	Atlas Scrap		05767	SB	8:25	5.43		0
	Cmt:Good,							

Purge/Sample Records

MONITOR WELL PURGING FORM

PROJECT NAME: RVAAP PROJECT NUMBER: 030240.0006

LOCATION: LOADLINE 6 DATE: 7/13/2009 START TIME: 16:10

WELL ID: LL6mw-005

WELL DEPTH: INITIAL WATER LEVEL: 12.64

WELL DIAMETER SCREEN INTERVAL: 9.5 - 19.5

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 14.5

PUMP READINGS: Throttle: 50 Recharge: 13 Discharge: 2

COMMENTS cloudy orange, tagged bottom, 1600 ORANGE Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
16:12	12.95	0.25	0.5	13.41	0.85	13.09	6.73	900
16:15	13.01	0.25	0.75	13.24	0.844	8.98	6.76	901
16:18	13.05	0.21	0.63	13.48	0.843	6.93	6.79	905
16:21	13.09	0.21	0.63	13.65	0.838	6.27	6.81	900

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: CAL

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 6** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL6mw-005 SampleID: FWGLL6mw-005C-1367-GW/GF DuplID:

SplitID: RinseID: FWGEQUIPRinse1-1423-GW

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/13/2009 TIME: 16:30

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 900	Color:	ORANGE
		Odor:	None

pH: 6.87 Temperature (°C): 13.74 DO (mg/L): 5.07 Specific Conductivity (mS/cm): 0.836

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: NW AMBIENT TEMP (°F): 75

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt: PERCH COLLECTED, RINSE AT 1730

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Poly	1	HNO3	6010/6020/7470	Metals
250ml/Poly	1	NaOH	9012	Cyanide
40ml/Vial	3	HCl	8260	VOC
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8270	SVOC
1L/Amber	2	4C	353.2/8330	Propellants

MONITOR WELL PURGING FORM

PROJECT NAME: RVAAP PROJECT NUMBER: 030240.0006

LOCATION: LOADLINE 6 DATE: 7/13/2009 START TIME: 15:30

WELL ID: LL6mw-006

WELL DEPTH: INITIAL WATER LEVEL: 14.5

WELL DIAMETER SCREEN INTERVAL: 7 - 17

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 12.0

PUMP READINGS: Throttle: 40 Recharge: 10 Discharge: 5

COMMENTS CLOUDY Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
15:55	14.50	0.25	0.2	13.6	0.578	4.67	6.36	934
15:58	14.75	0.25	0.75	13.45	0.553	1.58	6.56	734
16:01	14.75	0.25	0.75	13.46	0.56	1.47	6.53	680
16:04	14.80	0.25	0.75	13.38	0.552	1.41	6.58	482

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: SB

FIELD SAMPLING REPORT

PROJECT: RVAAP LOCATION: LOADLINE 6 PROJECT NO.: 030240.0006

SAMPLE INFORMATION

WELL: LL6mw-006 SampleID: FWGLL6mw-006C-1368-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/13/2009 TIME: 16:10

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 472	Color:	CLOUDY
		Odor:	None

pH: 6.6 Temperature (°C): 13.32 DO (mg/L): 1.33 Specific Conductivity (mS/cm): 0.546

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: E AMBIENT TEMP (°F): 75

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: SB Cmt: SAMPLE FOR CLO4

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	2	4C	353.2/8330	Propellants
1L/Amber	2	4C	8082	PCB
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	1	4C	8330	Explo
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8270	SVOC

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 6 DATE: 7/13/2009 START TIME: 16:39

WELL ID: LL6mw-007

WELL DEPTH: _____ INITIAL WATER LEVEL: 7.54

WELL DIAMETER_____ SCREEN INTERVAL: 9.5 - 19.5

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 14.5

PUMP READINGS: Throttle: 15 Recharge: 10 Discharge: 5

COMMENTS CLOUDY Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
16:42	7.54	0.2	1	14.59	0.446	3.53	6.34	999
16:45	7.54	0.2	0.6	14.61	0.429	3.84	6.43	999
16:48	7.54	0.2	0.6	13.03	0.434	4.56	6.57	999
16:51	7.54	0.2	0.6	12.71	0.432	5.17	6.66	999
16:54	7.54	0.2	0.6	13.09	0.435	5.32	6.71	999
16:57	7.54	0.2	0.6	13.41	0.426	5.75	6.83	999
17:00	7.55	0.2	0.6	12.29	0.431	6.27	7.04	999
17:03	7.55	0.2	0.6	12.5	0.428	5.91	7.08	999
17:06	7.55	0.2	0.6	12.16	0.427	6.1	7.15	999
17:09	7.55	0.2	0.6	12.08	0.429	6.21	7.22	999
17:12	7.55	0.2	0.6	12.62	0.428	6.21	7.3	999
17:15	7.55	0.2	0.6	12.77	0.428	6.52	7.37	999
17:18	7.55	0.2	0.6	12.71	0.429	6.75	7.39	999

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 6** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL6mw-007 SampleID: FWGLL6mw-007C-1369-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/13/2009 TIME: 17:20

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 999	Color: CLOUDY
		Odor: None

pH: 7.4 Temperature (°C): 12.66 DO (mg/L): 6.87 Specific Conductivity (mS/cm): 0.429

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: NW AMBIENT TEMP (°F): 75

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt: Sampled for CLO4

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Poly	1	HNO3	6010/6020/7470	Metals
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	2	4C	353.2/8330	Propellants
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8270	SVOC
40ml/Vial	3	HCl	8260	VOC

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 7 DATE: 7/13/2009 START TIME: 14:24

WELL ID: LL7mw-001

WELL DEPTH: INITIAL WATER LEVEL: 20.96

WELL DIAMETER SCREEN INTERVAL: 19.5 - 29.5

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 24.5

PUMP READINGS: Throttle: 20 Recharge: 10 Discharge: 5

COMMENTS CLOUDY Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
14:26	21.03	0.2	0.5	14.75	0.312	7.94	5.93	599
14:29	21.05	0.2	0.6	13.76	0.304	7.87	5.66	427
14:32	21.07	0.2	0.6	12.84	0.295	7.36	5.58	358
14:35	21.08	0.2	0.6	12.47	0.292	6.94	5.57	327
14:38	21.08	0.2	0.6	12.34	0.296	6.59	5.59	292
14:41	21.08	0.2	0.6	12.32	0.297	6.33	5.62	271

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: RVAAP LOCATION: LOADLINE 7 PROJECT NO.: 030240.0006

SAMPLE INFORMATION

WELL: LL7mw-001 SampleID: FWGLL7mw-001C-1370-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/13/2009 TIME: 14:45

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 241	Color:	CLOUDY
		Odor:	None

pH: 5.66 Temperature (°C): 12.19 DO (mg/L): 6.12 Specific Conductivity (mS/cm): 0.299

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: NW AMBIENT TEMP (°F): 73

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt: Sampled for CLO4

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8270	SVOC
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	2	4C	353.2/8330	Propellants
1L/Amber	1	4C	8330	Explo
40ml/Vial	3	HCl	8260	VOC
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	2	4C	8082	PCB

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 7 DATE: 7/13/2009 START TIME: 14:48

WELL ID: LL7mw-002

WELL DEPTH: INITIAL WATER LEVEL: 17.24

WELL DIAMETER SCREEN INTERVAL: 15 - 25

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 20.0

PUMP READINGS: Throttle: 50 Recharge: 12.5 Discharge: 2.5

COMMENTS TINT Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
14:51	17.53	0.2	0.4	16.08	0.369	12.21	5.65	226
14:54	17.79	0.2	0.6	15.45	0.368	11.95	5.63	238
14:57	17.86	0.2	0.6	15.11	0.363	11.66	5.59	251

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: CAL

FIELD SAMPLING REPORT

PROJECT: RVAAP LOCATION: LOADLINE 7 PROJECT NO.: 030240.0006

SAMPLE INFORMATION

WELL: LL7mw-002 SampleID: FWGLL7mw-002C-1371-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/13/2009 TIME: 15:10

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 238	Color:	TINT
		Odor:	None

pH: 5.57 Temperature (°C): 15.05 DO (mg/L): 11.86 Specific Conductivity (mS/cm): 0.364

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: NW AMBIENT TEMP (°F): 75

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt: PERCH COLLECTED

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	1	4C	8330	Explo
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	8270	SVOC
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	353.2/8330	Propellants
250ml/Poly	1	NaOH	9012	Cyanide
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	2	4C	8081	Pest

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 7 DATE: 7/13/2009 START TIME: 11:49

WELL ID: LL7mw-003

WELL DEPTH: INITIAL WATER LEVEL: 12.03

WELL DIAMETER SCREEN INTERVAL: 21 - 31

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 26.0

PUMP READINGS: Throttle: 20 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
11:55	12.05	0.2	0.5	15.36	0.302	2.81	5.64	209
11:58	12.06	0.2	0.6	14.27	0.28	2.12	5.29	184
12:01	12.06	0.2	0.6	13.81	0.27	2.09	5.32	145
12:04	12.06	0.2	0.6	13.53	0.262	2.47	5.34	116

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: RVAAP LOCATION: LOADLINE 7 PROJECT NO.: 030240.0006

SAMPLE INFORMATION

WELL: LL7mw-003 SampleID: FWGLL7mw-003C-1372-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: Y

GRAB: Y COMPOSITE: N DATE: 7/13/2009 TIME: 12:05

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 120	Color:	Clear
		Odor:	None

pH: 5.37 Temperature (°C): 13.13 DO (mg/L): 2.43 Specific Conductivity (mS/cm): 0.253

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: NW AMBIENT TEMP (°F): 70

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt: Sampled for CLO4

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Poly	3	HNO3	6010/6020/7470	Metals
1L/Amber	6	4C	8082	PCB
1L/Amber	3	4C	8330	Explo
1L/Amber	6	4C	8081	Pest
250ml/Poly	3	NaOH	9012	Cyanide
40ml/Vial	9	HCl	8260	VOC
1L/Amber	6	4C	8270	SVOC
1L/Amber	6	4C	353.2/8330	Propellants

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 7 DATE: 7/13/2009 START TIME: 13:36

WELL ID: LL7mw-004

WELL DEPTH: INITIAL WATER LEVEL: 15.6

WELL DIAMETER SCREEN INTERVAL: 19.5 - 29.5

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 24.5

PUMP READINGS: Throttle: 50 Recharge: 13 Discharge: 2

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
13:41	15.72	0.25	0.4	13.95	0.384	13.33	5.49	390
13:44	15.72	0.25	0.75	12.83	0.377	8.7	5.44	411
13:47	15.70	0.25	0.75	12.62	0.369	6.88	5.42	310
13:50	15.70	0.25	0.75	12.55	0.367	6.71	5.41	268

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: CAL

FIELD SAMPLING REPORT

PROJECT: RVAAP LOCATION: LOADLINE 7 PROJECT NO.: 030240.0006

SAMPLE INFORMATION

WELL: LL7mw-004 SampleID: FWGLL7mw-004C-1373-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/13/2009 TIME: 14:00

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 236	Color:	Clear
		Odor:	None

pH: 5.41 Temperature (°C): 12.55 DO (mg/L): 6.79 Specific Conductivity (mS/cm): 0.366

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: NW AMBIENT TEMP (°F): 75

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt: PERCH COLLECTED

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
40ml/Vial	3	HCl	8260	VOC
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	2	4C	353.2/8330	Propellants
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	8081	Pest
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	2	4C	8270	SVOC

MONITOR WELL PURGING FORM

PROJECT NAME: RVAAP PROJECT NUMBER: 030240.0006

LOCATION: LOADLINE 7 DATE: 7/13/2009 START TIME: 12:00

WELL ID: LL7mw-005

WELL DEPTH: INITIAL WATER LEVEL: 22.19

WELL DIAMETER SCREEN INTERVAL: 18 - 28

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 23.0

PUMP READINGS: Throttle: 40 Recharge: 12 Discharge: 3

COMMENTS CLOUDY Odor:N

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
12:05	22.19	0.5	0.2	12.5	0.096	3.65	5.23	60.5
12:08	23.81	0.5	1.5	12.23	0.095	2.91	5.06	63.9
12:11	24.21	0.5	1.5	12.17	0.098	1.99	5.1	54.5
12:14	24.76	0.5	1.5	11.97	0.102	1.71	5.11	50.8

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: SB

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 7** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL7mw-005 SampleID: FWGLL7mw-005C-1374-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/13/2009 TIME: 12:20

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 46.1	Color: CLOUDY
		Odor: N

pH: 5.07 Temperature (°C): 11.87 DO (mg/L): 1.85 Specific Conductivity (mS/cm): 0.104

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: E AMBIENT TEMP (°F): 70

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: SB Cmt: SAMPLE FOR CLO4

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8270	SVOC
1L/Poly	1	HNO3	6010/6020/7470	Metals
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	2	4C	8082	PCB
40ml/Vial	3	HCl	8260	VOC
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	353.2/8330	Propellants

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 7 DATE: 7/13/2009 START TIME: 11:41

WELL ID: LL7mw-006

WELL DEPTH: INITIAL WATER LEVEL: 12.3

WELL DIAMETER SCREEN INTERVAL: 17.5 - 27.5

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 22.5

PUMP READINGS: Throttle: 50 Recharge: 13 Discharge: 2

COMMENTS TINT Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
11:43	12.30	0.275	0.45	14.14	0.231	8.14	4.75	218
11:46	12.30	0.275	0.825	13.75	0.225	7.31	4.73	216
11:49	12.30	0.275	0.825	13.47	0.219	6.79	4.73	220

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: CAL

FIELD SAMPLING REPORT

PROJECT: RVAAP LOCATION: LOADLINE 7 PROJECT NO.: 030240.0006

SAMPLE INFORMATION

WELL: LL7mw-006 SampleID: FWGLL7mw-006C-1375-GW/GF DuplID: FWGLL7mw-DUP1-1413-GW/GF

SplitID: FWGLL7mw-006C-1418S-GW/GF RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/13/2009 TIME: 12:00

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 210	Color:	TINT
		Odor:	None

pH: 4.69 Temperature (°C): 13.06 DO (mg/L): 6.08 Specific Conductivity (mS/cm): 0.219

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: NW AMBIENT TEMP (°F): 75

SHIPPED VIA: Lab PU/FedEx

SHIPPED TO: Multiple Labs

SAMPLER: CAL Cmt: PERCH COLLECTED DUP AT 1300

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	3	4C	8330	Explo
250ml/Poly	3	NaOH	9012	Cyanide
1L/Amber	5	4C	8082	PCB
40ml/Vial	8	HCl	8260	VOC
1L/Amber	6	4C	8270	SVOC
1L/Amber	5	4C	8081	Pest
1L/Poly	3	HNO3	6010/6020/7470	Metals
1L/Amber	6	4C	353.2/8330	Propellants

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 8 DATE: 7/14/2009 START TIME: 8:45

WELL ID: LL8mw-001

WELL DEPTH: INITIAL WATER LEVEL: 12.25

WELL DIAMETER SCREEN INTERVAL: 14 - 24

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 19.0

PUMP READINGS: Throttle: 15 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
8:48	12.30	0.2	0.2	12.58	1.14	1.8	5.92	999
8:51	12.30	0.2	0.6	12.25	1.11	1.41	6.12	999
8:54	12.36	0.2	0.6	12.23	1.08	1.6	6.3	866
8:57	12.36	0.2	0.6	12.37	1.08	1.77	6.45	787
9:00	12.36	0.2	0.6	13.28	1.07	1.85	6.6	664
9:03	12.36	0.2	0.6	13.25	1.06	2.01	6.78	536
9:06	12.36	0.2	0.6	13.1	1.04	2.23	6.87	439
9:09	12.36	0.2	0.6	13.03	1.03	2.44	6.93	450
9:12	12.36	0.2	0.6	13.02	1.03	2.55	6.97	412

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 8** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL8mw-001 SampleID: FWGLL8mw-001C-1376-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/14/2009 TIME: 9:15

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 400	Color:	Clear
		Odor:	None

pH: 7 Temperature (°C): 13.02 DO (mg/L): 2.64 Specific Conductivity (mS/cm): 1.02

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 65

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt: Sampled for CLO4

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	8081	Pest
1L/Amber	1	4C	8330	Explo
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	8270	SVOC
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	353.2/8330	Propellants
250ml/Poly	1	NaOH	9012	Cyanide
1L/Poly	1	HNO3	6010/6020/7470	Metals

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 8 DATE: 7/14/2009 START TIME: 10:05

WELL ID: LL8mw-002

WELL DEPTH: INITIAL WATER LEVEL: 18.91

WELL DIAMETER SCREEN INTERVAL: 20 - 30

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 25.0

PUMP READINGS: Throttle: 20 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
10:08	18.95	0.2	0.2	12.91	1.04	1.71	6.76	129
10:11	18.98	0.2	0.6	12.61	1.02	1.04	6.54	118
10:14	18.98	0.2	0.6	12.64	1	0.8	6.46	59.6
10:17	18.99	0.2	0.6	12.49	0.98	0.71	6.44	45.6

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 8** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL8mw-002 SampleID: FWGLL8mw-002C-1377-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: Y

GRAB: Y COMPOSITE: N DATE: 7/14/2009 TIME: 10:20

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 40.2	Color:	Clear
		Odor:	None

pH: 6.45 Temperature (°C): 12.64 DO (mg/L): 0.66 Specific Conductivity (mS/cm): 0.98

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 74

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt: Sampled for CLO4

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
40ml/Vial	9	HCl	8260	VOC
1L/Amber	6	4C	353.2/8330	Propellants
250ml/Poly	3	NaOH	9012	Cyanide
1L/Poly	3	HNO3	6010/6020/7470	Metals
1L/Amber	6	4C	8270	SVOC
1L/Amber	6	4C	8081	Pest
1L/Amber	6	4C	8082	PCB
1L/Amber	3	4C	8330	Explo

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 8 DATE: 7/14/2009 START TIME: 8:40

WELL ID: LL8mw-003

WELL DEPTH: INITIAL WATER LEVEL: 13.15

WELL DIAMETER SCREEN INTERVAL: 10.5 - 20.5

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 15.5

PUMP READINGS: Throttle: 40 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
8:50	13.25	0.5	0.2	13.55	1.19	4.53	6.25	84.6
8:53	13.81	0.5	1.5	12.95	1.17	4.2	6.31	78.9
8:56	14.00	0.5	1.5	12.72	1.18	5.36	6.39	64.2
8:59	14.28	0.5	1.5	12.61	1.18	5.9	6.45	56.7
9:02	14.60	0.5	1.5	12.62	1.17	5.97	6.46	56

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: SB

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 8** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL8mw-003 SampleID: FWGLL8mw-003C-1378-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/14/2009 TIME: 9:10

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 61.5	Color:	Clear
		Odor:	None

pH: 6.45 Temperature (°C): 12.59 DO (mg/L): 5.83 Specific Conductivity (mS/cm): 1.18

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: N AMBIENT TEMP (°F): 68

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: SB Cmt: SAMPLE FOR CLO4

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Poly	1	HNO3	6010/6020/7470	Metals
40ml/Vial	3	HCl	8260	VOC
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	353.2/8330	Propellants
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	8270	SVOC

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 8 DATE: 7/14/2009 START TIME: 10:15

WELL ID: LL8mw-004

WELL DEPTH: INITIAL WATER LEVEL: 11.78

WELL DIAMETER SCREEN INTERVAL: 10 - 20

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 15.0

PUMP READINGS: Throttle: 40 Recharge: 10 Discharge: 5

COMMENTS CLOUDY Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
10:22	11.78	0.25	0.2	12.42	0.678	1.71	6.43	351
10:25	11.89	0.5	1.5	12.16	0.677	0.36	6.38	390
10:28	12.00	0.5	1.5	11.89	0.685	0.18	6.35	391

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: SB

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 8** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL8mw-004 SampleID: FWGLL8mw-004C-1379-GW/GF DuplID:

SplitID: RinseID: FWGEQUIPRinse2-1424-GW

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/14/2009 TIME: 10:35

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 340	Color:	CLOUDY
		Odor:	None

pH: 6.34 Temperature (°C): 11.9 DO (mg/L): 0.19 Specific Conductivity (mS/cm): 0.686

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: N AMBIENT TEMP (°F): 70

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: SB Cmt: SAMPLE FOR CLO4

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	353.2/8330	Propellants
1L/Amber	2	4C	8081	Pest
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	8270	SVOC
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	1	4C	8330	Explo
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	2	4C	8082	PCB

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 8 DATE: 7/14/2009 START TIME: 9:48

WELL ID: LL8mw-005

WELL DEPTH: INITIAL WATER LEVEL: 13.37

WELL DIAMETER SCREEN INTERVAL: 14 - 24

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 19.0

PUMP READINGS: Throttle: 50 Recharge: 13.5 Discharge: 1.5

COMMENTS tint tan tint Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
9:50	14.01	0.275	0.25	11.2	0.742	9.43	6.4	418
9:53	15.11	0.18	0.54	11.19	0.738	7.28	6.31	457
9:56	15.39	0.13	0.39	11.12	0.735	6.53	6.27	523
9:59	15.66	0.13	0.39	11.05	0.73	5.97	6.26	462

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: CAL

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 8** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL8mw-005 SampleID: FWGLL8mw-005C-1380-GW/GF DuplID: FWGLL8mw-DUP2-1414-GW/GF

SplitID: FWGLL8mw-005C-1419S-GW/GF RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/14/2009 TIME: 10:10

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 452	Color:	tint
		Odor:	None

pH: 6.25 Temperature (°C): 11.02 DO (mg/L): 5.84 Specific Conductivity (mS/cm): 0.724

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: N AMBIENT TEMP (°F): 70

SHIPPED VIA: Lab PU/FedEx

SHIPPED TO: Multiple Labs

SAMPLER: CAL Cmt: PERCH COLLECTED, DUP AT 1115

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	3	4C	8330	Explo
40ml/Vial	9	HCl	8260	VOC
1L/Amber	5	4C	8081	Pest
1L/Amber	6	4C	353.2/8330	Propellants
250ml/Poly	3	NaOH	9012	Cyanide
1L/Poly	3	HNO3	6010/6020/7470	Metals
1L/Amber	5	4C	8082	PCB
1L/Amber	6	4C	8270	SVOC

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 8 DATE: 7/14/2009 START TIME: 8:45

WELL ID: LL8mw-006

WELL DEPTH: INITIAL WATER LEVEL: 20.29

WELL DIAMETER SCREEN INTERVAL: 14 - 24

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 19.0

PUMP READINGS: Throttle: 40 Recharge: 12.5 Discharge: 2.5

COMMENTS tagged bottom, cloudy tan TAN Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
8:48	20.30	0.25	0.4	11.22	0.777	15.05	6.3	900
8:51	20.31	0.25	0.75	10.81	0.762	12.41	6.73	823
8:54	20.31	0.25	0.75	10.78	0.761	11.8	6.82	768
8:57	20.32	0.25	0.75	10.65	0.761	11.07	6.96	730
9:00	20.32	0.25	0.75	10.65	0.761	10.5	7.03	707
9:03	20.32	0.25	0.75	10.66	0.76	10.45	7.05	690
9:06	20.32	0.25	0.75	10.61	0.76	10.22	7.06	668

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: CAL

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 8** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL8mw-006 SampleID: FWGLL8mw-006C-1381-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/14/2009 TIME: 9:15

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 510	Color:	TAN
		Odor:	None

pH: 7.1 Temperature (°C): 10.68 DO (mg/L): 10.42 Specific Conductivity (mS/cm): 0.762

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: N AMBIENT TEMP (°F): 65

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt: PERCH COLLECTED

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	1	4C	8330	Explo
1L/Poly	1	HNO3	6010/6020/7470	Metals
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	8270	SVOC
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	353.2/8330	Propellants

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 9 DATE: 7/14/2009 START TIME: 12:16

WELL ID: LL9mw-001

WELL DEPTH: INITIAL WATER LEVEL: 16.4

WELL DIAMETER SCREEN INTERVAL: 10.5 - 20.5

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 15.5

PUMP READINGS: Throttle: 20 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
12:20	16.57	0.2	0.2	13.95	0.298	4.02	6.59	3.1
12:23	16.57	0.2	0.6	13.57	0.29	2.77	6.09	0.5
12:26	16.57	0.2	0.6	13.78	0.29	2.44	5.84	0
12:29	16.57	0.2	0.6	14.05	0.299	2.39	5.77	0
12:32	16.57	0.2	0.6	13.89	0.301	2.34	5.77	0

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 9** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL9mw-001 SampleID: FWGLL9mw-001C-1382-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/14/2009 TIME: 12:35

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 0	Color:	Clear
		Odor:	None

pH: 5.79 Temperature (°C): 14.18 DO (mg/L): 2.24 Specific Conductivity (mS/cm): 0.304

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: N AMBIENT TEMP (°F): 70

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt: Sampled for CLO4

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8082	PCB
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	1	4C	8330	Explo
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	353.2/8330	Propellants
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	2	4C	8270	SVOC

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 9 DATE: 7/14/2009 START TIME: 14:00

WELL ID: LL9mw-002

WELL DEPTH: INITIAL WATER LEVEL: 13.91

WELL DIAMETER SCREEN INTERVAL: 10 - 20

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 15.0

PUMP READINGS: Throttle: 40 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
14:06	14.00	0.5	0.25	13.97	0.183	6.64	4.87	41.2
14:09	14.12	0.5	1.5	13.58	0.171	6.17	4.86	28.7
14:12	14.31	0.5	1.5	13.57	0.172	5.93	4.75	24.7
14:15	14.49	0.5	1.5	13.48	0.173	5.97	4.79	23.8
14:18	14.49	0.5	1.5	13.48	0.172	5.89	4.77	23.8

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: SB

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 9** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL9mw-002 SampleID: FWGLL9mw-002C-1383-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/14/2009 TIME: 14:25

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 25.5	Color:	Clear
		Odor:	None

pH: 4.78 Temperature (°C): 5.77 DO (mg/L): 0 Specific Conductivity (mS/cm): 0.175

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: N AMBIENT TEMP (°F): 73

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: SB Cmt: SAMPLE FOR CLO4

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	2	4C	8082	PCB
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	353.2/8330	Propellants
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	2	4C	8270	SVOC
1L/Amber	1	4C	8330	Explo

MONITOR WELL PURGING FORM

PROJECT NAME: RVAAP PROJECT NUMBER: 030240.0006

LOCATION: LOADLINE 9 DATE: 7/14/2009 START TIME: 13:30

WELL ID: LL9mw-003

WELL DEPTH: INITIAL WATER LEVEL: 13.45

WELL DIAMETER SCREEN INTERVAL: 11.5 - 21.5

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 16.5

PUMP READINGS: Throttle: 25 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
13:33	13.70	0.2	0.2	14.38	0.229	4.45	5.93	999
13:36	13.73	0.2	0.6	13.95	0.232	3.91	5.63	999
13:39	13.76	0.2	0.6	13.81	0.233	3.68	5.4	999
13:42	13.78	0.2	0.6	13.76	0.227	3.65	5.3	999
13:45	13.81	0.2	0.6	13.81	0.218	3.8	5.27	441
13:48	13.82	0.2	0.6	13.89	0.211	3.95	5.25	164

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 9** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL9mw-003 SampleID: FWGLL9mw-003C-1384GW/GF DupIID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: Y

GRAB: Y COMPOSITE: N DATE: 7/14/2009 TIME: 13:50

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 121	Color:	Clear
		Odor:	None

pH: 5.26 Temperature (°C): 13.86 DO (mg/L): 3.98 Specific Conductivity (mS/cm): 0.208

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: N AMBIENT TEMP (°F): 75

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt: Sampled for CLO4

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Poly	3	HNO3	6010/6020/7470	Metals
1L/Amber	6	4C	8270	SVOC
1L/Amber	6	4C	8081	Pest
1L/Amber	6	4C	8082	PCB
1L/Amber	6	4C	353.2/8330	Propellants
40ml/Vial	9	HCl	8260	VOC
1L/Amber	3	4C	8330	Explo
250ml/Poly	3	NaOH	9012	Cyanide

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 9 DATE: 7/14/2009 START TIME: 11:54

WELL ID: LL9mw-004

WELL DEPTH: INITIAL WATER LEVEL: 21.29

WELL DIAMETER SCREEN INTERVAL: 22 - 32

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 27.0

PUMP READINGS: Throttle: 40 Recharge: 12.5 Discharge: 2.5

COMMENTS tint orange TINT Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
12:03	21.41	0.225	0.25	12.13	0.35	10.7	5.95	388
12:06	21.41	0.225	0.675	11.79	0.354	7.84	5.77	539
12:09	21.42	0.225	0.675	11.66	0.354	6.4	5.75	474
12:12	21.42	0.225	0.675	11.53	0.35	5.61	5.73	327

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: CAL

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 9** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL9mw-004 SampleID: FWGLL9mw-004C-1385-GW/GF DuplID: FWGLL9mw-DUP3-1415-GW/GF

SplitID: FWGLL9mw-004C-1420S-GW/GF RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/14/2009 TIME: 12:15

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 298	Color:	TINT
		Odor:	None

pH: 5.72 Temperature (°C): 11.5 DO (mg/L): 5.42 Specific Conductivity (mS/cm): 0.347

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: N AMBIENT TEMP (°F): 72

SHIPPED VIA: Lab PU/FedEx

SHIPPED TO: Multiple Labs

SAMPLER: CAL Cmt: DUP AT 1315

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	5	4C	8081	Pest
1L/Poly	3	HNO3	6010/6020/7470	Metals
250ml/Poly	3	NaOH	9012	Cyanide
1L/Amber	6	4C	353.2/8330	Propellants
1L/Amber	5	4C	8082	PCB
1L/Amber	6	4C	8270	SVOC
1L/Amber	3	4C	8330	Explo
40ml/Vial	9	HCl	8260	VOC

MONITOR WELL PURGING FORM

PROJECT NAME: RVAAP PROJECT NUMBER: 030240.0006

LOCATION: LOADLINE 9 DATE: 7/14/2009 START TIME: 15:20

WELL ID: LL9mw-005

WELL DEPTH: INITIAL WATER LEVEL: 17.28

WELL DIAMETER SCREEN INTERVAL: 10 - 20

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 15.0

PUMP READINGS: Throttle: 40 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
15:28	17.55	0.25	0.2	13.98	0.121	6.63	5.32	39.1
15:31	17.65	0.25	0.75	13.6	0.114	6.35	5.27	44
15:34	17.78	0.25	0.75	13.17	0.114	5.67	5.2	59.2
15:37	17.80	0.25	0.75	13.05	0.114	5.17	5.17	58.4

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: SB

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 9** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL9mw-005 SampleID: FWGLL9mw-005C-1386-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/14/2009 TIME: 15:40

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 45.7	Color:	Clear
		Odor:	None

pH: 5.17 Temperature (°C): 12.98 DO (mg/L): 5.35 Specific Conductivity (mS/cm): 0.117

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: N AMBIENT TEMP (°F): 74

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: SB Cmt: SAMPLE FOR CLO4

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Poly	1	HNO3	6010/6020/7470	Metals
40ml/Vial	3	HCl	8260	VOC
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	353.2/8330	Propellants
1L/Amber	2	4C	8270	SVOC

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 9 DATE: 7/14/2009 START TIME: 13:47

WELL ID: LL9mw-006

WELL DEPTH: INITIAL WATER LEVEL: 19.67

WELL DIAMETER SCREEN INTERVAL: 16 - 26

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 21.0

PUMP READINGS: Throttle: 50 Recharge: 12.5 Discharge: 2.5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
13:52	19.98	0.25	0.25	12.07	0.137	12.99	5.57	194
13:55	20.15	0.225	0.675	11.36	0.132	11.76	4.58	207
13:58	20.36	0.2	0.6	11.34	0.131	11.18	4.44	191
14:01	20.44	0.2	0.6	11.27	0.131	10.75	4.38	182
14:04	20.51	0.2	0.6	11.38	0.131	10.24	4.33	178
14:07	20.56	0.2	0.6	11.23	0.131	9.98	4.31	167

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: CAL

FIELD SAMPLING REPORT

PROJECT: RVAAP LOCATION: LOADLINE 9 PROJECT NO.: 030240.0006

SAMPLE INFORMATION

WELL: LL9mw-006 SampleID: FWGLL9mw-006C-1387-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/14/2009 TIME: 14:15

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 159	Color:	Clear
		Odor:	None

pH: 4.3 Temperature (°C): 11.27 DO (mg/L): 9.86 Specific Conductivity (mS/cm): 0.131

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: N AMBIENT TEMP (°F): 75

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt: PERCH COLLECTED

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	8270	SVOC
1L/Amber	2	4C	353.2/8330	Propellants
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	2	4C	8081	Pest
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	8082	PCB

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 9 DATE: 7/14/2009 START TIME: 12:45

WELL ID: LL9mw-007

WELL DEPTH: INITIAL WATER LEVEL: 10.25

WELL DIAMETER SCREEN INTERVAL: 8.5 - 18.5

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 13.5

PUMP READINGS: Throttle: 40 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
12:50	10.25	0.5	0.25	14.4	0.096	3.46	5.28	55
12:53	10.35	0.5	1.5	13.98	0.095	2.96	5.07	44.9
12:56	10.41	0.5	1.5	13.37	0.095	2.67	4.8	22
12:59	10.41	0.5	1.5	13.07	0.096	2.41	4.78	15.9
13:02	10.41	0.5	1.5	12.97	0.104	2.03	4.8	17.8

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: SB

FIELD SAMPLING REPORT

PROJECT: RVAAP LOCATION: LOADLINE 9 PROJECT NO.: 030240.0006

SAMPLE INFORMATION

WELL: LL9mw-007 SampleID: FWGLL9mw-007C-1388-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/14/2009 TIME: 13:05

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 17.5	Color:	Clear
		Odor:	None

pH: 4.84 Temperature (°C): 12.87 DO (mg/L): 1.74 Specific Conductivity (mS/cm): 0.111

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: N AMBIENT TEMP (°F): 70

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: SB Cmt: SAMPLE FOR CLO4

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	8270	SVOC
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8082	PCB
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	353.2/8330	Propellants
250ml/Poly	1	NaOH	9012	Cyanide
1L/Poly	1	HNO3	6010/6020/7470	Metals
40ml/Vial	3	HCl	8260	VOC

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 10 DATE: 7/14/2009 START TIME: 15:05

WELL ID: LL10mw-001

WELL DEPTH: INITIAL WATER LEVEL: 24.5

WELL DIAMETER SCREEN INTERVAL: 17 - 27

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 22.0

PUMP READINGS: Throttle: 40 Recharge: 13 Discharge: 2

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
15:08	24.75	0.125	0.2	14.16	0.801	15.92	6.34	277
15:11	24.80	0.125	0.375	13.76	0.803	14.5	6.45	305
15:14	24.89	0.125	0.375	13.68	0.805	13.1	6.5	307
15:17	24.90	0.125	0.375	13.73	0.803	12.01	6.6	311
15:20	24.92	0.125	0.375	13.7	0.799	11.45	6.65	299
15:23	24.94	0.125	0.375	13.56	0.798	11.3	6.69	281

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: CAL

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 10** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL10mw-001 SampleID: FWGLL10mw-001C-1389-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/14/2009 TIME: 15:30

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 299	Color:	Clear
		Odor:	None

pH: 6.7 Temperature (°C): 13.6 DO (mg/L): 11.15 Specific Conductivity (mS/cm): 0.798

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: N AMBIENT TEMP (°F): 75

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt: PERCH COLLECTED

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	353.2/8330	Propellants
1L/Amber	2	4C	8082	PCB
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	8081	Pest
250ml/Poly	1	NaOH	9012	Cyanide
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	2	4C	8270	SVOC

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 10 DATE: 7/14/2009 START TIME: 16:42

WELL ID: LL10mw-002

WELL DEPTH: INITIAL WATER LEVEL: 18.28

WELL DIAMETER SCREEN INTERVAL: 17 - 27

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 22.0

PUMP READINGS: Throttle: 35 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
16:45	18.33	0.2	0.2	13.38	0.269	1.85	6.14	7.3
16:48	18.34	0.2	0.6	12.48	0.267	1	5.57	0
16:51	18.34	0.2	0.6	12.09	0.266	0.81	5.38	0
16:54	18.34	0.2	0.6	12.01	0.266	0.77	5.33	0
16:57	18.34	0.2	0.6	11.87	0.265	0.76	5.33	1.3

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 10** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL10mw-002 SampleID: FWGLL10mw-002C-1390GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/14/2009 TIME: 17:00

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 0.8	Color:	Clear
		Odor:	None

pH: 5.33 Temperature (°C): 11.78 DO (mg/L): 0.74 Specific Conductivity (mS/cm): 0.265

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: N AMBIENT TEMP (°F): 74

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt: Sampled for CLO4

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Poly	1	HNO3	6010/6020/7470	Metals
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	2	4C	8081	Pest
40ml/Vial	3	HCl	8260	VOC
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	353.2/8330	Propellants
1L/Amber	2	4C	8270	SVOC

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 10 DATE: 7/14/2009 START TIME: 15:40

WELL ID: LL10mw-003

WELL DEPTH: _____ INITIAL WATER LEVEL: 21.43

WELL DIAMETER _____ SCREEN INTERVAL: 16 - 26

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 21.0

PUMP READINGS: Throttle: 30 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
13:43	21.62	0.2	0.2	15.4	0.43	3.69	6.35	52.6
13:46	21.62	0.2	0.6	15.07	0.418	3.82	6	49
13:49	21.63	0.2	0.6	14.57	0.408	4.54	6.01	56.6
13:52	21.64	0.2	0.6	14.51	0.401	5.12	6.03	51.6

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: RVAAP LOCATION: LOADLINE 10 PROJECT NO.: 030240.0006

SAMPLE INFORMATION

WELL: LL10mw-003 SampleID: FWGLL10mw-003C-1391GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/14/2009 TIME: 15:55

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 48.5	Color: Clear
		Odor: None

pH: 6.04 Temperature (°C): 14.6 DO (mg/L): 5.34 Specific Conductivity (mS/cm): 0.396

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: N AMBIENT TEMP (°F): 74

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt: Sampled for CLO4

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	1	4C	8330	Explo
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8270	SVOC
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	2	4C	353.2/8330	Propellants
1L/Amber	2	4C	8082	PCB
40ml/Vial	3	HCl	8260	VOC

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 10 DATE: 7/15/2009 START TIME: 8:20

WELL ID: LL10mw-004

WELL DEPTH: _____ INITIAL WATER LEVEL: 13.96

WELL DIAMETER _____ SCREEN INTERVAL: 21 - 31

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 26.0

PUMP READINGS: Throttle: 45 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
8:22	14.12	0.2	0.2	13.46	0.546	2.48	6.12	20.8
8:25	14.13	0.2	0.6	12.49	0.533	1.71	6.1	23.9
8:28	14.14	0.2	0.6	12.22	0.519	1.41	6.13	24.4
8:31	14.14	0.2	0.6	12.07	0.51	1.63	6.2	28.9

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 10** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL10mw-004 SampleID: FWGLL10mw-004C-1392-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: Y

GRAB: Y COMPOSITE: N DATE: 7/15/2009 TIME: 8:35

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 33	Color: Clear
		Odor: None

pH: 6.25 Temperature (°C): 11.93 DO (mg/L): 1.66 Specific Conductivity (mS/cm): 0.507

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: NW AMBIENT TEMP (°F): 65

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt: Sampled for CLO4

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	6	4C	8082	PCB
1L/Poly	3	HNO3	6010/6020/7470	Metals
40ml/Vial	9	HCl	8260	VOC
1L/Amber	6	4C	8270	SVOC
1L/Amber	6	4C	8081	Pest
1L/Amber	3	4C	8330	Explo
250ml/Poly	3	NaOH	9012	Cyanide
1L/Amber	6	4C	353.2/8330	Propellants

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 10 DATE: 7/15/2009 START TIME: 10:22

WELL ID: LL10mw-005

WELL DEPTH: INITIAL WATER LEVEL: 16.24

WELL DIAMETER SCREEN INTERVAL: 16.5 - 26.5

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 21.5

PUMP READINGS: Throttle: 35 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
10:25	16.28	0.2	0.2	15.07	0.446	2.77	6.58	35.6
10:28	16.32	0.2	0.6	14.33	0.447	2.16	6.3	31.2
10:31	16.32	0.2	0.6	13.97	0.437	1.86	6.3	17
10:34	16.32	0.2	0.6	13.57	0.436	1.62	6.31	11.6

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: RVAAP LOCATION: LOADLINE 10 PROJECT NO.: 030240.0006

SAMPLE INFORMATION

WELL: LL10mw-005 SampleID: FWGLL10mw-005C-1393-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/15/2009 TIME: 10:35

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 12.5	Color:	Clear
		Odor:	None

pH: 6.31 Temperature (°C): 13.22 DO (mg/L): 1.62 Specific Conductivity (mS/cm): 0.434

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: NW AMBIENT TEMP (°F): 74

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt: Sampled for CLO4

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	2	4C	8270	SVOC
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8082	PCB
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	353.2/8330	Propellants
40ml/Vial	3	HCl	8260	VOC
1L/Poly	1	HNO3	6010/6020/7470	Metals

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 10 DATE: 7/15/2009 START TIME: 8:25

WELL ID: LL10mw-006

WELL DEPTH: INITIAL WATER LEVEL: 13.19

WELL DIAMETER SCREEN INTERVAL: 13.5 - 23.5

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 18.5

PUMP READINGS: Throttle: 40 Recharge: 13 Discharge: 2

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
8:29	13.49	0.18	0.25	11.9	0.257	12.16	5.27	192
8:32	13.61	0.175	0.525	11.64	0.255	9.8	5.32	161
8:35	13.69	0.175	0.525	11.4	0.254	7.88	5.39	163
8:38	13.74	0.175	0.525	11.29	0.254	6.92	5.4	149

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: CAL

FIELD SAMPLING REPORT

PROJECT: RVAAP LOCATION: LOADLINE 10 PROJECT NO.: 030240.0006

SAMPLE INFORMATION

WELL: LL10mw-006 SampleID: FWGLL10mw-006C-1394-GW/GF DuplID: FWGLL10mw-DUP4-1416-GW/GF

SplitID: FWGLL10mw-006C-1421S-GW/GF RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/15/2009 TIME: 8:50

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 150	Color:	Clear
		Odor:	None

pH: 5.38 Temperature (°C): 11.16 DO (mg/L): 6.34 Specific Conductivity (mS/cm): 0.254

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: NE AMBIENT TEMP (°F): 65

SHIPPED VIA: Lab PU/FedEx

SHIPPED TO: Multiple Labs

SAMPLER: CAL Cmt: PERCH COLLECTED, DUP AT 1000

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
250ml/Poly	3	NaOH	9012	Cyanide
1L/Amber	6	4C	8270	SVOC
1L/Poly	3	HNO3	6010/6020/7470	Metals
40ml/Vial	9	HCl	8260	VOC
1L/Amber	5	4C	8082	PCB
1L/Amber	5	4C	8330	Explo
1L/Amber	6	4C	353.2/8330	Propellants
1L/Amber	5	4C	8081	Pest

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 11 DATE: 7/15/2009 START TIME: 14:15

WELL ID: LL11mw-001

WELL DEPTH: INITIAL WATER LEVEL: 11.25

WELL DIAMETER SCREEN INTERVAL: 11.4 - 21.4

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 16.4

PUMP READINGS: Throttle: 40 Recharge: 10 Discharge: 5

COMMENTS CLOUDY Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
14:18	11.43	0.25	0.2	13.05	0.527	1.79	6.2	271
14:21	11.50	0.25	0.75	12.66	0.546	0.91	6.15	304
14:24	11.50	0.25	0.75	12.28	0.568	0.33	6.11	463

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: SB

FIELD SAMPLING REPORT

PROJECT: RVAAP LOCATION: LOADLINE 11 PROJECT NO.: 030240.0006

SAMPLE INFORMATION

WELL: LL11mw-001 SampleID: FWGLL11mw-001C-1395-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/15/2009 TIME: 14:30

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 421	Color:	CLOUDY
		Odor:	None

pH: 6.11 Temperature (°C): 12.16 DO (mg/L): 0.15 Specific Conductivity (mS/cm): 0.575

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: S AMBIENT TEMP (°F): 80

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: SB Cmt: SAMPLE FOR CLO4

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	8270	SVOC
250ml/Poly	1	NaOH	9012	Cyanide
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	353.2/8330	Propellants
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	2	4C	8081	Pest

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 11 DATE: 7/15/2009 START TIME: 10:00

WELL ID: LL11mw-003

WELL DEPTH: INITIAL WATER LEVEL: 2.85

WELL DIAMETER SCREEN INTERVAL: 5.9 - 15.9

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 10.9

PUMP READINGS: Throttle: 40 Recharge: 10 Discharge: 5

COMMENTS CLOUDY Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
10:02	2.85	0.25	0.2	13.71	0.692	1.73	6.15	617
10:05	4.00	0.25	0.75	13.08	0.706	0.46	6.27	521
10:08	4.68	0.25	0.75	12.84	0.707	0.12	6.32	341
10:11	5.08	0.25	0.75	12.97	0.702	0.04	6.34	181

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: SB

FIELD SAMPLING REPORT

PROJECT: RVAAP LOCATION: LOADLINE 11 PROJECT NO.: 030240.0006

SAMPLE INFORMATION

WELL: LL11mw-003 SampleID: FWGLL11mw-003C-1396-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/15/2009 TIME: 10:25

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 156	Color:	CLOUDY
		Odor:	None

pH: 6.34 Temperature (°C): 13.08 DO (mg/L): 0.03 Specific Conductivity (mS/cm): 0.699

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: S AMBIENT TEMP (°F): 68

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: SB Cmt: SAMPLE FOR CLO4

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	2	4C	8270	SVOC
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	2	4C	353.2/8330	Propellants
40ml/Vial	3	HCl	8260	VOC
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	8081	Pest

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 11 DATE: 7/15/2009 START TIME: 11:44

WELL ID: LL11mw-004

WELL DEPTH: INITIAL WATER LEVEL: 2.24

WELL DIAMETER SCREEN INTERVAL: 6.1 - 16.1

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 11.1

PUMP READINGS: Throttle: 10 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
11:47	3.12	0.2	0.2	15.54	0.659	1.56	6.67	11.1
11:50	3.48	0.2	0.6	15.43	0.676	1.12	6.57	10.1
11:53	3.88	0.2	0.6	15.36	0.674	1.18	6.61	10.7

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 11** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL11mw-004 SampleID: FWGLL11mw-004C-1397-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: Y

GRAB: Y COMPOSITE: N DATE: 7/15/2009 TIME: 11:55

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 13.3	Color:	Clear
		Odor:	None

pH: 6.63 Temperature (°C): 15.36 DO (mg/L): 1.25 Specific Conductivity (mS/cm): 0.67

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 78

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt: Sampled for CLO4

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	6	4C	8270	SVOC
40ml/Vial	9	HCl	8260	VOC
1L/Poly	3	HNO3	6010/6020/7470	Metals
250ml/Poly	3	NaOH	9012	Cyanide
1L/Amber	6	4C	353.2/8330	Propellants
1L/Amber	3	4C	8330	Explo
1L/Amber	6	4C	8082	PCB
1L/Amber	6	4C	8081	Pest

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 11 DATE: 7/15/2009 START TIME: 8:25

WELL ID: LL11mw-005

WELL DEPTH: INITIAL WATER LEVEL: 8.91

WELL DIAMETER SCREEN INTERVAL: 6.2 - 16.2

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 11.2

PUMP READINGS: Throttle: 40 Recharge: 10 Discharge: 5

COMMENTS CLOUDY Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
8:30	9.25	0.25	0.2	13.86	0.119	6.89	4.62	20.5
8:33	9.58	0.25	0.75	13.37	0.112	6.21	4.59	56.1
8:36	9.83	0.25	0.75	13.2	0.112	5.83	4.56	106

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: SB

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 11** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL11mw-005 SampleID: FWGLL11mw-005C-1398-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/15/2009 TIME: 8:45

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 184	Color:	CLOUDY
		Odor:	None

pH: 4.52 Temperature (°C): 13.12 DO (mg/L): 5.56 Specific Conductivity (mS/cm): 0.111

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: S AMBIENT TEMP (°F): 65

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: SB Cmt: SAMPLE FOR CLO4

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	353.2/8330	Propellants
1L/Amber	2	4C	8081	Pest
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	8270	SVOC
40ml/Vial	3	HCl	8260	VOC
1L/Poly	1	HNO3	6010/6020/7470	Metals

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 11 DATE: 7/15/2009 START TIME: 13:50

WELL ID: LL11mw-006

WELL DEPTH: INITIAL WATER LEVEL: 6.05

WELL DIAMETER SCREEN INTERVAL: 5.6 - 15.6

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 10.6

PUMP READINGS: Throttle: 15 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
13:53	6.32	0.2	0.2	16.05	0.598	6.46	6.98	75.3
13:56	6.37	0.2	0.6	15.44	0.595	5.62	6.75	99.7
13:59	6.48	0.2	0.6	15.26	0.589	5.32	6.73	116
14:02	6.51	0.2	0.6	15.18	0.585	5.22	6.72	118

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: RVAAP LOCATION: LOADLINE 11 PROJECT NO.: 030240.0006

SAMPLE INFORMATION

WELL: LL11mw-006 SampleID: FWGLL11mw-006C-1399-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/15/2009 TIME: 14:05

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 100	Color:	Clear
		Odor:	None

pH: 6.74 Temperature (°C): 15.33 DO (mg/L): 5.12 Specific Conductivity (mS/cm): 0.58

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 80

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt: Sampled for CLO4

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	1	4C	8330	Explo
40ml/Vial	3	HCl	8260	VOC
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	353.2/8330	Propellants
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	2	4C	8270	SVOC

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 11 DATE: 7/15/2009 START TIME: 12:55

WELL ID: LL11mw-008

WELL DEPTH: INITIAL WATER LEVEL: 3.75

WELL DIAMETER SCREEN INTERVAL: 5.6 - 15.6

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 10.6

PUMP READINGS: Throttle: 40 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
13:00	4.42	0.25	0.2	14.37	0.757	2.38	6.47	40.9
13:03	5.29	0.25	0.75	14.33	0.75	1.72	6.43	27.5
13:06	5.85	0.25	0.75	14.29	0.749	2.84	6.43	23.3

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: SB

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 11** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL11mw-008 SampleID: FWGLL11mw-008C-1400-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/15/2009 TIME: 13:10

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 17.5	Color:	Clear
		Odor:	None

pH: 6.45 Temperature (°C): 14.3 DO (mg/L): 3.11 Specific Conductivity (mS/cm): 0.745

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: S AMBIENT TEMP (°F): 75

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: SB Cmt: SAMPLE FOR CLO4

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
40ml/Vial	3	HCl	8260	VOC
1L/Poly	1	HNO3	6010/6020/7470	Metals
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	8270	SVOC
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	353.2/8330	Propellants

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 11 DATE: 7/15/2009 START TIME: 11:30

WELL ID: LL11mw-009

WELL DEPTH: INITIAL WATER LEVEL: 4.55

WELL DIAMETER SCREEN INTERVAL: 6.7 - 16.7

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 11.7

PUMP READINGS: Throttle: 40 Recharge: 10 Discharge: 5

COMMENTS CLOUDY Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
11:32	4.71	0.25	0.2	16.7	0.618	1.47	6.27	38.4
11:35	5.04	0.25	0.75	15.41	0.631	0.5	6.27	32
11:38	5.17	0.25	0.75	14.94	0.631	0.25	6.27	51.2
11:41	5.34	0.25	0.75	14.75	0.629	0.13	6.27	115

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: SB

FIELD SAMPLING REPORT

PROJECT: RVAAP LOCATION: LOADLINE 11 PROJECT NO.: 030240.0006

SAMPLE INFORMATION

WELL: LL11mw-009 SampleID: FWGLL11mw-009C-1401-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/15/2009 TIME: 11:50

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 135	Color: CLOUDY
		Odor: None

pH: 6.25 Temperature (°C): 14.73 DO (mg/L): 0.12 Specific Conductivity (mS/cm): 0.628

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: S AMBIENT TEMP (°F): 70

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: SB Cmt: SAMPLE FOR CLO4

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	2	4C	8270	SVOC
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	8082	PCB
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	353.2/8330	Propellants
1L/Poly	1	HNO3	6010/6020/7470	Metals

MONITOR WELL PURGING FORM

PROJECT NAME: RVAAP PROJECT NUMBER: 030240.0006

LOCATION: LOADLINE 11 DATE: 7/15/2009 START TIME: 10:36

WELL ID: LL11mw-010

WELL DEPTH: INITIAL WATER LEVEL: 5.48

WELL DIAMETER SCREEN INTERVAL: 10.9 - 20.9

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 15.9

PUMP READINGS: Throttle: 40 Recharge: 13 Discharge: 2

COMMENTS lowered to 30ft Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
10:39	6.53	0.25	0.2	13.81	0.999	6.61	6.37	262
10:42	7.32	0.18	0.54	14.23	0.9	11.7	6.39	318
10:45	7.68	0.16	0.48	14.33	0.9	8.43	6.42	323
10:48	7.93	0.15	0.45	14.44	0.9	7.45	6.48	302

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: CAL

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 11** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL11mw-010 SampleID: FWGLL11mw-010C-1402-GW/GF DupIID: FWGLL11mw-DUP5-1417-GW/GF

SplitID: FWGLL11mw-010C-1422S-GW/GF RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/15/2009 TIME: 11:00

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 291	Color:	Clear
		Odor:	None

pH: 6.5 Temperature (°C): 14.43 DO (mg/L): 7.25 Specific Conductivity (mS/cm): 0.9

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: NE AMBIENT TEMP (°F): 70

SHIPPED VIA: Lab PU/FedEx

SHIPPED TO: Multiple Labs

SAMPLER: CAL Cmt: PERCH COLLECTED, DUP AT 1200

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	5	4C	8081	Pest
1L/Amber	6	4C	353.2/8330	Propellants
1L/Poly	3	HNO3	6010/6020/7470	Metals
250ml/Poly	3	NaOH	9012	Cyanide
1L/Amber	6	4C	8270	SVOC
40ml/Vial	9	HCl	8260	VOC
1L/Amber	3	4C	8330	Explo
1L/Amber	5	4C	8082	PCB

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: ATLAS SCRAP DATE: 7/15/2009 START TIME: 13:37

WELL ID: ASYmw-001

WELL DEPTH: INITIAL WATER LEVEL: 12.2

WELL DIAMETER SCREEN INTERVAL: 11 - 21

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 16.0

PUMP READINGS: Throttle: 40 Recharge: 13 Discharge: 2

COMMENTS gray cloudy GRAY Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
13:42	12.40	0.25	0.25	13.46	1.08	13.49	6.91	900
13:45	12.40	0.25	0.75	12.89	1.05	12.13	6.61	843
13:48	12.40	0.25	0.75	12.78	1	9.95	6.47	769
13:51	12.40	0.25	0.75	12.4	0.99	8.39	6.49	732
13:54	12.40	0.25	0.75	12.25	0.98	7.57	6.52	724

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: CAL

FIELD SAMPLING REPORT

PROJECT: RVAAP LOCATION: ATLAS SCRAP PROJECT NO.: 030240.0006

SAMPLE INFORMATION

WELL: ASYmw-001 SampleID: FWGASYmw-001C-1403-GW/GF DuplID:

SplitID: RinseID: FWGEQUIPRinse3-1425-GW

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/15/2009 TIME: 14:10

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 641	Color: GRAY
		Odor: None

pH: 6.54 Temperature (°C): 12.27 DO (mg/L): 7.52 Specific Conductivity (mS/cm): 0.98

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: N AMBIENT TEMP (°F): 70

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt: PERCH COLLECTED, RINSE AT 1450

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	8270	SVOC
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8082	PCB
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	353.2/8330	Propellants
1L/Poly	1	HNO3	6010/6020/7470	Metals
40ml/Vial	3	HCl	8260	VOC
250ml/Poly	1	NaOH	9012	Cyanide

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: ATLAS SCRAP DATE: 7/15/2009 START TIME: 14:55

WELL ID: ASYmw-002

WELL DEPTH: INITIAL WATER LEVEL: 14.6

WELL DIAMETER SCREEN INTERVAL: 10 - 19.5

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 14.8

PUMP READINGS: Throttle: 35 Recharge: 13 Discharge: 2

COMMENTS GRAY CLOUDY GRAY Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
14:57	14.73	0.19	0.2	13.8	0.772	15.99	7.08	900
15:00	14.73	0.19	0.57	13.76	0.77	14.47	6.9	867
15:03	14.73	0.19	0.57	13.73	0.767	13.69	6.85	793
15:06	14.73	0.19	0.57	13.35	0.766	12.44	6.87	707

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: CAL

FIELD SAMPLING REPORT

PROJECT: RVAAP LOCATION: ATLAS SCRAP PROJECT NO.: 030240.0006

SAMPLE INFORMATION

WELL: ASYmw-002 SampleID: FWGASYmw-002C-1404-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/15/2009 TIME: 15:20

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 630	Color:	GRAY
		Odor:	None

pH: 6.89 Temperature (°C): 13.42 DO (mg/L): 12.2 Specific Conductivity (mS/cm): 0.766

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: NE AMBIENT TEMP (°F): 70

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt: PERCH COLLECTED

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	353.2/8330	Propellants
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8270	SVOC
40ml/Vial	3	HCl	8260	VOC
1L/Poly	1	HNO3	6010/6020/7470	Metals

MONITOR WELL PURGING FORM

PROJECT NAME: RVAAP PROJECT NUMBER: 030240.0006

LOCATION: ATLAS SCRAP DATE: 7/15/2009 START TIME: 15:16

WELL ID: ASYmw-003

WELL DEPTH: INITIAL WATER LEVEL: 12.92

WELL DIAMETER SCREEN INTERVAL: 11 - 21

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 16.0

PUMP READINGS: Throttle: 20 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
15:19	13.26	0.2	0.2	14.98	1.54	2.6	7.01	325
15:22	13.27	0.2	0.6	13.9	1.58	1.29	6.76	451
15:25	13.28	0.2	0.6	13.32	1.57	0.91	6.72	230
15:28	13.28	0.2	0.6	12.98	1.57	0.83	6.8	131

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: RVAAP LOCATION: ATLAS SCRAP PROJECT NO.: 030240.0006

SAMPLE INFORMATION

WELL: ASYmw-003 SampleID: FWGASYmw-003C-1405-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/15/2009 TIME: 15:30

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 98.6	Color:	Clear
		Odor:	None

pH: 6.84 Temperature (°C): 12.93 DO (mg/L): 0.81 Specific Conductivity (mS/cm): 1.56

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 82

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt: Sampled for CLO4

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8270	SVOC
1L/Amber	1	4C	8330	Explo
1L/Poly	1	HNO3	6010/6020/7470	Metals
250ml/Poly	1	NaOH	9012	Cyanide
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	353.2/8330	Propellants
1L/Amber	2	4C	8082	PCB

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: ATLAS SCRAP DATE: 7/15/2009 START TIME: 16:23

WELL ID: ASYmw-004

WELL DEPTH: INITIAL WATER LEVEL: 9.3

WELL DIAMETER SCREEN INTERVAL: 17 - 27

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 22.0

PUMP READINGS: Throttle: 20 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
16:27	10.27	0.2	0.2	14	1.47	3.38	6.98	23.7
16:30	10.71	0.2	0.6	13.47	1.47	3.51	6.8	22.1
16:33	11.26	0.2	0.6	13.19	1.45	4.07	6.83	24.7
16:36	11.81	0.2	0.6	12.71	1.45	4.57	6.95	23
16:39	12.11	0.2	0.6	12.91	1.45	4.48	7.03	22
16:42	12.37	0.2	0.6	13.01	1.45	4.63	7.06	19.9
16:45	12.79	0.2	0.6	12.91	1.45	4.63	7.08	19.4

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **ATLAS SCRAP** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: ASYmw-004 SampleID: FWGASYmw-004C-1406-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/15/2009 TIME: 16:45

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 22.8	Color:	Clear
		Odor:	None

pH: 7.09 Temperature (°C): 12.85 DO (mg/L): 4.63 Specific Conductivity (mS/cm): 1.45

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 82

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt: Sampled for CLO4

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	8081	Pest
40ml/Vial	3	HCl	8260	VOC
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	2	4C	353.2/8330	Propellants
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	8270	SVOC
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	1	4C	8330	Explo

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: ATLAS SCRAP DATE: 7/15/2009 START TIME: 16:05

WELL ID: ASYmw-005

WELL DEPTH: INITIAL WATER LEVEL: 8.3356

WELL DIAMETER SCREEN INTERVAL: 14 - 24

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 19.0

PUMP READINGS: Throttle: 40 Recharge: 10 Discharge: 5

COMMENTS CLOUDY Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
16:08	9.50	0.5	0.2	12.37	1.07	0.42	6.39	356
16:11	10.30	0.5	1.5	12.32	1.07	0.23	6.37	324
16:14	11.47	0.5	1.5	12.16	1.07	0.09	6.37	161

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: SB

FIELD SAMPLING REPORT

PROJECT: RVAAP LOCATION: ATLAS SCRAP PROJECT NO.: 030240.0006

SAMPLE INFORMATION

WELL: ASYmw-005 SampleID: FWGASYmw-005C-1407-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/15/2009 TIME: 16:20

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 134	Color:	CLOUDY
		Odor:	None

pH: 6.38 Temperature (°C): 13.91 DO (mg/L): 0.07 Specific Conductivity (mS/cm): 1.07

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: S AMBIENT TEMP (°F): 84

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: SB Cmt: SAMPLE FOR CLO4

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	353.2/8330	Propellants
1L/Poly	1	HNO3	6010/6020/7470	Metals
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	8270	SVOC
1L/Amber	2	4C	8081	Pest
1L/Amber	1	4C	8330	Explo
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	2	4C	8082	PCB

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: ATLAS SCRAP DATE: 7/16/2009 START TIME: 9:59

WELL ID: ASYmw-006

WELL DEPTH: INITIAL WATER LEVEL: 13.91

WELL DIAMETER SCREEN INTERVAL: 16 - 26

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 21.0

PUMP READINGS: Throttle: 40 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
10:03	14.56	0.2	0.5	13.59	1.16	3.55	6.98	999
10:06	14.78	0.2	0.6	13.59	1.14	3.01	6.77	999
10:09	14.84	0.2	0.6	13.87	1.14	3.13	6.71	999
10:12	14.91	0.2	0.6	13.48	1.16	3.34	6.73	999

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: RVAAP LOCATION: ATLAS SCRAP PROJECT NO.: 030240.0006

SAMPLE INFORMATION

WELL: ASYmw-006 SampleID: FWGASYmw-006C-1408-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/16/2009 TIME: 10:15

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 969	Color:	Clear
		Odor:	None

pH: 6.75 Temperature (°C): 13.63 DO (mg/L): 3.33 Specific Conductivity (mS/cm): 1.16

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 78

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt: Sampled for CLO4

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	353.2/8330	Propellants
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8082	PCB
1L/Amber	1	4C	8330	Explo
40ml/Vial	3	HCl	8260	VOC
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	2	4C	8270	SVOC
250ml/Poly	1	NaOH	9012	Cyanide

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: ATLAS SCRAP DATE: 7/16/2009 START TIME: 8:23

WELL ID: ASYmw-007

WELL DEPTH: INITIAL WATER LEVEL: 14.91

WELL DIAMETER SCREEN INTERVAL: 16 - 26

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 21.0

PUMP READINGS: Throttle: 35 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
8:24	15.56	0.2	0.2	14.66	1.16	3.65	6.05	82
8:27	15.72	0.2	0.6	13.5	1.16	1.77	6.04	113
8:30	15.82	0.2	0.6	13.03	1.15	1.19	6.15	126
8:33	15.84	0.2	0.6	12.71	1.15	1.02	6.29	123
8:36	15.84	0.2	0.6	12.73	1.14	1.14	6.39	109
8:39	15.84	0.2	0.6	12.72	1.13	0.95	6.51	92.5
8:42	15.84	0.2	0.6	12.72	1.13	1.16	6.59	82.5
8:45	15.84	0.2	0.6	12.68	1.13	1.32	6.64	67.9
8:48	15.84	0.2	0.6	12.62	1.13	1.4	6.68	52.1

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: RVAAP LOCATION: ATLAS SCRAP PROJECT NO.: 030240.0006

SAMPLE INFORMATION

WELL: ASYmw-007 SampleID: FWGASYmw-007C-1409-GW/GF DuplID:

SplitID: RinseID: FWGEQUIPRinse4-1426-GW

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/16/2009 TIME: 8:50

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 52.7	Color: Clear
		Odor: None

pH: 6.7 Temperature (°C): 12.63 DO (mg/L): 1.38 Specific Conductivity (mS/cm): 1.14

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 70

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt: Sampled for CLO4

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	353.2/8330	Propellants
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	8081	Pest
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	2	4C	8082	PCB
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	8270	SVOC
250ml/Poly	1	NaOH	9012	Cyanide

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: ATLAS SCRAP DATE: 7/16/2009 START TIME: 8:25

WELL ID: ASYmw-008

WELL DEPTH: INITIAL WATER LEVEL: 5.43

WELL DIAMETER SCREEN INTERVAL: 15 - 25

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 20.0

PUMP READINGS: Throttle: 40 Recharge: 10 Discharge: 5

COMMENTS CLOUDY Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
8:34	5.43	0.5	0.2	12.6	1.61	0.73	6.18	771
8:37	7.25	0.5	1.5	12.36	1.6	0.63	6.19	472
8:40	8.35	0.5	1.5	12.4	1.6	0.79	6.21	377

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: SB

FIELD SAMPLING REPORT

PROJECT: RVAAP LOCATION: ATLAS SCRAP PROJECT NO.: 030240.0006

SAMPLE INFORMATION

WELL: ASYmw-008 SampleID: FWGASYmw-008C-1410-GW/GF DuplID:

SplitID: FWGASYmw-008C-1418S-GW/GF RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/16/2009 TIME: 8:45

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 407	Color:	CLOUDY
		Odor:	None

pH: 6.22 Temperature (°C): 12.38 DO (mg/L): 1.01 Specific Conductivity (mS/cm): 1.59

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: SW AMBIENT TEMP (°F): 75

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: SB Cmt: SAMPLE FOR CLO4

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
250ml/Poly	2	NaOH	9012	Cyanide
1L/Amber	3	4C	8081	Pest
1L/Amber	3	4C	8082	PCB
1L/Amber	3	4C	353.2/8330	Propellants
1L/Poly	2	HNO3	6010/6020/7470	Metals
1L/Amber	3	4C	8270	SVOC
40ml/Vial	6	HCl	8260	VOC
1L/Amber	2	4C	8330	Explo

MONITOR WELL PURGING FORM

PROJECT NAME: RVAAP PROJECT NUMBER: 030240.0006

LOCATION: ATLAS SCRAP DATE: 7/16/2009 START TIME: 8:27

WELL ID: ASYmw-009

WELL DEPTH: INITIAL WATER LEVEL: 12.78

WELL DIAMETER SCREEN INTERVAL: 11.5 - 21.5

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 16.5

PUMP READINGS: Throttle: 40 Recharge: 12.5 Discharge: 2.5

COMMENTS tan cloudy TINT Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
8:30	13.16	0.26	0.2	12.66	1.35	12.06	6.17	900
8:33	13.21	0.21	0.63	12.58	1.34	9.01	6.41	838
8:36	13.20	0.2	0.6	12.43	1.33	8.11	6.52	631
8:39	13.19	0.2	0.6	12.39	1.33	7.76	6.57	500
8:42	13.18	0.2	0.6	12.34	1.34	6.89	6.63	384
8:45	13.17	0.2	0.6	12.2	1.34	6.09	6.66	207

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: CAL

FIELD SAMPLING REPORT

PROJECT: RVAAP LOCATION: ATLAS SCRAP PROJECT NO.: 030240.0006

SAMPLE INFORMATION

WELL: ASYmw-009 SampleID: FWGASYmw-009C-1411-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/16/2009 TIME: 8:50

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 302	Color:	TINT
		Odor:	None

pH: 6.67 Temperature (°C): 12.23 DO (mg/L): 5.92 Specific Conductivity (mS/cm): 1.34

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: NW AMBIENT TEMP (°F): 65

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt: PERCH COLLECTED

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	353.2/8330	Propellants
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8270	SVOC
40ml/Vial	3	HCl	8260	VOC
1L/Poly	1	HNO3	6010/6020/7470	Metals
250ml/Poly	1	NaOH	9012	Cyanide

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: ATLAS SCRAP DATE: 7/16/2009 START TIME: 9:27

WELL ID: ASYmw-010

WELL DEPTH: INITIAL WATER LEVEL: 12.38

WELL DIAMETER SCREEN INTERVAL: 17 - 27

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 22.0

PUMP READINGS: Throttle: 40 Recharge: 12.5 Discharge: 2.5

COMMENTS CLOUDY TAN-GRAY TINT Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
9:34	12.57	0.21	0.21	13.15	1.25	9.72	6.89	900
9:37	12.54	0.21	0.63	12.93	1.25	7.58	6.83	882
9:40	12.56	0.21	0.63	12.84	1.25	6.18	6.83	789
9:43	12.57	0.21	0.63	12.69	1.25	5.63	6.85	745

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: CAL

FIELD SAMPLING REPORT

PROJECT: RVAAP LOCATION: ATLAS SCRAP PROJECT NO.: 030240.0006

SAMPLE INFORMATION

WELL: ASYmw-010 SampleID: FWGASYmw-010C-1412-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/16/2009 TIME: 9:50

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 523	Color:	TINT
		Odor:	None

pH: 6.86 Temperature (°C): 12.64 DO (mg/L): 5.4 Specific Conductivity (mS/cm): 1.24

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: NW AMBIENT TEMP (°F): 65

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt: PERCH COLLECTED

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	353.2/8330	Propellants
1L/Amber	1	4C	8330	Explo
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	8081	Pest
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	8270	SVOC
250ml/Poly	1	NaOH	9012	Cyanide

Daily QC Records

Date: 13-Jul

S	M	T	W	T	F	S
	X					

DAILY QUALITY CONTROL REPORT

COE Project Manager: Glen Beckham

Project: Ravenna Army Ammunition Plant Groundwater Monitoring

Job No.: 30240

Contract No.: W912QR-04-D-0036

Weather	Bright Sun	Clear	Over-Cast	Rain	Snow
	X	X			
Temp	To 32	32-50	50-70	70-85	85 up
				X	
Wind	Still	Moder	High	Report No.	
		X			
Humidity	Dry	Moder	Humid		
		X		071309	

SUB-CONTRACTORS ON SITE:

Environmental Quality Management, Inc.

EQUIPMENT ON SITE:

Three water quality meters (Horiba-U22's); One multigas detector (MSA); Four bladder pumps w/ associated controllers and compressors.

WORK PERFORMED (INCLUDING SAMPLING):

Samples were collected at the following locations: LL6mw-005, LL6mw-006, LL6mw-007, LL7mw-001, LL7mw-002, LL7mw-003, LL7mw-004, LL7mw-005, and LL7mw-006. A field duplicate and QA split sample was collected from LL7mw-006. Extra volume was collected from LL7mw-003 to be designated for matrix spike/matrix spike duplicate analysis at the laboratory. Additionally, a field rinsate was collected by Team #2.

Project	Ravenna Army Ammunition Plant Groundwater Monitorin	Report No.	071309
Job No.	30240	Date:	7/13/2009

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS):

All field equipment was calibrated prior to mobilizing to the field. Water quality meters were calibrated with AutoCal Solution - certified values are: Conductivity - 4.49 mS/cm; Turbidity - 0 NTU; pH - 4.0 and 7.0 su. Multigas detector calibrated with Zero Air Standard and 100 ppm Isobutylene. All field equipment was within calibration criteria.

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

Health & Safety briefing conducted by Colleen Lear prior to mobilizing to the field. All personnel to don modified Level 4 PPE (i.e. steel-toed shoes, safety glasses, and nitrile gloves). First Aid kits were included in each vehicle, and personnel were made aware of the location of eyewash stations. Each team was equipped with a cellular phone. Personnel were instructed to hydrate frequently and watch for signs of heat stress. Personnel were also instructed to be alert for storms, stinging insect, ticks, and roaming deer.

PROBLEMS ENCOUNTERED/CORRECTIVE ACTION (S) TAKEN:

NA

SPECIAL NOTES:

NA

TOMORROWS EXPECTATIONS:

Expectations for tomorrow are to safely and correctly collect samples from a minimum of 10 wells.

Date: 14-Jul

S	M	X T	W	T	F	S

DAILY QUALITY CONTROL REPORT

COE Project Manager: Glen Beckham

Project: Ravenna Army Ammunition Plant Groundwater Monitoring

Job No.: 30240

Contract No.: W912QR-04-D-0036

Weather	Bright Sun	Clear	Over-Cast	Rain	Snow
	X	X			
Temp	To 32	32-50	50-70	70-85	85 up
			X	X	
Wind	Still	Moder	High	Report No.	
		X			
Humidity	Dry	Moder	Humid	071409	
	X				

SUB-CONTRACTORS ON SITE:

Environmental Quality Management, Inc.

EQUIPMENT ON SITE:

Three water quality meters (Horiba-U22's); One multigas detector (MSA); Four bladder pumps w/ associated controllers and compressors.

WORK PERFORMED (INCLUDING SAMPLING):

Samples were collected at the following locations: LL10mw-001, LL10mw-002, LL10mw-003, LL8mw-001, LL8mw-002, LL8mw-003, LL8mw-004, LL8mw-005, LL8mw-006, LL9mw-001, LL9mw-002, LL9mw-003, LL9mw-004, LL9mw-005, LL9mw-006, and LL9mw-007. Field duplicate and QA split samples were collected from LL8mw-005 and LL9mw-004. Extra volume was collected from LL8mw-002 and LL9mw-003 to be designated for matrix spike/matrix spike duplicate analysis at the laboratory. Additionally, a field rinsate was collected by Team #3.

Project	Ravenna Army Ammunition Plant Groundwater Monitorin	Report No.	071409
Job No.	30240	Date:	7/14/2009

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS):

All field equipment was calibrated prior to mobilizing to the field. Water quality meters were calibrated with AutoCal Solution - certified values are: Conductivity - 4.49 mS/cm; Turbidity - 0 NTU; pH - 4.0 and 7.0 su. Multigas detector calibrated with Zero Air Standard and 100 ppm Isobutylene. All field equipment was within calibration criteria.

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

Health & Safety briefing conducted by Colleen Lear prior to mobilizing to the field. All personnel to don modified Level 4 PPE (i.e. steel-toed shoes, safety glasses, and nitrile gloves). First Aid kits were included in each vehicle, and personnel were made aware of the location of eyewash stations. Each team was equipped with a cellular phone. Personnel were instructed to hydrate frequently and watch for signs of heat stress. Personnel were also instructed to be alert for storms, stinging insect, ticks, and roaming deer.

PROBLEMS ENCOUNTERED/CORRECTIVE ACTION (S) TAKEN:

The laboratory responsible for analysis of split samples received sample FWGLL7mw-006-1418S-GW/GF (split of LL7mw-006), collected 7/13, above required temperatures. Upon consultation with USACE, the determined course of action was to cancel the analysis of the split portion of this sample. The parent and duplicated sample collected yesterday at LL7mw-006 will still be analyzed by the primary lab. A split will be collected on a subsequent well later in the July event.

SPECIAL NOTES:

NA

TOMORROWS EXPECTATIONS:

Expectations for tomorrow are to safely and correctly collect samples from a minimum of 10 wells.

Date: 15-Jul

S	M	T	X W	T	F	S

DAILY QUALITY CONTROL REPORT

COE Project Manager: Glen Beckham

Project: Ravenna Army Ammunition Plant Groundwater Monitoring

Job No.: 30240

Contract No.: W912QR-04-D-0036

Weather	Bright Sun	Clear	Over-Cast	Rain	Snow
	X	X			
Temp	To 32	32-50	50-70	70-85	85 up
			X	X	
Wind	Still	Moder	High	Report No.	
		X			
Humidity	Dry	Moder	Humid		
		X	X	071509	

SUB-CONTRACTORS ON SITE:

Environmental Quality Management, Inc.

EQUIPMENT ON SITE:

Three water quality meters (Horiba-U22's); One multigas detector (MSA); Four bladder pumps w/ associated controllers and compressors.

WORK PERFORMED (INCLUDING SAMPLING):

Samples were collected at the following locations: ASYmw-001, ASYmw-002, ASYmw-003, ASYmw-004, ASYmw-005, LL10mw-004, LL10mw-005, LL10mw-006, LL11mw-001, LL11mw-003, LL11mw-004, LL11mw-005, LL11mw-006, LL11mw-008, LL11mw-009, and LL11mw-010. A field duplicate and QA split sample was collected from LL10mw-006. Extra volume was collected from LL10mw-004 and LL11mw-004 to be designated for matrix spike/matrix spike duplicate analysis at the laboratory. Additionally, a field rinsate was collected by Team #2.

Project	Ravenna Army Ammunition Plant Groundwater Monitorin	Report No.	071509
Job No.	30240	Date:	4/27/2009

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS):

All field equipment was calibrated prior to mobilizing to the field. Water quality meters were calibrated with AutoCal Solution - certified values are: Conductivity - 4.49 mS/cm; Turbidity - 0 NTU; pH - 4.0 and 7.0 su. Multigas detector calibrated with Zero Air Standard and 100 ppm Isobutylene. All field equipment was within calibration criteria.

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

Health & Safety briefing conducted by Colleen Lear prior to mobilizing to the field. All personnel to don modified Level 4 PPE (i.e. steel-toed shoes, safety glasses, and nitrile gloves). First Aid kits were included in each vehicle, and personnel were made aware of the location of eyewash stations. Each team was equipped with a cellular phone. Personnel were instructed to hydrate frequently and watch for signs of heat stress. Personnel were also instructed to be alert for storms, stinging insect, ticks, and roaming deer.

PROBLEMS ENCOUNTERED/CORRECTIVE ACTION (S) TAKEN:

The sample bottle provided for cyanide analysis from the duplicate aliquot at LL10mw-006 (DUP4-1416) was inadvertently submitted to the laboratory empty. Laboratory personnel were instructed to pour sample from an unpreserved 1-liter amber bottle into the empty cyanide container and log for analysis.

SPECIAL NOTES:

NA

TOMORROWS EXPECTATIONS:

Expectations for tomorrow are to safely and correctly collect samples from remaining wells for the July 2009 quarterly sampling event.

Date: 16-Jul

S	M	T	W	T	F	S
				X		

DAILY QUALITY CONTROL REPORT

COE Project Manager: Glen Beckham

Project: Ravenna Army Ammunition Plant Groundwater Monitoring

Job No.: 30240

Contract No.: W912QR-04-D-0036

Weather	Bright Sun	Clear	Over-Cast	Rain	Snow
	X	X			
Temp	To 32	32-50	50-70	70-85	85 up
				X	
Wind	Still	Moder	High	Report No.	
	X				
Humidity	Dry	Moder	Humid		
		X	X	071609	

SUB-CONTRACTORS ON SITE:

Environmental Quality Management, Inc.

EQUIPMENT ON SITE:

Three water quality meters (Horiba-U22's); One multigas detector (MSA); Four bladder pumps w/ associated controllers and compressors.

WORK PERFORMED (INCLUDING SAMPLING):

Samples were collected at the following locations: ASYmw-006, ASYmw-007, ASYmw-008, ASYmw-009, and ASYmw-010. A QA split sample only was collected from ASYmw-008. Additionally, a field rinsate was collected by Team #1. Collected IDW sample, packed equipment for return back to Cincinnati, and cleaned Building 1036 while waiting for lab to arrive.

Project	Ravenna Army Ammunition Plant Groundwater Monitorin	Report No.	071609
Job No.	30240	Date:	4/28/2009

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS):

All field equipment was calibrated prior to mobilizing to the field. Water quality meters were calibrated with AutoCal Solution - certified values are: Conductivity - 4.49 mS/cm; Turbidity - 0 NTU; pH - 4.0 and 7.0 su. Multigas detector calibrated with Zero Air Standard and 100 ppm Isobutylene. All field equipment was within calibration criteria.

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

Health & Safety briefing conducted by Colleen Lear prior to mobilizing to the field. All personnel to don modified Level 4 PPE (i.e. steel-toed shoes, safety glasses, and nitrile gloves). First Aid kits were included in each vehicle, and personnel were made aware of the location of eyewash stations. Each team was equipped with a cellular phone. Personnel were instructed to hydrate frequently and watch for signs of heat stress. Personnel were also instructed to be alert for storms, stinging insect, ticks, and roaming deer.

PROBLEMS ENCOUNTERED/CORRECTIVE ACTION (S) TAKEN:

The replacement QA split sample was collected from ASYmw-008.

SPECIAL NOTES:

NA

TOMORROWS EXPECTATIONS:

NA

APPENDIX D

DATA VERIFICATION REPORTS/LABORATORY DATA SHEETS

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2009 **Date:** August 25, 2009
STL Sample Delivery Group: A9G140103 **Revision:** 0

Data Validator: Angye Dragotta/Environmental Quality Management, Inc. (EQM, Inc.)

QA/QC Summary

On July 13, 2009 the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A9G140103.

Field Sample ID	Analytes	Method
FWGLL7mw-003c-1372-GW	VOCs	SW846 8260B
FWGLL7mw-001c-1370-GW	SVOCs	SW846 8270C
FWGLL6mw-007c-1369-GW	Pesticides	SW846 8081A
FWGLL7mw-006c-1375-GW	PCBs	SW846 8082
FWGLL7mw-DUP1-1413-GW	Cyanide	SW846 9012A
FWGLL7mw-004c-1373-GW		
FWGLL7mw-002c-1371-GW		
FWGLL6mw-005c-1367-GW		
FWGEQUIPRINSE1-1423-GW		
FWGLL7mw-005c-1374-GW		
FWGLL6mw-006c-1368-GW		
FWGLL7mw-003c-1372-GF	TAL23 Metals	SW846 6010B/6020/7470A
FWGLL7mw-001c-1370-GF		
FWGLL6mw-007c-1369-GF		
FWGLL7mw-006c-1375-GF		
FWGLL7mw-DUP1-1413-GF		
FWGLL7mw-004c-1373-GF		
FWGLL7mw-002c-1371-GF		
FWGLL6mw-005c-1367-GF		
FWGEQUIPRINSE1-1423-GW		
FWGLL7mw-005c-1374-GF		
FWGLL6mw-006c-1368-GF		
FWGTEAM1-Trip	VOCs	SW846 8260B
FWGTEAM2-Trip		
FWGTEAM3-Trip		

The data presented in this report were evaluated according to the *Final Quality Assurance Project Plan Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant Ravenna, OH, Portage Environmental, September 2004.* The following documents will be used as needed to supplement the project documentation: *Louisville Chemistry Guidelines, USACE, June 2002 version 5, EPA National Functional Guidelines (NFG) for Organic Data Review, EPA-540/R-99-008, October 1999, NFG for Inorganic Data Review, EPA-540/R-04-004, October 2004*, Analytical Methods, and Laboratory Standard

Operating Procedures. These objectives represent accuracy and precision performance goals for each analytical method.

The coolers were received between 0.4 - 4.4 °C. Upon receipt, it was documented by the laboratory, that the samples were not frozen and in good condition. Therefore, no qualifications were made to sample results based on temperatures less than 2°C.

The completeness objective for the project was 90%. The completeness objective was met for this SDG, 100%. Limitations, if any, on the data are indicated with qualifiers detailed below.

All analytical results have been verified against compliance requirements specified in the project QAP, LCG, associated analytical methods and/or SOPs, as appropriate. Checklists used in review of the data have been inserted in the SDGs by parameter. Outliers have been noted below and results requiring qualification, as a result of this verification process, have been summarized in Appendix 1.

VOAs - 8260B

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Tuning criteria
- CCV criteria
- Initial Calibration Criteria including SPCC and CCC compounds
- Internal standard area counts and retention times
- MDL verification criteria
- Surrogate recoveries
- Method blank free from contamination
- Field duplicate RPD criteria

QC/MRL

The opening MRL check analyzed 7/17/09 at 1118 had dibromochloromethane recover above control limits at 152%, trans-1,3-dichloropropene at 135% and bromoform at 175%.
The closing MRL check analyzed at 2106 had acetone recover below control limits at 59.8%, while dibromochloromethane recovered above control limits at 152%, trans-1,3-dichloropropene at 135% and bromoform at 175%. The acetone results were qualified as estimated, "J/UJ". No other qualifications were made as there were no detected concentrations of dibromochloromethane, trans-1,3-dichloropropene or bromoform.

ICV

Chloromethane recovered below control limits at 71.5% in the ICV. All Chloromethane results were qualified as estimated, "J/UJ".

LCS Recovery
The percent recovery was below control limits in the LCS for vinyl chloride at 71% and in the LCS/LCD for chloroethane at 66% and 70%. Vinyl chloride and chloroethane results were qualified as estimated, "UJ".

Blanks
- FWGEQUIPRinse1-1423-GW had 2-butanone detected at 0.78ug/L, acetone at 5.9ug/L, benzene at 0.36ug/L, ethylbenzene at 0.32ug/L, methylene chloride at 2.8ug/L, o-xylene at 0.46ug/l, toluene at 1.9ug/L and total xylene at 1.8ug/L. No qualifications were made as there were no detected concentrations of these contaminants in the associated field samples.
- Acetone was detected in all three trip blanks from 1.9ug/L to 2.6ug/L. Sample FWGEQUIPRinse1-1423-GW was qualified as estimated, "B".

Matrix Spike Recovery
Chloromethane recovered below control limits in the MS at 54% and at 60% in the MSD. Bromomethane recovered below control limits in the MS at 54% and at 60% in the MSD. Chloroethane recovered below control limits in the MS at 69% and at 66% in the MSD. No qualifications were made for bromomethane or chloromethane as the LCS recovered within limits. Chloroethane results were qualified as estimated, "UJ".

SVOCs- 8270C
The following QC criteria were reviewed with acceptable results:
- Holding time, preservation and sample handling
- Tuning criteria
- Initial Calibration criteria including CCC and SPCC compounds
- ICV/ CCV criteria
- MDL Level Verification
- Internal standard area counts and retention times
- LCS Recovery
- Field Duplicate RPD criteria

MRL Recoveries
The MRL check analyzed 7/23/09 at 2251 had 2,4-dinitrophenol recover below control limits at 67.9%. Bracketed 2,4-dinitrophenol results were qualified as estimated, "UJ".

Blanks
- Bis (2-Ethylhexyl) phthalate was detected in the method blank at 1.1ug/L. bis (2-Ethylhexyl) phthalate results <10x contamination were qualified, "B".
- Bis (2-Ethylhexyl) phthalate was detected in FWGEQUIPRinse1-1423-GW at 1.9ug/L. bis (2-Ethylhexyl) phthalate results <10x contamination were qualified, "B".

Matrix Spike Recovery
Sample FWGLL7mw-003c-1372-GW was the parent MS/MSD sample from this SDG. Hexachloroethane recovered below control limits in the MS at 37% and 35% in the MSD while 1,3-dichlorobenzene recovered below control limits at 43% in the MSD. No qualifications were made as the associated LCS recovered within limits.

Surrogate Recovery Criteria
In sample FWGLL6mw-006c-1368-GW, 2-fluorobiphenyl recovered below limits at 48% and 2-fluorophenyl at 49%. No qualifications were made as LCG allows for one surrogate from each fraction to recover below limits without qualification as long as the outliers recover above 10%.

Pesticides- 8081A
The following QC criteria were reviewed with acceptable results:

- Preservation, holding time and sample handling
- Initial Calibration criteria
- DDT and Endrin breakdown criteria
- Retention time criteria
- ICV criteria
- The method blank was free from contamination
- Equipment Rinse was free from contamination
- LCS Recoveries
- Field Duplicate Criteria
- MDL verification criteria
- MRL Verification criteria
- Matrix Spike recovery criteria

CCV Recovery Criteria
The avg %D for the tox CCV analyzed on 7/20/09 @1442 and on the primary column was above limits at 20.8%. No qualifications were made as there were no detected toxaphene concentrations.

Surrogate Recoveries
The surrogate, DCB, recovered below control limits in samples FWGLL6mw-005c-1367-GW, FWGLL7mw-001c-1370-GW, FWGLL7mw-003c-1372-GW, FWGLL7mw-004c-1373-GW, FWGLL7mw-005c-1374-GW and FWGLL7mw-DUP1-1413-GW. The associated results were qualified as estimated, "UJ".

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2009 **Date:** August 25, 2009
STL Sample Delivery Group: A9G140103 **Revision:** 0

PCBs- 8082

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- Retention time criteria
- MDL verification criteria
- ICV/ CCV criteria
- The method blank was free from contamination
- Equipment Rinse was free from contamination
- LCS/ LCSD percent recoveries and RPD value criteria
- Matrix Spike Recovery and RPD Criteria
- Second Column confirmation criteria
- Field Duplicate RPD criteria
- MRL Verification Criteria

Surrogate Recovery

The surrogate, DCB, recovered below control limits in samples FWGLL6mw-005c-1367-GW and FWGLL7mw-003c-1372-GW. The associated results were qualified as estimated, "UJ".

Metals - 6010B

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- ICV criteria
- CCV criteria
- Interference Check Sample (ICSAB) criteria
- LCS recovery criteria
- MS recovery criteria
- MDL Verification criteria
- MRL verification criteria
- Field duplicate RPD

Blanks

- The ICB analyzed 7/17/09 had detected calcium at 91.2ug/L, selenium at 3.9ug/L and potassium at 152ug/L. No qualifications were made for potassium or calcium as there were no detected results <5x ICB contamination. Selenium results for FWGLL7mw-003c-1372-GF, FWGLL6mw-007c-1369-GF, FWGLL7mw-003c-1372-GF, FWGLL6mw-005c-1367-GF and FWGLL6mw-006c-1368-GF were qualified, "U", as the detected concentrations were <5x blank contamination. The potassium result for FWGEQUIPRinse1-1423-GW was qualified, "U", as the detected concentration was <5x blank contamination.

- The CCBs analyzed 7/17/09 had detected selenium at 4.1ug/L and potassium from 143ug/L to 153ug/L. The potassium result for FWGEQUIPRinse1-1423-GW was qualified, "U", as the detected concentration was <5x blank contamination. Selenium results for FWGLL7mw-003c-1372-GF, FWGLL6mw-007c-1369-GF, FWGLL7mw-003c-1372-GF, FWGLL6mw-005c-1367-GF and FWGLL6mw-006c-1368-GF were qualified, "U", as the detected concentrations were <5x blank contamination.
- Potassium was detected in the method blank at 153ug/L. All potassium and zinc results <5x contamination were qualified, "B".
- FWGEQUIPRinse1-1423-GW had potassium detected at 150ug/L. All contaminants <5x contamination were qualified, "B".

No qualifications were made for ICP or ICPMS due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.

Metals - 6020

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Internal standard and tune criteria
- Initial Calibration criteria
- ICV criteria
- MDL Verification Data
- Interference Check Sample (ICSAB) criteria
- LCS Recovery Criteria
- MS recovery criteria
- Field duplicate RPD

MRL Verification

The MRL analyzed 7/27/09 @ 1111 had zinc recover above limits at 142%. Detected concentrations of zinc were qualified as estimated, "J".

Blanks

- The CCBs analyzed 7/27/09 had detected antimony from 0.071 to 0.063ug/L, beryllium at 0.039ug/L, cadmium at 0.034ug/L, iron at 11.4 ug/L and thallium at 0.12ug/L. The thallium result for sample FWGLL7mw-001c-1370-GF was qualified, "U" as the result was <5x CCB contamination. No other qualifications were made as the all other contaminants were either nondetect or >5x contamination.
- FWGEQUIPRinse1-1423-GW had zinc detected at 3.4ug/L. All detected zinc results <5x contamination were qualified, "B".
- Zinc was detected in the method blank at 6.7ug/L. All detected zinc results <5x contamination were qualified, "B".

No qualifications were made for ICP or ICPMS due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2009 **Date:** August 25, 2009
STL Sample Delivery Group: A9G140103 **Revision:** 0

Mercury - 7470A

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- ICV and CCV criteria
- ICB /CCBs were free from contamination
- The method blank was free from contamination
- The equipment blank was free from contamination
- MRL and MDL verification criteria
- LCS percent recovery criteria
- MS percent recovery
- Matrix Duplicate RPD criteria
- Field duplicate RPD criteria

No QC outliers were noted.

Cyanide- 9012

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- ICV and CCV criteria
- MRL Verification Check criteria
- Method and Equipment Blank were free from contamination
- LCS/LCSD percent recoveries and RPD value criteria
- Field Duplicate RPD criteria
- Matrix spike recovery criteria

No QC outliers were noted.

Data Validator: Angie Dragos
Date: 9/14/09

2nd Level Data Reviewer: Erik Corbin
Date: 9/14/09

CASE NARRATIVE

A9G140103

The following report contains the analytical results for twenty-one water samples and three quality control samples submitted to TestAmerica North Canton by Environmental Quality Mgt., Inc. from the RVAAP (OH) Site, project number 30240.0006. The samples were received July 14, 2009, according to documented sample acceptance procedures.

TestAmerica utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Angye Dragotta, Erik Corbin, and Jackie Doan on July 30, 2009. A summary of QC data for these analyses is included at the back of the report.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Please refer to the Quality Control Elements Narrative following this case narrative for additional quality control information.

If you have any questions, please call the Project Manager, Mark J. Loeb, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT."

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The coolers were received at temperatures ranging from 0.4 to 4.4°C.

CASE NARRATIVE (continued)

GC/MS VOLATILES

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

The matrix spike and/or matrix spike duplicate for FWGLL7mw-003C-1372-GW had recoveries outside acceptance limits. However, since the associated method blank and laboratory control samples were in control, no corrective action was necessary.

Due to sporadic marginal failure, the LCS associated with QC Batch 9198160 shows recoveries for Vinyl Chloride (71<73) and Chloroethane (66<72) and the LCSD associated with QC Batch 9198160 shows recovery for Chloroethane (70<72).

GC/MS SEMIVOLATILES

The sample(s) that contained concentrations of target analyte(s) at a reportable level in the associated Method Blank(s) were flagged with "B". All target analytes in the Method Blank must be below the reporting limit (RL) or the associated sample(s) must be ND with the exception of common laboratory contaminants.

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

The matrix spike and/or matrix spike duplicates for FWGLL7mw-003C-1372-GW had recoveries outside acceptance limits for 1,3-Dichlorobenzene, Hexachlorobutadiene, Hexachlorocyclopentadiene, and Hexachloroethane. Per LCG requirements, no corrective action was necessary.

Sample(s) FWGLL6mw-006C-1368-GW had two (2) surrogate recoveries below 50%, but above 10%.

PESTICIDES-8081

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

CASE NARRATIVE (continued)

PESTICIDES-8081 (continued)

For samples FWGLL7mw-003C-1372-GW (MSD), FWGLL7mw-001C-1370-GW, FWGLL7mw-DUP1-1413-GW, FWGLL7mw-004C-1373-GW, FWGLL6mw-005C-1367-GW, FWGLL7mw-005C-1374-GW, and the Blank and LCS associated with batch(es) 9195068, one surrogate recovery is outside stated control limits. Per LCG requirements, surrogates recoveries must be less than 10% before corrective action must be initiated.

The opening Toxaphene CCV failed high, but since the associated sample(s) FWGLL7mw-003C-1372-GW, FWGLL7mw-001C-1370-GW, FWGLL6mw-007C-1369-GW, FWGLL7mw-006C-1375-GW, FWGLL7mw-DUP1-1413-GW, FWGLL7mw-004C-1373-GW, FWGLL7mw-002C-1371-GW, FWGLL6mw-005C-1367-GW, FWGEQUIPRINSE1-1423-GW, FWGLL7mw-005C-1374-GW, and FWGLL6mw-006C-1368-GW were non-detect for Toxaphene, no corrective action was necessary.

POLYCHLORINATED BIPHENYLS-8082

For sample(s) FWGLL7mw-003C-1372-GW, FWGLL6mw-005C-1367-GW, and the Blank and LCS associated with batch(es) 9195069, the recovery for one surrogate compound is outside acceptance criteria. Since LCG criterion is that one of two surrogate compounds must meet acceptance criteria, no corrective action was required. (Surrogate was below acceptance limit, but above 10%.)

METALS

The sample(s) that contain results between the MDL and the RL were flagged with "B". There is the possibility of false positive or mis-identification at these quantitation levels. The acceptance criteria for the ICB, CCB, and Method Blank are +/- the standard reporting limit (SRL).

Serial dilution of a sample in this lot indicates that physical and chemical interferences were present. Refer to the sample report pages for the affected analytes flagged with "E".

The sample(s) that contained concentrations of target analyte(s) at a reportable level in the associated Method Blank(s) were flagged with "J". Refer to the sample report pages for the affected analyte(s).

The sample duplicate RPD was outside the acceptance limits for some analytes. The result is less than five times the reporting limit; therefore, no corrective action is required. Refer to the sample duplicate report for RPDS that exceed 20%.

CASE NARRATIVE (continued)

GENERAL CHEMISTRY

The matrix spike/matrix spike duplicate(s) for batch(es) 9197481 had RPD's and recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

MANUAL INTEGRATION SUMMARY

Manual integrations were performed on samples(s) reported herein. A list of samples and analytes for which manual integration was necessary is provided following this Case Narrative.

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica Northb Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

QUALITY CONTROL ELEMENTS NARRATIVE (continued)

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

TestAmerica Certifications and Approvals:

The laboratory is certified for the analytes listed on the documents below. These are available upon request.
California (#01144CA), Connecticut (#PH-0590), Florida (#E87225),
Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Nevada (#OH-000482008A), OhioVAP (#CL0024), Pennsylvania (#008), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit

N:\QAQC\Customer Service\Narrative - Combined RCRA _CWA 032609.doc

MANUAL INTEGRATION SUMMARY

Lot A9G140103

Client ID: FWGLL7mw-003C-1372-
Compound Name: Benzyl Alcohol
Instrument ID: a4hp7.i
File Name: LGE9E1AF.D
Inj. Date and Time: 23-JUL-2009 18:32
Manual Integration Reason: Peak not found

Client ID: FWGLL7mw-003C-1372-
Compound Name: Benzoic Acid
Instrument ID: a4hp7.i
File Name: LGE9E1AF.D
Inj. Date and Time: 23-JUL-2009 18:32
Manual Integration Reason: Peak not found

Client ID: FWGLL7mw-003C-1372-
Compound Name: 2,6-Dinitrotoluene
Instrument ID: a4hp7.i
File Name: LGE9E1AF.D
Inj. Date and Time: 23-JUL-2009 18:32
Manual Integration Reason: Peak not found

Client ID: FWGLL7mw-003C-1372-
Compound Name: 4-Nitrophenol
Instrument ID: a4hp7.i
File Name: LGE9E1AF.D
Inj. Date and Time: 23-JUL-2009 18:32
Manual Integration Reason: Peak not found

Client ID: FWGLL7mw-003C-1372-
Compound Name: 4-Nitroaniline
Instrument ID: a4hp7.i
File Name: LGE9E1AF.D
Inj. Date and Time: 23-JUL-2009 18:32
Manual Integration Reason: Peak not found

Client ID: FWGLL7mw-003C-1372-
Compound Name: 4,6-Dinitro-2-methylphenol
Instrument ID: a4hp7.i
File Name: LGE9E1AF.D
Inj. Date and Time: 23-JUL-2009 18:32
Manual Integration Reason: Peak not found

Client ID: FWGLL7mw-003C-1372-
Compound Name: Benzoic Acid
Instrument ID: a4hp7.i
File Name: LGE9E1AG.D
Inj. Date and Time: 23-JUL-2009 19:14
Manual Integration Reason: Poor Chromatography

MANUAL INTEGRATION SUMMARY

Lot A9G140103 (Continued)

Client ID: FWGLL7mw-003C-1372-
Compound Name: 2,6-Dinitrotoluene
Instrument ID: a4hp7.i
File Name: LGE9E1AG.D
Inj. Date and Time: 23-JUL-2009 19:14
Manual Integration Reason: Peak not found

Client ID: FWGLL7mw-003C-1372-
Compound Name: 4-Nitroaniline
Instrument ID: a4hp7.i
File Name: LGE9E1AG.D
Inj. Date and Time: 23-JUL-2009 19:14
Manual Integration Reason: Peak not found

Client ID: FWGLL7mw-003C-1372-
Compound Name: AROCLOR-1016
Instrument ID: a2hp2.i
File Name: 037F3701.D
Inj. Date and Time: 20-JUL-2009 12:14
Manual Integration Reason: Manually Assigned

Client ID: FWGLL7mw-003C-1372-
Compound Name: AROCLOR-1016
Instrument ID: a2hp2.i
File Name: 037F3701.D
Inj. Date and Time: 20-JUL-2009 12:14
Manual Integration Reason: Manually Assigned

Client ID: FWGLL6mw-006C-1368-
Compound Name: Decachlorobiphenyl
Instrument ID: a2hp3.i
File Name: 041F4101.D
Inj. Date and Time: 21-JUL-2009 08:50
Manual Integration Reason: Baseline Event

SAMPLE SUMMARY

A9G140103

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LGE9C	001	FWGTEAM1-TRIP	07/13/09	10:00
LGE9E	002	FWGLL7mw-003C-1372-GW	07/13/09	12:05
LGE9F	003	FWGLL7mw-003C-1372-GF	07/13/09	12:05
LGE9G	004	FWGLL7mw-001C-1370-GW	07/13/09	14:45
LGE9H	005	FWGLL7mw-001C-1370-GF	07/13/09	14:45
LGE9J	006	FWGLL6mw-007C-1369-GW	07/13/09	17:20
LGE9K	007	FWGLL6mw-007C-1369-GF	07/13/09	17:20
LGE9L	008	FWGTEAM2-TRIP	07/13/09	10:00
LGE9M	009	FWGLL7mw-006C-1375-GW	07/13/09	12:00
LGE9N	010	FWGLL7mw-006C-1375-GF	07/13/09	12:00
LGE9P	011	FWGLL7mw-DUP1-1413-GW	07/13/09	13:00
LGE9Q	012	FWGLL7mw-DUP1-1413-GF	07/13/09	13:00
LGE9R	013	FWGLL7mw-004C-1373-GW	07/13/09	14:00
LGE9V	014	FWGLL7mw-004C-1373-GF	07/13/09	14:00
LGE9W	015	FWGLL7mw-002C-1371-GW	07/13/09	15:10
LGE9X	016	FWGLL7mw-002C-1371-GF	07/13/09	15:10
LGE90	017	FWGLL6mw-005C-1367-GW	07/13/09	16:30
LGE92	018	FWGLL6mw-005C-1367-GF	07/13/09	16:30
LGE93	019	FWGEQUIPRINSE1-1423-GW	07/13/09	17:30
LGE97	020	FWGTEAM3-TRIP	07/13/09	11:00
LGFAD	021	FWGLL7mw-005C-1374-GW	07/13/09	12:20
LGFAF	022	FWGLL7mw-005C-1374-GF	07/13/09	12:20
LGFAG	023	FWGLL6mw-006C-1368-GW	07/13/09	16:10
LGFAK	024	FWGLL6mw-006C-1368-GF	07/13/09	16:10

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 7-13-09	Chain of Custody Number: 003179
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513 825 7500 (fax 7495)	Lab Number: 3304979396	Page 1 of 1
City: Cincinnati; State: OH; Zip Code: 45240	Site Contact: E Corbin; Lab Contact: M Loeb		
Project Name and Location (State): RVAAP (OH) PN: 30240.0006	Carrier/Waybill Number: NA lab pickup		
Contract/Purchase Order/Quote No.: PO # 15660			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Propellants	Cyanide 9012	Metals 6010/6020 7470	Perchlorates	Explo 8330	Special Instructions/ Conditions of Receipt: Cooler ID #
FWG Team1 - Trip	7-13-09	10:00		X						2			X									C444
FWGLL7mw-003C-1372-GW	7-13-09	12:05		X			27			9	3		X	X	X	X	X	X			X	MSMSD A-1,405A,S1
FWGLL7mw-003C-1372-GF	7-13-09	12:05		X			3		3										X	X		MSMSD A-1,405A,S1
FWGLL7mw-001C-1370-GW	7-13-09	14:45		X			9			3	1		X	X	X	X	X	X			X	C10
FWGLL7mw-001C-1370-GF	7-13-09	14:45		X					1										X	X		C10
FWGLL6mw-007C-1369-GW	7-13-09	17:20		X			9			3	1		X	X	X	X	X	X			X	C444
FWGLL6mw-007C-1369-GF	7-13-09	17:20		X					1										X	X		C444

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other per SOW

QC Requirements (Specify): Metals / perchlorates were field filtered

	Date	Time		Date	Time
1. Relinquished By: [signature]	7/13/09	1800	1. Received By: RC Robison	7/13/09	1800
2. Relinquished By: RC Robison	7/13/09	1905	2. Received By: [signature]	7/14/09	0800
3. Relinquished By			3. Received By		

Comments: Temps may not meet requirements if sample collection is close to lab pickup time

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
EQM	John Miller	7-13-09	003158

Address	Telephone Number (Area Code)/Fax Number	Lab Number	Page
1800 CARILLON BLVD	513 825 7500 (fax 7495)	3304979396	1 of

City	State	Zip Code	Site Contact	Lab Contact
Cincinnati	OH	45240	E Corbin	M Loen

Project Name and Location (State)	Carrier/Waybill Number
RVAAP (OH) PN 30240.0006	N/A LAB PICKUP

Contract/Purchase Order/Quote No.: PO 15660

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC 8260	SVOC 8270	Pest 8081	PCB 8082	EXPLO 8330	Propellants	Cyanide 9012	Metals 6020	Perchlorates	Special Instructions/ Conditions of Receipt: Cooler ID #
FWG Team2-Trip	7-13-09	1000		X						2			X									C111
FWGLL7mw006C-1375-GW	↓	1200		X			9			3	1		X	X	X	X	X	X	X			179
FWGLL7mw-006C-1375-GF	↓	↓		X			1		1											X	X	179
FWGLL7mw-DUP1-1413-GW	↓	1300		X			9			3	1		X	X	X	X	X	X	X			175
FWGLL7mw-DUP1-1413-GF	↓	↓		X			1		1											X	X	175
FWGLL7mw-004C-1373-GW	↓	1400		X			9			3	1		X	X	X	X	X	X	X			174
FWGLL7mw-004C-1373-GF	↓	↓		X			1		1											X	X	174
FWGLL7mw-002C-1371-GW	↓	1510		X			9			3	1		X	X	X	X	X	X	X			1D27
FWGLL7mw-002C-1371-GF	↓	1510		X			1		1											X	X	1D27
FWGLL6mw-005C-1367-GW	↓	1630		X			9			3	1		X	X	X	X	X	X	X			C111
FWGLL6mw-005C-1367-GF	↓	↓		X			1		1	Xoe										X	X	C111
FWGEQUIPRinse1-1423-GW	7-13-09	1730		X			10		1	3	1		X	X	X	X	X	X	X	X	X	*NOT FILTERED C333

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other Per SOW

QC Requirements (Specify): Metal/Perchlorates were field filtered

	Date	Time		Date	Time
1. Relinquished By: [signature]	07/13/09	1800	1. Received By: R C Robison	7/13/09	1800
2. Relinquished By: [signature]	07/13/09	1800	2. Received By: [signature]	7-14-09	8:00
3. Relinquished By: R Robison	7/13/09	1905	3. Received By:		

Comments: Temps may not meet requirements if sample collection close to lab pickup time. All VOAs in Cooler C111

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
EQM	JOHN MILLER	07/13/2009	003166
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
1800 CARILLON BLVD	(513) 825-7500 (FAX - 7493)	(330) 497-9396	

City	State	Zip Code	Site Contact	Lab Contact
CINCINNATI	OH	45240	E CORBIN	M. LOEB

Project Name and Location (State)	Carrier/Waybill Number
RVAAP (OH) 030240.0006	N/A - LAB PICKUP

Contract/Purchase Order/Quote No.: PO 156660

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil		Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		VOC 8260	SVOC 8270	PEST 8081	PCB 8082	EXPLO 8330	PROPELLANTS	CYANIDE 9012	METALS 6010/6020 7470	PERCHLORATES				Special Instructions/ Conditions of Receipt
FWG TRIP 3 TRIP	07/13/09	1100		X							2				X												MIN. VOLUME
FWG LL7MW-005C-1374-GW	07/13/09	1220		X				9			3	1			X	X	X	X	X	X	X						COOLER C119
FWG LL7MW-005C-1374-GF	07/13/09	1220		X				1		1												X	X				C119
FWG LL6MW-006C-1368-GW	07/13/09	1610		X				9			3	1			X	X	X	X	X	X	X						SB01
FWG LL6MW-006C-1368-GF	07/13/09	1610		X				1		1												X	X				SB01

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other PER SOW

QC Requirements (Specify): METALS/PERCHLORATE WERE FIELD FILTERED

	Date	Time		Date	Time
1. Relinquished By: [signature]	7/13/09	1800	1. Received By: [signature]	7/13/09	1800
2. Relinquished By: RC Robison	7/13/09	1905	2. Received By: [signature]	7/14/09	0800
3. Relinquished By			3. Received By		

Comments: TEMPS MAY NOT MEET REQUIREMENTS IF SAMPLE COLLECTION IS CLOSE TO LAB PICKUP TIME

ALL VOC'S IN COOLER SB01

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

24

TestAmerica Cooler Receipt Form/Narrative **Lot Number:** A9G140103
North Canton Facility

Client EQM Project RJAAP(OH) By: Chris Lingard
Cooler Received on 7-14-09 Opened on 7-14-09 (Signature)
FedEx ☐ UPS ☐ DHL ☐ FAS ☐ Stetson ☐ Client Drop Off ☐ TestAmerica Courier ☒ Other _____
TestAmerica Cooler # _____ Multiple Coolers ☒ Foam Box ☐ Client Cooler ☐ Other _____

1. Were custody seals on the outside of the cooler(s)? Yes ☒ No ☐ Intact? Yes ☒ No ☐ NA ☐
   If YES, Quantity 6 Quantity Unsalvageable _____
   Were custody seals on the outside of cooler(s) signed and dated? Yes ☒ No ☐ NA ☐
   Were custody seals on the bottle(s)? Yes ☐ No ☒
   If YES, are there any exceptions? _____
2. Shippers' packing slip attached to the cooler(s)? Yes ☐ No ☒
3. Did custody papers accompany the sample(s)? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Were the custody papers signed in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☒ Foam ☐ None ☐ Other _____
6. Cooler temperature upon receipt _____ °C See back of form for multiple coolers/temps ☒
   METHOD: IR ☒ Other ☐ _____
   COOLANT: Wet Ice ☒ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐
7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels be reconciled with the COC? Yes ☒ No ☐
9. Were sample(s) at the correct pH upon receipt? Yes ☒ No ☐ NA ☐
10. Were correct bottle(s) used for the test(s) indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☒ NA ☐
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a trip blank present in the cooler(s)? Yes ☒ No ☐ Were VOAs on the COC? Yes ☒ No ☐

Contacted PM _____ Date _____ by _____ via Verbal ☐ Voice Mail ☐ Other ☐
Concerning _____

14. CHAIN OF CUSTODY

The following discrepancies occurred:

_____

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in Sample Receiving to meet recommended pH level(s). *Nitric Acid Lot# 031909-HNO_3; Sulfuric Acid Lot# 100108-H_2SO_4; Sodium Hydroxide Lot# 073007 -NaOH; Hydrochloric Acid Lot# 092006-HCl; Sodium Hydroxide and Zinc Acetate Lot# 050205-$(CH_3COO)_2ZN/NaOH$.* What time was preservative added to sample(s)? _____

Client ID	GF GW pH	Date	Initials
1375 GW / GF	<2 >12	7-14-09	CSL
1413 GW / GF	<2 >12	↓	↓
1373 GW / GF	<2 >12	↓	↓
1371 GW / GF	<2 >12	↓	↓
1367 GW / GF	<2 >12	↓	↓
1423 GW / GF	<2 >12	↓	↓
1372 GW/GF	<2 <2 <2 >12 >12 >12	↓	↓
1370 GW/GF	<2 >12	↓	↓

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials
1369 GW/GF	<2 >12	7/14/09	[illegible]
1374 GW/GF	<2 >12		
1368 GW/GF	<2 >12		

Cooler #	Temp. °C	Method	Coolant
179	3.2	IR	Ice
175	4.4		
174	3.7		
1D27	4.1		
C111	4.4		
C333	3.6		
A1	2.2		
405A	2.6		
S1	4.4		
C10	2.8		
C444	2.6		
C119	0.4°C		

Discrepancies Cont'd:

SB01	2.8°C		

GCMS VOLATILE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/August 24, 2009

SDG: A9G140103 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.4 - 4.4 °C. Upon receipt, it was documented by the laboratory, that the samples were not frozen and in good condition. Therefore, no qualifications were made to sample results based on temperatures less than 2°C.	QAPP Table 4-2, NELAC
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3.3
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-3
7. Was the GC/MS system tuned with bromofluorobenzene (BFB)?	✓				LCG Table 1
8. Was the criteria met during each 12 hour shift (prior to ICAL and Cal Ver.)?	✓				SW846 8260B 7.3.1
9. Did the initial calibration curve consist of 5 concentration levels?	✓			Instrument A3UX11 – 6/22/09 stds – 5, 10, 25, 50, 100, 200 ng on column	LCG Table 1 R
10. Did the Calibration Check Compounds (CCCs) (see Table 1 below) relative standard deviations (%RSD) ≤ 30%?	✓				LCG Table 1 R
11. Were the minimum response factors (RFs) for the System Performance Check Compounds (SPCCs) (see Table 2 below) met?	✓				LCG Table 1
12. Were all other target analytes ≤ 15% RSD? OR Was the average RSD ≤ 15%? Was a different calibration option used?	✓			Acetone, methylene chloride, cis-1,3-dichloropropene, trans-1,3-dichloropropene, dibromochloromethane and bromoform used weighted linear curves.	LCG Table 1 15% <RSD< 20% = J/UJ
13. If a linear regression curve was used, was the correlation coefficient r≥0.99?	✓			All correlation coefficients were ≥0.99. No qualifications were made since the correlation coefficients were acceptable.	LCG Table 1 R<0.99=-J/R
14. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓			4/28/09 @2107, 2043	LCG Table 1 R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/August 24, 2009

SDG: A9G140103 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
15. Was a MRL Level Verification run at the beginning and end of every daily sequence or every 12 hours?	✓				LCG Table 1
16. Were the QC/MRL recoveries 70-130%?		✓		The opening MRL check analyzed 7/17/09 at 1118 had dibromochloromethane recover above control limits at 152%, trans-1,3-dichloropropene at 135% and bromoform at 175%. The closing MRL check analyzed at 2106 had acetone recover below control limits at 59.8%, while dibromochloromethane recovered above control limits at 152%, trans-1,3-dichloropropene at 135% and bromoform at 175%. The acetone results were qualified as estimated, "J/UJ". No other qualifications were made as there were no detected concentrations of dibromochloromethane, trans-1,3-dichloropropene or bromoform.	LCG Table 1 >130%=J; 70-60%=J/UJ; <60%=J/R
17. Was a second source verification (ICV) analyzed after the ICAL? Were results 80-120%?	✓			6/22/09 @ 1345 Chloromethane recovered below control limits at 71.5%. All Chloromethane results were qualified as estimated, "J/UJ".	LCG Table 1 >120%=J; 60-80%=J/UJ; <60%=J/R
18. Was a CCV run every 12 hours?	✓				LCG Table 1
19. Did the CCCs have a %Difference < 20%?	✓				LCG Table 1
20. Were the minimum RFs for the SPCCs within limits?	✓				LCG Table 1
21. Was the average of all target analytes ≤ 20%D with a maximum D for each target analyte ≤30%?	✓				LCG Table 1 Avg D>20% and D>30% =R; Avg %D<20% and D>30% =J D>20% (neg) = J/R D>30% (pos) = J
22. Were the internal standards added to every sample?	✓				LCG Table 1
23. Were the retention times for all IS compounds within ±30 seconds from the RT of the mid-point standard in the ICAL?	✓				LCG Table 1 R
24. Was the EICP area between -50% and +100% of the ICAL mid-point standard?	✓				LCG Table 1 R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/August 24, 2009

SDG: A9G140103 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
25. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 1
26. Were target analytes detected in the method blank >1/2 the MRL?		✓		Checked by ADR.	LCG Table 1 <5/10X =B
27. Was a field blank (equipment and/or trip) collected and analyzed?	✓			FWGEQUIPRinse1-1423-GW	
28. Were target analytes detected in the field blank analyses >1/2 the MRL?	✓			FWGEQUIPRinse1-1423-GW had 2-butanone detected at 0.78ug/L, acetone at 5.9ug/L, benzene at 0.36ug/L, ethylbenzene at 0.32ug/L, methylene chloride at 2.8ug/L, o-xylene at 0.46ug/l, toluene at 1.9ug/L and total xylene at 1.8ug/L. No qualifications were made as there were no detected concentrations of these contaminants in the associated field samples Acetone was detected in all three trip blanks from 1.9ug/L to 2.6ug/L. Sample FWGEQUIPRinse1-1423-GW was qualified as estimated, "B".	<5/10X =B
29. Was a field duplicate analyzed?	✓			Sample FWGLL7mw-DUP1-1413-GW was the field duplicate for sample FWGLL7mw-006c-13775-GW.	
30. Were the Field duplicates RPDs within ±30%?	✓			ADR checked section;	QAPP Table 3-2 RPD >30=J
31. Was a LCS prepared and analyzed with each batch?	✓				LCG Table 1
32. Were the LCS recoveries within limits specified in Appendix C of the LCG?	✓			ADR checked section; The percent recovery was below control limits in the LCS for vinyl chloride at 71% and in the LCS/LCD for chloroethane at 66% and 70%. Vinyl chloride and chloroethane results were qualified as estimated, "UJ".	LCG Appendix C >UL=J; 30%-LL=J/UJ; <30%=J/R
33. Was a MS/MSD prepared with each batch?	✓				LCG Table 1
34. Was the MS/MSD parent sample a Ravenna sample?	✓			Sample FWGLL7mw-003c-1372-GW was the parent MS/MSD sample from this SDG.	
35. Were MS/MSD recoveries 70-130% and RPD values ≤20%?		✓		ADR checked section. Chloromethane recovered below control limits in the MS at 54% and at 60% in the MSD. Bromomethane recovered below control limits in the MS at 54% and at 60% in the MSD. Chloroethane recovered below control limits in the MS at 69% and at 66% in the MSD. No qualifications were made for bromomethane or Chloromethane as the LCS recovered within limits. Chloroethane results were qualified as estimated, "UJ".	LCG Table 1 Pj

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/August 24, 2009

SDG: A9G140103 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
36. Were surrogate recoveries 50-150%?	✓				LCG Table 1 >150%=J; 10% -50%=J/UJ; <10%=J/R
37. Were reported sample concentrations within calibration range?	✓				
38. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
39. Were lab comments included in report? If yes, summarize contents.		✓			

References:

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 1 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Table1- CCCs

Analyte
1,1-Dichloroethene
Chloroform
1,2-Dichloropropane
Toluene
Ethylbenzene
Vinyl chloride

Table 2- SPCCs

Analyte	Minimum RF
Chloromethane	0.10
1,1-Dichlorethane	0.10
Bromoform	0.10
Chlorobenzene	0.30
1,1,2,2-Tetrachloroethane	0.30

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM1-TRIP

GC/MS Volatiles

Lot-Sample #...: A9G140103-001 **Work Order #...:** LGE9C1AA **Matrix.....:** WQ
Date Sampled...: 07/13/09 10:00 **Date Received..:** 07/14/09
Prep Date.....: 07/17/09 **Analysis Date..:** 07/17/09
Prep Batch #...: 9198160
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	**2.3 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM1-TRIP

GC/MS Volatiles

Lot-Sample #...: A9G140103-001 **Work Order #...:** LGE9C1AA **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
1,2-Dichloroethane-d4	93	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	82	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-003C-1372-GW

GC/MS Volatiles

Lot-Sample #...: A9G140103-002 **Work Order #...:** LGE9E1AA **Matrix.....:** WG
Date Sampled...: 07/13/09 12:05 **Date Received..:** 07/14/09
Prep Date.....: 07/17/09 **Analysis Date..:** 07/17/09
Prep Batch #...: 9198160
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-003C-1372-GW

GC/MS Volatiles

Lot-Sample #...: A9G140103-002 **Work Order #...:** LGE9E1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	91	(50 - 150)
1,2-Dichloroethane-d4	91	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-001C-1370-GW

GC/MS Volatiles

Lot-Sample #...: A9G140103-004 Work Order #...: LGE9G1AA Matrix.....: WG
Date Sampled...: 07/13/09 14:45 Date Received..: 07/14/09
Prep Date.....: 07/17/09 Analysis Date..: 07/17/09
Prep Batch #...: 9198160
Dilution Factor: 1 Initial Wgt/Vol: 5 mL Final Wgt/Vol..: 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	**6.4**	**1.0**	**ug/L**	**0.19**
1,1-Dichloroethane	**2.9**	**1.0**	**ug/L**	**0.15**
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	**10**	**1.0**	**ug/L**	**0.22**
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-001C-1370-GW

GC/MS Volatiles

Lot-Sample #...: A9G140103-004 **Work Order #...:** LGE9G1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	95	(50 - 150)
1,2-Dichloroethane-d4	92	(50 - 150)
Toluene-d8	95	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-007C-1369-GW

GC/MS Volatiles

Lot-Sample #...: A9G140103-006 **Work Order #...:** LGE9J1AA **Matrix.....:** WG
Date Sampled...: 07/13/09 17:20 **Date Received..:** 07/14/09
Prep Date.....: 07/17/09 **Analysis Date..:** 07/17/09
Prep Batch #...: 9198160
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-007C-1369-GW

GC/MS Volatiles

Lot-Sample #...: A9G140103-006 **Work Order #...:** LGE9J1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	95	(50 - 150)
1,2-Dichloroethane-d4	92	(50 - 150)
Toluene-d8	93	(50 - 150)
4-Bromofluorobenzene	82	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM2-TRIP

GC/MS Volatiles

Lot-Sample #...: A9G140103-008 **Work Order #...:** LGE9L1AA **Matrix.....:** WQ
Date Sampled...: 07/13/09 10:00 **Date Received..:** 07/14/09
Prep Date.....: 07/17/09 **Analysis Date..:** 07/17/09
Prep Batch #...: 9198160
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	**1.9 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM2-TRIP

GC/MS Volatiles

Lot-Sample #...: A9G140103-008 **Work Order #...:** LGE9L1AA **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
1,2-Dichloroethane-d4	87	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	81	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-006C-1375-GW

GC/MS Volatiles

Lot-Sample #...: A9G140103-009 Work Order #...: LGE9M1AA Matrix.....: WG
Date Sampled...: 07/13/09 12:00 Date Received..: 07/14/09
Prep Date.....: 07/17/09 Analysis Date..: 07/17/09
Prep Batch #...: 9198160
Dilution Factor: 1 Initial Wgt/Vol: 5 mL Final Wgt/Vol..: 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-006C-1375-GW

GC/MS Volatiles

Lot-Sample #...: A9G140103-009 **Work Order #...:** LGE9M1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
1,2-Dichloroethane-d4	92	(50 - 150)
Toluene-d8	94	(50 - 150)
4-Bromofluorobenzene	87	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-DUP1-1413-GW

GC/MS Volatiles

Lot-Sample #...: A9G140103-011 **Work Order #...:** LGE9P1AA **Matrix.....:** WG
Date Sampled...: 07/13/09 13:00 **Date Received..:** 07/14/09
Prep Date.....: 07/17/09 **Analysis Date..:** 07/17/09
Prep Batch #...: 9198160
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-DUP1-1413-GW

GC/MS Volatiles

Lot-Sample #...: A9G140103-011 **Work Order #...:** LGE9P1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	96	(50 - 150)
1,2-Dichloroethane-d4	95	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-004C-1373-GW

GC/MS Volatiles

Lot-Sample #...: A9G140103-013 **Work Order #...:** LGE9R1AA **Matrix.....:** WG
Date Sampled...: 07/13/09 14:00 **Date Received..:** 07/14/09
Prep Date.....: 07/17/09 **Analysis Date..:** 07/17/09
Prep Batch #...: 9198160
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-004C-1373-GW

GC/MS Volatiles

Lot-Sample #...: A9G140103-013 **Work Order #...:** LGE9R1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	96	(50 - 150)
1,2-Dichloroethane-d4	97	(50 - 150)
Toluene-d8	91	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-002C-1371-GW

GC/MS Volatiles

Lot-Sample #...: A9G140103-015 **Work Order #...:** LGE9W1AA **Matrix.....:** WG
Date Sampled...: 07/13/09 15:10 **Date Received..:** 07/14/09
Prep Date.....: 07/17/09 **Analysis Date..:** 07/17/09
Prep Batch #...: 9198160
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-002C-1371-GW

GC/MS Volatiles

Lot-Sample #...: A9G140103-015 **Work Order #...:** LGE9W1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	93	(50 - 150)
1,2-Dichloroethane-d4	95	(50 - 150)
Toluene-d8	91	(50 - 150)
4-Bromofluorobenzene	81	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-005C-1367-GW

GC/MS Volatiles

Lot-Sample #...: A9G140103-017 **Work Order #...:** LGE901AA **Matrix.....:** WG
Date Sampled...: 07/13/09 16:30 **Date Received..:** 07/14/09
Prep Date.....: 07/17/09 **Analysis Date..:** 07/17/09
Prep Batch #...: 9198160
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-005C-1367-GW

GC/MS Volatiles

Lot-Sample #...: A9G140103-017 **Work Order #...:** LGE901AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
1,2-Dichloroethane-d4	94	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1423-GW

GC/MS Volatiles

Lot-Sample #...: A9G140103-019 **Work Order #...:** LGE931AA **Matrix.....:** WQ
Date Sampled...: 07/13/09 17:30 **Date Received..:** 07/14/09
Prep Date.....: 07/17/09 **Analysis Date..:** 07/17/09
Prep Batch #...: 9198160
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	**0.46 J**	**1.0**	**ug/L**	**0.14**
m-Xylene & p-Xylene	**1.3 J**	**2.0**	**ug/L**	**0.24**
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	**2.8**	**2.0**	**ug/L**	**0.33**
Acetone	**5.9 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	**0.78 J**	**10**	**ug/L**	**0.57**
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	**0.36 J**	**1.0**	**ug/L**	**0.13**
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	**1.9**	**1.0**	**ug/L**	**0.13**
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	**0.32 J**	**1.0**	**ug/L**	**0.17**

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1423-GW

GC/MS Volatiles

Lot-Sample #...: A9G140103-019 **Work Order #...:** LGE931AA **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	**1.8 J**	**2.0**	**ug/L**	**0.28**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	92	(50 - 150)
1,2-Dichloroethane-d4	95	(50 - 150)
Toluene-d8	88	(50 - 150)
4-Bromofluorobenzene	87	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM3-TRIP

GC/MS Volatiles

Lot-Sample #...: A9G140103-020 **Work Order #...:** LGE971AA **Matrix.....:** WQ
Date Sampled...: 07/13/09 11:00 **Date Received..:** 07/14/09
Prep Date.....: 07/17/09 **Analysis Date..:** 07/17/09
Prep Batch #...: 9198160
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	**2.6 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM3-TRIP

GC/MS Volatiles

Lot-Sample #...: A9G140103-020 **Work Order #...:** LGE971AA **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	99	(50 - 150)
1,2-Dichloroethane-d4	94	(50 - 150)
Toluene-d8	93	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-005C-1374-GW

GC/MS Volatiles

Lot-Sample #...: A9G140103-021 **Work Order #...:** LGFAD1AA **Matrix.....:** WG
Date Sampled...: 07/13/09 12:20 **Date Received..:** 07/14/09
Prep Date.....: 07/17/09 **Analysis Date..:** 07/17/09
Prep Batch #...: 9198160
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-005C-1374-GW

GC/MS Volatiles

Lot-Sample #...: A9G140103-021 **Work Order #...:** LGFAD1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	95	(50 - 150)
1,2-Dichloroethane-d4	97	(50 - 150)
Toluene-d8	92	(50 - 150)
4-Bromofluorobenzene	88	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-006C-1368-GW

GC/MS Volatiles

Lot-Sample #...: A9G140103-023 **Work Order #...:** LGFAG1AA **Matrix.....:** WG
Date Sampled...: 07/13/09 16:10 **Date Received..:** 07/14/09
Prep Date.....: 07/17/09 **Analysis Date..:** 07/17/09
Prep Batch #...: 9198160
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-006C-1368-GW

GC/MS Volatiles

Lot-Sample #...: A9G140103-023 Work Order #...: LGFAG1AA Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	93	(50 - 150)
1,2-Dichloroethane-d4	90	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	86	(50 - 150)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A9G140103 **Work Order #...:** LGMJ21AA **Matrix.....:** WATER
MB Lot-Sample #: A9G170000-160

Prep Date.....: 07/17/09 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 07/17/09 **Prep Batch #...:** 9198160
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dibromoethane	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
o-Xylene	ND	1.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	ND	2.0	ug/L	SW846 8260B
Chloromethane	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	2.0	ug/L	SW846 8260B
Acetone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	10	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B
2-Hexanone	ND	10	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	2.0	ug/L	SW846 8260B

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A9G140103 **Work Order #...:** LGMJ21AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	92	(50 - 150)
1,2-Dichloroethane-d4	92	(50 - 150)
Toluene-d8	92	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G140103 **Work Order #...:** LGMJ21AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A9G170000-160 LGMJ21AD-LCSD
Prep Date.....: 07/17/09 **Analysis Date..:** 07/17/09
Prep Batch #...: 9198160
Dilution Factor: 1 **Final Wgt/Vol..:** 5 mL
Initial Wgt/Vol: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Bromochloromethane	94	(75 - 127)			SW846 8260B
	105	(75 - 127)	11	(0-30)	SW846 8260B
m-Xylene & p-Xylene	98	(75 - 122)			SW846 8260B
	110	(75 - 122)	12	(0-30)	SW846 8260B
o-Xylene	95	(75 - 118)			SW846 8260B
	107	(75 - 118)	12	(0-30)	SW846 8260B
cis-1,2-Dichloroethene	92	(73 - 133)			SW846 8260B
	107	(73 - 133)	15	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	88	(75 - 134)			SW846 8260B
	91	(75 - 134)	4.1	(0-30)	SW846 8260B
1,2-Dibromoethane	93	(75 - 127)			SW846 8260B
	106	(75 - 127)	13	(0-30)	SW846 8260B
Chloromethane	58	(58 - 135)			SW846 8260B
	61	(58 - 135)	5.7	(0-30)	SW846 8260B
Bromomethane	57	(35 - 153)			SW846 8260B
	61	(35 - 153)	7.4	(0-30)	SW846 8260B
Vinyl chloride	71 a	(73 - 134)			SW846 8260B
	77	(73 - 134)	8.3	(0-30)	SW846 8260B
Chloroethane	66 a	(72 - 129)			SW846 8260B
	70 a	(72 - 129)	6.0	(0-30)	SW846 8260B
Methylene chloride	82	(69 - 118)			SW846 8260B
	94	(69 - 118)	14	(0-30)	SW846 8260B
Acetone	90	(51 - 157)			SW846 8260B
	91	(51 - 157)	1.9	(0-30)	SW846 8260B
Carbon disulfide	75	(74 - 123)			SW846 8260B
	81	(74 - 123)	7.7	(0-30)	SW846 8260B
1,1-Dichloroethene	82	(75 - 125)			SW846 8260B
	87	(75 - 125)	5.4	(0-30)	SW846 8260B
1,1-Dichloroethane	88	(75 - 133)			SW846 8260B
	104	(75 - 133)	17	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	90	(85 - 111)			SW846 8260B
	99	(85 - 111)	10	(0-30)	SW846 8260B
Chloroform	92	(74 - 127)			SW846 8260B
	104	(74 - 127)	12	(0-30)	SW846 8260B
1,2-Dichloroethane	92	(67 - 132)			SW846 8260B
	106	(67 - 132)	14	(0-30)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G140103 Work Order #...: LGMJ21AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A9G170000-160 LGMJ21AD-LCSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Butanone	90	(45 - 150)			SW846 8260B
	95	(45 - 150)	5.6	(0-30)	SW846 8260B
1,1,1-Trichloroethane	95	(70 - 127)			SW846 8260B
	107	(70 - 127)	13	(0-30)	SW846 8260B
Carbon tetrachloride	100	(71 - 132)			SW846 8260B
	110	(71 - 132)	10	(0-30)	SW846 8260B
Bromodichloromethane	94	(70 - 130)			SW846 8260B
	110	(70 - 130)	16	(0-30)	SW846 8260B
1,2-Dichloropropane	90	(75 - 127)			SW846 8260B
	100	(75 - 127)	10	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	80	(73 - 132)			SW846 8260B
	90	(73 - 132)	12	(0-30)	SW846 8260B
Trichloroethene	92	(67 - 128)			SW846 8260B
	101	(67 - 128)	9.3	(0-30)	SW846 8260B
Dibromochloromethane	94	(74 - 145)			SW846 8260B
	107	(74 - 145)	13	(0-30)	SW846 8260B
1,1,2-Trichloroethane	93	(75 - 136)			SW846 8260B
	102	(75 - 136)	9.3	(0-30)	SW846 8260B
Benzene	87	(75 - 126)			SW846 8260B
	100	(75 - 126)	13	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	82	(74 - 131)			SW846 8260B
	92	(74 - 131)	12	(0-30)	SW846 8260B
Bromoform	98	(72 - 136)			SW846 8260B
	106	(72 - 136)	8.0	(0-30)	SW846 8260B
4-Methyl-2-pentanone	86	(59 - 150)			SW846 8260B
	94	(59 - 150)	8.1	(0-30)	SW846 8260B
2-Hexanone	86	(53 - 139)			SW846 8260B
	96	(53 - 139)	11	(0-30)	SW846 8260B
Tetrachloroethene	103	(75 - 129)			SW846 8260B
	111	(75 - 129)	7.3	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	85	(68 - 129)			SW846 8260B
	95	(68 - 129)	11	(0-30)	SW846 8260B
Toluene	91	(75 - 125)			SW846 8260B
	101	(75 - 125)	10	(0-30)	SW846 8260B
Chlorobenzene	92	(75 - 127)			SW846 8260B
	104	(75 - 127)	13	(0-30)	SW846 8260B
Ethylbenzene	96	(75 - 120)			SW846 8260B
	106	(75 - 120)	9.4	(0-30)	SW846 8260B
Styrene	98	(75 - 130)			SW846 8260B
	112	(75 - 130)	13	(0-30)	SW846 8260B
Xylenes (total)	97	(90 - 114)			SW846 8260B
	109	(90 - 114)	12	(0-30)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G140103 **Work Order #...:** LGMJ21AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A9G170000-160 LGMJ21AD-LCSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	92	(50 - 150)
	93	(50 - 150)
1,2-Dichloroethane-d4	92	(50 - 150)
	88	(50 - 150)
Toluene-d8	92	(50 - 150)
	93	(50 - 150)
4-Bromofluorobenzene	96	(50 - 150)
	101	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G140103 Work Order #...: LGE9E1AC-MS Matrix.....: WG
MS Lot-Sample #: A9G140103-002 LGE9E1AD-MSD
Date Sampled...: 07/13/09 12:05 Date Received..: 07/14/09
Prep Date.....: 07/17/09 Analysis Date..: 07/17/09
Prep Batch #...: 9198160
Dilution Factor: 1 Initial Wgt/Vol: 5 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
cis-1,2-Dichloroethene	88	(70 - 130)			SW846 8260B
	95	(70 - 130)	7.9	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	86	(70 - 130)			SW846 8260B
	88	(70 - 130)	2.3	(0-30)	SW846 8260B
1,2-Dibromoethane	90	(70 - 130)			SW846 8260B
	95	(70 - 130)	5.0	(0-30)	SW846 8260B
Bromochloromethane	88	(70 - 130)			SW846 8260B
	94	(70 - 130)	6.8	(0-30)	SW846 8260B
m-Xylene & p-Xylene	94	(70 - 130)			SW846 8260B
	96	(70 - 130)	2.6	(0-30)	SW846 8260B
o-Xylene	91	(70 - 130)			SW846 8260B
	99	(70 - 130)	8.6	(0-30)	SW846 8260B
Chloromethane	54 a	(70 - 130)			SW846 8260B
	60 a	(70 - 130)	9.4	(0-30)	SW846 8260B
Bromomethane	55 a	(70 - 130)			SW846 8260B
	60 a	(70 - 130)	8.0	(0-30)	SW846 8260B
Vinyl chloride	72	(70 - 130)			SW846 8260B
	79	(70 - 130)	8.9	(0-30)	SW846 8260B
Chloroethane	69 a	(70 - 130)			SW846 8260B
	66 a	(70 - 130)	4.9	(0-30)	SW846 8260B
Methylene chloride	78	(70 - 130)			SW846 8260B
	83	(70 - 130)	6.1	(0-30)	SW846 8260B
Acetone	73	(70 - 130)			SW846 8260B
	86	(70 - 130)	17	(0-30)	SW846 8260B
Carbon disulfide	72	(70 - 130)			SW846 8260B
	76	(70 - 130)	5.9	(0-30)	SW846 8260B
1,1-Dichloroethene	83	(70 - 130)			SW846 8260B
	86	(70 - 130)	3.6	(0-30)	SW846 8260B
1,1-Dichloroethane	85	(70 - 130)			SW846 8260B
	90	(70 - 130)	6.4	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	87	(70 - 130)			SW846 8260B
	92	(70 - 130)	5.2	(0-30)	SW846 8260B
Chloroform	87	(70 - 130)			SW846 8260B
	95	(70 - 130)	8.6	(0-30)	SW846 8260B
1,2-Dichloroethane	87	(70 - 130)			SW846 8260B
	94	(70 - 130)	7.1	(0-30)	SW846 8260B
2-Butanone	82	(70 - 130)			SW846 8260B
	88	(70 - 130)	7.4	(0-30)	SW846 8260B

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G140103 Work Order #...: LGE9E1AC-MS Matrix.....: WG
MS Lot-Sample #: A9G140103-002 LGE9E1AD-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1,1-Trichloroethane	92	(70 - 130)			SW846 8260B
	98	(70 - 130)	6.2	(0-30)	SW846 8260B
Carbon tetrachloride	95	(70 - 130)			SW846 8260B
	100	(70 - 130)	5.3	(0-30)	SW846 8260B
Bromodichloromethane	89	(70 - 130)			SW846 8260B
	96	(70 - 130)	8.1	(0-30)	SW846 8260B
1,2-Dichloropropane	85	(70 - 130)			SW846 8260B
	90	(70 - 130)	6.2	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	74	(70 - 130)			SW846 8260B
	79	(70 - 130)	6.4	(0-30)	SW846 8260B
Trichloroethene	92	(70 - 130)			SW846 8260B
	96	(70 - 130)	4.9	(0-30)	SW846 8260B
Dibromochloromethane	91	(70 - 130)			SW846 8260B
	92	(70 - 130)	0.95	(0-30)	SW846 8260B
1,1,2-Trichloroethane	88	(70 - 130)			SW846 8260B
	89	(70 - 130)	1.3	(0-30)	SW846 8260B
Benzene	84	(70 - 130)			SW846 8260B
	90	(70 - 130)	7.0	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	76	(70 - 130)			SW846 8260B
	82	(70 - 130)	7.4	(0-30)	SW846 8260B
Bromoform	94	(70 - 130)			SW846 8260B
	96	(70 - 130)	2.5	(0-30)	SW846 8260B
4-Methyl-2-pentanone	84	(70 - 130)			SW846 8260B
	88	(70 - 130)	5.1	(0-30)	SW846 8260B
2-Hexanone	85	(70 - 130)			SW846 8260B
	82	(70 - 130)	3.7	(0-30)	SW846 8260B
Tetrachloroethene	95	(70 - 130)			SW846 8260B
	101	(70 - 130)	6.0	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	84	(70 - 130)			SW846 8260B
	86	(70 - 130)	1.6	(0-30)	SW846 8260B
Toluene	86	(70 - 130)			SW846 8260B
	91	(70 - 130)	5.5	(0-30)	SW846 8260B
Chlorobenzene	90	(70 - 130)			SW846 8260B
	93	(70 - 130)	3.7	(0-30)	SW846 8260B
Ethylbenzene	89	(70 - 130)			SW846 8260B
	93	(70 - 130)	4.9	(0-30)	SW846 8260B
Styrene	95	(70 - 130)			SW846 8260B
	97	(70 - 130)	2.6	(0-30)	SW846 8260B
Xylenes (total)	93	(70 - 130)			SW846 8260B
	97	(70 - 130)	4.6	(0-30)	SW846 8260B

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G140103 **Work Order #...:** LGE9E1AC-MS **Matrix.....:** WG
MS Lot-Sample #: A9G140103-002 LGE9E1AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
	94	(50 - 150)
1,2-Dichloroethane-d4	93	(50 - 150)
	88	(50 - 150)
Toluene-d8	93	(50 - 150)
	91	(50 - 150)
4-Bromofluorobenzene	100	(50 - 150)
	98	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J90622A-IC.b\UXJ2410.D
Report Date: 23-Jun-2009 09:52

TestAmerica North Canton

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: ICV
Level: LOW
Data Type: MS DATA
SpikeList File: DOD-ck.spk
Sublist File: 4-8260+IX.sub
Method File: \\cansvr11\dd\chem\MSV\a3ux11.i\J90622A-IC.b\8260LLUX11.m
Misc Info: J90622A,8260LLUX11,,43582,3

Client SDG: SDGa01304
Fraction: VOA

Operator: 43582
SampleType: METHSPIKE
Quant Type: ISTD

6/22/09
D 1345

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	17 1,1-Dichloroethene	10.000	9.114	91.14	45-155
	42 Trichloroethene	10.000	9.831	98.31	45-155
	59 Chlorobenzene	10.000	9.990	99.91	45-155
	50 Toluene	10.000	9.708	97.08	45-155
	41 Benzene	10.000	9.864	98.64	45-155
	16 Acetone	10.000	10.274	102.74	45-155
	20 Carbon Disulfide	10.000	9.591	95.91	45-155
	9 Chloromethane	10.000	7.152	71.52	45-155
	11 Bromomethane	10.000	8.414	84.14	45-155
	10 Vinyl Chloride	10.000	8.650	86.50	45-155
	12 Chloroethane	10.000	8.795	87.95	45-155
	21 Methylene Chloride	10.000	9.283	92.83	45-155
	28 1,1-Dichloroethane	10.000	9.977	99.77	45-155
M	31 1,2-Dichloroethene	20.000	19.677	98.39	45-155
	35 Chloroform	10.000	9.980	99.80	45-155
	40 1,2-Dichloroethane	10.000	10.077	100.77	45-155
	30 2-Butanone	10.000	9.971	99.71	45-155
	37 1,1,1-Trichloroeth	10.000	10.060	100.60	45-155
	39 Carbon Tetrachlori	10.000	9.927	99.27	45-155
	46 Bromodichlorometha	10.000	10.404	104.04	45-155
	43 1,2-Dichloropropan	10.000	10.020	100.20	45-155
	48 cis-1,3-Dichloropr	10.000	8.778	87.78	45-155
	54 1,3-Dichloropropan	10.000	9.716	97.16	45-155
	57 Dibromochlorometha	10.000	9.553	95.53	45-155
	53 1,1,2-Trichloroeth	10.000	9.923	99.23	45-155
	51 trans-1,3-Dichloro	10.000	8.615	86.15	45-155
	66 Bromoform	10.000	8.770	87.70	45-155
	49 4-Methyl-2-pentano	10.000	10.223	102.23	45-155
	56 2-Hexanone	10.000	9.569	95.69	45-155
	55 Tetrachloroethene	10.000	10.076	100.76	45-155
	68 1,1,2,2-Tetrachlor	10.000	10.147	101.47	45-155
	61 Ethylbenzene	10.000	9.670	96.70	45-155
	65 Styrene	10.000	9.965	99.65	45-155
M	63 Xylenes (total)	30.000	30.114	100.38	45-155
	32 cis-1,2-dichloroet	10.000	10.392	103.93	45-155
	25 trans-1,2-Dichloro	10.000	9.285	92.85	45-155
	8 Dichlorodifluorome	10.000	7.882	NT ~~78.82~~	45-155
	13 Trichlorofluoromet	10.000	9.484	94.84	45-155
	70 1,2,3-Trichloropro	10.000	10.124	101.24	45-155
	18 Freon-113	10.000	11.093	110.93	45-155

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J90622A-IC.b\UXJ2410.D
Report Date: 23-Jun-2009 09:52

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
24 Methyl tert-butyl	10.000	9.290	92.90	45-155
58 1,2-Dibromoethane	10.000	10.348	103.48	45-155
67 Isopropylbenzene	10.000	10.044	100.44	45-155
80 1,3-Dichlorobenzen	10.000	10.106	101.06	45-155
81 1,4-Dichlorobenzen	10.000	9.960	99.60	45-155
83 1,2-Dichlorobenzen	10.000	9.915	99.15	45-155
84 1,2-Dibromo-3-chlo	10.000	10.031	100.31	45-155
85 1,2,4-Trichloroben	10.000	9.705	97.05	45-155
98 Cyclohexane	10.000	8.460	84.60	45-155
143 Methyl Acetate	10.000	8.152	81.52	45-155
144 Methylcyclohexane	10.000	8.606	86.06	45-155
71 Bromobenzene	10.000	10.060	100.60	45-155
34 Bromochloromethane	10.000	10.004	100.04	45-155
82 n-Butylbenzene	10.000	10.046	100.46	45-155
78 sec-Butylbenzene	10.000	10.140	101.40	45-155
76 tert-Butylbenzene	10.000	9.989	99.89	45-155
73 2-Chlorotoluene	10.000	9.961	99.61	45-155
75 4-Chlorotoluene	10.000	10.141	101.41	45-155
45 Dibromomethane	10.000	10.289	102.89	45-155
33 2,2-Dichloropropan	10.000	9.955	99.55	45-155
38 1,1-Dichloropropen	10.000	9.842	98.42	45-155
86 Hexachlorobutadien	10.000	8.354	83.54	45-155
19 Iodomethane	10.000	8.597	85.97	45-155
92 Isopropyl Ether	10.000	10.248	102.48	45-155
79 4-Isopropyltoluene	10.000	10.315	103.15	45-155
87 Naphthalene	10.000	9.123	91.23	45-155
72 n-Propylbenzene	10.000	9.893	98.93	45-155
60 1,1,1,2-Tetrachlor	10.000	10.088	100.88	45-155
88 1,2,3-Trichloroben	10.000	9.303	93.03	45-155
77 1,2,4-Trimethylben	10.000	10.390	103.90	45-155
74 1,3,5-Trimethylben	10.000	9.991	99.91	45-155
150 Vinyl Acetate-86	10.000	13.623	136.23	45-155
62 m + p-Xylene	20.000	20.315	101.57	45-155
64 Xylene-o	10.000	9.799	97.99	45-155

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Dibromofluorometha	10.000	8.909	89.09	73-122
$ 5 1,2-Dichloroethane	10.000	9.188	91.88	61-128
$ 6 Toluene-d8	10.000	9.128	91.28	76-110
$ 7 Bromofluorobenzene	10.000	9.205	92.05	74-116

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J90717A.b\UXJ3163.D
Report Date: 20-Jul-2009 08:09

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a3ux11.i Injection Date: 17-JUL-2009 10:02
Lab File ID: UXJ3163.D Init. Cal. Date(s): 09-JUN-2009 22-JUN-2009
Analysis Type: WATER Init. Cal. Times: 12:04 13:21
Lab Sample ID: 50NG-CC Quant Type: ISTD
Method: \\cansvr11\dd\chem\MSV\a3ux11.i\J90717A.b\8260LLUX11.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 4 Dibromofluoromethane	0.34038	0.33501	0.33501	0.010	1.57561	50.00000	Averaged	
$ 5 1,2-Dichloroethane-d4	0.43886	0.38251	0.38251	0.010	12.83876	50.00000	Averaged	
$ 6 Toluene-d8	2.15638	2.03479	2.03479	0.010	5.63894	50.00000	Averaged	
$ 7 Bromofluorobenzene	0.56718	0.52978	0.52978	0.010	6.59385	50.00000	Averaged	
8 Dichlorodifluoromethane	0.38646	0.44986	0.44986	0.010	-16.40696	50.00000	Averaged	
9 Chloromethane	0.65933	0.67701	0.67701	0.100	-2.68261	50.00000	Averaged	
10 Vinyl Chloride	0.50121	0.57836	0.57836	0.010	-15.39299	20.00000	Averaged	
11 Bromomethane	0.21173	0.18335	0.18335	0.010	13.40107	50.00000	Averaged	
12 Chloroethane	0.28683	0.25973	0.25973	0.010	9.44782	50.00000	Averaged	
13 Trichlorofluoromethane	0.56520	0.59824	0.59824	0.010	-5.84526	50.00000	Averaged	
15 Acrolein	0.09232	0.06813	0.06813	0.01	26.20923	50.00000	Averaged	
16 Acetone	100	83.94162	0.15827	0.010	16.05838	0.000e+000	Wt Linear	
17 1,1-Dichloroethene	0.39637	0.41575	0.41575	0.010	-4.88752	20.00000	Averaged	
18 Freon-113	0.25782	0.30254	0.30254	0.010	-17.34768	50.00000	Averaged	
19 Iodomethane	0.49841	0.52134	0.52134	0.010	-4.60067	50.00000	Averaged	
20 Carbon Disulfide	0.96895	0.92482	0.92482	0.010	4.55453	50.00000	Averaged	
21 Methylene Chloride	50.00000	49.82295	0.43653	0.010	0.35410	0.000e+000	Wt Linear	
22 Acetonitrile	0.07890	0.06367	0.06367	0.010	19.30554	50.00000	Averaged	
23 Acrylonitrile	0.21704	0.18090	0.18090	0.010	16.65179	50.00000	Averaged	
24 Methyl tert-butyl ether	1.32207	1.19061	1.19061	0.010	9.94294	50.00000	Averaged	
25 trans-1,2-Dichloroethene	0.51140	0.52281	0.52281	0.010	-2.23072	50.00000	Averaged	
26 Hexane	0.08443	0.10151	0.10151	0.010	-20.22285	20.00000	Averaged	<-
27 Vinyl acetate	0.74672	0.57769	0.57769	0.010	22.63568	50.00000	Averaged	
28 1,1-Dichloroethane	0.82159	0.87632	0.87632	0.100	-6.66157	50.00000	Averaged	
29 tert-Butyl Alcohol	0.03847	0.03174	0.03174	0.010	17.48499	50.00000	Averaged	
30 2-Butanone	0.22845	0.19376	0.19376	0.010	15.18439	50.00000	Averaged	
M 31 1,2-Dichloroethene (total)	0.47703	0.49549	0.49549	0.010	-3.87055	50.00000	Averaged	
32 cis-1,2-dichloroethene	0.44266	0.46818	0.46818	0.010	-5.76505	50.00000	Averaged	
33 2,2-Dichloropropane	0.29173	0.36076	0.36076	0.010	-23.66100	50.00000	Averaged	
34 Bromochloromethaue	0.20198	0.21861	0.21861	0.010	-8.23245	50.00000	Averaged	
35 Chloroform	0.69521	0.74519	0.74519	0.010	-7.18926	20.00000	Averaged	
36 Tetrahydrofuran	0.14956	0.13204	0.13204	0.010	11.71740	50.00000	Averaged	
37 1,1,1-Trichloroethane	0.45240	0.50507	0.50507	0.010	-11.64216	50.00000	Averaged	
38 1,1-Dichloropropene	0.54747	0.58292	0.58292	0.010	-6.47488	50.00000	Averaged	
39 Carbou Tetrachloride	0.36608	0.43246	0.43246	0.010	-18.13551	50.00000	Averaged	
40 1,2-Dichloroethane	0.52174	0.53549	0.53549	0.010	-2.63523	50.00000	Averaged	
41 Benzeue	1.82351	1.84010	1.84010	0.010	-0.91014	50.00000	Averaged	
42 Trichloroethene	0.38234	0.39310	0.39310	0.010	-2.81550	50.00000	Averaged	
43 1,2-Dichloropropane	0.42519	0.43036	0.43036	0.010	-1.21531	20.00000	Averaged	
44 1,4-Dioxane	0.00321	0.00275	0.00275	0.010	14.31437	50.00000	Averaged	<-
45 Dibromomethane	0.21472	0.22055	0.22055	0.010	-2.71357	50.00000	Averaged	
46 Bromodichloromethane	0.39158	0.43274	0.43274	0.010	-10.51078	50.00000	Averaged	
47 2-Chloroethyl vinyl ether	0.15085	0.13424	0.13424	0.010	11.00702	50.00000	Averaged	

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J90717A.b\UXJ3163.D
Report Date: 20-Jul-2009 08:09

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a3ux11.i Injection Date: 17-JUL-2009 10:02
Lab File ID: UXJ3163.D Init. Cal. Date(s): 09-JUN-2009 22-JUN-2009
Analysis Type: WATER Init. Cal. Times: 12:04 13:21
Lab Sample ID: 50NG-CC Quant Type: ISTD
Method: \\cansvr11\dd\chem\MSV\a3ux11.i\J90717A.b\8260LLUX11.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
48 cis-1,3-Dichloropropene	50.00000	46.91233	0.50327	0.010	6.17533	0.000e+000	Wt Linear
49 4-Methyl-2-pentanone	0.35891	0.30163	0.30163	0.010	15.96149	50.00000	Averaged
50 Toluene	2.67421	2.74024	2.74024	0.010	-2.46893	20.00000	Averaged
51 trans-1,3-Dichloropropene	50.00000	45.98973	0.64299	0.010	8.02053	0.000e+000	Wt Linear
52 Ethyl Methacrylate	0.75156	0.73016	0.73016	0.010	2.84718	50.00000	Averaged
53 1,1,2-Trichloroethane	0.50727	0.50946	0.50946	0.010	-0.43026	50.00000	Averaged
54 1,3-Dichloropropane	0.96530	0.95776	0.95776	0.010	0.78073	50.00000	Averaged
55 Tetrachloroethene	0.41196	0.45593	0.45593	0.010	-10.67377	50.00000	Averaged
56 2-Hexanone	0.36684	0.31741	0.31741	0.010	13.47504	50.00000	Averaged
57 Dibromochloromethane	50.00000	51.78659	0.39499	0.010	-3.57319	0.000e+000	Quadratic
58 1,2-Dibromoethane	0.45496	0.46981	0.46981	0.010	-3.26384	50.00000	Averaged
59 Chlorobenzene	1.46454	1.52177	1.52177	0.300	-3.90800	50.00000	Averaged
60 1,1,1,2-Tetrachloroethane	0.42627	0.47880	0.47880	0.010	-12.32384	50.00000	Averaged
61 Ethylbenzene	0.78281	0.81925	0.81925	0.010	-4.65517	20.00000	Averaged
62 m + p-Xylene	0.94675	1.01992	1.01992	0.010	-7.72821	50.00000	Averaged
M 63 Xylenes (total)	0.92719	0.98669	0.98669	0.010	-6.41721	50.00000	Averaged
64 Xylene-o	0.88806	0.92022	0.92022	0.010	-3.62191	50.00000	Averaged
65 Styrene	1.50205	1.60628	1.60628	0.010	-6.93921	50.00000	Averaged
66 Bromoform	50.00000	53.13310	0.17502	0.100	-6.26621	0.000e+000	Quadratic
67 Isopropylbenzene	1.96856	2.11477	2.11477	0.010	-7.42729	50.00000	Averaged
68 1,1,2,2-Tetrachloroethane	1.46499	1.27328	1.27328	0.300	13.08636	50.00000	Averaged
69 1,4-Dichloro-2-butene	50.00000	57.36494	0.16268	0.010	-14.72988	0.000e+000	Quadratic
70 1,2,3-Trichloropropane	0.41877	0.37703	0.37703	0.010	9.96847	50.00000	Averaged
71 Bromobenzene	1.30034	1.24062	1.24062	0.010	4.59253	50.00000	Averaged
72 n-Propylbenzene	1.28962	1.30294	1.30294	0.010	-1.03266	50.00000	Averaged
73 2-Chlorotoluene	1.20416	1.19939	1.19939	0.010	0.39586	50.00000	Averaged
74 1,3,5-Trimethylbenzene	3.60456	3.71455	3.71455	0.010	-3.05127	50.00000	Averaged
75 4-Chlorotoluene	1.21539	1.21426	1.21426	0.010	0.09285	50.00000	Averaged
76 tert-Butylbenzene	2.81069	2.86213	2.86213	0.010	-1.82995	50.00000	Averaged
77 1,2,4-Trimethylbenzene	3.51472	3.63487	3.63487	0.010	-3.41861	50.00000	Averaged
78 sec-Butylbenzene	3.62635	3.85657	3.85657	0.010	-6.34853	50.00000	Averaged
79 4-Isopropyltoluene	2.84619	3.04210	3.04210	0.010	-6.88329	50.00000	Averaged
80 1,3-Dichlorobenzene	1.88028	1.95749	1.95749	0.010	-4.10640	50.00000	Averaged
81 1,4-Dichlorobenzene	1.97498	1.98279	1.98279	0.010	-0.39529	50.00000	Averaged
82 n-Butylbenzene	2.16236	2.24451	2.24451	0.010	-3.79913	50.00000	Averaged
83 1,2-Dichlorobenzene	1.64791	1.66151	1.66151	0.010	-0.82534	50.00000	Averaged
84 1,2-Dibromo-3-chloropropane	50.00000	43.87138	0.08828	0.010	12.25724	0.000e+000	Quadratic
85 1,2,4-Trichlorobenzene	0.63816	0.58428	0.58428	0.010	8.44293	50.00000	Averaged
86 Hexachlorobutadiene	0.29369	0.25772	0.25772	0.010	12.24669	50.00000	Averaged
87 Naphthalene	1.88417	1.46195	1.46195	0.010	22.40865	50.00000	Averaged
88 1,2,3-Trichlorobenzene	0.61145	0.53497	0.53497	0.010	12.50844	50.00000	Averaged
98 Cyclohexane	0.69782	0.76510	0.76510	0.010	-9.64012	50.00000	Averaged
143 Methyl Acetate	0.56044	0.50996	0.50996	0.010	9.00703	50.00000	Averaged

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J90717A.b\UXJ3166.D
Report Date: 17-Jul-2009 11:30

7/17/09 @ 1113

TestAmerica North Canton

RECOVERY REPORT

QCMRL Opener

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: QCMRL
Level: LOW
Data Type: MS DATA
SpikeList File: MRL.spk
Sublist File: 4-8260+IX.sub
Method File: \\cansvr11\dd\chem\MSV\a3ux11.i\J90717A.b\8260LLUX11.m
Misc Info: J90717A,8260LLUX11,,43582,3

Client SDG: SDGa01304
Fraction: VOA

Operator: 43582
SampleType: METHSPIKE
Quant Type: ISTD

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	17 1,1-Dichloroethene	1.000	0.9690	96.90	70-130
	42 Trichloroethene	1.000	0.9929	99.29	70-130
	59 Chlorobenzene	1.000	1.088	108.82	70-130
	50 Toluene	1.000	1.017	101.68	70-130
	41 Benzene	1.000	0.9687	96.87	70-130
	16 Acetone	2.000	1.651	82.55	70-130
	20 Carbon Disulfide	1.000	0.7637	76.37	70-130
	9 Chloromethane	1.000	0.8254	82.55	70-130
	11 Bromomethane	1.000	0.8604	86.04	70-130
	10 Vinyl Chloride	1.000	0.9727	97.27	70-130
	12 Chloroethane	1.000	0.8619	86.19	70-130
	21 Methylene Chloride	1.000	0.9711	97.11	70-130
	28 1,1-Dichloroethane	1.000	0.9990	99.90	70-130
M	31 1,2-Dichloroethene	2.000	2.021	101.05	70-130
	35 Chloroform	1.000	0.9606	96.06	70-130
	40 1,2-Dichloroethane	1.000	0.9794	97.94	70-130
	30 2-Butanone	2.000	1.993	99.65	70-130
	37 1,1,1-Trichloroeth	1.000	1.076	107.57	70-130
	39 Carbon Tetrachlori	1.000	1.086	108.57	70-130
	46 Bromodichlorometha	1.000	0.8680	86.80	70-130
	43 1,2-Dichloropropan	1.000	0.9966	99.67	70-130
	48 cis-1,3-Dichloropr	1.000	1.244	124.36	70-130
	54 1,3-Dichloropropan	1.000	1.023	102.26	70-130
	57 Dibromochlorometha	1.000	1.520	~~151.97*~~	70-130
	53 1,1,2-Trichloroeth	1.000	1.108	110.82	70-130
	51 trans-1,3-Dichloro	1.000	1.351	~~135.11*~~	70-130
	49 4-Methyl-2-pentano	2.000	1.465	73.24	70-130
	56 2-Hexanone	2.000	1.770	88.49	70-130
	55 Tetrachloroethene	1.000	1.105	110.51	70-130
	68 1,1,2,2-Tetrachlor	1.000	0.8588	85.88	70-130
	66 Bromoform	1.000	1.750	~~175.00*~~	70-130
	61 Ethylbenzene	1.000	0.9962	99.62	70-130
	65 Styrene	1.000	0.8894	88.94	70-130
M	63 Xylenes (total)	3.000	2.858	95.26	70-130
	32 cis-1,2-dichloroet	1.000	1.046	104.61	70-130
	25 trans-1,2-Dichloro	1.000	0.9749	97.49	70-130
	8 Dichlorodifluorome	1.000	1.113	111.27	70-130
	13 Trichlorofluoromet	1.000	0.9378	93.78	70-130
	70 1,2,3-Trichloropro	1.000	0.9170	91.70	70-130
	18 Freon-113	1.000	1.081	108.11	70-130

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J90717A.b\UXJ3166.D
Report Date: 17-Jul-2009 11:30

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
24 Methyl tert-butyl	1.000	0.8576	85.76	70-130
58 1,2-Dibromoethane	1.000	0.9540	95.40	70-130
67 Isopropylbenzene	1.000	0.9573	95.73	70-130
80 1,3-Dichlorobenzen	1.000	1.156	115.60	70-130
81 1,4-Dichlorobenzen	1.000	1.102	110.15	70-130
83 1,2-Dichlorobenzen	1.000	1.188	118.77	70-130
84 1,2-Dibromo-3-chlo	1.000	1.204	120.45	70-130
85 1,2,4-Trichloroben	1.000	1.043	104.34	70-130
98 Cyclohexane	1.000	0.8486	84.86	70-130
143 Methyl Acetate	2.000	1.993	99.67	70-130
144 Methylcyclohexane	1.000	0.9630	96.30	70-130
71 Bromobenzene	1.000	1.059	105.92	70-130
34 Bromochloromethane	1.000	1.024	102.44	70-130
82 n-Butylbenzene	1.000	0.8639	86.39	70-130
78 sec-Butylbenzene	1.000	0.9314	93.14	70-130
76 tert-Butylbenzene	1.000	1.018	101.76	70-130
73 2-Chlorotoluene	1.000	0.8846	88.46	70-130
75 4-Chlorotoluene	1.000	0.9623	96.23	70-130
45 Dibromomethane	1.000	1.030	103.03	70-130
33 2,2-Dichloropropan	1.000	1.058	105.81	70-130
38 1,1-Dichloropropen	1.000	0.9631	96.31	70-130
86 Hexachlorobutadien	1.000	1.203	120.30	70-130
19 Iodomethane	1.000	0.9641	96.41	70-130
79 4-Isopropyltoluene	1.000	0.8730	87.30	70-130
87 Naphthalene	1.000	0.8503	85.03	70-130
72 n-Propylbenzene	1.000	0.9058	90.58	70-130
60 1,1,1,2-Tetrachlor	1.000	1.058	105.85	70-130
88 1,2,3-Trichloroben	1.000	1.032	103.20	70-130
77 1,2,4-Trimethylben	1.000	0.9466	94.66	70-130
74 1,3,5-Trimethylben	1.000	0.9242	92.42	70-130
150 Vinyl Acetate-86	1.000	0.7100	71.00	70-130
62 m + p-Xylene	2.000	1.986	99.32	70-130
64 Xylene-o	1.000	0.8714	87.14	70-130
49 4-Methyl-2-pentano	2.000	1.465	73.24	70-130
27 Vinyl acetate	1.000	0.6868	68.68* NT	70-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Dibromofluorometha	10.000	9.141	91.41	73-122
$ 5 1,2-Dichloroethane	10.000	8.839	88.39	61-128
$ 6 Toluene-d8	10.000	9.358	93.58	76-110
$ 7 Bromofluorobenzene	10.000	9.181	91.81	74-116

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J90717A.b\UXJ3191.D
Report Date: 20-Jul-2009 07:43

TestAmerica North Canton

RECOVERY REPORT

Qcmrl closer

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: QCMRL
Level: LOW
Data Type: MS DATA
SpikeList File: MRL.spk
Sublist File: 4-8260+IX.sub
Method File: \\cansvr11\dd\chem\MSV\a3ux11.i\J90717A.b\8260LLUX11.m
Misc Info: J90717A,8260LLUX11,,43582,3

Client SDG: SDGa01304
Fraction: VOA

Operator: 43582
SampleType: METHSPIKE
Quant Type: ISTD

7/17/09 @ 2106

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	17 1,1-Dichloroethene	1.000	0.9798	97.99	70-130
	42 Trichloroethene	1.000	0.9695	96.95	70-130
	59 Chlorobenzene	1.000	1.082	108.16	70-130
	50 Toluene	1.000	0.9638	96.38	70-130
	41 Benzene	1.000	1.039	103.94	70-130
	16 Acetone	2.000	1.196	59.79*	70-130
	20 Carbon Disulfide	1.000	0.7395	73.95	70-130
	9 Chloromethane	1.000	0.8472	84.72	70-130
	11 Bromomethane	1.000	0.9125	91.25	70-130
	10 Vinyl Chloride	1.000	1.031	103.11	70-130
	12 Chloroethane	1.000	0.9999	99.99	70-130
	21 Methylene Chloride	1.000	1.113	111.30	70-130
	28 1,1-Dichloroethane	1.000	1.005	100.52	70-130
M	31 1,2-Dichloroethene	2.000	2.055	102.75	70-130
	35 Chloroform	1.000	1.078	107.83	70-130
	40 1,2-Dichloroethane	1.000	1.069	106.92	70-130
	30 2-Butanone	2.000	1.600	79.98	70-130
	37 1,1,1-Trichloroeth	1.000	1.036	103.61	70-130
	39 Carbon Tetrachlori	1.000	0.8256	82.56	70-130
	46 Bromodichlorometha	1.000	0.8428	84.28	70-130
	43 1,2-Dichloropropan	1.000	0.9261	92.61	70-130
	48 cis-1,3-Dichloropr	1.000	1.176	117.58	70-130
	54 1,3-Dichloropropan	1.000	0.9724	97.24	70-130
	57 Dibromochlorometha	1.000	1.513	151.34*	70-130
	53 1,1,2-Trichloroeth	1.000	1.050	104.96	70-130
	51 trans-1,3-Dichloro	1.000	1.363	136.29*	70-130
	49 4-Methyl-2-pentano	2.000	1.424	71.22	70-130
	56 2-Hexanone	2.000	1.429	71.45	70-130
	55 Tetrachloroethene	1.000	0.8854	88.54	70-130
	68 1,1,2,2-Tetrachlor	1.000	1.019	101.88	70-130
	66 Bromoform	1.000	1.902	190.21*	70-130
	61 Ethylbenzene	1.000	0.7785	77.85	70-130
	65 Styrene	1.000	0.7921	79.21	70-130
M	63 Xylenes (total)	3.000	2.513	83.76	70-130
	32 cis-1,2-dichloroet	1.000	1.050	105.01	70-130
	25 trans-1,2-Dichloro	1.000	1.005	100.49	70-130
	8 Dichlorodifluorome	1.000	0.7847	78.47	70-130
	13 Trichlorofluoromet	1.000	0.7622	76.22	70-130
	70 1,2,3-Trichloropro	1.000	0.9458	94.58	70-130
	18 Freon-113	1.000	0.7856	78.57	70-130

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J90717A.b\UXJ3191.D
Report Date: 20-Jul-2009 07:43

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
24 Methyl tert-butyl	1.000	0.9053	90.53	70-130
58 1,2-Dibromoethane	1.000	1.107	110.68	70-130
67 Isopropylbenzene	1.000	0.7457	74.57	70-130
80 1,3-Dichlorobenzen	1.000	1.090	108.95	70-130
81 1,4-Dichlorobenzen	1.000	0.9332	93.32	70-130
83 1,2-Dichlorobenzen	1.000	1.002	100.21	70-130
84 1,2-Dibromo-3-chlo	1.000	1.462	NT ~~146.23*~~	70-130
85 1,2,4-Trichloroben	1.000	0.6914	NT ~~69.15*~~	70-130
98 Cyclohexane	1.000	0.6653	NT ~~66.53*~~	70-130
143 Methyl Acetate	2.000	2.118	105.92	70-130
144 Methylcyclohexane	1.000	0.6531	NT ~~65.31*~~	70-130
71 Bromobenzene	1.000	0.9887	98.87	70-130
34 Bromochloromethane	1.000	1.011	101.06	70-130
82 n-Butylbenzene	1.000	0.6752	NT ~~67.52*~~	70-130
78 sec-Butylbenzene	1.000	0.7233	72.33	70-130
76 tert-Butylbenzene	1.000	0.8192	81.93	70-130
73 2-Chlorotoluene	1.000	0.9402	94.02	70-130
75 4-Chlorotoluene	1.000	0.9281	92.81	70-130
45 Dibromomethane	1.000	1.082	108.21	70-130
33 2,2-Dichloropropan	1.000	0.8575	85.75	70-130
38 1,1-Dichloropropen	1.000	0.8421	84.21	70-130
86 Hexachlorobutadien	1.000	0.6983	OK 20 ~~69.83*~~	70-130
19 Iodomethane	1.000	0.9085	90.85	70-130
79 4-Isopropyltoluene	1.000	0.7548	75.48	70-130
87 Naphthalene	1.000	0.5698	NT ~~56.98*~~	70-130
72 n-Propylbenzene	1.000	0.7168	71.68	70-130
60 1,1,1,2-Tetrachlor	1.000	0.9287	92.87	70-130
88 1,2,3-Trichloroben	1.000	0.9172	91.72	70-130
77 1,2,4-Trimethylben	1.000	0.8285	82.85	70-130
74 1,3,5-Trimethylben	1.000	0.7169	71.69	70-130
150 Vinyl Acetate-86	1.000	0.3146	NT ~~31.46*~~	70-130
62 m + p-Xylene	2.000	1.707	85.36	70-130
64 Xylene-o	1.000	0.8057	80.57	70-130
49 4-Methyl-2-pentano	2.000	1.424	71.22	70-130
27 Vinyl acetate	1.000	0.4936	NT ~~49.36*~~	70-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Dibromofluorometha	10.000	9.372	93.73	73-122
$ 5 1,2-Dichloroethane	10.000	9.223	92.23	61-128
$ 6 Toluene-d8	10.000	9.395	93.95	76-110
$ 7 Bromofluorobenzene	10.000	9.282	92.82	74-116

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J90717A.b\UXJ3192.D
Report Date: 20-Jul-2009 13:19

TestAmerica North Canton

VOLATILE REPORT SW-846 Method 8260A/8260B

Data file : \\cansvr11\dd\chem\MSV\a3ux11.i\J90717A.b\UXJ3192.D
Lab Smp Id: MDL CHECK
Inj Date : 17-JUL-2009 21:30
Operator : 43582 Inst ID: a3ux11.i
Smp Info : MDL CHECK
Misc Info : J90717A,8260LLUX11,,43582
Comment :
Method : \\cansvr11\dd\chem\MSV\a3ux11.i\J90717A.b\8260LLUX11.m
Meth Date : 20-Jul-2009 13:12 quayler Quant Type: ISTD
Cal Date : 16-JUN-2009 18:28 Cal File: UXJ2216.D
Als bottle: 30
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-8260.sub
Target Version: 4.14
Processing Host: CANPMSV30

Concentration Formula: Amt * DF * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample volume
Va	100.000	Injection Volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)
* 1 Fluorobenzene	96	5.295	5.295	(1.000)	863104	50.0000	
* 2 Chlorobenzene-d5	117	7.969	7.969	(1.000)	533987	50.0000	
* 3 1,4-Dichlorobenzene-d4	152	10.217	10.217	(1.000)	206033	50.0000	
$ 4 Dibromofluoromethane	113	4.727	4.727	(0.893)	280180	47.6855	9.537
$ 5 1,2-Dichloroethane-d4	65	5.011	5.011	(0.946)	357014	47.1270	9.425
$ 6 Toluene-d8	98	6.656	6.656	(0.835)	1056963	45.8958	9.179
$ 7 Bromofluorobenzene	95	9.081	9.081	(1.140)	261421	43.1580	8.632
8 Dichlorodifluoromethane	85	1.627	1.603	(0.307)	15342	2.29980	0.4600
9 Chloromethane	50	1.769	1.769	(0.334)	27736	2.43697	0.4874
10 Vinyl Chloride	62	1.863	1.863	(0.352)	24440	2.82482	0.5650
11 Bromomethane	94	2.159	2.171	(0.408)	8919	2.44034	0.4881
12 Chloroethane	64	2.254	2.254	(0.426)	13054	2.63649	0.5273
13 Trichlorofluoromethane	101	2.455	2.455	(0.464)	24269	2.48746	0.4975
15 Acrolein	56	2.798	2.798	(0.528)	25126	15.7662	3.153
16 Acetone	43	2.928	2.917	(0.553)	30525	1.95084	0.3902
17 1,1-Dichloroethene	96	2.893	2.893	(0.546)	19737	2.88458	0.5769
18 Freon-113	151	2.881	2.881	(0.544)	10948	2.45999	0.4920
19 Iodomethane	142	3.047	3.046	(0.575)	22318	2.59405	0.5188
20 Carbon Disulfide	76	3.106	3.106	(0.587)	30114	1.80043	0.3601
21 Methylene Chloride	84	3.283	3.283	(0.620)	37688	2.84978	0.5700

22 Acetonitrile	41	3.153	3.153 (0.596)	42527	31.2229	6.244
23 Acrylonitrile	53	3.484	3.484 (0.658)	17867	4.76901	0.9538

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J90717A.b\UXJ3192.D
Report Date: 20-Jul-2009 13:19

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)
	24 Methyl tert-butyl ether	73	3.508	3.508	(0.663)	56521	2.47664	0.4953
	25 trans-1,2-Dichloroethene	96	3.508	3.508	(0.663)	25094	2.84259	0.5685
	26 Hexane	86	3.709	3.733	(0.701)	2410	1.65356	0.3307
	27 Vinyl acetate	43	3.887	3.887	(0.734)	18700	1.45075	0.2901
	28 1,1-Dichloroethane	63	3.851	3.851	(0.727)	40229	2.83654	0.5673
	29 tert-Butyl Alcohol	59	3.366	3.366	(0.636)	36821	55.4539	11.091
	30 2-Butanone	43	4.348	4.336	(0.821)	22298	5.65430	1.131
M	31 1,2-Dichloroethene (total)	96				45402	5.50029	1.100
	32 cis-1,2-dichloroethene	96	4.336	4.336	(0.819)	20308	2.65770	0.5315
	33 2,2-Dichloropropane	77	4.336	4.336	(0.819)	12907	2.56300	0.5126
	34 Bromochloromethane	128	4.537	4.537	(0.857)	10325	2.96127	0.5922
	35 Chloroform	83	4.597	4.585	(0.868)	31779	2.64808	0.5296
	36 Tetrahydrofuran	42	4.585	4.585	(0.866)	5578	2.16056	0.4321
	37 1,1,1-Trichloroethane	97	4.762	4.762	(0.899)	18796	2.40685	0.4814
	38 1,1-Dichloropropene	75	4.892	4.892	(0.924)	24144	2.55479	0.5110
	39 Carbon Tetrachloride	117	4.904	4.904	(0.926)	13847	2.19125	0.4382
	40 1,2-Dichloroethane	62	5.070	5.070	(0.958)	25708	2.85444	0.5709
	41 Benzene	78	5.070	5.070	(0.958)	80135	2.54579	0.5092
	42 Trichloroethene	130	5.602	5.602	(1.058)	17866	2.70700	0.5414
	43 1,2-Dichloropropane	63	5.792	5.792	(1.094)	18205	2.48033	0.4961
	44 1,4-Dioxane	88	5.910	5.898	(1.116)	5168	93.3276	18.666
	45 Dibromomethane	93	5.898	5.898	(1.114)	11688	3.15331	0.6307
	46 Bromodichloromethane	83	6.017	6.017	(1.136)	15720	2.32563	0.4651
	47 2-Chloroethyl vinyl ether	63	6.265	6.265	(1.183)	10149	3.89756	0.7795
	48 cis-1,3-Dichloropropene	75	6.407	6.407	(1.210)	12222	4.68247	0.9365
	49 4-Methyl-2-pentanone	43	6.537	6.537	(1.235)	25016	4.03770	0.8075
	50 Toluene	91	6.715	6.715	(0.843)	74898	2.62249	0.5245
	51 trans-1,3-Dichloropropene	75	6.892	6.892	(0.865)	8196	5.52593	1.105
	52 Ethyl Methacrylate	69	6.963	6.951	(0.874)	14828	1.84738	0.3695
	53 1,1,2-Trichloroethane	97	7.058	7.058	(0.886)	14438	2.66504	0.5330
	54 1,3-Dichloropropane	76	7.212	7.212	(0.905)	28714	2.78530	0.5571
	55 Tetrachloroethene	164	7.200	7.212	(0.903)	10165	2.31043	0.4621
	56 2-Hexanone	43	7.283	7.271	(0.914)	15257	3.89434	0.7789
	57 Dibromochloromethane	129	7.425	7.425	(0.932)	8120	6.35164	1.270
	58 1,2-Dibromoethane	107	7.543	7.543	(0.947)	13860	2.85252	0.5705
	59 Chlorobenzene	112	7.993	7.993	(1.003)	42235	2.70029	0.5400
	60 1,1,1,2-Tetrachloroethane	131	8.064	8.064	(1.012)	9881	2.17049	0.4341
	61 Ethylbenzene	106	8.087	8.087	(1.015)	17669	2.11346	0.4227
	62 m + p-Xylene	106	8.194	8.194	(1.028)	37559	3.71465	0.7429
M	63 Xylenes (total)	106				56545	5.71650	1.143
	64 Xylene-o	106	8.573	8.572	(1.076)	18986	2.00186	0.4004
	65 Styrene	104	8.584	8.584	(1.077)	30635	1.90973	0.3819
	66 Bromoform	173	8.774	8.774	(1.101)	2901	8.39023	1.678
	67 Isopropylbenzene	105	8.927	8.927	(1.120)	47088	2.23975	0.4480
	68 1,1,2,2-Tetrachloroethane	83	9.211	9.200	(0.902)	15081	2.49820	0.4996
	69 1,4-Dichloro-2-butene	53	Compound Not Detected.					
	70 1,2,3-Trichloropropane	110	9.259	9.259	(0.906)	4271	2.47506	0.4950
	71 Bromobenzene	156	9.235	9.235	(0.904)	15656	2.92185	0.5844
	72 n-Propylbenzene	120	9.330	9.330	(0.913)	11028	2.07523	0.4150
	73 2-Chlorotoluene	126	9.413	9.413	(0.921)	12567	2.53269	0.5065
	74 1,3,5-Trimethylbenzene	105	9.495	9.495	(0.929)	27716	1.86600	0.3732
	75 4-Chlorotoluene	126	9.519	9.519	(0.932)	9298	1.85655	0.3713

76 tert-Butylbenzene	119	9.815	9.815 (0.961)	24573	2.12167	0.4243
77 1,2,4-Trimethylbenzene	105	9.862	9.862 (0.965)	25915	1.78934	0.3579

GCMS SEMIVOLATILE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 24, 2009

SDG: A9G140103 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.4 - 4.4 °C. Upon receipt, it was documented by the laboratory, that the samples were not frozen and in good condition. Therefore, no qualifications were made to sample results based on temperatures less than 2°C.	QAPP Table 4-2
3. Were samples extracted using the correct preparation, clean-up methods?	✓				QAPP Table 4-2
4. Were samples extracted within required holding times (7 days - water)?	✓				QAPP Table 4-2 J/UJ/R
5. Were samples analyzed within required holding times (40 days after extraction)?	✓				QAPP Table 4-2 J/UJ/R
6. Were sample storage requirements met?	✓				QAPP Table 4-2
7. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-4 and 3-6
8. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-4 and 3-6
9. Was the GC/MS system tuned with decafluorotriphenylphosphine (DFTPP)?	✓				LCG Table 2
10. Were the criteria met during each 12 hour shift?	✓				LCG Table 2
11. Did the initial calibration curve consist of 5 concentration levels, with the low standard near but above the MDL?	✓			A4HP7-7/22/09, 7/29/09 stds = 0.05, 0.25, 0.50, 1.0, 2.5, 5.0, 7.5, 10.0, 12.5 ng on column	LCG Table 2 R
12. Did the Calibration Check Compounds (CCCs) (see Table 1 below) relative standard deviation (%RSD) ≤ 30%?	✓				LCG Table 2 R
13. Were the minimum response factors (RFs) for the System Performance Check Compounds (SPCCs) (see Table 2 below) met?	✓				LCG Table 2 R
14. Was each target analyte <15 % RSD, or was the average RSD <15%?	✓				LCG Table 2 15% <RSD< 30% = J/UJ

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 24, 2009

SDG: A9G140103 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
15. If a different calibration option was used, was the correlation coefficient (r^2) or the coefficient of determination ≥0.99?	✓			7/22/09- Benzoic acid and 2,4-dinitrophenol, used a quadratic fit. 7/29/09- Benzoic acid, 2,4-dinitrophenol, 4,6-dinitro-2-methylphenol and pentachlorophenol used a quadratic fit. No qualifications were made as coefficients of determination (COD) (r) were≥0.99.	LCG Table 2 r<0.99=-J/R
16. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓			7/7/09	LCG Table 2 R
17. Was a MRL Level Verification run at the beginning and end of the sequence or every 12 hours?	✓				LCG Table 2
18. Were the QC/MRL recoveries 70-130%?		✓		The MRL check analyzed 7/23/09 at 2251 had 2,4-dinitrophenol recover below control limits at 67.9%. Bracketed 2,4-dinitrophenol results were qualified as estimated, "UJ".	LCG Table 2 >130%=J; 50-70%=J/UJ; <50%=J/R
19. Was a second source (ICV) verification analyzed after the ICAL? Were results 70-130%?	✓			7/23/09, 7/29/09	LCG Table 2 >130%=J; 50-70%=J/UJ; <50%=J/R
20. Was a CCV analyzed every 12 hours?			✓		LCG Table 2
21. Was the percent difference (% D) for the CCCs ≤ 20%? (see Table 1) (% drift if regression fit model used)			✓		LCG Table 2
22. Were the minimum RFs for the SPCCs met? (see Table 2)			✓		LCG Table 2
23. Was the %Difference or %Drift ≤20% for all target analytes? OR was the average %D ≤20% with no individual analyte ≥30%D?			✓		LCG Table 2 Avg D>20% and D>30% =R; Avg %D<20% and D>30% =J D>30% (neg) = J/R D>30% (pos) = J
24. Were the internal standards added to every sample?	✓				LCG Table 2

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 24, 2009

SDG: A9G140103 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
25. Were the retention times for all IS compounds within ±30 seconds from the RT of the mid-point ICAL std?	✓				LCG Table 2 R
26. Did the areas of all IS compounds vary by no more than -50% to +100% from the ICAL EICP area?	✓				LCG Table 2 R
27. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 2
28. Were all target analytes in the method blank <1/2 the MRL?	✓			Checked by ADR. Bis (2-Ethylhexyl) phthalate was detected in the method blank at 1.1ug/L. bis (2-Ethylhexyl) phthalate results <10x contamination were qualified, "B".	LCG Table 2 <5/10x blank = B
29. Was a field blank collected and analyzed?	✓			FWGEQUIPRinse1-1423-GW	
30. Were all target analytes in the field blank analysis <1/2 the MRL?	✓			Checked by ADR. Bis (2-Ethylhexyl) phthalate was detected in FWGEQUIPRinse1-1423-GW at 1.9ug/L. Bis (2-Ethylhexyl) phthalate results <10x contamination were qualified, "B".	<5/10x blank = B
31. Was a field duplicate analyzed?	✓			Sample FWGLL7mw-DUP1-1413-GW was the field duplicate for sample FWGLL7mw-006c-13775-GW.	
32. Were the field duplicate RPDs ≤30%?	✓			Checked by ADR.	QAPP Table 3-2 RPD >30=J
33. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 2
34. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR.	LCG Appendix C >UL=J; 30%-LL=J/UJ; <30%=J/R
35. Was a MS/MSD pair prepared with each batch?	✓				LCG Table 2
36. Was the MS/MSD parent a Ravenna sample?	✓			Sample FWGLL7mw-003c-1372-GW was the parent MS/MSD sample from this SDG.	
37. Were MS/MSD recoveries 45-135% and RPD value ≤40%?		✓		Hexachloroethane recovered below control limits in the MS at 37% and 35% in the MSD while 1,3-dichlorobenzene recovered below control limits at 43% in the MSD. No qualifications were made as the associated LCS recovered within limits.	LCG Table 2 Pj

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 24, 2009

SDG: A9G140103 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
38. Were surrogate recoveries within 50-150%?		✓		In sample FWGLL6mw-006c-1368-GW, 2-fluorobiphenyl recovered below limits at 48% and 2-fluorophenyl at 49%. No qualifications were made as LCG allows for one surrogate from each fraction to recover below limits without qualification as long as the outliers recover above 10%.	LCG Table 2 >150%=J; 10% -50%=J/UJ; <10%=J/R
39. Were reported sample concentrations within calibration range?	✓				
40. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
41. Were lab comments included in report? If yes, summarize contents.	✓			See narrative regarding MS outliers.	

References:
Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 2 and Attachment A "Data Validation Guidelines:
Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Table 1: CCCs

Base / Neutral Compunds	Acid Compounds
Acenaphthalene	4-Chloro-3-methylphenol
1,4-Dichlorobenzene	2,4-Dichlorophenol
Hexachlorobutadiene	2-Nitrophenol
N-Nitrosodiphehylamine	Phenol
Di-n-octylphthalate	Pentachlorophenol
Fluoroanthene	2,4,6-Trichlorophenol
Benzo(a)pyrene	

(All analytes if CCCs not included in standard)

Table 2: SPCCs

N-Nitroso-di-n-propylamine	0.050
Hexachlorocyclopentadiene	0.050
2,4-Dinitrophenol	0.050
4-Nitrophenol	0.050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-003C-1372-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G140103-002 **Work Order #...:** LGE9E1AE **Matrix.....:** WG
Date Sampled...: 07/13/09 12:05 **Date Received..:** 07/14/09
Prep Date.....: 07/14/09 **Analysis Date..:** 07/23/09
Prep Batch #...: 9195070
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**3.3 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-003C-1372-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G140103-002 Work Order #...: LGE9E1AE Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-003C-1372-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G140103-002 **Work Order #...:** LGE9E1AE **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	72	(50 - 150)
2-Fluorobiphenyl	64	(50 - 150)
Terphenyl-d14	96	(50 - 150)
Phenol-d5	68	(50 - 150)
2-Fluorophenol	64	(50 - 150)
2,4,6-Tribromophenol	90	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-001C-1370-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G140103-004 **Work Order #...:** LGE9G1AC **Matrix.....:** WG
Date Sampled...: 07/13/09 14:45 **Date Received..:** 07/14/09
Prep Date.....: 07/14/09 **Analysis Date..:** 07/23/09
Prep Batch #...: 9195070
Dilution Factor: 1 **Initial Wgt/Vol:** 1040 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**3.6 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-001C-1370-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G140103-004 **Work Order #...:** LGE9G1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-001C-1370-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G140103-004 **Work Order #...:** LGE9G1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	74	(50 - 150)
2-Fluorobiphenyl	65	(50 - 150)
Terphenyl-d14	95	(50 - 150)
Phenol-d5	71	(50 - 150)
2-Fluorophenol	64	(50 - 150)
2,4,6-Tribromophenol	104	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-007C-1369-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G140103-006 **Work Order #...:** LGE9J1AC **Matrix.....:** WG
Date Sampled...: 07/13/09 17:20 **Date Received..:** 07/14/09
Prep Date.....: 07/14/09 **Analysis Date..:** 07/23/09
Prep Batch #...: 9195070
Dilution Factor: 1 **Initial Wgt/Vol:** 1010 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)- ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.1 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-007C-1369-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G140103-006 **Work Order #...:** LGE9J1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-007C-1369-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G140103-006 **Work Order #...:** LGE9J1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	76	(50 - 150)
2-Fluorobiphenyl	65	(50 - 150)
Terphenyl-d14	93	(50 - 150)
Phenol-d5	70	(50 - 150)
2-Fluorophenol	68	(50 - 150)
2,4,6-Tribromophenol	101	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-006C-1375-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G140103-009 **Work Order #...:** LGE9M1AC **Matrix.....:** WG
Date Sampled...: 07/13/09 12:00 **Date Received..:** 07/14/09
Prep Date.....: 07/14/09 **Analysis Date..:** 07/23/09
Prep Batch #...: 9195070
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.4 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-006C-1375-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G140103-009 **Work Order #...:** LGE9M1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-006C-1375-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G140103-009 **Work Order #...:** LGE9M1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	75	(50 - 150)
2-Fluorobiphenyl	63	(50 - 150)
Terphenyl-d14	103	(50 - 150)
Phenol-d5	70	(50 - 150)
2-Fluorophenol	63	(50 - 150)
2,4,6-Tribromophenol	98	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-DUP1-1413-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G140103-011 **Work Order #...:** LGE9P1AC **Matrix.....:** WG
Date Sampled...: 07/13/09 13:00 **Date Received..:** 07/14/09
Prep Date.....: 07/14/09 **Analysis Date..:** 07/23/09
Prep Batch #...: 9195070
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.7 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-DUP1-1413-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G140103-011 **Work Order #...:** LGE9P1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-DUP1-1413-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G140103-011 **Work Order #...:** LGE9P1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	69	(50 - 150)
2-Fluorobiphenyl	59	(50 - 150)
Terphenyl-d14	99	(50 - 150)
Phenol-d5	60	(50 - 150)
2-Fluorophenol	57	(50 - 150)
2,4,6-Tribromophenol	97	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-004C-1373-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G140103-013 **Work Order #...:** LGE9R1AC **Matrix.....:** WG
Date Sampled...: 07/13/09 14:00 **Date Received..:** 07/14/09
Prep Date.....: 07/14/09 **Analysis Date..:** 07/23/09
Prep Batch #...: 9195070
Dilution Factor: 1 **Initial Wgt/Vol:** 990 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.2 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-004C-1373-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G140103-013 Work Order #...: LGE9R1AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-004C-1373-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G140103-013 **Work Order #...:** LGE9R1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	77	(50 - 150)
2-Fluorobiphenyl	67	(50 - 150)
Terphenyl-d14	108	(50 - 150)
Phenol-d5	69	(50 - 150)
2-Fluorophenol	65	(50 - 150)
2,4,6-Tribromophenol	104	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-002C-1371-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G140103-015 **Work Order #...:** LGE9W1AC **Matrix.....:** WG
Date Sampled...: 07/13/09 15:10 **Date Received..:** 07/14/09
Prep Date.....: 07/14/09 **Analysis Date..:** 07/23/09
Prep Batch #...: 9195070
Dilution Factor: 1 **Initial Wgt/Vol:** 960 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**5.8 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-002C-1371-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G140103-015 **Work Order #...:** LGE9W1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-002C-1371-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G140103-015 **Work Order #...:** LGE9W1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	70	(50 - 150)
2-Fluorobiphenyl	53	(50 - 150)
Terphenyl-d14	96	(50 - 150)
Phenol-d5	60	(50 - 150)
2-Fluorophenol	55	(50 - 150)
2,4,6-Tribromophenol	94	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-005C-1367-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G140103-017 **Work Order #...:** LGE901AC **Matrix.....:** WG
Date Sampled...: 07/13/09 16:30 **Date Received..:** 07/14/09
Prep Date.....: 07/14/09 **Analysis Date..:** 07/23/09
Prep Batch #...: 9195070
Dilution Factor: 1 **Initial Wgt/Vol:** 940 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	0.80
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-005C-1367-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G140103-017 **Work Order #...:** LGE901AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-005C-1367-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G140103-017 **Work Order #...:** LGE901AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	70	(50 - 150)
2-Fluorobiphenyl	60	(50 - 150)
Terphenyl-d14	92	(50 - 150)
Phenol-d5	63	(50 - 150)
2-Fluorophenol	58	(50 - 150)
2,4,6-Tribromophenol	95	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1423-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G140103-019 **Work Order #...:** LGE931AC **Matrix.....:** WQ
Date Sampled...: 07/13/09 17:30 **Date Received..:** 07/14/09
Prep Date.....: 07/14/09 **Analysis Date..:** 07/23/09
Prep Batch #...: 9195070
Dilution Factor: 1 **Initial Wgt/Vol:** 920 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.9 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1423-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G140103-019 **Work Order #...:** LGE931AC **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1423-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G140103-019 **Work Order #...:** LGE931AC **Matrix.....:** WQ

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	73	(50 - 150)
2-Fluorobiphenyl	62	(50 - 150)
Terphenyl-d14	102	(50 - 150)
Phenol-d5	67	(50 - 150)
2-Fluorophenol	61	(50 - 150)
2,4,6-Tribromophenol	88	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-005C-1374-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G140103-021 **Work Order #...:** LGFAD1AC **Matrix.....:** WG
Date Sampled...: 07/13/09 12:20 **Date Received..:** 07/14/09
Prep Date.....: 07/14/09 **Analysis Date..:** 07/29/09
Prep Batch #...: 9195070
Dilution Factor: 1 **Initial Wgt/Vol:** 920 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.3 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-005C-1374-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G140103-021 **Work Order #...:** LGFAD1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-005C-1374-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G140103-021 **Work Order #...:** LGFAD1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	71	(50 - 150)
2-Fluorobiphenyl	64	(50 - 150)
Terphenyl-d14	81	(50 - 150)
Phenol-d5	57	(50 - 150)
2-Fluorophenol	51	(50 - 150)
2,4,6-Tribromophenol	55	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-006C-1368-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G140103-023 **Work Order #...:** LGFAG1AC **Matrix.....:** WG
Date Sampled...: 07/13/09 16:10 **Date Received..:** 07/14/09
Prep Date.....: 07/14/09 **Analysis Date..:** 07/23/09
Prep Batch #...: 9195070
Dilution Factor: 1 **Initial Wgt/Vol:** 1010 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)- ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	0.80
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-006C-1368-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G140103-023 Work Order #...: LGFAG1AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-006C-1368-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G140103-023 **Work Order #...:** LGFAG1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	63	(50 - 150)
2-Fluorobiphenyl	48 *	(50 - 150)
Terphenyl-d14	84	(50 - 150)
Phenol-d5	54	(50 - 150)
2-Fluorophenol	49 *	(50 - 150)
2,4,6-Tribromophenol	78	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A9G140103 **Work Order #...:** LGFA31AA **Matrix.....:** WATER
MB Lot-Sample #: A9G140000-070

Prep Date.....: 07/14/09 **Final Wgt/Vol..:** 2 mL
Analysis Date..: 07/23/09 **Prep Batch #...:** 9195070
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Chrysene	ND	0.20	ug/L	SW846 8270C
Dibenz(a,h)anthracene	ND	0.20	ug/L	SW846 8270C
Dibenzofuran	ND	1.0	ug/L	SW846 8270C
Di-n-butyl phthalate	ND	1.0	ug/L	SW846 8270C
Acenaphthene	ND	0.20	ug/L	SW846 8270C
Acenaphthylene	ND	0.20	ug/L	SW846 8270C
Anthracene	ND	0.20	ug/L	SW846 8270C
Benzo(a)anthracene	ND	0.20	ug/L	SW846 8270C
Benzo(b)fluoranthene	ND	0.20	ug/L	SW846 8270C
Benzo(k)fluoranthene	ND	0.20	ug/L	SW846 8270C
Benzoic acid	ND	10	ug/L	SW846 8270C
Benzo(ghi)perylene	ND	0.20	ug/L	SW846 8270C
Benzo(a)pyrene	ND	0.20	ug/L	SW846 8270C
Benzyl alcohol	ND	5.0	ug/L	SW846 8270C
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	SW846 8270C
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	SW846 8270C
bis(2-Ethylhexyl) phthalate	**1.1 J**	**10**	**ug/L**	**SW846 8270C**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	SW846 8270C
Butyl benzyl phthalate	ND	1.0	ug/L	SW846 8270C
4-Chloroaniline	ND	2.0	ug/L	SW846 8270C
4-Chloro-3-methylphenol	ND	2.0	ug/L	SW846 8270C
2-Chloronaphthalene	ND	1.0	ug/L	SW846 8270C
2-Chlorophenol	ND	1.0	ug/L	SW846 8270C
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	SW846 8270C
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8270C
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8270C
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8270C
3,3'-Dichlorobenzidine	ND	5.0	ug/L	SW846 8270C
2,4-Dichlorophenol	ND	2.0	ug/L	SW846 8270C
Diethyl phthalate	ND	1.0	ug/L	SW846 8270C
2,4-Dimethylphenol	ND	2.0	ug/L	SW846 8270C
Dimethyl phthalate	ND	1.0	ug/L	SW846 8270C
Di-n-octyl phthalate	ND	1.0	ug/L	SW846 8270C
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	SW846 8270C
2,4-Dinitrophenol	ND	5.0	ug/L	SW846 8270C

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A9G140103 **Work Order #...:** LGFA31AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,4-Dinitrotoluene	ND	5.0	ug/L	SW846 8270C
2,6-Dinitrotoluene	ND	5.0	ug/L	SW846 8270C
Fluoranthene	ND	0.20	ug/L	SW846 8270C
Fluorene	ND	0.20	ug/L	SW846 8270C
Hexachlorobenzene	ND	0.20	ug/L	SW846 8270C
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8270C
Hexachlorocyclopenta-diene	ND	10	ug/L	SW846 8270C
Hexachloroethane	ND	1.0	ug/L	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	SW846 8270C
Isophorone	ND	1.0	ug/L	SW846 8270C
2-Methylnaphthalene	ND	0.20	ug/L	SW846 8270C
2-Methylphenol	ND	1.0	ug/L	SW846 8270C
4-Methylphenol	ND	1.0	ug/L	SW846 8270C
Naphthalene	ND	0.20	ug/L	SW846 8270C
2-Nitroaniline	ND	2.0	ug/L	SW846 8270C
3-Nitroaniline	ND	2.0	ug/L	SW846 8270C
4-Nitroaniline	ND	2.0	ug/L	SW846 8270C
Nitrobenzene	ND	1.0	ug/L	SW846 8270C
2-Nitrophenol	ND	2.0	ug/L	SW846 8270C
4-Nitrophenol	ND	5.0	ug/L	SW846 8270C
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	SW846 8270C
N-Nitrosodiphenylamine	ND	1.0	ug/L	SW846 8270C
Pentachlorophenol	ND	5.0	ug/L	SW846 8270C
Phenanthrene	ND	0.20	ug/L	SW846 8270C
Phenol	ND	1.0	ug/L	SW846 8270C
Pyrene	ND	0.20	ug/L	SW846 8270C
1,2,4-Trichloro-benzene	ND	1.0	ug/L	SW846 8270C
2,4,5-Trichloro-phenol	ND	5.0	ug/L	SW846 8270C
2,4,6-Trichloro-phenol	ND	5.0	ug/L	SW846 8270C
Carbazole	ND	1.0	ug/L	SW846 8270C
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	70	(50 - 150)
2-Fluorobiphenyl	59	(50 - 150)
Terphenyl-d14	100	(50 - 150)
Phenol-d5	66	(50 - 150)
2-Fluorophenol	67	(50 - 150)

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A9G140103 **Work Order #...:** LGFA31AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,4,6-Tribromophenol	83	(50 - 150)		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G140103 Work Order #...: LGFA31AC Matrix.....: WATER
LCS Lot-Sample#: A9G140000-070
Prep Date.....: 07/14/09 Analysis Date..: 07/23/09
Prep Batch #...: 9195070
Dilution Factor: 1 Final Wgt/Vol..: 2 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Benzyl alcohol	82	(29 - 115)	SW846 8270C
1,2,4-Trichloro-benzene	48	(30 - 120)	SW846 8270C
Acenaphthene	76	(31 - 120)	SW846 8270C
2,4-Dinitrotoluene	89	(34 - 151)	SW846 8270C
Pyrene	89	(35 - 139)	SW846 8270C
N-Nitrosodi-n-propyl-amine	88	(30 - 132)	SW846 8270C
1,4-Dichlorobenzene	53	(30 - 115)	SW846 8270C
Pentachlorophenol	46	(30 - 150)	SW846 8270C
Phenol	75	(30 - 115)	SW846 8270C
2-Chlorophenol	79	(30 - 120)	SW846 8270C
4-Chloro-3-methylphenol	76	(31 - 121)	SW846 8270C
4-Nitrophenol	80	(30 - 138)	SW846 8270C
1,2-Dichlorobenzene	52	(30 - 120)	SW846 8270C
1,3-Dichlorobenzene	47	(30 - 120)	SW846 8270C
2,4,5-Trichloro-phenol	76	(36 - 135)	SW846 8270C
4-Methylphenol	77	(31 - 115)	SW846 8270C
4-Nitroaniline	86	(30 - 140)	SW846 8270C
Acenaphthylene	80	(37 - 115)	SW846 8270C
Anthracene	93	(45 - 118)	SW846 8270C
Benzo(a)anthracene	86	(43 - 138)	SW846 8270C
Benzo(a)pyrene	80	(38 - 144)	SW846 8270C
Benzo(b)fluoranthene	78	(31 - 146)	SW846 8270C
Benzo(ghi)perylene	91	(35 - 129)	SW846 8270C
Benzo(k)fluoranthene	91	(40 - 127)	SW846 8270C
bis(2-Chloroethoxy) methane	75	(30 - 115)	SW846 8270C
bis(2-Chloroethyl)-ether	84	(30 - 115)	SW846 8270C
bis(2-Chloroisopropyl) ether	70	(50 - 150)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G140103 Work Order #...: LGFA31AC Matrix.....: WATER
LCS Lot-Sample#: A9G140000-070

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
bis(2-Ethylhexyl) phthalate	103	(30 - 154)	SW846 8270C
2,4,6-Trichloro-phenol	72	(39 - 115)	SW846 8270C
2,4-Dichlorophenol	74	(34 - 115)	SW846 8270C
2,4-Dimethylphenol	62	(31 - 120)	SW846 8270C
2,4-Dinitrophenol	52	(29 - 146)	SW846 8270C
2,6-Dinitrotoluene	89	(43 - 122)	SW846 8270C
2-Chloronaphthalene	70	(35 - 115)	SW846 8270C
2-Methylnaphthalene	68	(32 - 115)	SW846 8270C
2-Methylphenol	77	(30 - 116)	SW846 8270C
2-Nitroaniline	84	(36 - 140)	SW846 8270C
2-Nitrophenol	73	(33 - 115)	SW846 8270C
3,3'-Dichlorobenzidine	65	(30 - 160)	SW846 8270C
3-Nitroaniline	82	(30 - 138)	SW846 8270C
4,6-Dinitro-2-methylphenol	71	(42 - 144)	SW846 8270C
4-Bromophenyl phenyl ether	92	(43 - 118)	SW846 8270C
4-Chloroaniline	68	(30 - 133)	SW846 8270C
4-Chlorophenyl phenyl ether	78	(40 - 115)	SW846 8270C
Butyl benzyl phthalate	101	(37 - 136)	SW846 8270C
Carbazole	90	(49 - 126)	SW846 8270C
Chrysene	87	(42 - 142)	SW846 8270C
Dibenz(a,h)anthracene	94	(38 - 130)	SW846 8270C
Dibenzofuran	81	(40 - 115)	SW846 8270C
Diethyl phthalate	92	(43 - 132)	SW846 8270C
Dimethyl phthalate	89	(42 - 116)	SW846 8270C
Di-n-octyl phthalate	99	(36 - 151)	SW846 8270C
Fluoranthene	93	(47 - 132)	SW846 8270C
Fluorene	84	(41 - 115)	SW846 8270C
Hexachlorobenzene	90	(42 - 123)	SW846 8270C
Hexachlorobutadiene	34	(30 - 120)	SW846 8270C
Hexachloroethane	38	(30 - 120)	SW846 8270C
Isophorone	83	(33 - 115)	SW846 8270C
Naphthalene	64	(30 - 119)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G140103 **Work Order #...:** LGFA31AC **Matrix.....:** WATER
LCS Lot-Sample#: A9G140000-070

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Nitrobenzene	**82**	**(31 - 115)**	**SW846 8270C**
N-Nitrosodiphenylamine	**81**	**(35 - 124)**	**SW846 8270C**
Phenanthrene	**88**	**(45 - 117)**	**SW846 8270C**
Indeno(1,2,3-cd)pyrene	**93**	**(37 - 130)**	**SW846 8270C**
Di-n-butyl phthalate	**100**	**(46 - 123)**	**SW846 8270C**
Hexachlorocyclopenta-diene	**37**	**(30 - 115)**	**SW846 8270C**
Benzoic acid	**66**	**(30 - 136)**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	77	(50 - 150)
2-Fluorobiphenyl	69	(50 - 150)
Terphenyl-d14	102	(50 - 150)
Phenol-d5	82	(50 - 150)
2-Fluorophenol	78	(50 - 150)
2,4,6-Tribromophenol	99	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G140103 Work Order #...: LGE9E1AF-MS Matrix.....: WG
MS Lot-Sample #: A9G140103-002 LGE9E1AG-MSD
Date Sampled...: 07/13/09 12:05 Date Received..: 07/14/09
Prep Date.....: 07/14/09 Analysis Date..: 07/23/09
Prep Batch #...: 9195070
Dilution Factor: 1 Initial Wgt/Vol: 525 mL Final Wgt/Vol..: 2 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,2,4-Trichloro-benzene	51	(45 - 135)			SW846 8270C
	49	(45 - 135)	3.7	(0-40)	SW846 8270C
Acenaphthene	75	(45 - 135)			SW846 8270C
	79	(45 - 135)	5.6	(0-40)	SW846 8270C
2,4-Dinitrotoluene	87	(45 - 135)			SW846 8270C
	91	(45 - 135)	5.2	(0-40)	SW846 8270C
Pyrene	85	(45 - 135)			SW846 8270C
	87	(45 - 135)	3.2	(0-40)	SW846 8270C
N-Nitrosodi-n-propyl-amine	84	(45 - 135)			SW846 8270C
	90	(45 - 135)	7.4	(0-40)	SW846 8270C
1,4-Dichlorobenzene	55	(45 - 135)			SW846 8270C
	47	(45 - 135)	15	(0-40)	SW846 8270C
Pentachlorophenol	49	(45 - 135)			SW846 8270C
	46	(45 - 135)	4.7	(0-40)	SW846 8270C
Phenol	69	(45 - 135)			SW846 8270C
	73	(45 - 135)	5.7	(0-40)	SW846 8270C
2-Chlorophenol	72	(45 - 135)			SW846 8270C
	75	(45 - 135)	4.4	(0-40)	SW846 8270C
4-Chloro-3-methylphenol	75	(45 - 135)			SW846 8270C
	83	(45 - 135)	10	(0-40)	SW846 8270C
4-Nitrophenol	87	(45 - 135)			SW846 8270C
	89	(45 - 135)	2.7	(0-40)	SW846 8270C
Acenaphthylene	78	(45 - 135)			SW846 8270C
	85	(45 - 135)	7.6	(0-40)	SW846 8270C
Anthracene	89	(45 - 135)			SW846 8270C
	96	(45 - 135)	7.1	(0-40)	SW846 8270C
Benzo(a)anthracene	81	(45 - 135)			SW846 8270C
	85	(45 - 135)	4.1	(0-40)	SW846 8270C
Benzo(b)fluoranthene	77	(45 - 135)			SW846 8270C
	80	(45 - 135)	4.5	(0-40)	SW846 8270C
Benzo(k)fluoranthene	82	(45 - 135)			SW846 8270C
	86	(45 - 135)	4.8	(0-40)	SW846 8270C
Benzo(ghi)perylene	88	(45 - 135)			SW846 8270C
	92	(45 - 135)	4.2	(0-40)	SW846 8270C
Benzo(a)pyrene	76	(45 - 135)			SW846 8270C
	81	(45 - 135)	5.7	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G140103 Work Order #...: LGE9E1AF-MS Matrix.....: WG
MS Lot-Sample #: A9G140103-002 LGE9E1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
bis(2-Chloroethoxy) methane	72	(45 - 135)			SW846 8270C
	79	(45 - 135)	10	(0-40)	SW846 8270C
bis(2-Chloroethyl)-ether	72	(45 - 135)			SW846 8270C
	75	(45 - 135)	3.7	(0-40)	SW846 8270C
bis(2-Chloroisopropyl) ether	61	(45 - 135)			SW846 8270C
	64	(45 - 135)	4.7	(0-40)	SW846 8270C
bis(2-Ethylhexyl) phthalate	92	(45 - 135)			SW846 8270C
	95	(45 - 135)	2.8	(0-40)	SW846 8270C
4-Bromophenyl phenyl ether	93	(45 - 135)			SW846 8270C
	99	(45 - 135)	5.5	(0-40)	SW846 8270C
Butyl benzyl phthalate	95	(45 - 135)			SW846 8270C
	98	(45 - 135)	3.1	(0-40)	SW846 8270C
Carbazole	86	(45 - 135)			SW846 8270C
	91	(45 - 135)	5.4	(0-40)	SW846 8270C
4-Chloroaniline	66	(45 - 135)			SW846 8270C
	67	(45 - 135)	2.1	(0-40)	SW846 8270C
2-Chloronaphthalene	71	(45 - 135)			SW846 8270C
	74	(45 - 135)	4.1	(0-40)	SW846 8270C
4-Chlorophenyl phenyl ether	76	(45 - 135)			SW846 8270C
	83	(45 - 135)	8.1	(0-40)	SW846 8270C
Chrysene	81	(45 - 135)			SW846 8270C
	87	(45 - 135)	7.1	(0-40)	SW846 8270C
Dibenz(a,h)anthracene	87	(45 - 135)			SW846 8270C
	95	(45 - 135)	7.9	(0-40)	SW846 8270C
Dibenzofuran	77	(45 - 135)			SW846 8270C
	85	(45 - 135)	9.5	(0-40)	SW846 8270C
Di-n-butyl phthalate	96	(45 - 135)			SW846 8270C
	103	(45 - 135)	7.0	(0-40)	SW846 8270C
1,2-Dichlorobenzene	53	(45 - 135)			SW846 8270C
	49	(45 - 135)	8.8	(0-40)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G140103 **Work Order #...:** LGE9E1AF-MS **Matrix.....:** WG
MS Lot-Sample #: A9G140103-002 LGE9E1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3-Dichlorobenzene	48	(45 - 135)			SW846 8270C
	43 a	(45 - 135)	11	(0-40)	SW846 8270C
3,3'-Dichlorobenzidine	58	(45 - 135)			SW846 8270C
	60	(45 - 135)	3.4	(0-40)	SW846 8270C
2,4-Dichlorophenol	73	(45 - 135)			SW846 8270C
	80	(45 - 135)	9.8	(0-40)	SW846 8270C
Diethyl phthalate	89	(45 - 135)			SW846 8270C
	98	(45 - 135)	9.6	(0-40)	SW846 8270C
2,4-Dimethylphenol	69	(45 - 135)			SW846 8270C
	76	(45 - 135)	9.8	(0-40)	SW846 8270C
Dimethyl phthalate	86	(45 - 135)			SW846 8270C
	94	(45 - 135)	8.8	(0-40)	SW846 8270C
4,6-Dinitro-2-methylphenol	67	(45 - 135)			SW846 8270C
	69	(45 - 135)	4.0	(0-40)	SW846 8270C
2,4-Dinitrophenol	47	(45 - 135)			SW846 8270C
	51	(45 - 135)	8.2	(0-40)	SW846 8270C
2,6-Dinitrotoluene	86	(45 - 135)			SW846 8270C
	94	(45 - 135)	9.4	(0-40)	SW846 8270C
Di-n-octyl phthalate	91	(45 - 135)			SW846 8270C
	96	(45 - 135)	6.0	(0-40)	SW846 8270C
Fluoranthene	90	(45 - 135)			SW846 8270C
	97	(45 - 135)	7.6	(0-40)	SW846 8270C
Fluorene	83	(45 - 135)			SW846 8270C
	87	(45 - 135)	4.7	(0-40)	SW846 8270C
Hexachlorobenzene	89	(45 - 135)			SW846 8270C
	95	(45 - 135)	6.2	(0-40)	SW846 8270C
Hexachlorobutadiene	37 a	(45 - 135)			SW846 8270C
	35 a	(45 - 135)	4.0	(0-40)	SW846 8270C
Hexachlorocyclopentadiene	37 a	(45 - 135)			SW846 8270C
	41 a	(45 - 135)	10	(0-40)	SW846 8270C
Hexachloroethane	37 a	(45 - 135)			SW846 8270C
	35 a	(45 - 135)	7.4	(0-40)	SW846 8270C
Indeno(1,2,3-cd)pyrene	88	(45 - 135)			SW846 8270C
	94	(45 - 135)	7.0	(0-40)	SW846 8270C
Isophorone	81	(45 - 135)			SW846 8270C
	88	(45 - 135)	7.4	(0-40)	SW846 8270C
2-Methylnaphthalene	70	(45 - 135)			SW846 8270C
	73	(45 - 135)	4.5	(0-40)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G140103 **Work Order #...:** LGE9E1AF-MS **Matrix.....:** WG
MS Lot-Sample #: A9G140103-002 LGE9E1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Methylphenol	74	(45 - 135)			SW846 8270C
	77	(45 - 135)	4.0	(0-40)	SW846 8270C
4-Methylphenol	73	(45 - 135)			SW846 8270C
	80	(45 - 135)	9.3	(0-40)	SW846 8270C
Naphthalene	66	(45 - 135)			SW846 8270C
	66	(45 - 135)	0.30	(0-40)	SW846 8270C
2-Nitroaniline	86	(45 - 135)			SW846 8270C
	93	(45 - 135)	8.4	(0-40)	SW846 8270C
3-Nitroaniline	77	(45 - 135)			SW846 8270C
	84	(45 - 135)	8.2	(0-50)	SW846 8270C
4-Nitroaniline	81	(45 - 135)			SW846 8270C
	89	(45 - 135)	8.7	(0-40)	SW846 8270C
Nitrobenzene	84	(45 - 135)			SW846 8270C
	88	(45 - 135)	4.7	(0-40)	SW846 8270C
2-Nitrophenol	70	(45 - 135)			SW846 8270C
	72	(45 - 135)	3.5	(0-40)	SW846 8270C
N-Nitrosodiphenylamine	81	(45 - 135)			SW846 8270C
	86	(45 - 135)	5.7	(0-40)	SW846 8270C
Phenanthrene	84	(45 - 135)			SW846 8270C
	93	(45 - 135)	9.3	(0-40)	SW846 8270C
2,4,5-Trichloro-phenol	77	(45 - 135)			SW846 8270C
	77	(45 - 135)	0.70	(0-40)	SW846 8270C
2,4,6-Trichloro-phenol	71	(45 - 135)			SW846 8270C
	75	(45 - 135)	5.2	(0-40)	SW846 8270C
Benzoic acid	71	(45 - 135)			SW846 8270C
	81	(45 - 135)	13	(0-40)	SW846 8270C
Benzyl alcohol	69	(45 - 135)			SW846 8270C
	77	(45 - 135)	9.9	(0-40)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	79	(50 - 150)
	79	(50 - 150)
2-Fluorobiphenyl	69	(50 - 150)
	69	(50 - 150)
Terphenyl-d14	100	(50 - 150)
	99	(50 - 150)

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G140103 **Work Order #...:** LGE9E1AF-MS **Matrix.....:** WG
MS Lot-Sample #: A9G140103-002 LGE9E1AG-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Phenol-d5	73	(50 - 150)
	74	(50 - 150)
2-Fluorophenol	71	(50 - 150)
	68	(50 - 150)
2,4,6-Tribromophenol	102	(50 - 150)
	106	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

Data File: \\cansvr11\dd\chem\MSS\a4hp7.i\90723a.b\7QCMRLCL.D Page 1
Report Date: 24-Jul-2009 07:38

TestAmerica North Canton

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: qcmrl
Level: LOW
Data Type: MS DATA
SpikeList File: qcmrl.spk
Sublist File: qcmrl.sub
Method File: \\cansvr11\dd\chem\MSS\a4hp7.i\90723a.b\8270C-625.m
Misc Info:

Client SDG: SDGa00278
Fraction: SV

Operator: 001710
SampleType: MRL
Quant Type: ISTD

7/23/09 @ 2251

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
82 Acenaphthene	10.000	8.9244	89.24	70-130
79 Acenaphthylene	10.000	9.2296	92.30	70-130
116 Anthracene	10.000	9.7885	97.88	70-130
136 Benzo(a)Anthracene	10.000	9.0876	90.88	70-130
141 Benzo(b)fluoranthe	10.000	8.3384	83.38	70-130
151 Benzo(g,h,i)peryle	10.000	9.2462	92.46	70-130
146 Benzo(a)pyrene	10.000	8.9824	89.82	70-130
29 Benzyl Alcohol	10.000	7.6848	76.85	70-130
44 bis(2-Chloroethoxy	10.000	8.2881	82.88	70-130
23 bis(2-Chloroethyl)	10.000	9.4532	94.53	70-130
31 bis(2-Chloroisopro	10.000	7.1981	71.98	70-130
139 bis(2-ethylhexyl)P	10.000	9.7952	97.95	70-130
106 4-Bromophenyl-phen	10.000	10.367	103.67	70-130
131 Butylbenzylphthala	10.000	10.093	100.93	70-130
52 4-Chloroaniline	10.000	8.4038	84.04	70-130
70 2-Chloronaphthalen	10.000	8.6680	86.68	70-130
95 4-Chlorophenyl-phe	10.000	8.9613	89.61	70-130
137 Chrysene	10.000	8.6472	86.47	70-130
150 Dibenz(a,h)anthrac	10.000	9.8875	98.88	70-130
86 Dibenzofuran	10.000	9.2322	92.32	70-130
120 Di-n-Butylphthalat	10.000	10.187	101.87	70-130
28 1,2-Dichlorobenzen	10.000	9.2232	92.23	70-130
26 1,3-Dichlorobenzen	10.000	9.5221	95.22	70-130
27 1,4-Dichlorobenzen	10.000	10.032	100.32	70-130
135 3,3'-Dichlorobenzi	10.000	8.7842	87.84	70-130
93 Diethylphthalate	10.000	9.9594	99.59	70-130
76 Dimethylphthalate	10.000	9.3024	93.02	70-130
87 2,4-Dinitrotoluene	10.000	9.2733	92.73	70-130
78 2,6-Dinitrotoluene	10.000	9.3284	93.28	70-130
140 Di-n-octylphthalat	10.000	9.6390	96.39	70-130
123 Fluoranthene	10.000	9.5560	95.56	70-130
94 Fluorene	10.000	9.3263	93.26	70-130
107 Hexachlorobenzene	10.000	10.158	101.58	70-130
56 Hexachlorobutadien	10.000	9.4342	94.34	70-130
64 Hexachlorocyclopen	10.000	8.1237	81.24	70-130
34 Hexachloroethane	10.000	9.2192	92.19	70-130
149 Indeno(1,2,3-cd)py	10.000	9.5539	95.54	70-130
41 Isophorone	10.000	9.3920	93.92	70-130

63 1-Methylnaphthalen	10.000	9.3689	93.69	70-130
62 2-Methylnaphthalen	10.000	9.2979	92.98	70-130

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
51 Naphthalene	10.000	8.6671	86.67	70-130
73 2-Nitroaniline	10.000	9.5457	95.46	70-130
81 3-Nitroaniline	10.000	8.5992	85.99	70-130
96 4-Nitroaniline	10.000	8.6950	86.95	70-130
35 Nitrobenzene	10.000	10.003	100.03	70-130
32 N-Nitroso-di-n-pro	10.000	10.298	102.98	70-130
99 N-Nitrosodiphenyla	10.000	8.9162	89.16	70-130
115 Phenanthrene	10.000	9.6110	96.11	70-130
125 Pyrene	10.000	8.9972	89.97	70-130
50 1,2,4-Trichloroben	10.000	9.2741	92.74	70-130
49 Benzoic Acid	20.000	16.246	81.23	70-130
59 4-Chloro-3-Methylp	10.000	9.2033	92.03	70-130
24 2-Chlorophenol	10.000	9.4559	94.56	70-130
48 2,4-Dichlorophenol	10.000	8.9806	89.81	70-130
43 2,4-Dimethylphenol	10.000	9.5104	95.10	70-130
98 4,6-Dinitro-2-meth	10.000	7.6858	76.86	70-130
83 2,4-Dinitrophenol	20.000	13.418	67.09	70-130
30 2-Methylphenol	10.000	9.3704	93.70	70-130
192 4-Methylphenol	10.000	8.7834	87.83	70-130
42 2-Nitrophenol	10.000	8.9628	89.63	70-130
85 4-Nitrophenol	10.000	10.715	107.15	70-130
111 Pentachlorophenol	20.000	17.354	86.77	70-130
22 Phenol	10.000	8.8070	88.07	70-130
67 2,4,5-Trichlorophe	10.000	8.9481	89.48	70-130
66 2,4,6-Trichlorophe	10.000	8.5186	85.19	70-130
119 Carbazole	10.000	9.3068	93.07	70-130
142 Benzo(k)fluoranthe	10.000	9.2183	92.18	70-130
37 Acetophenone	10.000	9.7430	97.43	70-130
209 Benzaldehyde	10.000	11.110	111.10	70-130
210 Caprolactam	10.000	8.0956	80.96	70-130
211 1,1'-Biphenyl	10.000	8.9604	89.60	70-130
212 Atrazine	10.000	9.6793	96.79	70-130
21 Aniline	10.000	8.4064	84.06	70-130
10 N-Nitrosodimethyla	10.000	7.9285	79.29	70-130
80 1,2-Dinitrobenzene	10.000	8.7551	87.55	70-130
91 2,3,5,6-Tetrachlor	10.000	9.1301	91.30	70-130

TestAmerica North Canton

Semivolatile REPORT SW-846 Method 8270

Data file : \\cansvr11\dd\chem\MSS\a4hp7.i\90729a.b\7QCMRL.D
Lab Smp Id: qcmrl
Inj Date : 29-JUL-2009 13:43
Operator : 001710 Inst ID: a4hp7.i
Smp Info : qcmrl,90729a.b,8270C-625,1-827042d.sub
Misc Info :
Comment :
Method : \\cansvr11\dd\chem\MSS\a4hp7.i\90729a.b\8270C-625.m
Meth Date : 29-Jul-2009 14:05 ulmanm Quant Type: ISTD
Cal Date : 29-JUL-2009 11:23 Cal File: 7SML0729.D
Als bottle: 12 QC Sample: mrl
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: qcmrl.sub
Target Version: 4.14
Processing Host: CANPMSSV06

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	2000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	0.50000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 1 1,4-Dichlorobenzene-d4	152	3.589	3.583	(1.000)	369668	2.00000	
* 2 Naphthalene-d8	136	4.482	4.482	(1.000)	1548319	2.00000	
* 3 Acenaphthene-d10	164	5.749	5.749	(1.000)	805279	2.00000	
* 4 Phenanthrene-d10	188	6.835	6.835	(1.000)	1289571	2.00000	
* 5 Chrysene-d12	240	8.830	8.820	(1.000)	1144477	2.00000	
* 6 Perylene-d12	264	10.328	10.323	(1.000)	1052741	2.00000	
9 Pyridine	79	1.989	1.989	(0.554)	965230	2.38084	9.5234
10 N-Nitrosodimethylamine	74	1.957	1.963	(0.545)	559754	2.40607	9.6243
11 Ethyl methacrylate	69	2.187	2.187	(0.610)	843527	2.39377	9.5751
12 3-Chloropropionitrile	54	2.364	2.364	(0.659)	425021	2.36649	9.4659
13 Malononitrile	66	2.503	2.503	(0.697)	1146379	2.41018	9.6407
209 Benzaldehyde	77	3.294	3.300	(0.918)	605797	2.37322	9.4929
21 Aniline	93	3.359	3.359	(0.936)	1528536	2.31402	9.2561
22 Phenol	94	3.294	3.294	(0.918)	1118991	2.35250	9.4100
23 bis(2-Chloroethyl)ether	93	3.380	3.380	(0.942)	851545	2.23340	8.9336
24 2-Chlorophenol	128	3.444	3.444	(0.960)	671399	2.36775	9.4710
26 1,3-Dichlorobenzene	146	3.551	3.551	(0.990)	644712	2.36688	9.4675
27 1,4-Dichlorobenzene	146	3.599	3.599	(1.003)	605895	2.34631	9.3852

28 1,2-Dichlorobenzene	146	3.706	3.706 (1.033)	615014	2.36967	9.4787
29 Benzyl Alcohol	108	3.653	3.658 (1.018)	489935	2.36808	9.4723

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)
30 2-Methylphenol	108	3.712	3.712	(1.034)	735144	2.33487	9.3395
31 bis(2-Chloroisopropyl)ether	45	3.744	3.744	(1.043)	1008787	2.36568	9.4627
37 Acetophenone	105	3.851	3.851	(1.073)	1025690	2.33789	9.3516
32 N-Nitroso-di-n-propylamine	70	3.835	3.840	(1.069)	714784	2.41112	9.6445
192 4-Methylphenol	108	3.813	3.813	(1.063)	782782	2.36255	9.4502
34 Hexachloroethane	117	3.947	3.947	(1.100)	263710	2.38865	9.5546
35 Nitrobenzene	77	3.974	3.979	(0.887)	948915	2.34544	9.3818
41 Isophorone	82	4.134	4.140	(0.922)	1748908	2.44778	9.7911
42 2-Nitrophenol	139	4.198	4.198	(0.937)	345526	2.42942	9.7177
43 2,4-Dimethylphenol	107	4.193	4.193	(0.936)	817949	2.38083	9.5233
44 bis(2-Chloroethoxy)methane	93	4.262	4.263	(0.951)	972093	2.34504	9.3801
46 2,4-Toluenediamene	121	5.295	5.300	(1.181)	208500	2.36050	9.4420
47 1,3,5-Trichlorobenzene	180	4.209	4.209	(0.939)	616257	2.37668	9.5067
48 2,4-Dichlorophenol	162	4.359	4.364	(0.973)	496555	2.42430	9.6972
49 Benzoic Acid	122	4.241	4.268	(0.946)	599876	4.60978	[redacted] (QM)
50 1,2,4-Trichlorobenzene	180	4.428	4.428	(0.988)	530525	2.34105	9.3642
51 Naphthalene	128	4.498	4.498	(1.004)	1992769	2.34693	9.3877(Q)
52 4-Chloroaniline	127	4.514	4.514	(1.007)	822711	2.23738	8.9495
56 Hexachlorobutadiene	225	4.567	4.567	(1.019)	266324	2.35320	9.4128
210 Caprolactam	113	4.755	4.771	(1.061)	227513	2.47393	9.8957
57 1,2,3-Trichlorobenzene	180	4.594	4.594	(1.025)	484204	2.31296	9.2518
59 4-Chloro-3-Methylphenol	107	4.835	4.835	(1.079)	687513	2.39416	9.5766
62 2-Methylnaphthalene	142	4.985	4.990	(1.112)	1188615	2.38227	9.5291
63 1-Methylnaphthalene	142	5.059	5.065	(1.129)	1194110	2.37645	9.5058
64 Hexachlorocyclopentadiene	237	5.097	5.097	(0.887)	280192	2.26456	9.0582
66 2,4,6-Trichlorophenol	196	5.177	5.177	(0.900)	329935	2.38468	9.5387
67 2,4,5-Trichlorophenol	196	5.204	5.209	(0.905)	355869	2.33270	9.3308
211 1,1'-Biphenyl	154	5.316	5.316	(0.925)	1465238	2.41914	9.6766
68 1,2,3,5-Tetrachlorobenzene	216	5.097	5.097	(0.887)	476145	2.35414	9.4166
70 2-Chloronaphthalene	162	5.343	5.343	(0.929)	1085387	2.29775	9.1910
73 2-Nitroaniline	65	5.396	5.402	(0.939)	507626	2.45801	9.8320
74 1,2,3,4-Tetrachlorobenzene	216	5.316	5.316	(0.925)	448228	2.36243	9.4497
76 Dimethylphthalate	163	5.509	5.514	(0.958)	1219375	2.35351	9.4140
78 2,6-Dinitrotoluene	165	5.562	5.568	(0.967)	280320	2.44447	9.7779
79 Acenaphthylene	152	5.648	5.653	(0.982)	1884833	2.56313	10.252
80 1,2-Dinitrobenzene	168	5.610	5.616	(0.976)	136529	2.33802	9.3521
81 3-Nitroaniline	138	5.691	5.696	(0.990)	332634	2.42595	9.7038
82 Acenaphthene	153	5.771	5.776	(1.004)	1131730	2.35488	9.4195
83 2,4-Dinitrophenol	184	5.771	5.771	(1.004)	275269	4.59639	[redacted]
85 4-Nitrophenol	109	5.787	5.787	(1.007)	171878	2.12627	8.5051
86 Dibenzofuran	168	5.894	5.899	(1.025)	1547297	2.41494	9.6598
87 2,4-Dinitrotoluene	165	5.856	5.862	(1.019)	377033	2.47676	9.9070
91 2,3,5,6-Tetrachlorophenol	232	5.942	5.942	(1.033)	259332	2.26757	9.0703
93 Diethylphthalate	149	6.017	6.017	(1.047)	1270912	2.42213	9.6885
94 Fluorene	166	6.145	6.145	(1.069)	1286352	2.36055	9.4422
95 4-Chlorophenyl-phenylether	204	6.124	6.129	(1.065)	582680	2.32600	9.3040
96 4-Nitroaniline	138	6.140	6.145	(1.068)	350315	2.39419	9.5768
98 4,6-Dinitro-2-methylphenol	198	6.156	6.161	(0.901)	188375	2.24744	8.9897
99 N-Nitrosodiphenylamine	169	6.209	6.209	(0.908)	967935	2.41184	9.6474
100 1,2-Diphenylhydrazine	77	6.241	6.242	(0.913)	2067624	2.59458	10.378
106 4-Bromophenyl-phenylether	248	6.487	6.488	(0.949)	317936	2.43493	9.7397
107 Hexachlorobenzene	284	6.546	6.552	(0.958)	284885	2.29396	9.1758

212 Atrazine	200	6.568	6.573 (0.961)	263623	2.51775	10.071
111 Pentachlorophenol	266	6.685	6.685 (0.978)	340158	4.38080	[illegible]

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
115 Phenanthrene	178	6.851	6.857	(1.002)	1855839	2.38423	9.5369
116 Anthracene	178	6.889	6.894	(1.008)	1869146	2.50626	10.025
119 Carbazole	167	6.990	6.996	(1.023)	1772552	2.47613	9.9045
120 Di-n-Butylphthalate	149	7.199	7.199	(1.053)	2173035	2.73404	10.936
123 Fluoranthene	202	7.728	7.728	(1.131)	1882908	2.48271	9.9308
124 Benzidine	184	7.798	7.798	(0.883)	1069081	2.34541	9.3816
125 Pyrene	202	7.905	7.905	(0.895)	2015718	2.42227	9.6891
131 Butylbenzylphthalate	149	8.322	8.317	(0.942)	932204	2.48936	9.9574
133 3,3'-Dimethoxybenzidine	244	8.729	8.723	(0.988)	354301	2.41533	9.6613
135 3,3'-Dichlorobenzidine	252	8.766	8.761	(0.993)	707516	2.42927	9.7171
136 Benzo(a)Anthracene	228	8.819	8.814	(0.999)	1902453	2.40480	9.6192
137 Chrysene	228	8.852	8.846	(1.002)	1816717	2.38392	9.5357
138 4,4'-Methylene bis(o-chloroan	231	8.766	8.755	(0.993)	352818	2.45430	9.8172
139 bis(2-ethylhexyl)Phthalate	149	8.745	8.734	(0.990)	1322581	2.49714	9.9885
140 Di-n-octylphthalate	149	9.317	9.306	(0.902)	2122840	2.68466	10.739
141 Benzo(b)fluoranthene	252	9.862	9.852	(0.955)	1700840	2.26454	9.0581
142 Benzo(k)flnoranthene	252	9.889	9.884	(0.958)	1893680	2.53945	10.158
146 Benzo(a)pyrene	252	10.264	10.258	(0.994)	1637409	2.42338	9.6935
149 Indeno(1,2,3-cd)pyrene	276	11.970	11.970	(1.159)	1835542	2.54278	10.171
150 Dibenz(a,h)anthracene	278	11.981	11.986	(1.160)	1515614	2.52184	10.087
151 Benzo(g,h,i)perylene	276	12.473	12.473	(1.208)	1474490	2.44686	9.7874
198 1,4-Dioxane	88	1.786	1.786	(0.498)	331022	2.35459	9.4184
101 Diphenylamine	169	6.209	6.209	(0.908)	967935	2.41184	9.6474

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

TestAmerica North Canton

Semivolatile REPORT SW-846 Method 8270

Data file : \\cansvr11\dd\chem\MSS\a4hp7.i\90729a.b\7QCMRLCL.D
Lab Smp Id: qcmrl
Inj Date : 29-JUL-2009 20:14
Operator : 001710 Inst ID: a4hp7.i
Smp Info : qcmrl,90729a.b,8270C-625,1-827042d.sub
Misc Info :
Comment :
Method : \\cansvr11\dd\chem\MSS\a4hp7.i\90729a.b\8270C-625.m
Meth Date : 29-Jul-2009 14:17 ulmanm Quant Type: ISTD
Cal Date : 29-JUL-2009 10:17 Cal File: 7SMH0729.D
Als bottle: 31 QC Sample: mrl
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: qcmrl.sub
Target Version: 4.14
Processing Host: CANPMSSV06

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	2000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	0.50000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 1 1,4-Dichlorobenzene-d4	152	3.583	3.589	(1.000)	491619	2.00000	
* 2 Naphthalene-d8	136	4.482	4.482	(1.000)	2057492	2.00000	
* 3 Acenaphthene-d10	164	5.749	5.750	(1.000)	1071878	2.00000	
* 4 Phenanthrene-d10	188	6.835	6.835	(1.000)	1767101	2.00000	
* 5 Chrysene-d12	240	8.814	8.820	(1.000)	1552296	2.00000	
* 6 Perylene-d12	264	10.312	10.317	(1.000)	1454248	2.00000	
9 Pyridine	79	1.989	1.989	(0.555)	1220626	2.26394	9.0558
10 N-Nitrosodimethylamine	74	1.957	1.963	(0.546)	715671	2.31317	9.2527
11 Ethyl methacrylate	69	2.187	2.187	(0.610)	1066176	2.27508	9.1003
12 3-Chloropropionitrile	54	2.364	2.364	(0.660)	551359	2.30840	9.2336
13 Malononitrile	66	2.503	2.503	(0.699)	1500372	2.37194	9.4877
209 Benzaldehyde	77	3.294	3.300	(0.919)	858197	2.59988	10.400
21 Aniline	93	3.359	3.359	(0.937)	1989845	2.26514	9.0605
22 Phenol	94	3.294	3.294	(0.919)	1467129	2.31929	9.2771
23 bis(2-Chloroethyl)ether	93	3.380	3.380	(0.943)	1104421	2.17810	8.7124
24 2-Chlorophenol	128	3.439	3.444	(0.960)	878055	2.32842	9.3137
26 1,3-Dichlorobenzene	146	3.551	3.551	(0.991)	842506	2.32577	9.3031
27 1,4-Dichlorobenzene	146	3.599	3.599	(1.004)	777749	2.26470	9.0588

28 1,2-Dichlorobenzene	146	3.706	3.706 (1.034)	810319	2.34770	9.3908
29 Benzyl Alcohol	108	3.653	3.658 (1.019)	653258	2.37425	9.4970

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
30	2-Methylphenol	108	3.712	3.712	(1.036)	1021388	2.43929	9.7572
31	bis(2-Chloroisopropyl)ether	45	3.738	3.744	(1.043)	1414316	2.49394	9.9757
37	Acetophenone	105	3.851	3.851	(1.075)	1385969	2.37545	9.5018
32	N-Nitroso-di-n-propylamine	70	3.835	3.840	(1.070)	946589	2.40098	9.6039
192	4-Methylphenol	108	3.813	3.813	(1.064)	1044715	2.37094	9.4838
34	Hexachloroethane	117	3.942	3.947	(1.100)	351611	2.39481	9.5792
35	Nitrobenzene	77	3.974	3.979	(0.887)	1277146	2.37553	9.5021
41	Isophorone	82	4.134	4.140	(0.922)	2393433	2.52086	10.083
42	2-Nitrophenol	139	4.198	4.198	(0.937)	462829	2.44887	9.7955
43	2,4-Dimethylphenol	107	4.193	4.193	(0.936)	1100510	2.41057	9.6423
44	bis(2-Chloroethoxy)methane	93	4.263	4.263	(0.951)	1300863	2.36154	9.4462
46	2,4-Toluenediamene	121	5.295	5.300	(1.181)	321312	2.78202	11.128
47	1,3,5-Trichlorobenzene	180	4.204	4.209	(0.938)	828619	2.40484	9.6193
48	2,4-Dichlorophenol	162	4.359	4.364	(0.973)	650192	2.38882	9.5553
49	Benzoic Acid	122	4.241	4.263	(0.946)	911974	5.07906	[illegible]
50	1,2,4-Trichlorobenzene	180	4.428	4.434	(0.988)	708426	2.35245	9.4098
51	Naphthalene	128	4.493	4.498	(1.002)	2672880	2.36890	9.4756
52	4-Chloroaniline	127	4.509	4.514	(1.006)	1063441	2.17635	8.7054
56	Hexachlorobutadiene	225	4.567	4.567	(1.019)	354992	2.36042	9.4417
210	Caprolactam	113	4.755	4.765	(1.061)	306814	2.51061	10.042
57	1,2,3-Trichlorobenzene	180	4.594	4.594	(1.025)	663706	2.38582	9.5433
59	4-Chloro-3-Methylphenol	107	4.835	4.835	(1.079)	873730	2.28966	9.1586
62	2-Methylnaphthalene	142	4.985	4.990	(1.112)	1571278	2.36987	9.4795
63	1-Methylnaphthalene	142	5.060	5.065	(1.129)	1582843	2.37052	9.4821
64	Hexachlorocyclopentadiene	237	5.092	5.097	(0.886)	395879	2.40376	9.6150
66	2,4,6-Trichlorophenol	196	5.177	5.177	(0.900)	439392	2.38591	9.5436
67	2,4,5-Trichlorophenol	196	5.204	5.209	(0.905)	505697	2.49035	9.9614
211	1,1'-Biphenyl	154	5.316	5.316	(0.925)	1957946	2.42860	9.7144
68	1,2,3,5-Tetrachlorobenzene	216	5.097	5.097	(0.887)	643958	2.39195	9.5678
70	2-Chloronaphthalene	162	5.343	5.343	(0.929)	1444949	2.29811	9.1924
73	2-Nitroaniline	65	5.396	5.402	(0.939)	663321	2.41304	9.6522
74	1,2,3,4-Tetrachlorobenzene	216	5.316	5.316	(0.925)	605808	2.39881	9.5952
76	Dimethylphthalate	163	5.509	5.514	(0.958)	1657302	2.40316	9.6126
78	2,6-Dinitrotoluene	165	5.562	5.568	(0.967)	374235	2.45175	9.8070
79	Acenaphthylene	152	5.648	5.653	(0.982)	2517544	2.57202	10.288
80	1,2-Dinitrobenzene	168	5.610	5.616	(0.976)	182227	2.34443	9.3777
81	3-Nitroaniline	138	5.691	5.696	(0.990)	434970	2.38328	9.5331
82	Acenaphthene	153	5.771	5.776	(1.004)	1547683	2.41940	9.6776
83	2,4-Dinitrophenol	184	5.766	5.771	(1.003)	392250	4.82543	[illegible]
85	4-Nitrophenol	109	5.782	5.787	(1.006)	232308	2.15905	8.6362
86	Dibenzofuran	168	5.894	5.899	(1.025)	2082556	2.44191	9.7676
87	2,4-Dinitrotoluene	165	5.856	5.862	(1.019)	510107	2.51749	10.070
91	2,3,5,6-Tetrachlorophenol	232	5.942	5.942	(1.033)	347423	2.28226	9.1290
93	Diethylphthalate	149	6.017	6.017	(1.047)	1696034	2.42839	9.7136
94	Fluorene	166	6.145	6.145	(1.069)	1742057	2.40169	9.6068
95	4-Chlorophenyl-phenylether	204	6.124	6.129	(1.065)	780220	2.33990	9.3596
96	4-Nitroaniline	138	6.140	6.140	(1.068)	470609	2.41636	9.6654
98	4,6-Dinitro-2-methylphenol	198	6.156	6.161	(0.901)	267168	2.30937	9.2375
99	N-Nitrosodiphenylamine	169	6.204	6.209	(0.908)	1290246	2.34617	9.3847
100	1,2-Diphenylhydrazine	77	6.242	6.242	(0.913)	2799470	2.56363	10.254
106	4-Bromophenyl-phenylether	248	6.482	6.488	(0.948)	425040	2.37553	9.5021
107	Hexachlorobenzene	284	6.546	6.552	(0.958)	405786	2.38449	9.5380

212 Atrazine	200	6.568	6.573 (0.961)	359089	2.50274	10.011
111 Pentachlorophenol	266	6.680	6.686 (0.977)	502200	4.67630	[illegible]

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
115 Phenanthrene	178	6.851	6.851	(1.002)	2557448	2.39773	9.5909
116 Anthracene	178	6.889	6.894	(1.008)	2514794	2.46076	9.8430
119 Carbazole	167	6.990	6.990	(1.023)	2441116	2.48855	9.9542
120 Di-n-Butylphthalate	149	7.194	7.199	(1.052)	2952644	2.71103	10.844
123 Fluoranthene	202	7.723	7.729	(1.130)	2567085	2.47013	9.8805
124 Benzidine	184	7.793	7.793	(0.884)	1379041	2.23058	8.9223
125 Pyrene	202	7.900	7.900	(0.896)	2699176	2.39143	9.5657
131 Butylbenzylphthalate	149	8.311	8.317	(0.943)	1279310	2.51875	10.075
133 3,3'-Dimethoxybenzidine	244	8.713	8.718	(0.988)	470291	2.36376	9.4550
135 3,3'-Dichlorobenzidine	252	8.755	8.761	(0.993)	939535	2.37840	9.5136
136 Benzo(a)Anthracene	228	8.804	8.809	(0.999)	2618610	2.44044	9.7618
137 Chrysene	228	8.836	8.841	(1.002)	2570636	2.48701	9.9480
138 4,4'-Methylene bis(o-chloroan	231	8.750	8.755	(0.993)	479147	2.45741	9.8296
139 bis(2-ethylhexyl)Phthalate	149	8.729	8.739	(0.990)	1837345	2.55766	10.231
140 Di-n-octylphthalate	149	9.296	9.306	(0.901)	3000400	2.74684	10.987
141 Benzo(b)fluoranthene	252	9.841	9.852	(0.954)	2353512	2.26838	9.0735
142 Benzo(k)fluoranthene	252	9.873	9.884	(0.957)	2561563	2.48669	9.9468
146 Benzo(a)pyrene	252	10.242	10.253	(0.993)	2212553	2.37051	9.4820
149 Indeno(1,2,3-cd)pyrene	276	11.943	11.965	(1.158)	2505441	2.51254	10.050
150 Dibenz(a,h)anthracene	278	11.959	11.975	(1.160)	2038116	2.45494	9.8198
151 Benzo(g,h,i)perylene	276	12.446	12.467	(1.207)	2036609	2.44658	9.7863
198 1,4-Dioxane	88	1.786	1.786	(0.499)	405017	2.16628	8.6651
101 Diphenylamine	169	6.204	6.209	(0.908)	1290246	2.34617	9.3847

QC Flag Legend

Q - Qualifier signal failed the ratio test.

PESTICIDE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 24, 2009

SDG: A9G140103 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.4 - 4.4 °C. Upon receipt, it was documented by the laboratory, that the samples were not frozen and in good condition. Therefore, no qualifications were made to sample results based on temperatures less than 2°C.	QAPP Table 4-2, NELAC
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-5
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-5
7. Was a DDT standard analyzed every 12 hours? Was the DDT %breakdown < 15%?	✓				LCG Table 4 >15%=J/R
8. Was an endrin standard analyzed every 12 hours? Was endrin %breakdown <15%?	✓				LCG Table 4 >15%=J/R
9. Does the initial calibration curve consist of 5 concentration levels?	✓			Instrument A2HP3 7/07/09, 7/17/09 stds = 0.05, 0.25, 0.50, 1.0, 2.5, 5.0, 7.5, 10.0, 12.5 ng on column	LCG Table 4 R
10. Were the %RSDs for each analyte ≤ 20%? OR was the average %RSD ≤ 20% with the r^2 >0.990?	✓				LCG Table 4 RSD>20% or r<0.99=J/R
11. Was a blank run prior to the initial calibration?			✓	No data provided to evaluate.	
12. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓			7/18/09	LCG Table 4 R
13. Was a MRL Verification performed at the beginning and end of the sequence or every 12 hours with results 70-130%?	✓				LCG Table 4 >130%=J; 65-70%%=J/UJ; <65%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 24, 2009

SDG: A9G140103 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
14. Was a second source (ICV) verification analyzed after the ICAL? Were results 85-115%?	✓			7/20/09@1308	LCG Table 4 >115%=J; 80-85%=J/UJ; <80%=J/R
15. Was a CCV run every 12 hours?	✓				LCG Table 4
16. Was the %D for all target analytes ≤15%? OR was the average %D ≤ 15% with no individual analyte >30%?		✓		The avg %D for the tox CCV analyzed on 7/20/09 @1442 and on the primary column was above limits at 20.8%. No qualifications were made as there were no detected toxaphene concentrations.	LCG Table 4 D>30% (neg) =J/R D>30% (pos) = J
17. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 4
18. Were target analytes < ½ the MRL?	✓				LCG Table 4 <5x=B
20. Was a field blank collected and analyzed?	✓			FWGEQUIPRinse1-1366-GW	
20. Were target analytes in the field blank analyses (equipment) <1/2 the MRL?	✓				<5x =B
21. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 4
22. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR.	LCG Appendix C >UL=J; 30%-LL=J/UJ; <30%=J/R
23. Was a MS/MSD pair prepared with each batch?	✓				LCG Table 4
24. Was the MS/MSD parent a Ravenna sample?	✓			Sample FWGLL7mw-003c-1372-GW was the parent MS/MSD sample from this SDG.	
25. Were MS/MSD recoveries 40-140% and RPD ≤20%?	✓			Checked by ADR	*Was QAPP Table 3-2*, Pj
26. Were surrogate recoveries 50-150%?		✓		The surrogate, DCB, recovered below control limits in samples FWGLL6mw-005c-1367-GW, FWGLL7mw-001c-1370-GW, FWGLL7mw-003c-1372-GW, FWGLL7mw-004c-1373-GW, FWGLL7mw-005c-1374-GW and FWGLL7mw-DUP1-1413-GW. The associated results were qualified as estimated, "UJ".	LCG Table 4 >150%=J; 10% -50%=J/UJ; <10%=J/R
27. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓			Sample FWGLL7mw-DUP1-1413-GW was the field duplicate for sample FWGLL7mw-006c-13775-GW.	QAPP Table 3-2 RPD >30=J

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 24, 2009

SDG: A9G140103 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
28. Were all positive results verified by a second column confirmation? Were the RPD's ≤ 40?	✓			Only detected concentrations above the RL were evaluated.	LCG Table 4 >40 RPD=J
29. Were reported sample concentrations within calibration range?	✓				
30. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
31. Were lab comments included in report? If yes, summarize contents.	✓			See narrative.	

References:

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 4 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-003C-1372-GW

GC Semivolatiles

Lot-Sample #...:	A9G140103-002	**Work Order #...:**	LGE9E1AH	**Matrix.....:**	WG
Date Sampled...:	07/13/09 12:05	**Date Received..:**	07/14/09		
Prep Date.....:	07/14/09	**Analysis Date..:**	07/21/09		
Prep Batch #...:	9195068				
Dilution Factor:	1	**Initial Wgt/Vol:**	1050 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8081A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	74	(50 - 150)
Decachlorobiphenyl	23 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-001C-1370-GW

GC Semivolatiles

Lot-Sample #...: A9G140103-004 **Work Order #...:** LGE9G1AD **Matrix.....:** WG
Date Sampled...: 07/13/09 14:45 **Date Received..:** 07/14/09
Prep Date.....: 07/14/09 **Analysis Date..:** 07/21/09
Prep Batch #...: 9195068
Dilution Factor: 1 **Initial Wgt/Vol:** 1040 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	91	(50 - 150)
Decachlorobiphenyl	44 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-007C-1369-GW

GC Semivolatiles

Lot-Sample #...: A9G140103-006 **Work Order #...:** LGE9J1AD **Matrix.....:** WG
Date Sampled...: 07/13/09 17:20 **Date Received..:** 07/14/09
Prep Date.....: 07/14/09 **Analysis Date..:** 07/21/09
Prep Batch #...: 9195068
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	89	(50 - 150)
Decachlorobiphenyl	54	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-006C-1375-GW

GC Semivolatiles

Lot-Sample #...: A9G140103-009 **Work Order #...:** LGE9M1AD **Matrix.....:** WG
Date Sampled...: 07/13/09 12:00 **Date Received..:** 07/14/09
Prep Date.....: 07/14/09 **Analysis Date..:** 07/21/09
Prep Batch #...: 9195068
Dilution Factor: 1 **Initial Wgt/Vol:** 960 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	**0.017 J**	**0.030**	**ug/L**	**0.0084**
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	85	(50 - 150)
Decachlorobiphenyl	56	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-DUP1-1413-GW

GC Semivolatiles

Lot-Sample #...: A9G140103-011 **Work Order #...:** LGE9P1AD **Matrix.....:** WG
Date Sampled...: 07/13/09 13:00 **Date Received..:** 07/14/09
Prep Date.....: 07/14/09 **Analysis Date..:** 07/21/09
Prep Batch #...: 9195068
Dilution Factor: 1 **Initial Wgt/Vol:** 1020 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	88	(50 - 150)
Decachlorobiphenyl	43 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-004C-1373-GW

GC Semivolatiles

Lot-Sample #...:	A9G140103-013	**Work Order #...:**	LGE9R1AD	**Matrix.....:**	WG
Date Sampled...:	07/13/09 14:00	**Date Received..:**	07/14/09		
Prep Date.....:	07/14/09	**Analysis Date..:**	07/21/09		
Prep Batch #...:	9195068				
Dilution Factor:	1	**Initial Wgt/Vol:**	960 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8081A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	**0.022 J**	**0.030**	**ug/L**	**0.0084**
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	96	(50 - 150)
Decachlorobiphenyl	47 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-002C-1371-GW

GC Semivolatiles

Lot-Sample #...: A9G140103-015 **Work Order #...:** LGE9W1AD **Matrix.....:** WG
Date Sampled...: 07/13/09 15:10 **Date Received..:** 07/14/09
Prep Date.....: 07/14/09 **Analysis Date..:** 07/21/09
Prep Batch #...: 9195068
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	**0.027 J**	**0.030**	**ug/L**	**0.0084**
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	93	(50 - 150)
Decachlorobiphenyl	92	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-005C-1367-GW

GC Semivolatiles

Lot-Sample #...:	A9G140103-017	**Work Order #...:**	LGE901AD	**Matrix.....:**	WG
Date Sampled...:	07/13/09 16:30	**Date Received..:**	07/14/09		
Prep Date.....:	07/14/09	**Analysis Date..:**	07/21/09		
Prep Batch #...:	9195068				
Dilution Factor:	1	**Initial Wgt/Vol:**	1000 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8081A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	89	(50 - 150)
Decachlorobiphenyl	37 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1423-GW

GC Semivolatiles

Lot-Sample #...: A9G140103-019 **Work Order #...:** LGE931AD **Matrix.....:** WQ
Date Sampled...: 07/13/09 17:30 **Date Received..:** 07/14/09
Prep Date.....: 07/14/09 **Analysis Date..:** 07/21/09
Prep Batch #...: 9195068
Dilution Factor: 1 **Initial Wgt/Vol:** 930 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	93	(50 - 150)
Decachlorobiphenyl	80	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-005C-1374-GW

GC Semivolatiles

Lot-Sample #...: A9G140103-021 **Work Order #...:** LGFAD1AD **Matrix.....:** WG
Date Sampled...: 07/13/09 12:20 **Date Received..:** 07/14/09
Prep Date.....: 07/14/09 **Analysis Date..:** 07/21/09
Prep Batch #...: 9195068
Dilution Factor: 1 **Initial Wgt/Vol:** 970 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	91	(50 - 150)
Decachlorobiphenyl	42 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-006C-1368-GW

GC Semivolatiles

Lot-Sample #...: A9G140103-023 **Work Order #...:** LGFAG1AD **Matrix.....:** WG
Date Sampled...: 07/13/09 16:10 **Date Received..:** 07/14/09
Prep Date.....: 07/14/09 **Analysis Date..:** 07/21/09
Prep Batch #...: 9195068
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	85	(50 - 150)
Decachlorobiphenyl	121	(50 - 150)

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A9G140103 **Work Order #...:** LGFAW1AA **Matrix.....:** WATER
MB Lot-Sample #: A9G140000-068

Prep Date.....: 07/14/09 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 07/21/09 **Prep Batch #...:** 9195068
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
alpha-BHC	ND	0.030	ug/L	SW846 8081A
beta-BHC	ND	0.030	ug/L	SW846 8081A
delta-BHC	ND	0.030	ug/L	SW846 8081A
gamma-BHC (Lindane)	ND	0.030	ug/L	SW846 8081A
Heptachlor	ND	0.030	ug/L	SW846 8081A
Aldrin	ND	0.030	ug/L	SW846 8081A
Heptachlor epoxide	ND	0.030	ug/L	SW846 8081A
Endosulfan I	ND	0.025	ug/L	SW846 8081A
Dieldrin	ND	0.030	ug/L	SW846 8081A
4,4'-DDE	ND	0.030	ug/L	SW846 8081A
Endrin	ND	0.030	ug/L	SW846 8081A
Endosulfan II	ND	0.025	ug/L	SW846 8081A
4,4'-DDD	ND	0.030	ug/L	SW846 8081A
Endosulfan sulfate	ND	0.030	ug/L	SW846 8081A
4,4'-DDT	ND	0.030	ug/L	SW846 8081A
Methoxychlor	ND	0.10	ug/L	SW846 8081A
Endrin ketone	ND	0.030	ug/L	SW846 8081A
Endrin aldehyde	ND	0.030	ug/L	SW846 8081A
alpha-Chlordane	ND	0.030	ug/L	SW846 8081A
gamma-Chlordane	ND	0.030	ug/L	SW846 8081A
Toxaphene	ND	2.0	ug/L	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	101	(50 - 150)
Decachlorobiphenyl	43 *	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

* Surrogate recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A9G140103 Work Order #...: LGFAW1AC Matrix.....: WATER
LCS Lot-Sample#: A9G140000-068
Prep Date.....: 07/14/09 Analysis Date..: 07/21/09
Prep Batch #...: 9195068
Dilution Factor: 2 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
alpha-BHC	96	(44 - 137)	SW846 8081A
beta-BHC	91	(50 - 135)	SW846 8081A
delta-BHC	97	(58 - 160)	SW846 8081A
gamma-BHC (Lindane)	94	(58 - 127)	SW846 8081A
Heptachlor	90	(48 - 150)	SW846 8081A
Aldrin	93	(53 - 128)	SW846 8081A
Heptachlor epoxide	94	(50 - 127)	SW846 8081A
Endosulfan I	58	(50 - 160)	SW846 8081A
Dieldrin	90	(50 - 124)	SW846 8081A
4,4'-DDE	98	(50 - 130)	SW846 8081A
Endrin	97	(50 - 137)	SW846 8081A
Endosulfan II	66	(50 - 144)	SW846 8081A
4,4'-DDD	99	(50 - 137)	SW846 8081A
Endosulfan sulfate	93	(50 - 160)	SW846 8081A
4,4'-DDT	93	(50 - 145)	SW846 8081A
Methoxychlor	94	(50 - 160)	SW846 8081A
Endrin ketone	88	(50 - 150)	SW846 8081A
Endrin aldehyde	79	(30 - 160)	SW846 8081A
alpha-Chlordane	94	(50 - 122)	SW846 8081A
gamma-Chlordane	95	(50 - 130)	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	85	(50 - 150)
Decachlorobiphenyl	37 *	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

* Surrogate recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A9G140103 Work Order #...: LGE9E1AJ-MS Matrix.....: WG
MS Lot-Sample #: A9G140103-002 LGE9E1AK-MSD
Date Sampled...: 07/13/09 12:05 Date Received..: 07/14/09
Prep Date.....: 07/14/09 Analysis Date..: 07/21/09
Prep Batch #...: 9195068
Dilution Factor: 2 Initial Wgt/Vol: 525 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
alpha-BHC	105	(50 - 150)			SW846 8081A
	97	(50 - 150)	7.3	(0-50)	SW846 8081A
beta-BHC	105	(50 - 150)			SW846 8081A
	94	(50 - 150)	11	(0-50)	SW846 8081A
delta-BHC	103	(50 - 150)			SW846 8081A
	96	(50 - 150)	6.5	(0-50)	SW846 8081A
gamma-BHC (Lindane)	99	(50 - 150)			SW846 8081A
	95	(50 - 150)	4.1	(0-50)	SW846 8081A
Heptachlor	95	(50 - 150)			SW846 8081A
	89	(50 - 150)	6.4	(0-50)	SW846 8081A
Aldrin	103	(50 - 150)			SW846 8081A
	91	(50 - 150)	12	(0-50)	SW846 8081A
Heptachlor epoxide	101	(50 - 150)			SW846 8081A
	93	(50 - 150)	7.8	(0-50)	SW846 8081A
Endosulfan I	62	(50 - 150)			SW846 8081A
	59	(50 - 150)	4.9	(0-50)	SW846 8081A
Dieldrin	93	(50 - 150)			SW846 8081A
	88	(50 - 150)	5.4	(0-50)	SW846 8081A
4,4'-DDE	104	(50 - 150)			SW846 8081A
	89	(50 - 150)	15	(0-50)	SW846 8081A
Endrin	100	(50 - 150)			SW846 8081A
	95	(50 - 150)	4.9	(0-50)	SW846 8081A
Endosulfan II	67	(50 - 150)			SW846 8081A
	65	(50 - 150)	2.8	(0-50)	SW846 8081A
4,4'-DDD	101	(50 - 150)			SW846 8081A
	96	(50 - 150)	4.9	(0-50)	SW846 8081A
Endosulfan sulfate	94	(50 - 150)			SW846 8081A
	90	(50 - 150)	4.3	(0-50)	SW846 8081A
4,4'-DDT	91	(50 - 150)			SW846 8081A
	85	(50 - 150)	6.8	(0-50)	SW846 8081A
Methoxychlor	99	(50 - 150)			SW846 8081A
	90	(50 - 150)	10	(0-50)	SW846 8081A
Endrin ketone	86	(50 - 150)			SW846 8081A
	85	(50 - 150)	1.5	(0-50)	SW846 8081A
Endrin aldehyde	79	(50 - 150)			SW846 8081A
	77	(50 - 150)	3.0	(0-50)	SW846 8081A
alpha-Chlordane	101	(50 - 150)			SW846 8081A
	91	(50 - 150)	10	(0-50)	SW846 8081A
gamma-Chlordane	98	(50 - 150)			SW846 8081A
	92	(50 - 150)	6.2	(0-50)	SW846 8081A

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A9G140103 **Work Order #...:** LGE9E1AJ-MS **Matrix.....:** WG
MS Lot-Sample #: A9G140103-002 LGE9E1AK-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	93	(50 - 150)
	87	(50 - 150)
Decachlorobiphenyl	63	(50 - 150)
	35 *	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

* Surrogate recovery is outside stated control limits.

Data File: \\cansvr11\dd\chem\GCS\a2hp3.i\90720A-1.b\007F0701.D Page 1
Report Date: 20-Jul-2009 14:57

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a2hp3.i Injection Date: 20-JUL-2009 14:42
Lab File ID: 007F0701.D Init. Cal. Date(s): 11-JUN-2009 17-JUL-2009
Analysis Type: Init. Cal. Times: 10:46 23:09
Lab Sample ID: TOX3 G098 Quant Type: ESTD
Method: \\cansvr11\dd\chem\GCS\a2hp3.i\90720A-1.b\PEST3.m

COMPOUND	RRF / AMOUNT	RF0.025	CCAL RRF0.025	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
19 Toxaphene(1)	2881793	3431943	3431943	0.010	-19.09053	15.00000	Averaged	<-
(2)	5553596	6758225	6758225	0.010	-21.69098	15.00000	Averaged	<-
(3)	5517531	6873736	6873736	0.010	-24.57992	15.00000	Averaged	<-
(4)	6787850	8116482	8116482	0.010	-19.57368	15.00000	Averaged	<-
(5)	3889276	4639692	4639692	0.010	-19.29448	15.00000	Averaged	<-

Average %D / Drift Results.

Calculated Average %D/Drift = 20.84592
Maximun Average %D/Drift = 15.00000
* Failed Average %D/Drift Test.

POLYCHLORINATED BIPHENYLS DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/August 25, 2009

SDG: A9G140103 R0
Analysis: SW846 8082

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.4 - 4.4 °C. Upon receipt, it was documented by the laboratory, that the samples were not frozen and in good condition. Therefore, no qualifications were made to sample results based on temperatures less than 2°C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-5
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-5
7. Does the initial calibration curve consist of 5 concentration levels of Aroclors 1016 and 1260?	✓			Instrument A2HP2; ICAL on 7/02/09 Stds = 0.05, 0.1, 0.2, 0.5, 1.0, 2.0	LCG Table 3 R
8. Was the % RSD ≤ 20%? Were the r^2s >0.990?	✓				LCG Table 3 RSD>20% or r<0.99= J/R
9. Was a MDL Level Verification performed once per quarter? Were all target analytes detected?	✓			7/18/09	LCG Table 3 R
10. Was a MRL Level Verification performed at the beginning and end of the sequence or every 12 hours? Were the results 70-130%	✓				LCG Table 3 >130%=J; 65-70%=J/UJ; <65%=J/R
11. Was a second source (ICV) verification performed after the ICAL? Were results 85-115%?	✓			7/2/09 @ 0350	LCG Table 3 >115%=J; 80-85%=J/UJ; <80%=J/R
12. Were single standards of the other five Aroclors run to aid in pattern recognition and to determine a single point calibration factor?	✓				Method 8082 Section 5.6.2
13. Was a CCV run every 12 hours?	✓				LCG Table 3

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/August 25, 2009

SDG: A9G140103 R0
Analysis: SW846 8082

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
14. Was the % D ≤ 15 % for each analyte or the average %D across all analytes ≤ 15% with a maximum %D for each target analyte ≤30%?	✓				LCG Table 3 D>30% (neg) =J/R D>30% (pos) =J
15. Was a method blank prepared and analyzed with each batch?	✓			Section checked by ADR	LCG Table 5
16. Were target analytes <1/2 the MRL?	✓				LCG Table 5 <5x = B
17. Was an equipment blank collected and analyzed?	✓			FWGEQUIPRinse1-1423-GW	
18. Were target analytes in the field blank analyses (equipment) <1/2 the MRL?	✓			Section checked by ADR	<5x = B
19. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 3
20. Were the LCS recoveries within limits specified in LCG Appendix C?	✓				LCG Appendix C >UL=J; LL-30%=J/UJ; <30%=J/R
21. Was a MS/MSD pair prepared with each batch?	✓				LCG Table 3
22. Was the MS/MSD parent a Ravenna sample?	✓			Sample FWGLL7mw-003c-1372-GW was the parent MS/MSD sample from this SDG.	
23. Were MS/MSD recoveries 50-150% and RPD ≤20%?	✓				QAPP Table 3-2 Pj
24. Was the surrogate spiked into all samples?	✓				
25. Were surrogate recoveries 50-150%?		✓		The surrogate, DCB, recovered below control limits in samples FWGLL6mw-005c-1367-GW and FWGLL7mw-003c-1372-GW. The associated results were qualified as estimated, "UJ".	LCG Table 3 >150%=J; 10-50%=J/UJ; <10%=R
26. Was a field duplicate analyzed? Were the RPDs <30%?	✓			Sample FWGLL7mw-DUP1-1413-GW was the field duplicate for sample FWGLL7mw-006c-13775-GW.	QAPP Table 3-2 RPD >30=J

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/August 25, 2009

SDG: A9G140103 R0
Analysis: SW846 8082

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
27. Were all positive results verified by a second dissimilar column confirmation? Was the RPD ≤ 40?	✓				LCG Table 3 RPD>40=J
28. Were reported sample concentrations within calibration range?	✓				
29. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
30. Were lab comments included in report? If yes, summarize contents.	✓			See narrative for surrogate outliers.	

References:

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 3 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments: As the second column is used only for confirmation and there were no detected aroclors in the samples, only the front column was evaluated.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-003C-1372-GW

GC Semivolatiles

Lot-Sample #...:	A9G140103-002	**Work Order #...:**	LGE9E1AP	**Matrix.....:**	WG
Date Sampled...:	07/13/09 12:05	**Date Received..:**	07/14/09		
Prep Date.....:	07/14/09	**Analysis Date..:**	07/20/09		
Prep Batch #...:	9195069				
Dilution Factor:	1	**Initial Wgt/Vol:**	1050 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	87	(50 - 150)
Decachlorobiphenyl	29 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-001C-1370-GW

GC Semivolatiles

Lot-Sample #...: A9G140103-004 **Work Order #...:** LGE9G1AF **Matrix.....:** WG
Date Sampled...: 07/13/09 14:45 **Date Received..:** 07/14/09
Prep Date.....: 07/14/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9195069
Dilution Factor: 1 **Initial Wgt/Vol:** 1040 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	90	(50 - 150)
Decachlorobiphenyl	55	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-007C-1369-GW

GC Semivolatiles

Lot-Sample #...: A9G140103-006 **Work Order #...:** LGE9J1AF **Matrix.....:** WG
Date Sampled...: 07/13/09 17:20 **Date Received..:** 07/14/09
Prep Date.....: 07/14/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9195069
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	91	(50 - 150)
Decachlorobiphenyl	61	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-006C-1375-GW

GC Semivolatiles

Lot-Sample #...:	A9G140103-009	**Work Order #...:**	LGE9M1AF	**Matrix.....:**	WG
Date Sampled...:	07/13/09 12:00	**Date Received..:**	07/14/09		
Prep Date.....:	07/14/09	**Analysis Date..:**	07/20/09		
Prep Batch #...:	9195069				
Dilution Factor:	1	**Initial Wgt/Vol:**	960 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	76	(50 - 150)
Decachlorobiphenyl	64	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-DUP1-1413-GW

GC Semivolatiles

Lot-Sample #...: A9G140103-011 **Work Order #...:** LGE9P1AF **Matrix.....:** WG
Date Sampled...: 07/13/09 13:00 **Date Received..:** 07/14/09
Prep Date.....: 07/14/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9195069
Dilution Factor: 1 **Initial Wgt/Vol:** 1020 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	80	(50 - 150)
Decachlorobiphenyl	57	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-004C-1373-GW

GC Semivolatiles

Lot-Sample #...: A9G140103-013 **Work Order #...:** LGE9R1AF **Matrix.....:** WG
Date Sampled...: 07/13/09 14:00 **Date Received..:** 07/14/09
Prep Date.....: 07/14/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9195069
Dilution Factor: 1 **Initial Wgt/Vol:** 960 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	84	(50 - 150)
Decachlorobiphenyl	52	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-002C-1371-GW

GC Semivolatiles

Lot-Sample #...:	A9G140103-015	**Work Order #...:**	LGE9W1AF	**Matrix.....:**	WG
Date Sampled...:	07/13/09 15:10	**Date Received..:**	07/14/09		
Prep Date.....:	07/14/09	**Analysis Date..:**	07/20/09		
Prep Batch #...:	9195069				
Dilution Factor:	1	**Initial Wgt/Vol:**	1000 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	93	(50 - 150)
Decachlorobiphenyl	107	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-005C-1367-GW

GC Semivolatiles

Lot-Sample #...:	A9G140103-017	**Work Order #...:**	LGE901AF	**Matrix.....:**	WG
Date Sampled...:	07/13/09 16:30	**Date Received..:**	07/14/09		
Prep Date.....:	07/14/09	**Analysis Date..:**	07/20/09		
Prep Batch #...:	9195069				
Dilution Factor:	1	**Initial Wgt/Vol:**	1000 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	80	(50 - 150)
Decachlorobiphenyl	39 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1423-GW

GC Semivolatiles

Lot-Sample #...: A9G140103-019 **Work Order #...:** LGE931AF **Matrix.....:** WQ
Date Sampled...: 07/13/09 17:30 **Date Received..:** 07/14/09
Prep Date.....: 07/14/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9195069
Dilution Factor: 1 **Initial Wgt/Vol:** 930 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	91	(50 - 150)
Decachlorobiphenyl	97	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-005C-1374-GW

GC Semivolatiles

Lot-Sample #...:	A9G140103-021	**Work Order #...:**	LGFAD1AF	**Matrix.....:**	WG
Date Sampled...:	07/13/09 12:20	**Date Received..:**	07/14/09		
Prep Date.....:	07/14/09	**Analysis Date..:**	07/20/09		
Prep Batch #...:	9195069				
Dilution Factor:	1	**Initial Wgt/Vol:**	970 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	90	(50 - 150)
Decachlorobiphenyl	51	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-006C-1368-GW

GC Semivolatiles

Lot-Sample #...:	A9G140103-023	**Work Order #...:**	LGFAG1AF	**Matrix.....:**	WG
Date Sampled...:	07/13/09 16:10	**Date Received..:**	07/14/09		
Prep Date.....:	07/14/09	**Analysis Date..:**	07/20/09		
Prep Batch #...:	9195069				
Dilution Factor:	1	**Initial Wgt/Vol:**	1000 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	79	(50 - 150)
Decachlorobiphenyl	57	(50 - 150)

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A9G140103 **Work Order #...:** LGFA11AA **Matrix.....:** WATER
MB Lot-Sample #: A9G140000-069

Prep Date.....: 07/14/09 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 07/20/09 **Prep Batch #...:** 9195069
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	0.50	ug/L	SW846 8082
Aroclor 1221	ND	0.50	ug/L	SW846 8082
Aroclor 1232	ND	0.50	ug/L	SW846 8082
Aroclor 1242	ND	0.50	ug/L	SW846 8082
Aroclor 1248	ND	0.50	ug/L	SW846 8082
Aroclor 1254	ND	0.50	ug/L	SW846 8082
Aroclor 1260	ND	0.50	ug/L	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	88	(50 - 150)
Decachlorobiphenyl	46 *	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

* Surrogate recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A9G140103 **Work Order #...:** LGFA11AC **Matrix.....:** WATER
LCS Lot-Sample#: A9G140000-069
Prep Date.....: 07/14/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9195069
Dilution Factor: 2 **Final Wgt/Vol..:** 5 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Aroclor 1016	**83**	**(58 - 141)**	**SW846 8082**
Aroclor 1260	**89**	**(71 - 143)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	87	(50 - 150)
Decachlorobiphenyl	36 *	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

* Surrogate recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A9G140103 **Work Order #...:** LGE9E1AQ-MS **Matrix.....:** WG
MS Lot-Sample #: A9G140103-002 LGE9E1AR-MSD
Date Sampled...: 07/13/09 12:05 **Date Received..:** 07/14/09
Prep Date.....: 07/14/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9195069
Dilution Factor: 2 **Initial Wgt/Vol:** 460 mL **Final Wgt/Vol..:** 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**91**	**(50 - 150)**			**SW846 8082**
	84	**(50 - 150)**	**8.1**	**(0-50)**	**SW846 8082**
Aroclor 1260	**95**	**(50 - 150)**			**SW846 8082**
	86	**(50 - 150)**	**9.4**	**(0-50)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	88	(50 - 150)
	79	(50 - 150)
Decachlorobiphenyl	69	(50 - 150)
	55	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METALS DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta / August 25, 2009

SDG: A9G140103 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.4 - 4.4 °C. Upon receipt, it was documented by the laboratory, that the samples were not frozen and in good condition. Therefore, no qualifications were made to sample results based on temperatures less than 2°C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	✓				QAPP Table 3-8
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-8
7. Did the initial calibration curve range include 3 standards and a blank?	✓				LCG Table 7 R
8. Was the ICAL performed daily?	✓				LCG Table 7 R
9. Was the correlation coefficient r≥0.995 for each analyte?	✓				LCG Table 7 R<0.995=J/R
10. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓				LCG Table 7 R
11. Was a MRL Level Verification performed at the beginning of the daily sequence? Were results 70-130%?		✓		The MRL analyzed 7/27/09 @ 1111 had zinc recover above limits at 142%. Detected concentrations of zinc were qualified as estimated, "J".	LCG Table 7 >130%=J; 65-70%=J/UJ; <65%=J/R
12. Was the ICV (second source verification) analyzed after the ICAL?	✓				LCG Table 7
13. Were all analytes within 90-110% in the ICV?	✓				LCG Table 7 J>110%=J; 90-85%=J/UJ; <85%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta / August 25, 2009

SDG: A9G140103 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
14. Was the ICB analyzed after the ICV with results <1/2 the MRL?		✓		ICP The ICB analyzed 7/17/09 had detected calcium at 91.2ug/L, selenium at 3.9ug/L and potassium at 152ug/L. No qualifications were made for potassium or calcium as there were no detected results <5x ICB contamination. Selenium results for FWGLL7mw-003c-1372-GF, FWGLL6mw-007c-1369-GF, FWGLL7mw-003c-1372-GF, FWGLL6mw-005c-1367-GF and FWGLL6mw-006c-1368-GF were qualified, "U", as the detected concentrations were <5x blank contamination. The potassium result for FWGEQUIPRinse1-1423-GW was qualified, "U", as the detected concentration was <5x blank contamination. No qualifications were made for ICP or ICPMS due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.	LCG Table 7 < 5x = U
15. Were CCVs analyzed every 10 samples and at the end of the analytical sequence?	✓				LCG Table 7
16. Were CCV results within 90 to 110%?	✓				LCG Table 7 >110%=J 90-85%=J/UJ; <85%=J/R
17. Were the CCBs run every 10 samples and at the end of the analytical sequence? Were results <1/2 the MRL?		✓		ICP The CCBs analyzed 7/17/09 had detected selenium at 4.1ug/L and potassium from 143ug/L to 153ug/L. The potassium result for FWGEQUIPRinse1-1423-GW was qualified, "U", as the detected concentration was <5x blank contamination. Selenium results for FWGLL7mw-003c-1372-GF, FWGLL6mw-007c-1369-GF, FWGLL7mw-003c-1372-GF, FWGLL6mw-005c-1367-GF and FWGLL6mw-006c-1368-GF were qualified, "U", as the detected concentrations were <5x blank contamination. ICPMS The CCBs analyzed 7/27/09 had detected antimony from 0.071 to 0.063ug/L, beryllium at 0.039ug/L, cadmium at 0.034ug/L, iron at 11.4 ug/L and thallium at 0.12ug/L. The thallium result for sample FWGLL7mw-001c-1370-GF was qualified, "U" as the result was <5x CCB contamination. No other qualifications were made as the all other contaminants were either nondetect or >5x contamination.	LCG Table 7 <5x = U
18. Was an Interelement Check Standard run at the beginning of the analytical sequence?	✓				LCG Table 7
19. Was the ICS recovery within 80 to 120% of true value for each element of interest?	✓				LCG Table 7 >120%=J; 50-79%=J/UJ; <50%=Pj/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28 **SDG:** A9G140103 R0
Sample Event: July 2009 **Analysis:** SW846 6010B/6020
Data Reviewer/Date: Angye Dragotta / August 25, 2009

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
21. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 7
22. Were target analytes <1/2 the MRL in the method blank?		✓		ADR checked section; Potassium was detected in the method blank at 153ug/L and zinc at 6.7ug/L. All detected potassium and zinc results <5x contamination were qualified, "B".	LCG Table 7 <5x = B
23. Was a field blank collected and analyzed?	✓			FWGEQUIPRinse1-1423-GW	
24. Were target analytes reported in the field blank analyses >1/2 the MRL?	✓			ADR checked section; FWGEQUIPRinse1-1423-GW had potassium detected at 150ug/L and zinc at 3.4ug/L. All detected potassium and zinc results <5x contamination were qualified, "B".	<5x=B
25. Was a LCS prepared and analyzed with each batch?	✓				LCG Table 7
26. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR.	LCG Appendix C >UL=J; 60%-LL= J/UJ; <60%=J/R
27. Was a MS prepared with each batch?	✓				LCG Table 7
28. Was the MS and Lab Duplicate parent a Ravenna sample?	✓			Sample FWGLL7mw-003c-1372-GF was the parent MS/MSD sample from this SDG.	
29. Were the MS recoveries within 75-125%?	✓			Checked by ADR.	LCG Table 7 >125% = J 30% - 75% = J/UJ <30% = J/R
30. Was the lab sample duplicate RPD ≤20%?	✓			Only detected results above RL were evaluated.	LCG Table 7 >20% = J
31. Was a Post Digestion Spike analyzed as needed? Were results within 75-125%?			✓		LCG Table 7 >125%=J; 30-75%=J/UJ; <30%=R
32. Was a serial dilution performed as needed?			✓		
33. Was the 4 fold dilution within ± 10% of the original result?			✓		LCG Table 7 >10%=J
34. Was a field duplicate analyzed? Were the RPDs ± 30%?	✓			Checked by ADR. Sample FWGLL7mw-DUP1-1413-GF was the field duplicate for sample FWGLL7mw-006c-13775-GF. Only results above the RL were evaluated.	QAPP Table 3-2 >30% = J

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta / August 25, 2009

SDG: A9G140103 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
35. Were sample concentrations within calibration range?	✓				
36. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
37. Were lab comments included in report? If yes, summarize contents.	✓			See narrative.	

References:
Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 7 and Attachment A "Data Validation Guidelines:
Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 25, 2009

SDG: A9G140103 R0
Analysis: SW846 7470A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.4 - 4.4 °C. Upon receipt, it was documented by the laboratory, that the samples were not frozen and in good condition. Therefore, no qualifications were made to sample results based on temperatures less than 2°C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	✓				QAPP Table 3.8
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-8
7. Did the initial calibration curve range include 5 standards and a blank?	✓				LCG Table 9 R
8. Was the correlation coefficient ≥ 0.995 for Hg?	✓				LCG Table 9 R<0.995=J/R
9. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓				LCG Table 9 R
10. Was a MRL Level Verification performed at the beginning of every daily analytical sequence with 70-130%?	✓				LCG Table 9 >130%=J; 70-65%=J/UJ; <65%=J/R
11. Was the ICV analyzed after the ICAL but before samples with recoveries between 80-120%?	✓				LCG Table 9 >120%=J; 80-75%=J/UJ; <75%=J/R
12. Was the ICB analyzed after the ICAL with results <1/2 the MRL?	✓			No qualifications were made due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.	LCG Table 9 <5x = U
13. Were the CCVs analyzed every 10 samples and at the end of the analytical sequence?	✓				LCG Table 9

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 25, 2009

SDG: A9G140103 R0
Analysis: SW846 7470A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
14. Were CCV results within 80 to 120%?	✓				LCG Table 9 >120%=J; 80-75%=J/UJ; <75%=J/R
15. Were the CCBs analyzed every 10 samples and at the end of the analytical sequence? Were results <1/2 the MRL?	✓			No qualifications were made for due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.	LCG Table 9 <5x = U
16. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 9
17. Were target analytes detected in the method blank <1/2 the MRL?	✓				LCG Table 9 <5x = B
18. Was a field blank collected and analyzed?	✓			FWGEQUIPRinse1-1423-GW	
19. Were target analytes reported in the field blank analyses at <1/2 the MRL?	✓				<5x=B
20. Was a LCS prepared and analyzed with each batch?	✓				LCG Table 9
21. Were the LCS recoveries within 80-120%?	✓			Checked by ADR.	LCG Table 9 J>120%=J; 50-79%=J/UJ; <50%=R
22. Was a MS prepared with each batch?	✓				LCG Table 9
23. Was the MS and Lab Duplicate parent sample a Ravenna sample?	✓			Sample FWGLL7mw-003c-1372-GF was the parent MS/MSD sample from this SDG.	
24. Were the MS recoveries within 80-120%?	✓			Checked by ADR.	LCG Table 9 >125% = J 30% - 75% = J/UJ <30% = J/R
25. Was the Matrix Duplicate RPD ± 20%?	✓				LCG Table 9 >20% = J
26. Was a field duplicate analyzed? Were the RPDs ± 30%?	✓			Checked by ADR. Sample FWGLL7mw-DUP1-1413-GF was the field duplicate for sample FWGLL7mw-006c-13775-GF.	QAPP Table 3-2
27. Were sample concentrations within calibration range?	✓				

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 25, 2009

SDG: A9G140103 R0
Analysis: SW846 7470A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
29. Were lab comments included in report? If yes, summarize contents.		✓			

References:

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 9 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-003C-1372-GF

TOTAL Metals

Lot-Sample #...: A9G140103-003 **Matrix.....:** WG
Date Sampled...: 07/13/09 12:05 **Date Received..:** 07/14/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9196012						
Silver	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9F1CA
		Dilution Factor: 1		Analysis Time..: 12:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/15-07/27/09	LGE9F1AA
		Dilution Factor: 1		Analysis Time..: 11:46	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9F1A1
		Dilution Factor: 1		Analysis Time..: 12:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**48.1**	**10.0**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9F1CE**
		Dilution Factor: 1		Analysis Time..: 12:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/15-07/27/09	LGE9F1AE
		Dilution Factor: 1		Analysis Time..: 11:46	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**15900**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9F1CH**
		Dilution Factor: 1		Analysis Time..: 12:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/15-07/27/09	LGE9F1AH
		Dilution Factor: 1		Analysis Time..: 11:46	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**5.2**	**5.0**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9F1CL**
		Dilution Factor: 1		Analysis Time..: 12:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9F1CP
		Dilution Factor: 1		Analysis Time..: 12:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9F1CT
		Dilution Factor: 1		Analysis Time..: 12:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-003C-1372-GF

TOTAL Metals

Lot-Sample #...: A9G140103-003 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**20200**	**50.0**	**ug/L**	**SW846 6020**	**07/15-07/27/09**	**LGE9F1AL**
		Dilution Factor: 1		Analysis Time..: 11:46	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/15/09	LGE9F1DH
		Dilution Factor: 1		Analysis Time..: 15:07	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.12		
Potassium	**1190 J,E**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9F1CW**
		Dilution Factor: 1		Analysis Time..: 12:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**5630**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9F1C1**
		Dilution Factor: 1		Analysis Time..: 12:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**1430**	**10.0**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9F1C4**
		Dilution Factor: 1		Analysis Time..: 12:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**5610**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9F1C7**
		Dilution Factor: 1		Analysis Time..: 12:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	**6.1 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9F1DA**
		Dilution Factor: 1		Analysis Time..: 12:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9F1A4
		Dilution Factor: 1		Analysis Time..: 12:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/15-07/27/09	LGE9F1AP
		Dilution Factor: 1		Analysis Time..: 11:46	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	**5.3**	**5.0**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9F1A7**
		Dilution Factor: 1		Analysis Time..: 12:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-003C-1372-GF

TOTAL Metals

Lot-Sample #...: A9G140103-003 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/15-07/27/09	LGE9F1AW
		Dilution Factor: 1		Analysis Time..: 11:46	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9F1DE
		Dilution Factor: 1		Analysis Time..: 12:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**16.2 J**	**10.0**	**ug/L**	**SW846 6020**	**07/15-07/27/09**	**LGE9F1AT**
		Dilution Factor: 1		Analysis Time..: 11:46	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

E Matrix interference.

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-001C-1370-GF

TOTAL Metals

Lot-Sample #...: A9G140103-005 **Matrix.....:** WG
Date Sampled...: 07/13/09 14:45 **Date Received..:** 07/14/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9196012						
Silver	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9H1AQ
		Dilution Factor: 1		Analysis Time..: 13:23	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/15-07/27/09	LGE9H1AE
		Dilution Factor: 1		Analysis Time..: 12:05	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9H1AA
		Dilution Factor: 1		Analysis Time..: 13:23	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**20.5**	**10.0**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9H1AR**
		Dilution Factor: 1		Analysis Time..: 13:23	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/15-07/27/09	LGE9H1AF
		Dilution Factor: 1		Analysis Time..: 12:05	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**37200**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9H1AT**
		Dilution Factor: 1		Analysis Time..: 13:23	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/15-07/27/09	LGE9H1AG
		Dilution Factor: 1		Analysis Time..: 12:05	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**6.0**	**5.0**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9H1AU**
		Dilution Factor: 1		Analysis Time..: 13:23	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9H1AV
		Dilution Factor: 1		Analysis Time..: 13:23	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9H1AW
		Dilution Factor: 1		Analysis Time..: 13:23	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-001C-1370-GF

TOTAL Metals

Lot-Sample #...: A9G140103-005 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**7850**	**50.0**	**ug/L**	**SW846 6020**	**07/15-07/27/09**	**LGE9H1AH**
		Dilution Factor: 1		Analysis Time..: 12:05	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/15/09	LGE9H1A2
		Dilution Factor: 1		Analysis Time..: 15:19	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.12		
Potassium	**921 B,J**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9H1AX**
		Dilution Factor: 1		Analysis Time..: 13:23	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**12300**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9H1AM**
		Dilution Factor: 1		Analysis Time..: 13:23	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**454**	**10.0**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9H1AN**
		Dilution Factor: 1		Analysis Time..: 13:23	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**5680**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9H1AP**
		Dilution Factor: 1		Analysis Time..: 13:23	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	**8.8 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9H1A0**
		Dilution Factor: 1		Analysis Time..: 13:23	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9H1AC
		Dilution Factor: 1		Analysis Time..: 13:23	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/15-07/27/09	LGE9H1AJ
		Dilution Factor: 1		Analysis Time..: 12:05	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9H1AD
		Dilution Factor: 1		Analysis Time..: 13:23	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-001C-1370-GF

TOTAL Metals

Lot-Sample #...: A9G140103-005 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.18 B**	**1.0**	**ug/L**	**SW846 6020**	**07/15-07/27/09**	**LGE9H1AL**
		Dilution Factor: 1		Analysis Time..: 12:05	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9H1A1
		Dilution Factor: 1		Analysis Time..: 13:23	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**53.9 J**	**10.0**	**ug/L**	**SW846 6020**	**07/15-07/27/09**	**LGE9H1AK**
		Dilution Factor: 1		Analysis Time..: 12:05	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-007C-1369-GF

TOTAL Metals

Lot-Sample #...: A9G140103-007 **Matrix.....:** WG
Date Sampled...: 07/13/09 17:20 **Date Received..:** 07/14/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9196012						
Silver	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9K1AQ
		Dilution Factor: 1		Analysis Time..: 13:28	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/15-07/27/09	LGE9K1AE
		Dilution Factor: 1		Analysis Time..: 12:09	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9K1AA
		Dilution Factor: 1		Analysis Time..: 13:28	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**14.7**	**10.0**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9K1AR**
		Dilution Factor: 1		Analysis Time..: 13:28	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/15-07/27/09	LGE9K1AF
		Dilution Factor: 1		Analysis Time..: 12:09	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**54600**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9K1AT**
		Dilution Factor: 1		Analysis Time..: 13:28	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	**2.8**	**0.50**	**ug/L**	**SW846 6020**	**07/15-07/27/09**	**LGE9K1AG**
		Dilution Factor: 1		Analysis Time..: 12:09	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9K1AU
		Dilution Factor: 1		Analysis Time..: 13:28	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9K1AV
		Dilution Factor: 1		Analysis Time..: 13:28	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9K1AW
		Dilution Factor: 1		Analysis Time..: 13:28	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-007C-1369-GF

TOTAL Metals

Lot-Sample #...: A9G140103-007 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/15-07/27/09	LGE9K1AH
		Dilution Factor: 1		Analysis Time..: 12:09	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/15/09	LGE9K1A2
		Dilution Factor: 1		Analysis Time..: 15:14	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.12		
Potassium	**1160 J**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9K1AX**
		Dilution Factor: 1		Analysis Time..: 13:28	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**22400**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9K1AM**
		Dilution Factor: 1		Analysis Time..: 13:28	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**395**	**10.0**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9K1AN**
		Dilution Factor: 1		Analysis Time..: 13:28	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**7940**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9K1AP**
		Dilution Factor: 1		Analysis Time..: 13:28	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9K1A0
		Dilution Factor: 1		Analysis Time..: 13:28	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9K1AC
		Dilution Factor: 1		Analysis Time..: 13:28	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/15-07/27/09	LGE9K1AJ
		Dilution Factor: 1		Analysis Time..: 12:09	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	**5.0**	**5.0**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9K1AD**
		Dilution Factor: 1		Analysis Time..: 13:28	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.I		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-007C-1369-GF

TOTAL Metals

Lot-Sample #...: A9G140103-007 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/15-07/27/09	LGE9K1AL
		Dilution Factor: 1		Analysis Time..: 12:09	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9K1A1
		Dilution Factor: 1		Analysis Time..: 13:28	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**3.7 B,J**	**10.0**	**ug/L**	**SW846 6020**	**07/15-07/27/09**	**LGE9K1AK**
		Dilution Factor: 1		Analysis Time..: 12:09	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-006C-1375-GF

TOTAL Metals

Lot-Sample #...: A9G140103-010 **Matrix.....:** WG
Date Sampled...: 07/13/09 12:00 **Date Received..:** 07/14/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9196012						
Silver	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9N1AQ
		Dilution Factor: 1		Analysis Time..: 13:33	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/15-07/27/09	LGE9N1AE
		Dilution Factor: 1		Analysis Time..: 12:13	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9N1AA
		Dilution Factor: 1		Analysis Time..: 13:33	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**16.7**	**10.0**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9N1AR**
		Dilution Factor: 1		Analysis Time..: 13:33	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/15-07/27/09	LGE9N1AF
		Dilution Factor: 1		Analysis Time..: 12:13	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**8680**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9N1AT**
		Dilution Factor: 1		Analysis Time..: 13:33	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	**0.31 B**	**0.50**	**ug/L**	**SW846 6020**	**07/15-07/27/09**	**LGE9N1AG**
		Dilution Factor: 1		Analysis Time..: 12:13	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**1.8 B**	**5.0**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9N1AU**
		Dilution Factor: 1		Analysis Time..: 13:33	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9N1AV
		Dilution Factor: 1		Analysis Time..: 13:33	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9N1AW
		Dilution Factor: 1		Analysis Time..: 13:33	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-006C-1375-GF

TOTAL Metals

Lot-Sample #...: A9G140103-010 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**2210**	**50.0**	**ug/L**	**SW846 6020**	**07/15-07/27/09**	**LGE9N1AH**
		Dilution Factor: 1		Analysis Time..: 12:13	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/15/09	LGE9N1A2
		Dilution Factor: 1		Analysis Time..: 15:18	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.12		
Potassium	**856 B,J**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9N1AX**
		Dilution Factor: 1		Analysis Time..: 13:33	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**5560**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9N1AM**
		Dilution Factor: 1		Analysis Time..: 13:33	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**1280**	**10.0**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9N1AN**
		Dilution Factor: 1		Analysis Time..: 13:33	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**7550**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9N1AP**
		Dilution Factor: 1		Analysis Time..: 13:33	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	**8.5 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9N1A0**
		Dilution Factor: 1		Analysis Time..: 13:33	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9N1AC
		Dilution Factor: 1		Analysis Time..: 13:33	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/15-07/27/09	LGE9N1AJ
		Dilution Factor: 1		Analysis Time..: 12:13	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9N1AD
		Dilution Factor: 1		Analysis Time..: 13:33	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-006C-1375-GF

TOTAL Metals

Lot-Sample #...: A9G140103-010 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/15-07/27/09	LGE9N1AL
		Dilution Factor: 1		Analysis Time..: 12:13	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9N1A1
		Dilution Factor: 1		Analysis Time..: 13:33	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**14.0 J**	**10.0**	**ug/L**	**SW846 6020**	**07/15-07/27/09**	**LGE9N1AK**
		Dilution Factor: 1		Analysis Time..: 12:13	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-DUP1-1413-GF

TOTAL Metals

Lot-Sample #...: A9G140103-012 **Matrix.....:** WG
Date Sampled...: 07/13/09 13:00 **Date Received..:** 07/14/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9196012						
Silver	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9Q1AQ
		Dilution Factor: 1		Analysis Time..: 13:37	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/15-07/27/09	LGE9Q1AE
		Dilution Factor: 1		Analysis Time..: 12:17	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9Q1AA
		Dilution Factor: 1		Analysis Time..: 13:37	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**17.0**	**10.0**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9Q1AR**
		Dilution Factor: 1		Analysis Time..: 13:37	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/15-07/27/09	LGE9Q1AF
		Dilution Factor: 1		Analysis Time..: 12:17	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**9130**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9Q1AT**
		Dilution Factor: 1		Analysis Time..: 13:37	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	**0.23 B**	**0.50**	**ug/L**	**SW846 6020**	**07/15-07/27/09**	**LGE9Q1AG**
		Dilution Factor: 1		Analysis Time..: 12:17	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**1.7 B**	**5.0**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9Q1AU**
		Dilution Factor: 1		Analysis Time..: 13:37	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9Q1AV
		Dilution Factor: 1		Analysis Time..: 13:37	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9Q1AW
		Dilution Factor: 1		Analysis Time..: 13:37	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-DUP1-1413-GF

TOTAL Metals

Lot-Sample #...: A9G140103-012 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**2160**	**50.0**	**ug/L**	**SW846 6020**	**07/15-07/27/09**	**LGE9Q1AH**
		Dilution Factor: 1		Analysis Time..: 12:17	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/15/09	LGE9Q1A2
		Dilution Factor: 1		Analysis Time..: 15:24	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.12		
Potassium	**892 B,J**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9Q1AX**
		Dilution Factor: 1		Analysis Time..: 13:37	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**5670**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9Q1AM**
		Dilution Factor: 1		Analysis Time..: 13:37	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**1280**	**10.0**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9Q1AN**
		Dilution Factor: 1		Analysis Time..: 13:37	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**7690**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9Q1AP**
		Dilution Factor: 1		Analysis Time..: 13:37	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	**7.1 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9Q1A0**
		Dilution Factor: 1		Analysis Time..: 13:37	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9Q1AC
		Dilution Factor: 1		Analysis Time..: 13:37	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/15-07/27/09	LGE9Q1AJ
		Dilution Factor: 1		Analysis Time..: 12:17	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9Q1AD
		Dilution Factor: 1		Analysis Time..: 13:37	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-DUP1-1413-GF

TOTAL Metals

Lot-Sample #...: A9G140103-012 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/15-07/27/09	LGE9Q1AL
		Dilution Factor: 1		Analysis Time..: 12:17	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9Q1A1
		Dilution Factor: 1		Analysis Time..: 13:37	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**16.8 J**	**10.0**	**ug/L**	**SW846 6020**	**07/15-07/27/09**	**LGE9Q1AK**
		Dilution Factor: 1		Analysis Time..: 12:17	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-004C-1373-GF

TOTAL Metals

Lot-Sample #...: A9G140103-014 **Matrix.....:** WG
Date Sampled...: 07/13/09 14:00 **Date Received..:** 07/14/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9196012						
Silver	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9V1AQ
		Dilution Factor: 1		Analysis Time..: 13:42	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/15-07/27/09	LGE9V1AE
		Dilution Factor: 1		Analysis Time..: 12:31	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9V1AA
		Dilution Factor: 1		Analysis Time..: 13:42	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**39.8**	**10.0**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9V1AR**
		Dilution Factor: 1		Analysis Time..: 13:42	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/15-07/27/09	LGE9V1AF
		Dilution Factor: 1		Analysis Time..: 12:31	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**8160**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9V1AT**
		Dilution Factor: 1		Analysis Time..: 13:42	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/15-07/27/09	LGE9V1AG
		Dilution Factor: 1		Analysis Time..: 12:31	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**6.7**	**5.0**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9V1AU**
		Dilution Factor: 1		Analysis Time..: 13:42	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9V1AV
		Dilution Factor: 1		Analysis Time..: 13:42	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9V1AW
		Dilution Factor: 1		Analysis Time..: 13:42	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-004C-1373-GF

TOTAL Metals

Lot-Sample #...: A9G140103-014 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**19000**	**50.0**	**ug/L**	**SW846 6020**	**07/15-07/27/09**	**LGE9V1AH**
		Dilution Factor: 1		Analysis Time..: 12:31	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/15/09	LGE9V1A2
		Dilution Factor: 1		Analysis Time..: 15:15	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.12		
Potassium	**1240 J**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9V1AX**
		Dilution Factor: 1		Analysis Time..: 13:42	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**6110**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9V1AM**
		Dilution Factor: 1		Analysis Time..: 13:42	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**1240**	**10.0**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9V1AN**
		Dilution Factor: 1		Analysis Time..: 13:42	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**14500**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9V1AP**
		Dilution Factor: 1		Analysis Time..: 13:42	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	**7.4 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9V1A0**
		Dilution Factor: 1		Analysis Time..: 13:42	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9V1AC
		Dilution Factor: 1		Analysis Time..: 13:42	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/15-07/27/09	LGE9V1AJ
		Dilution Factor: 1		Analysis Time..: 12:31	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9V1AD
		Dilution Factor: 1		Analysis Time..: 13:42	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-004C-1373-GF

TOTAL Metals

Lot-Sample #...: A9G140103-014 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/15-07/27/09	LGE9V1AL
		Dilution Factor: 1		Analysis Time..: 12:31	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9V1A1
		Dilution Factor: 1		Analysis Time..: 13:42	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**16.8 J**	**10.0**	**ug/L**	**SW846 6020**	**07/15-07/27/09**	**LGE9V1AK**
		Dilution Factor: 1		Analysis Time..: 12:31	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-002C-1371-GF

TOTAL Metals

Lot-Sample #...: A9G140103-016 **Matrix.....:** WG
Date Sampled...: 07/13/09 15:10 **Date Received..:** 07/14/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9196012						
Silver	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9X1AQ
		Dilution Factor: 1		Analysis Time..: 13:46	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/15-07/27/09	LGE9X1AE
		Dilution Factor: 1		Analysis Time..: 12:36	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9X1AA
		Dilution Factor: 1		Analysis Time..: 13:46	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**62.6**	**10.0**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9X1AR**
		Dilution Factor: 1		Analysis Time..: 13:46	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/15-07/27/09	LGE9X1AF
		Dilution Factor: 1		Analysis Time..: 12:36	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**34500**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9X1AT**
		Dilution Factor: 1		Analysis Time..: 13:46	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	**0.18 B**	**0.50**	**ug/L**	**SW846 6020**	**07/15-07/27/09**	**LGE9X1AG**
		Dilution Factor: 1		Analysis Time..: 12:36	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9X1AU
		Dilution Factor: 1		Analysis Time..: 13:46	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9X1AV
		Dilution Factor: 1		Analysis Time..: 13:46	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9X1AW
		Dilution Factor: 1		Analysis Time..: 13:46	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-002C-1371-GF

TOTAL Metals

Lot-Sample #...: A9G140103-016 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/15-07/27/09	LGE9X1AH
		Dilution Factor: 1		Analysis Time..: 12:36	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/15/09	LGE9X1A2
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.12		
Potassium	**1820 J**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9X1AX**
		Dilution Factor: 1		Analysis Time..: 13:46	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**7040**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9X1AM**
		Dilution Factor: 1		Analysis Time..: 13:46	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**32.4**	**10.0**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9X1AN**
		Dilution Factor: 1		Analysis Time..: 13:46	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**2280**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9X1AP**
		Dilution Factor: 1		Analysis Time..: 13:46	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	**4.2 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE9X1A0**
		Dilution Factor: 1		Analysis Time..: 13:46	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9X1AC
		Dilution Factor: 1		Analysis Time..: 13:46	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/15-07/27/09	LGE9X1AJ
		Dilution Factor: 1		Analysis Time..: 12:36	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9X1AD
		Dilution Factor: 1		Analysis Time..: 13:46	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-002C-1371-GF

TOTAL Metals

Lot-Sample #...: A9G140103-016 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/15-07/27/09	LGE9X1AL
		Dilution Factor: 1		Analysis Time..: 12:36	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/15-07/17/09	LGE9X1A1
		Dilution Factor: 1		Analysis Time..: 13:46	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**8.1 B,J**	**10.0**	**ug/L**	**SW846 6020**	**07/15-07/27/09**	**LGE9X1AK**
		Dilution Factor: 1		Analysis Time..: 12:36	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-005C-1367-GF

TOTAL Metals

Lot-Sample #...: A9G140103-018 **Matrix.....:** WG
Date Sampled...: 07/13/09 16:30 **Date Received..:** 07/14/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9196012						
Silver	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE921AQ
		Dilution Factor: 1		Analysis Time..: 13:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	**143**	**50.0**	**ug/L**	**SW846 6020**	**07/15-07/27/09**	**LGE921AE**
		Dilution Factor: 1		Analysis Time..: 12:40	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**45.2**	**5.0**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE921AA**
		Dilution Factor: 1		Analysis Time..: 13:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**71.3**	**10.0**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE921AR**
		Dilution Factor: 1		Analysis Time..: 13:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/15-07/27/09	LGE921AF
		Dilution Factor: 1		Analysis Time..: 12:40	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**78500**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE921AT**
		Dilution Factor: 1		Analysis Time..: 13:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/15-07/27/09	LGE921AG
		Dilution Factor: 1		Analysis Time..: 12:40	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE921AU
		Dilution Factor: 1		Analysis Time..: 13:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE921AV
		Dilution Factor: 1		Analysis Time..: 13:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE921AW
		Dilution Factor: 1		Analysis Time..: 13:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-005C-1367-GF

TOTAL Metals

Lot-Sample #...: A9G140103-018 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**2520**	**50.0**	**ug/L**	**SW846 6020**	**07/15-07/27/09**	**LGE921AH**
		Dilution Factor: 1		Analysis Time..: 12:40	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/15/09	LGE921A2
		Dilution Factor: 1		Analysis Time..: 15:13	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.12		
Potassium	**1060 J**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE921AX**
		Dilution Factor: 1		Analysis Time..: 13:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**24600**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE921AM**
		Dilution Factor: 1		Analysis Time..: 13:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**583**	**10.0**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE921AN**
		Dilution Factor: 1		Analysis Time..: 13:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**8770**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE921AP**
		Dilution Factor: 1		Analysis Time..: 13:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/15-07/17/09	LGE921A0
		Dilution Factor: 1		Analysis Time..: 13:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/15-07/17/09	LGE921AC
		Dilution Factor: 1		Analysis Time..: 13:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/15-07/27/09	LGE921AJ
		Dilution Factor: 1		Analysis Time..: 12:40	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	**5.8**	**5.0**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE921AD**
		Dilution Factor: 1		Analysis Time..: 13:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-005C-1367-GF

TOTAL Metals

Lot-Sample #...: A9G140103-018 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/15-07/27/09	LGE921AL
		Dilution Factor: 1		Analysis Time..: 12:40	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/15-07/17/09	LGE921A1
		Dilution Factor: 1		Analysis Time..: 13:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**3.2 B,J**	**10.0**	**ug/L**	**SW846 6020**	**07/15-07/27/09**	**LGE921AK**
		Dilution Factor: 1		Analysis Time..: 12:40	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1423-GW

TOTAL Metals

Lot-Sample #...: A9G140103-019 **Matrix.....:** WQ
Date Sampled...: 07/13/09 17:30 **Date Received..:** 07/14/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9196012						
Silver	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE931AT
		Dilution Factor: 1		Analysis Time..: 14:07	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/15-07/27/09	LGE931AG
		Dilution Factor: 1		Analysis Time..: 12:44	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE931AP
		Dilution Factor: 1		Analysis Time..: 14:07	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	ND	10.0	ug/L	SW846 6010B	07/15-07/17/09	LGE931AU
		Dilution Factor: 1		Analysis Time..: 14:07	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/15-07/27/09	LGE931AH
		Dilution Factor: 1		Analysis Time..: 12:44	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	ND	1000	ug/L	SW846 6010B	07/15-07/17/09	LGE931AV
		Dilution Factor: 1		Analysis Time..: 14:07	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/15-07/27/09	LGE931AJ
		Dilution Factor: 1		Analysis Time..: 12:44	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE931AW
		Dilution Factor: 1		Analysis Time..: 14:07	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE931AX
		Dilution Factor: 1		Analysis Time..: 14:07	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE931A0
		Dilution Factor: 1		Analysis Time..: 14:07	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1423-GW

TOTAL Metals

Lot-Sample #...: A9G140103-019 **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/15-07/27/09	LGE931AK
		Dilution Factor: 1		Analysis Time..: 12:44	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/15/09	LGE931A7
		Dilution Factor: 1		Analysis Time..: 15:20	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.12		
Potassium	**150 B,J**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGE931A1**
		Dilution Factor: 1		Analysis Time..: 14:07	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	ND	1000	ug/L	SW846 6010B	07/15-07/17/09	LGE931A2
		Dilution Factor: 1		Analysis Time..: 14:07	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	ND	10.0	ug/L	SW846 6010B	07/15-07/17/09	LGE931A3
		Dilution Factor: 1		Analysis Time..: 14:07	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	ND	1000	ug/L	SW846 6010B	07/15-07/17/09	LGE931A4
		Dilution Factor: 1		Analysis Time..: 14:07	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/15-07/17/09	LGE931A5
		Dilution Factor: 1		Analysis Time..: 14:07	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/15-07/17/09	LGE931AQ
		Dilution Factor: 1		Analysis Time..: 14:07	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/15-07/27/09	LGE931AL
		Dilution Factor: 1		Analysis Time..: 12:44	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGE931AR
		Dilution Factor: 1		Analysis Time..: 14:07	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1423-GW

TOTAL Metals

Lot-Sample #...: A9G140103-019 **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/15-07/27/09	LGE931AN
		Dilution Factor: 1		Analysis Time..: 12:44	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/15-07/17/09	LGE931A6
		Dilution Factor: 1		Analysis Time..: 14:07	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**3.4 B,J**	**10.0**	**ug/L**	**SW846 6020**	**07/15-07/27/09**	**LGE931AM**
		Dilution Factor: 1		Analysis Time..: 12:44	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-005C-1374-GF

TOTAL Metals

Lot-Sample #...: A9G140103-022 **Matrix.....:** WG
Date Sampled...: 07/13/09 12:20 **Date Received..:** 07/14/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9196012						
Silver	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGFAF1AQ
		Dilution Factor: 1		Analysis Time..: 14:12	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/15-07/27/09	LGFAF1AE
		Dilution Factor: 1		Analysis Time..: 12:48	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGFAF1AA
		Dilution Factor: 1		Analysis Time..: 14:12	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**151**	**10.0**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGFAF1AR**
		Dilution Factor: 1		Analysis Time..: 14:12	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/15-07/27/09	LGFAF1AF
		Dilution Factor: 1		Analysis Time..: 12:48	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**7010**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGFAF1AT**
		Dilution Factor: 1		Analysis Time..: 14:12	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/15-07/27/09	LGFAF1AG
		Dilution Factor: 1		Analysis Time..: 12:48	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**7.0**	**5.0**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGFAF1AU**
		Dilution Factor: 1		Analysis Time..: 14:12	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGFAF1AV
		Dilution Factor: 1		Analysis Time..: 14:12	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGFAF1AW
		Dilution Factor: 1		Analysis Time..: 14:12	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-005C-1374-GF

TOTAL Metals

Lot-Sample #...: A9G140103-022 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/15-07/27/09	LGFAF1AH
		Dilution Factor: 1		Analysis Time..: 12:48	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/15/09	LGFAF1A2
		Dilution Factor: 1		Analysis Time..: 15:17	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.12		
Potassium	**992 B,J**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGFAF1AX**
		Dilution Factor: 1		Analysis Time..: 14:12	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**3750**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGFAF1AM**
		Dilution Factor: 1		Analysis Time..: 14:12	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**1660**	**10.0**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGFAF1AN**
		Dilution Factor: 1		Analysis Time..: 14:12	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**3070**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGFAF1AP**
		Dilution Factor: 1		Analysis Time..: 14:12	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	**8.8 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGFAF1A0**
		Dilution Factor: 1		Analysis Time..: 14:12	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/15-07/17/09	LGFAF1AC
		Dilution Factor: 1		Analysis Time..: 14:12	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/15-07/27/09	LGFAF1AJ
		Dilution Factor: 1		Analysis Time..: 12:48	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGFAF1AD
		Dilution Factor: 1		Analysis Time..: 14:12	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-005C-1374-GF

TOTAL Metals

Lot-Sample #...: A9G140103-022 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/15-07/27/09	LGFAF1AL
		Dilution Factor: 1		Analysis Time..: 12:48	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/15-07/17/09	LGFAF1A1
		Dilution Factor: 1		Analysis Time..: 14:12	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**11.4 J**	**10.0**	**ug/L**	**SW846 6020**	**07/15-07/27/09**	**LGFAF1AK**
		Dilution Factor: 1		Analysis Time..: 12:48	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-006C-1368-GF

TOTAL Metals

Lot-Sample #...: A9G140103-024 **Matrix.....:** WG
Date Sampled...: 07/13/09 16:10 **Date Received..:** 07/14/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9196012						
Silver	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGFAK1AQ
		Dilution Factor: 1		Analysis Time..: 14:16	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	**195**	**50.0**	**ug/L**	**SW846 6020**	**07/15-07/27/09**	**LGFAK1AE**
		Dilution Factor: 1		Analysis Time..: 12:52	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGFAK1AA
		Dilution Factor: 1		Analysis Time..: 14:16	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**20.1**	**10.0**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGFAK1AR**
		Dilution Factor: 1		Analysis Time..: 14:16	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/15-07/27/09	LGFAK1AF
		Dilution Factor: 1		Analysis Time..: 12:52	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**71800**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGFAK1AT**
		Dilution Factor: 1		Analysis Time..: 14:16	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	**0.50**	**0.50**	**ug/L**	**SW846 6020**	**07/15-07/27/09**	**LGFAK1AG**
		Dilution Factor: 1		Analysis Time..: 12:52	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGFAK1AU
		Dilution Factor: 1		Analysis Time..: 14:16	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGFAK1AV
		Dilution Factor: 1		Analysis Time..: 14:16	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGFAK1AW
		Dilution Factor: 1		Analysis Time..: 14:16	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-006C-1368-GF

TOTAL Metals

Lot-Sample #...: A9G140103-024 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**174**	**50.0**	**ug/L**	**SW846 6020**	**07/15-07/27/09**	**LGFAK1AH**
		Dilution Factor: 1		Analysis Time..: 12:52	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/15/09	LGFAK1A2
		Dilution Factor: 1		Analysis Time..: 15:22	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.12		
Potassium	**1300 J**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGFAK1AX**
		Dilution Factor: 1		Analysis Time..: 14:16	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**27900**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGFAK1AM**
		Dilution Factor: 1		Analysis Time..: 14:16	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**97.6**	**10.0**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGFAK1AN**
		Dilution Factor: 1		Analysis Time..: 14:16	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**6620**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGFAK1AP**
		Dilution Factor: 1		Analysis Time..: 14:16	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/15-07/17/09	LGFAK1A0
		Dilution Factor: 1		Analysis Time..: 14:16	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/15-07/17/09	LGFAK1AC
		Dilution Factor: 1		Analysis Time..: 14:16	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/15-07/27/09	LGFAK1AJ
		Dilution Factor: 1		Analysis Time..: 12:52	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	**4.3 B**	**5.0**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGFAK1AD**
		Dilution Factor: 1		Analysis Time..: 14:16	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-006C-1368-GF

TOTAL Metals

Lot-Sample #...: A9G140103-024 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/15-07/27/09	LGFAK1AL
		Dilution Factor: 1		Analysis Time..: 12:52	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/15-07/17/09	LGFAK1A1
		Dilution Factor: 1		Analysis Time..: 14:16	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**5.1 B,J**	**10.0**	**ug/L**	**SW846 6020**	**07/15-07/27/09**	**LGFAK1AK**
		Dilution Factor: 1		Analysis Time..: 12:52	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A9G140103 **Matrix.....:** WATER

MB Lot-Sample #: A9G150000-012 **Prep Batch #...:** 9196012

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Aluminum	ND	50.0	ug/L	SW846 6020	07/15-07/27/09	LGG0J1AA
		Dilution Factor: 1				
		Analysis Time..: 11:36		Analyst ID.....: 001637	Instrument ID..: I8	
Antimony	ND	2.0	ug/L	SW846 6020	07/15-07/27/09	LGG0J1AF
		Dilution Factor: 1				
		Analysis Time..: 11:36		Analyst ID.....: 001637	Instrument ID..: I8	
Arsenic	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGG0J1AJ
		Dilution Factor: 1				
		Analysis Time..: 12:41		Analyst ID.....: 000079	Instrument ID..: I5	
Barium	ND	10.0	ug/L	SW846 6010B	07/15-07/17/09	LGG0J1AN
		Dilution Factor: 1				
		Analysis Time..: 12:41		Analyst ID.....: 000079	Instrument ID..: I5	
Beryllium	ND	1.0	ug/L	SW846 6020	07/15-07/27/09	LGG0J1AC
		Dilution Factor: 1				
		Analysis Time..: 11:36		Analyst ID.....: 001637	Instrument ID..: I8	
Cadmium	ND	0.50	ug/L	SW846 6020	07/15-07/27/09	LGG0J1AD
		Dilution Factor: 1				
		Analysis Time..: 11:36		Analyst ID.....: 001637	Instrument ID..: I8	
Calcium	ND	1000	ug/L	SW846 6010B	07/15-07/17/09	LGG0J1AP
		Dilution Factor: 1				
		Analysis Time..: 12:41		Analyst ID.....: 000079	Instrument ID..: I5	
Chromium	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGG0J1AR
		Dilution Factor: 1				
		Analysis Time..: 12:41		Analyst ID.....: 000079	Instrument ID..: I5	
Cobalt	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGG0J1AQ
		Dilution Factor: 1				
		Analysis Time..: 12:41		Analyst ID.....: 000079	Instrument ID..: I5	
Copper	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGG0J1AT
		Dilution Factor: 1				
		Analysis Time..: 12:41		Analyst ID.....: 000079	Instrument ID..: I5	
Iron	ND	50.0	ug/L	SW846 6020	07/15-07/27/09	LGG0J1AE
		Dilution Factor: 1				
		Analysis Time..: 11:36		Analyst ID.....: 001637	Instrument ID..: I8	

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A9G140103 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Lead	ND	3.0	ug/L	SW846 6010B	07/15-07/17/09	LGG0J1AK
		Dilution Factor: 1				
		Analysis Time..: 12:41		Analyst ID.....: 000079	Instrument ID..: I5	
Magnesium	ND	1000	ug/L	SW846 6010B	07/15-07/17/09	LGG0J1AV
		Dilution Factor: 1				
		Analysis Time..: 12:41		Analyst ID.....: 000079	Instrument ID..: I5	
Manganese	ND	10.0	ug/L	SW846 6010B	07/15-07/17/09	LGG0J1AW
		Dilution Factor: 1				
		Analysis Time..: 12:41		Analyst ID.....: 000079	Instrument ID..: I5	
Mercury	ND	0.20	ug/L	SW846 7470A	07/15/09	LGG0J1A2
		Dilution Factor: 1				
		Analysis Time..: 15:04		Analyst ID.....: 001576	Instrument ID..: H1	
Nickel	ND	10.0	ug/L	SW846 6010B	07/15-07/17/09	LGG0J1A0
		Dilution Factor: 1				
		Analysis Time..: 12:41		Analyst ID.....: 000079	Instrument ID..: I5	
Potassium	**153 B**	**1000**	**ug/L**	**SW846 6010B**	**07/15-07/17/09**	**LGG0J1AU**
		Dilution Factor: 1				
		Analysis Time..: 12:41		Analyst ID.....: 000079	Instrument ID..: I5	
Selenium	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGG0J1AL
		Dilution Factor: 1				
		Analysis Time..: 12:41		Analyst ID.....: 000079	Instrument ID..: I5	
Silver	ND	5.0	ug/L	SW846 6010B	07/15-07/17/09	LGG0J1AM
		Dilution Factor: 1				
		Analysis Time..: 12:41		Analyst ID.....: 000079	Instrument ID..: I5	
Sodium	ND	1000	ug/L	SW846 6010B	07/15-07/17/09	LGG0J1AX
		Dilution Factor: 1				
		Analysis Time..: 12:41		Analyst ID.....: 000079	Instrument ID..: I5	
Thallium	ND	1.0	ug/L	SW846 6020	07/15-07/27/09	LGG0J1AH
		Dilution Factor: 1				
		Analysis Time..: 11:36		Analyst ID.....: 001637	Instrument ID..: I8	
Vanadium	ND	10.0	ug/L	SW846 6010B	07/15-07/17/09	LGG0J1A1
		Dilution Factor: 1				
		Analysis Time..: 12:41		Analyst ID.....: 000079	Instrument ID..: I5	
Zinc	**6.7 B**	**10.0**	**ug/L**	**SW846 6020**	**07/15-07/27/09**	**LGG0J1AG**
		Dilution Factor: 1				
		Analysis Time..: 11:36		Analyst ID.....: 001637	Instrument ID..: I8	

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A9G140103 Matrix.....: WATER

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A9G140103 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A9G150000-012 **Prep Batch #...:** 9196012					
Aluminum	105	(80 - 120)	SW846 6020	07/15-07/27/09	LGG0J1A3
		Dilution Factor: 1	Analysis Time..: 11:40	Analyst ID.....: 001637	
		Instrument ID..: I8			
Beryllium	102	(80 - 120)	SW846 6020	07/15-07/27/09	LGG0J1A4
		Dilution Factor: 1	Analysis Time..: 11:40	Analyst ID.....: 001637	
		Instrument ID..: I8			
Cadmium	106	(80 - 120)	SW846 6020	07/15-07/27/09	LGG0J1A5
		Dilution Factor: 1	Analysis Time..: 11:40	Analyst ID.....: 001637	
		Instrument ID..: I8			
Iron	106	(80 - 120)	SW846 6020	07/15-07/27/09	LGG0J1A6
		Dilution Factor: 1	Analysis Time..: 11:40	Analyst ID.....: 001637	
		Instrument ID..: I8			
Antimony	102	(80 - 120)	SW846 6020	07/15-07/27/09	LGG0J1A7
		Dilution Factor: 1	Analysis Time..: 11:40	Analyst ID.....: 001637	
		Instrument ID..: I8			
Zinc	113	(80 - 120)	SW846 6020	07/15-07/27/09	LGG0J1A8
		Dilution Factor: 1	Analysis Time..: 11:40	Analyst ID.....: 001637	
		Instrument ID..: I8			
Thallium	94	(80 - 120)	SW846 6020	07/15-07/27/09	LGG0J1A9
		Dilution Factor: 1	Analysis Time..: 11:40	Analyst ID.....: 001637	
		Instrument ID..: I8			
Arsenic	107	(80 - 120)	SW846 6010B	07/15-07/17/09	LGG0J1CA
		Dilution Factor: 1	Analysis Time..: 12:46	Analyst ID.....: 000079	
		Instrument ID..: I5			
Lead	101	(80 - 120)	SW846 6010B	07/15-07/17/09	LGG0J1CC
		Dilution Factor: 1	Analysis Time..: 12:46	Analyst ID.....: 000079	
		Instrument ID..: I5			
Selenium	104	(80 - 120)	SW846 6010B	07/15-07/17/09	LGG0J1CD
		Dilution Factor: 1	Analysis Time..: 12:46	Analyst ID.....: 000079	
		Instrument ID..: I5			

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A9G140103 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Silver	109	(80 - 120)	SW846 6010B	07/15-07/17/09	LGG0J1CE
		Dilution Factor: 1	Analysis Time..: 12:46	Analyst ID.....: 000079	
		Instrument ID..: I5			
Barium	105	(80 - 120)	SW846 6010B	07/15-07/17/09	LGG0J1CF
		Dilution Factor: 1	Analysis Time..: 12:46	Analyst ID.....: 000079	
		Instrument ID..: I5			
Calcium	104	(80 - 120)	SW846 6010B	07/15-07/17/09	LGG0J1CG
		Dilution Factor: 1	Analysis Time..: 12:46	Analyst ID.....: 000079	
		Instrument ID..: I5			
Cobalt	104	(80 - 120)	SW846 6010B	07/15-07/17/09	LGG0J1CH
		Dilution Factor: 1	Analysis Time..: 12:46	Analyst ID.....: 000079	
		Instrument ID..: I5			
Chromium	105	(80 - 120)	SW846 6010B	07/15-07/17/09	LGG0J1CJ
		Dilution Factor: 1	Analysis Time..: 12:46	Analyst ID.....: 000079	
		Instrument ID..: I5			
Copper	105	(80 - 120)	SW846 6010B	07/15-07/17/09	LGG0J1CK
		Dilution Factor: 1	Analysis Time..: 12:46	Analyst ID.....: 000079	
		Instrument ID..: I5			
Potassium	102	(80 - 120)	SW846 6010B	07/15-07/17/09	LGG0J1CL
		Dilution Factor: 1	Analysis Time..: 12:46	Analyst ID.....: 000079	
		Instrument ID..: I5			
Magnesium	105	(80 - 120)	SW846 6010B	07/15-07/17/09	LGG0J1CM
		Dilution Factor: 1	Analysis Time..: 12:46	Analyst ID.....: 000079	
		Instrument ID..: I5			
Manganese	109	(80 - 120)	SW846 6010B	07/15-07/17/09	LGG0J1CN
		Dilution Factor: 1	Analysis Time..: 12:46	Analyst ID.....: 000079	
		Instrument ID..: I5			
Sodium	106	(80 - 120)	SW846 6010B	07/15-07/17/09	LGG0J1CP
		Dilution Factor: 1	Analysis Time..: 12:46	Analyst ID.....: 000079	
		Instrument ID..: I5			
Nickel	106	(80 - 120)	SW846 6010B	07/15-07/17/09	LGG0J1CQ
		Dilution Factor: 1	Analysis Time..: 12:46	Analyst ID.....: 000079	
		Instrument ID..: I5			

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A9G140103 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	101	(80 - 120)	SW846 6010B	07/15-07/17/09	LGG0J1CR
		Dilution Factor: 1	Analysis Time..: 12:46		Analyst ID.....: 000079
		Instrument ID..: I5			
Mercury	97	(80 - 120)	SW846 7470A	07/15/09	LGG0J1CT
		Dilution Factor: 1	Analysis Time..: 15:05		Analyst ID.....: 001576
		Instrument ID..: H1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A9G140103 **Matrix.....:** WG
Date Sampled...: 07/13/09 12:05 **Date Received..:** 07/14/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A9G140103-003 **Prep Batch #...:** 9196012					
Aluminum	105	(75 - 125)	SW846 6020	07/15-07/27/09	LGE9F1AC
		Dilution Factor: 1	Analysis Time..: 11:46	Instrument ID..: I8	
		Analyst ID.....: 001637			
Antimony	102	(75 - 125)	SW846 6020	07/15-07/27/09	LGE9F1AQ
		Dilution Factor: 1	Analysis Time..: 11:46	Instrument ID..: I8	
		Analyst ID.....: 001637			
Arsenic	110	(75 - 125)	SW846 6010B	07/15-07/17/09	LGE9F1A2
		Dilution Factor: 1	Analysis Time..: 12:51	Instrument ID..: I5	
		Analyst ID.....: 000079			
Barium	108	(75 - 125)	SW846 6010B	07/15-07/17/09	LGE9F1CF
		Dilution Factor: 1	Analysis Time..: 12:51	Instrument ID..: I5	
		Analyst ID.....: 000079			
Beryllium	103	(75 - 125)	SW846 6020	07/15-07/27/09	LGE9F1AF
		Dilution Factor: 1	Analysis Time..: 11:46	Instrument ID..: I8	
		Analyst ID.....: 001637			
Cadmium	105	(75 - 125)	SW846 6020	07/15-07/27/09	LGE9F1AJ
		Dilution Factor: 1	Analysis Time..: 11:46	Instrument ID..: I8	
		Analyst ID.....: 001637			
Calcium	105	(75 - 125)	SW846 6010B	07/15-07/17/09	LGE9F1CJ
		Dilution Factor: 1	Analysis Time..: 12:51	Instrument ID..: I5	
		Analyst ID.....: 000079			
Chromium	106	(75 - 125)	SW846 6010B	07/15-07/17/09	LGE9F1CQ
		Dilution Factor: 1	Analysis Time..: 12:51	Instrument ID..: I5	
		Analyst ID.....: 000079			
Cobalt	106	(75 - 125)	SW846 6010B	07/15-07/17/09	LGE9F1CM
		Dilution Factor: 1	Analysis Time..: 12:51	Instrument ID..: I5	
		Analyst ID.....: 000079			
Copper	107	(75 - 125)	SW846 6010B	07/15-07/17/09	LGE9F1CU
		Dilution Factor: 1	Analysis Time..: 12:51	Instrument ID..: I5	
		Analyst ID.....: 000079			

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A9G140103 **Matrix.....:** WG
Date Sampled...: 07/13/09 12:05 **Date Received..:** 07/14/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	111	(75 - 125)	SW846 6020	07/15-07/27/09	LGE9F1AM
		Dilution Factor: 1	Analysis Time..: 11:46	Instrument ID..: I8	
		Analyst ID.....: 001637			
Lead	102	(75 - 125)	SW846 6010B	07/15-07/17/09	LGE9F1A5
		Dilution Factor: 1	Analysis Time..: 12:51	Instrument ID..: I5	
		Analyst ID.....: 000079			
Magnesium	107	(75 - 125)	SW846 6010B	07/15-07/17/09	LGE9F1C2
		Dilution Factor: 1	Analysis Time..: 12:51	Instrument ID..: I5	
		Analyst ID.....: 000079			
Manganese	107	(75 - 125)	SW846 6010B	07/15-07/17/09	LGE9F1C5
		Dilution Factor: 1	Analysis Time..: 12:51	Instrument ID..: I5	
		Analyst ID.....: 000079			
Mercury	110	(80 - 120)	SW846 7470A	07/15/09	LGE9F1DJ
		Dilution Factor: 1	Analysis Time..: 15:07	Instrument ID..: H1	
		Analyst ID.....: 001576			
Nickel	108	(75 - 125)	SW846 6010B	07/15-07/17/09	LGE9F1DC
		Dilution Factor: 1	Analysis Time..: 12:51	Instrument ID..: I5	
		Analyst ID.....: 000079			
Potassium	105	(75 - 125)	SW846 6010B	07/15-07/17/09	LGE9F1CX
		Dilution Factor: 1	Analysis Time..: 12:51	Instrument ID..: I5	
		Analyst ID.....: 000079			
Selenium	106	(75 - 125)	SW846 6010B	07/15-07/17/09	LGE9F1A8
		Dilution Factor: 1	Analysis Time..: 12:51	Instrument ID..: I5	
		Analyst ID.....: 000079			
Silver	118	(75 - 125)	SW846 6010B	07/15-07/17/09	LGE9F1CC
		Dilution Factor: 1	Analysis Time..: 12:51	Instrument ID..: I5	
		Analyst ID.....: 000079			
Sodium	107	(75 - 125)	SW846 6010B	07/15-07/17/09	LGE9F1C8
		Dilution Factor: 1	Analysis Time..: 12:51	Instrument ID..: I5	
		Analyst ID.....: 000079			
Thallium	96	(75 - 125)	SW846 6020	07/15-07/27/09	LGE9F1AX
		Dilution Factor: 1	Analysis Time..: 11:46	Instrument ID..: I8	
		Analyst ID.....: 001637			

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A9G140103 **Matrix.....:** WG
Date Sampled...: 07/13/09 12:05 **Date Received..:** 07/14/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	102	(75 - 125)	SW846 6010B	07/15-07/17/09	LGE9F1DF
		Dilution Factor: 1	Analysis Time..: 12:51	Instrument ID..: I5	
		Analyst ID.....: 000079			
Zinc	102	(75 - 125)	SW846 6020	07/15-07/27/09	LGE9F1AU
		Dilution Factor: 1	Analysis Time..: 11:46	Instrument ID..: I8	
		Analyst ID.....: 001637			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Client Lot #...: A9G140103 **Work Order #...:** LGE9F-SMP LGE9F-DUP **Matrix.....:** WG

Date Sampled...: 07/13/09 12:05 **Date Received..:** 07/14/09

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Silver						SD Lot-Sample #:	A9G140103-003	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/15-07/17/09	9196012
			Dilution Factor: 1			Analysis Time..: 12:51	Analyst ID.....: 000079	
			Instrument ID..: I5					
Aluminum						SD Lot-Sample #:	A9G140103-003	
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/15-07/27/09	9196012
			Dilution Factor: 1			Analysis Time..: 11:46	Analyst ID.....: 001637	
			Instrument ID..: I8					
Arsenic						SD Lot-Sample #:	A9G140103-003	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/15-07/17/09	9196012
			Dilution Factor: 1			Analysis Time..: 12:51	Analyst ID.....: 000079	
			Instrument ID..: I5					
Barium						SD Lot-Sample #:	A9G140103-003	
	48.1	47.3	ug/L	1.7	(0-20)	SW846 6010B	07/15-07/17/09	9196012
			Dilution Factor: 1			Analysis Time..: 12:51	Analyst ID.....: 000079	
			Instrument ID..: I5					
Beryllium						SD Lot-Sample #:	A9G140103-003	
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/15-07/27/09	9196012
			Dilution Factor: 1			Analysis Time..: 11:46	Analyst ID.....: 001637	
			Instrument ID..: I8					
Calcium						SD Lot-Sample #:	A9G140103-003	
	15900	15600	ug/L	2.2	(0-20)	SW846 6010B	07/15-07/17/09	9196012
			Dilution Factor: 1			Analysis Time..: 12:51	Analyst ID.....: 000079	
			Instrument ID..: I5					
Cadmium						SD Lot-Sample #:	A9G140103-003	
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/15-07/27/09	9196012
			Dilution Factor: 1			Analysis Time..: 11:46	Analyst ID.....: 001637	
			Instrument ID..: I8					
Cobalt						SD Lot-Sample #:	A9G140103-003	
	5.2	4.9 B	ug/L	6.6	(0-20)	SW846 6010B	07/15-07/17/09	9196012
			Dilution Factor: 1			Analysis Time..: 12:51	Analyst ID.....: 000079	
			Instrument ID..: I5					
Chromium						SD Lot-Sample #:	A9G140103-003	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/15-07/17/09	9196012
			Dilution Factor: 1			Analysis Time..: 12:51	Analyst ID.....: 000079	
			Instrument ID..: I5					

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SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A9G140103-000 **Work Order #...:** LGE9F-SMP LGE9F-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Copper						SD Lot-Sample #:	A9G140103-003	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/15-07/17/09	9196012
			Dilution Factor: 1			Analysis Time..: 12:51	Analyst ID.....: 000079	
			Instrument ID..: I5					
Iron						SD Lot-Sample #:	A9G140103-003	
	20200	20400	ug/L	0.74	(0-20)	SW846 6020	07/15-07/27/09	9196012
			Dilution Factor: 1			Analysis Time..: 11:46	Analyst ID.....: 001637	
			Instrument ID..: I8					
Mercury						SD Lot-Sample #:	A9G140103-003	
	ND	ND	ug/L	0	(0-20)	SW846 7470A	07/15/09	9196012
			Dilution Factor: 1			Analysis Time..: 15:07	Analyst ID.....: 001576	
			Instrument ID..: H1					
Potassium						SD Lot-Sample #:	A9G140103-003	
	1190 J,E	1160	ug/L	2.6	(0-20)	SW846 6010B	07/15-07/17/09	9196012
			Dilution Factor: 1			Analysis Time..: 12:51	Analyst ID.....: 000079	
			Instrument ID..: I5					
Magnesium						SD Lot-Sample #:	A9G140103-003	
	5630	5510	ug/L	2.1	(0-20)	SW846 6010B	07/15-07/17/09	9196012
			Dilution Factor: 1			Analysis Time..: 12:51	Analyst ID.....: 000079	
			Instrument ID..: I5					
Manganese						SD Lot-Sample #:	A9G140103-003	
	1430	1410	ug/L	1.7	(0-20)	SW846 6010B	07/15-07/17/09	9196012
			Dilution Factor: 1			Analysis Time..: 12:51	Analyst ID.....: 000079	
			Instrument ID..: I5					
Sodium						SD Lot-Sample #:	A9G140103-003	
	5610	5390	ug/L	4.0	(0-20)	SW846 6010B	07/15-07/17/09	9196012
			Dilution Factor: 1			Analysis Time..: 12:51	Analyst ID.....: 000079	
			Instrument ID..: I5					
Nickel						SD Lot-Sample #:	A9G140103-003	
	6.1 B	6.9 B	ug/L	13	(0-20)	SW846 6010B	07/15-07/17/09	9196012
			Dilution Factor: 1			Analysis Time..: 12:51	Analyst ID.....: 000079	
			Instrument ID..: I5					
Lead						SD Lot-Sample #:	A9G140103-003	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/15-07/17/09	9196012
			Dilution Factor: 1			Analysis Time..: 12:51	Analyst ID.....: 000079	
			Instrument ID..: I5					

(Continued on next page)

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A9G140103-000 **Work Order #...:** LGE9F-SMP LGE9F-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Antimony						SD Lot-Sample #:	A9G140103-003	
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/15-07/27/09	9196012
			Dilution Factor: 1			Analysis Time..: 11:46	Analyst ID.....: 001637	
			Instrument ID..: I8					
Selenium						SD Lot-Sample #:	A9G140103-003	
	5.3	ND	ug/L	200	(0-20)	SW846 6010B	07/15-07/17/09	9196012
			Dilution Factor: 1			Analysis Time..: 12:51	Analyst ID.....: 000079	
			Instrument ID..: I5					
Thallium						SD Lot-Sample #:	A9G140103-003	
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/15-07/27/09	9196012
			Dilution Factor: 1			Analysis Time..: 11:46	Analyst ID.....: 001637	
			Instrument ID..: I8					
Vanadium						SD Lot-Sample #:	A9G140103-003	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/15-07/17/09	9196012
			Dilution Factor: 1			Analysis Time..: 12:51	Analyst ID.....: 000079	
			Instrument ID..: I5					
Zinc						SD Lot-Sample #:	A9G140103-003	
	16.2 J	16.6	ug/L	2.3	(0-20)	SW846 6020	07/15-07/27/09	9196012
			Dilution Factor: 1			Analysis Time..: 11:46	Analyst ID.....: 001637	
			Instrument ID..: I8					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

E Matrix interference.

TestAmerica North Canton

Metals Data Reporting Form

Contract Required Detection Limit Standard

Instrument: ICPMS **Units:** ug/L

Chart Number: I80727B.csv **Acceptable Range:** 70% - 130%

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	True Conc	CRI 07/27/09 11:11 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Aluminum	27	50.0	64.48	**129.0**								
Antimony	121	2.0	2.10	**104.9**								
Beryllium	9	1.0	1.02	**101.5**								
Cadmium	111	0.5	0.51	**102.2**								
Iron	56	50.0	50.16	**100.3**								
Thallium	205	1.0	0.92	**92.3**								
Zinc	66	10.0	14.18	**141.8**								

TestAmerica North Canton

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: I50717A.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 07/17/09 10:03 AM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	189.042	5	2.9	U								
Barium	493.409	10	0.2	U								
Calcium	317.933	1000	91.2	B								
Chromium	267.716	5	1.1	U								
Cobalt	228.616	5	0.5	U								
Copper	324.753	5	1.0	U								
Lead	220.353	3	1.1	U								
Magnesium	279.078	1000	3.9	U								
Manganese	257.61	10	0.1	U								
Nickel	231.604	10	1.2	U								
Potassium	766.491	1000	152.0	B								
Selenium	196.026	5	3.9	B								
Silver	328.068	5	1.1	U								
Sodium	330.232	1000	**-550.0**	**B**								
Vanadium	292.402	10	0.8	U								

B flag results for:
Calcium < 450 ug/L
K < 760
Se < 20

5.21.0

U Result is less than the IDL
B Result is between IDL and RL

Form 3 Equivalent

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: I50717A.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 07/17/09 11:06 AM Found	Q	CCB 07/17/09 1:03 PM Found	Q	CCB 07/17/09 2:02 PM Found	Q	CCB 07/17/09 3:01 PM Found	Q	Found	Q
Arsenic	189.042	5	2.9	U	2.9	U	2.9	U	2.9	U		
Barium	493.409	10	0.2	U	0.2	U	0.2	U	0.2	U		
Calcium	317.933	1000	40.9	U	40.9	U	40.9	U	40.9	U		
Chromium	267.716	5	1.1	U	1.1	U	1.1	U	1.1	U		
Cobalt	228.616	5	0.5	U	0.5	U	0.5	U	0.5	U		
Copper	324.753	5	1.0	U	1.0	U	1.0	U	1.0	U		
Lead	220.353	3	1.1	U	1.1	U	1.1	U	1.1	U		
Magnesium	279.078	1000	3.9	U	3.9	U	3.9	U	3.9	U		
Manganese	257.61	10	0.1	U	0.1	U	0.1	U	0.1	U		
Nickel	231.604	10	1.2	U	**-1.4**	**B**	1.2	U	1.2	U		
Potassium	766.491	1000	**149.0**	**B**	**149.0**	**B**	**143.0**	**B**	**153.0**	**B**		
Selenium	196.026	5	3.6	U	3.6	U	**4.1**	**B**	3.6	U		
Silver	328.068	5	1.1	U	1.1	U	1.1	U	1.1	U		
Sodium	330.232	1000	503.0	U	503.0	U	**-640.0**	**B**	503.0	U		
Vanadium	292.402	10	0.8	U	0.8	U	0.8	U	0.8	U		

5.21.0

U Result is less than the IDL
B Result is between IDL and RL

Form 3 Equivalent

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: I80727B.csv

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 07/27/09 11:31 AM Found	Q	CCB 1 07/27/09 12:27 PM Found	Q	CCB 2 07/27/09 1:21 PM Found	Q	Found	Q	Found	Q
Aluminum	27	50	8.2	U	8.2	U	8.2	U				
Antimony	121	2	0.055	U	~~0.071~~	~~B~~	~~0.063~~	~~B~~				
Beryllium	9	1	0.037	U	~~0.039~~	~~B~~	0.037	U				
Cadmium	111	0.5	0.027	U	~~0.034~~	~~B~~	0.027	U				
Iron	56	50	11	U	~~11.4~~	~~B~~	11	U				
Thallium	205	1	~~0.12~~	~~B~~	0.12	U	0.12	U				
Zinc	66	10	0.85	U	0.85	U	0.85	U				

U results for

Sb < 0.355 NQ
Be < 0.195 NQ
Cd < 0.170 NQ
Fe < 57.0 NQ
Tl < 0.6

sample -005 1

5.04.5

U Result is less than the IDL
B Result is between IDL and RL

Form 3 Equivalent

EXECUTIVE SUMMARY - Detection Highlights

A9G140103

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGTEAM1-TRIP 07/13/09 10:00 001				
Acetone	2.3 J	10	ug/L	SW846 8260B
FWGLL7mw-003C-1372-GW 07/13/09 12:05 002				
bis(2-Ethylhexyl) phthalate	3.3 J,B	10	ug/L	SW846 8270C
FWGLL7mw-003C-1372-GF 07/13/09 12:05 003				
Iron	20200	50.0	ug/L	SW846 6020
Zinc	16.2 J	10.0	ug/L	SW846 6020
Selenium U	5.3	5.0	ug/L	SW846 6010B
Barium	48.1	10.0	ug/L	SW846 6010B
Calcium	15900	1000	ug/L	SW846 6010B
Cobalt	5.2	5.0	ug/L	SW846 6010B
Potassium	1190 J,E	1000	ug/L	SW846 6010B
Magnesium	5630	1000	ug/L	SW846 6010B
Manganese	1430	10.0	ug/L	SW846 6010B
Sodium	5610	1000	ug/L	SW846 6010B
Nickel	6.1 B	10.0	ug/L	SW846 6010B
FWGLL7mw-001C-1370-GW 07/13/09 14:45 004				
bis(2-Ethylhexyl) phthalate	3.6 J,B	10	ug/L	SW846 8270C
1,1-Dichloroethene	6.4	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	2.9	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	10	1.0	ug/L	SW846 8260B
FWGLL7mw-001C-1370-GF 07/13/09 14:45 005				
Iron	7850	50.0	ug/L	SW846 6020
Thallium U	0.18 B	1.0	ug/L	SW846 6020
Zinc	53.9 J	10.0	ug/L	SW846 6020
Barium	20.5	10.0	ug/L	SW846 6010B
Calcium	37200	1000	ug/L	SW846 6010B
Cobalt	6.0	5.0	ug/L	SW846 6010B
Potassium	921 B,J	1000	ug/L	SW846 6010B
Magnesium	12300	1000	ug/L	SW846 6010B
Manganese	454	10.0	ug/L	SW846 6010B
Sodium	5680	1000	ug/L	SW846 6010B
Nickel	8.8 B	10.0	ug/L	SW846 6010B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A9G140103

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGLL6mw-007C-1369-GW 07/13/09 17:20	**006**			
bis(2-Ethylhexyl) phthalate	1.1 J,B	10	ug/L	SW846 8270C
FWGLL6mw-007C-1369-GF 07/13/09 17:20	**007**			
Cadmium	2.8	0.50	ug/L	SW846 6020
Zinc	3.7 B,J	10.0	ug/L	SW846 6020
Selenium U	5.0	5.0	ug/L	SW846 6010B
Barium	14.7	10.0	ug/L	SW846 6010B
Calcium	54600	1000	ug/L	SW846 6010B
Potassium	1160 J	1000	ug/L	SW846 6010B
Magnesium	22400	1000	ug/L	SW846 6010B
Manganese	395	10.0	ug/L	SW846 6010B
Sodium	7940	1000	ug/L	SW846 6010B
FWGTEAM2-TRIP 07/13/09 10:00 008				
Acetone	1.9 J	10	ug/L	SW846 8260B
FWGLL7mw-006C-1375-GW 07/13/09 12:00	**009**			
beta-BHC	0.017 J	0.030	ug/L	SW846 8081A
bis(2-Ethylhexyl) phthalate	1.4 J,B	10	ug/L	SW846 8270C
FWGLL7mw-006C-1375-GF 07/13/09 12:00	**010**			
Cadmium	0.31 B	0.50	ug/L	SW846 6020
Iron	2210	50.0	ug/L	SW846 6020
Zinc	14.0 J	10.0	ug/L	SW846 6020
Barium	16.7	10.0	ug/L	SW846 6010B
Calcium	8680	1000	ug/L	SW846 6010B
Cobalt	1.8 B	5.0	ug/L	SW846 6010B
Potassium	856 B,J	1000	ug/L	SW846 6010B
Magnesium	5560	1000	ug/L	SW846 6010B
Manganese	1280	10.0	ug/L	SW846 6010B
Sodium	7550	1000	ug/L	SW846 6010B
Nickel	8.5 B	10.0	ug/L	SW846 6010B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A9G140103

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGLL7mw-DUP1-1413-GW 07/13/09 13:00	**011**			
bis(2-Ethylhexyl) phthalate	1.7 J,B	10	ug/L	SW846 8270C
FWGLL7mw-DUP1-1413-GF 07/13/09 13:00	**012**			
Cadmium	0.23 B	0.50	ug/L	SW846 6020
Iron	2160	50.0	ug/L	SW846 6020
Zinc	16.8 J	10.0	ug/L	SW846 6020
Barium	17.0	10.0	ug/L	SW846 6010B
Calcium	9130	1000	ug/L	SW846 6010B
Cobalt	1.7 B	5.0	ug/L	SW846 6010B
Potassium	892 B,J	1000	ug/L	SW846 6010B
Magnesium	5670	1000	ug/L	SW846 6010B
Manganese	1280	10.0	ug/L	SW846 6010B
Sodium	7690	1000	ug/L	SW846 6010B
Nickel	7.1 B	10.0	ug/L	SW846 6010B
FWGLL7mw-004C-1373-GW 07/13/09 14:00	**013**			
beta-BHC	0.022 J	0.030	ug/L	SW846 8081A
bis(2-Ethylhexyl) phthalate	1.2 J,B	10	ug/L	SW846 8270C
FWGLL7mw-004C-1373-GF 07/13/09 14:00	**014**			
Iron	19000	50.0	ug/L	SW846 6020
Zinc	16.8 J	10.0	ug/L	SW846 6020
Barium	39.8	10.0	ug/L	SW846 6010B
Calcium	8160	1000	ug/L	SW846 6010B
Cobalt	6.7	5.0	ug/L	SW846 6010B
Potassium	1240 J	1000	ug/L	SW846 6010B
Magnesium	6110	1000	ug/L	SW846 6010B
Manganese	1240	10.0	ug/L	SW846 6010B
Sodium	14500	1000	ug/L	SW846 6010B
Nickel	7.4 B	10.0	ug/L	SW846 6010B
FWGLL7mw-002C-1371-GW 07/13/09 15:10	**015**			
beta-BHC	0.027 J	0.030	ug/L	SW846 8081A
bis(2-Ethylhexyl) phthalate	5.8 J,B	10	ug/L	SW846 8270C

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A9G140103

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGLL7mw-002C-1371-GF 07/13/09 15:10	016			
Cadmium	0.18 B	0.50	ug/L	SW846 6020
Zinc	8.1 B,J	10.0	ug/L	SW846 6020
Barium	62.6	10.0	ug/L	SW846 6010B
Calcium	34500	1000	ug/L	SW846 6010B
Potassium	1820 J	1000	ug/L	SW846 6010B
Magnesium	7040	1000	ug/L	SW846 6010B
Manganese	32.4	10.0	ug/L	SW846 6010B
Sodium	2280	1000	ug/L	SW846 6010B
Nickel	4.2 B	10.0	ug/L	SW846 6010B
FWGLL6mw-005C-1367-GF 07/13/09 16:30	018			
Aluminum	143	50.0	ug/L	SW846 6020
Iron	2520	50.0	ug/L	SW846 6020
Zinc	3.2 B,J	10.0	ug/L	SW846 6020
Arsenic	45.2	5.0	ug/L	SW846 6010B
Selenium U	5.8	5.0	ug/L	SW846 6010B
Barium	71.3	10.0	ug/L	SW846 6010B
Calcium	78500	1000	ug/L	SW846 6010B
Potassium	1060 J	1000	ug/L	SW846 6010B
Magnesium	24600	1000	ug/L	SW846 6010B
Manganese	583	10.0	ug/L	SW846 6010B
Sodium	8770	1000	ug/L	SW846 6010B
FWGEQUIPRINSE1-1423-GW 07/13/09 17:30	019			
Zinc	3.4 B,J	10.0	ug/L	SW846 6020
Potassium U	150 B,J	1000	ug/L	SW846 6010B
bis(2-Ethylhexyl) phthalate	1.9 J,B	10	ug/L	SW846 8270C
o-Xylene	0.46 J	1.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	1.3 J	2.0	ug/L	SW846 8260B
Methylene chloride	2.8	2.0	ug/L	SW846 8260B
Acetone	5.9 J	10	ug/L	SW846 8260B
2-Butanone	0.78 J	10	ug/L	SW846 8260B
Benzene	0.36 J	1.0	ug/L	SW846 8260B
Toluene	1.9	1.0	ug/L	SW846 8260B
Ethylbenzene	0.32 J	1.0	ug/L	SW846 8260B
Xylenes (total)	1.8 J	2.0	ug/L	SW846 8260B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A9G140103

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGTEAM3-TRIP 07/13/09 11:00 020				
Acetone	2.6 J	10	ug/L	SW846 8260B
FWGLL7mw-005C-1374-GW 07/13/09 12:20 021				
bis(2-Ethylhexyl) phthalate	1.3 J,B	10	ug/L	SW846 8270C
FWGLL7mw-005C-1374-GF 07/13/09 12:20 022				
Zinc	11.4 J	10.0	ug/L	SW846 6020
Barium	151	10.0	ug/L	SW846 6010B
Calcium	7010	1000	ug/L	SW846 6010B
Cobalt	7.0	5.0	ug/L	SW846 6010B
Potassium	992 B,J	1000	ug/L	SW846 6010B
Magnesium	3750	1000	ug/L	SW846 6010B
Manganese	1660	10.0	ug/L	SW846 6010B
Sodium	3070	1000	ug/L	SW846 6010B
Nickel	8.8 B	10.0	ug/L	SW846 6010B
FWGLL6mw-006C-1368-GF 07/13/09 16:10 024				
Aluminum	195	50.0	ug/L	SW846 6020
Cadmium	0.50	0.50	ug/L	SW846 6020
Iron	174	50.0	ug/L	SW846 6020
Zinc	5.1 B,J	10.0	ug/L	SW846 6020
Selenium U	4.3 B	5.0	ug/L	SW846 6010B
Barium	20.1	10.0	ug/L	SW846 6010B
Calcium	71800	1000	ug/L	SW846 6010B
Potassium	1300 J	1000	ug/L	SW846 6010B
Magnesium	27900	1000	ug/L	SW846 6010B
Manganese	97.6	10.0	ug/L	SW846 6010B
Sodium	6620	1000	ug/L	SW846 6010B

GENERAL CHEMISTRY DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 25, 2009

SDG: A9G140103 R0
Analysis: SW846 9012

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.4 - 4.4 °C. Upon receipt, it was documented by the laboratory, that the samples were not frozen and in good condition. Therefore, no qualifications were made to sample results based on temperatures less than 2°C.	QAPP Table 4-2
3. Were holding times met?		✓			QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-9
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-9
7. Does the initial calibration curve consist of at least 6 standards and one blank?	✓				LCG Table 10 R
8. Was the correlation coefficient R ≥ 0.995?	✓				LCG Table 10 R<0.995=-J/R
9. Were % RSDs ≤ 10% in all standards and ICV/CCVs?	✓				LCG Table 10 RSD%>10=J
10. Were a high and low standard distilled and compared to the undistilled standard? Were the results within ± 10%?			✓		LCG Table 10 R
11. Was an MDL Level Verification performed at least once per quarter with all target analytes detected?	✓				LCG Table 10 R
12. Was a MRL Level Verification performed at the beginning of every daily sequence? Were results within 70-130%?	✓				LCG Table 10 >130%=J; 65-70%=J/UJ; <65%=J/R
13. Was a second source verification (ICV) analyzed after the ICAL and all analytes 85-115%?	✓				LCG Table 10 >115%=J; 80-85%=J/UJ; <80%=J/R
14. Was the ICB analyzed after the ICV with results <1/2 the MRL?	✓				LCG Table 7 < 5x = U

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 25, 2009

SDG: A9G140103 R0
Analysis: SW846 9012

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
15. Was a CCV run at the beginning and end of the analytical sequence?	✓				LCG Table 10
16. Were the CCV results 80-120%?	✓				LCG Table 10 >120%=J; 75-80%=J/UJ; <75%=J/R
17. Was a method blank prepared and analyzed with each batch?	✓				
18. Were target analytes detected in the method blank >1/2 the MRL?	✓			Checked by ADR.	LCG Table 10 <5x=B
19. Was a field blank collected and analyzed?	✓			FWGEQUIPRinse1-1423-GW	
20. Were target analytes in the field blank analyses <1/2 the MRL?	✓				<5x=B
21. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓			Checked by ADR.	QAPP Table 3-2 >30% = J
22. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 10
23. Were the LCS recoveries 80-120%?	✓			Checked by ADR.	LCG Table 10 >120%=J; 50-79%=J/UJ; <50%=R
24. Was a MS prepared once per every 10 samples?	✓				LCG Table 10
25. Was the MS parent a Ravenna sample?	✓			Sample FWGLL7mw-003c-1372-GW was the parent MS/MSD sample from this SDG. Another Matrix spike was analyzed, but not evaluated as the parent was from another SDG.	
26. Were MS recoveries 75-125%?	✓			Checked by ADR.	QAPP Table 3-2 >120%=J; 30-74%=J/UJ; <30%=J/R
27. Were reported sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 25, 2009

SDG: A9G140103 R0
Analysis: SW846 9012

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
29. Were lab comments included in report? If yes, summarize contents.		✓			

References: Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 10 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-003C-1372-GW

General Chemistry

Lot-Sample #...: A9G140103-002 **Work Order #...:** LGE9E **Matrix.....:** WG
Date Sampled...: 07/13/09 12:05 **Date Received..:** 07/14/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/16/09	9197481

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-001C-1370-GW

General Chemistry

Lot-Sample #...: A9G140103-004 **Work Order #...:** LGE9G **Matrix.....:** WG
Date Sampled...: 07/13/09 14:45 **Date Received..:** 07/14/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/16/09	9197481

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-007C-1369-GW

General Chemistry

Lot-Sample #...: A9G140103-006 **Work Order #...:** LGE9J **Matrix.....:** WG
Date Sampled...: 07/13/09 17:20 **Date Received..:** 07/14/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/16/09	9197481

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-006C-1375-GW

General Chemistry

Lot-Sample #...: A9G140103-009 **Work Order #...:** LGE9M **Matrix.....:** WG
Date Sampled...: 07/13/09 12:00 **Date Received..:** 07/14/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/16/09	9197481

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-DUP1-1413-GW

General Chemistry

Lot-Sample #...: A9G140103-011 **Work Order #...:** LGE9P **Matrix.....:** WG
Date Sampled...: 07/13/09 13:00 **Date Received..:** 07/14/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/16/09	9197481

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-004C-1373-GW

General Chemistry

Lot-Sample #...: A9G140103-013 **Work Order #...:** LGE9R **Matrix.....:** WG
Date Sampled...: 07/13/09 14:00 **Date Received..:** 07/14/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/16/09	9197481

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-002C-1371-GW

General Chemistry

Lot-Sample #...: A9G140103-015 **Work Order #...:** LGE9W **Matrix.....:** WG
Date Sampled...: 07/13/09 15:10 **Date Received..:** 07/14/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/16/09	9197481

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-005C-1367-GW

General Chemistry

Lot-Sample #...: A9G140103-017 **Work Order #...:** LGE90 **Matrix.....:** WG
Date Sampled...: 07/13/09 16:30 **Date Received..:** 07/14/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/16/09	9197481

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1423-GW

General Chemistry

Lot-Sample #...: A9G140103-019 **Work Order #...:** LGE93 **Matrix.....:** WQ
Date Sampled...: 07/13/09 17:30 **Date Received..:** 07/14/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/16/09	9197481

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-005C-1374-GW

General Chemistry

Lot-Sample #...: A9G140103-021 **Work Order #...:** LGFAD **Matrix.....:** WG
Date Sampled...: 07/13/09 12:20 **Date Received..:** 07/14/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/16/09	9197481

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-006C-1368-GW

General Chemistry

Lot-Sample #...: A9G140103-023 **Work Order #...:** LGFAG **Matrix.....:** WG
Date Sampled...: 07/13/09 16:10 **Date Received..:** 07/14/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/16/09	9197481

Dilution Factor: 1 MDL.....: 0.0050

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A9G140103 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: LGLX71AA		MB Lot-Sample #:	A9G160000-481	
	ND	0.010	mg/L	SW846 9012A	07/16/09	9197481
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A9G140103 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: LGLX71AC	LCS Lot-Sample#: A9G160000-481		
	106	(80 - 120)	SW846 9012A	07/16/09	9197481
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A9G140103 **Matrix.....:** WG
Date Sampled...: 07/13/09 12:05 **Date Received..:** 07/14/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#:	LGE9E1AM-MS/LGE9E1AN-MSD			MS Lot-Sample #:	A9G140103-002
	99	(80 - 120)			SW846 9012A	07/16/09	9197481
	97	(80 - 120)	2.0	(0-20)	SW846 9012A	07/16/09	9197481
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A9G140103 **Matrix.....:** WATER
Date Sampled...: 07/14/09 10:20 **Date Received..:** 07/15/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total			WO#:	LGG2H1AM-MS/LGG2H1AN-MSD		MS Lot-Sample #:	A9G150104-004
	99	(80 - 120)			SW846 9012A	07/16/09	9197481
	128 N,*	(80 - 120)	25	(0-20)	SW846 9012A	07/16/09	9197481

Dilution Factor: 1

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

* Relative percent difference (RPD) is outside stated control limits.

Appendix I

Reason Code Library: Example 1

Category	Code
Low Bias Indicator	-
High Bias Indicator	+
Temperature	A
Holding Times	
Sampling to Analysis	C
Sampling to Extraction	D
Extaction to Analysis	E
Method Blanks	F
Surrogate Recovery	G
MS/MSD	
MS/MSD Recovery	H
MS/MSD RPD	I
LCS	
LCS Recovery	J
LCS RPD	K
Reporting Limits	L
Field QC	
Field Blank	M
Equipment Blank	N
Trip Blank	O
Field Duplicate	P

Category	Code
Initial Calibration	
Initial Calibration RRF	Q
Initial Calibration RSD	R
Initial Calibration Cor. Coef	S
Initial Calibration Verification	
Initial Calibration Verificaton RRF	T
Initial CalibrationVerification %D	U
Continuing Calibration	
Continuing Calibraiton RRF	V
Continuing Calibration %D	W
GC/MS Tune	
GC/MS Tune for Initial Calibration	X
GC/MS Tune for Continuing Calibration	Y
Laboratory Duplicate	Z
Categories not Assessed by Automated Data Review*	
Internal Standards	Is
Calibration Blanks	Cb
Resolution Check Mixture	Rm
Performance Evaluation Mixture	Pm
Professional Judgement	Pj

* Qualifiers for data-review categories not assessed by automated data review are manually entered by the user. The application automaticallly adds reason codes listed here when the user manually adds qualifiers for these categories if the option for applying reason codes was selected during automated data review.

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G140103										
6010B	FWGEQUIPRINSE1-1423-GW	AQ	EB							
				Potassium	1000	150B J		UJB	ug/L	Cb,F,L
6010B	FWGLL6mw-005C-1367-GF	AQ	N							
				Selenium	5.0	5.8		U	ug/L	Cb
6010B	FWGLL6mw-006C-1368-GF	AQ	N							
				Selenium	5.0	4.3B		UJ	ug/L	Cb,L
6010B	FWGLL6mw-007C-1369-GF	AQ	N							
				Selenium	5.0	5.0		U	ug/L	Cb
6010B	FWGLL7mw-001C-1370-GF	AQ	N							
				Nickel	10.0	8.8B		J	ug/L	L
				Potassium	1000	921B J		J	ug/L	L
6010B	FWGLL7mw-002C-1371-GF	AQ	N							
				Nickel	10.0	4.2B		J	ug/L	L
6010B	FWGLL7mw-003C-1372-GF	AQ	N							
				Nickel	10.0	6.1B		J	ug/L	L
				Selenium	5.0	5.3		U	ug/L	Cb
6010B	FWGLL7mw-004C-1373-GF	AQ	N							
				Nickel	10.0	7.4B		J	ug/L	L
6010B	FWGLL7mw-005C-1374-GF	AQ	N							
				Nickel	10.0	8.8B		J	ug/L	L
				Potassium	1000	992B J		J	ug/L	L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G140103										
6010B	FWGLL7mw-006C-1375-GF	AQ	N							
				Cobalt	5.0	1.8B		J	ug/L	L
				Nickel	10.0	8.5B		J	ug/L	L
				Potassium	1000	856B J		J	ug/L	L
6010B	FWGLL7mw-DUP1-1413-GF	AQ	FD							
				Cobalt	5.0	1.7B		J	ug/L	L
				Nickel	10.0	7.1B		J	ug/L	L
				Potassium	1000	892B J		J	ug/L	L
6020	FWGEQUIPRINSE1-1423-GW	AQ	EB							
				Zinc	10.0	3.4B J		JB	ug/L	Pj,F,L
6020	FWGLL6mw-005C-1367-GF	AQ	N							
				Zinc	10.0	3.2B J		JB	ug/L	Pj,N,F,L
6020	FWGLL6mw-006C-1368-GF	AQ	N							
				Zinc	10.0	5.1B J		JB	ug/L	Pj,N,F,L
6020	FWGLL6mw-007C-1369-GF	AQ	N							
				Zinc	10.0	3.7B J		JB	ug/L	Pj,N,F,L
6020	FWGLL7mw-001C-1370-GF	AQ	N							
				Thallium	1.0	0.18B		UJ	ug/L	Cb,L
				Zinc	10.0	53.9J		J	ug/L	Pj
6020	FWGLL7mw-002C-1371-GF	AQ	N							
				Cadmium	0.50	0.18B		J	ug/L	L
				Zinc	10.0	8.1B J		JB	ug/L	Pj,N,F,L
6020	FWGLL7mw-003C-1372-GF	AQ	N							
				Zinc	10.0	16.2J		JB	ug/L	Pj,N,F

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G140103										
6020	FWGLL7mw-004C-1373-GF	AQ	N							
				Zinc	10.0	16.8J		JB	ug/L	Pj,N,F
6020	FWGLL7mw-005C-1374-GF	AQ	N							
				Zinc	10.0	11.4J		JB	ug/L	Pj,N,F
6020	FWGLL7mw-006C-1375-GF	AQ	N							
				Cadmium	0.50	0.31B		J	ug/L	L
				Zinc	10.0	14.0J		JB	ug/L	Pj,N,F
6020	FWGLL7mw-DUP1-1413-GF	AQ	FD							
				Cadmium	0.50	0.23B		J	ug/L	L
				Zinc	10.0	16.8J		JB	ug/L	Pj,N,F

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G140103										
8081A	FWGLL6mw-005C-1367-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G140103										
8081A	FWGLL7mw-001C-1370-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G
8081A	FWGLL7mw-002C-1371-GW	AQ	N							
				beta-BHC	0.030	0.027J		J	ug/L	L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G140103										
8081A	FWGLL7mw-003C-1372-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G140103										
8081A	FWGLL7mw-004C-1373-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.022J		J	ug/L	G,L
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G140103										
8081A	FWGLL7mw-005C-1374-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G
8081A	FWGLL7mw-006C-1375-GW	AQ	N							
				beta-BHC	0.030	0.017J		J	ug/L	L,P

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G140103										
8081A	FWGLL7mw-DUP1-1413-GW	AQ	FD							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G,P
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G
8082	FWGLL6mw-005C-1367-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G140103										
8082	FWGLL7mw-003C-1372-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G
8260B	FWGEQUIPRINSE1-1423-GW	AQ	EB							
				2-Butanone	10	0.78J		J	ug/L	L
				Acetone	10	5.9J		UJ	ug/L	Pj,L,O
				Benzene	1.0	0.36J		J	ug/L	L
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	U
				Ethylbenzene	1.0	0.32J		J	ug/L	L
				M&P-XYLENES	2.0	1.3J		J	ug/L	L
				o-Xylene	1.0	0.46J		J	ug/L	L
				TOTAL XYLENES	2.0	1.8J		J	ug/L	L
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGLL6mw-005C-1367-GW	AQ	N							
				Acetone	10	10U		UJ	ug/L	Pj
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	U
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGLL6mw-006C-1368-GW	AQ	N							
				Acetone	10	10U		UJ	ug/L	Pj
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	U
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G140103										
8260B	FWGLL6mw-007C-1369-GW	AQ	N							
				Acetone	10	10U		UJ	ug/L	Pj
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	U
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGLL7mw-001C-1370-GW	AQ	N							
				Acetone	10	10U		UJ	ug/L	Pj
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	U
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGLL7mw-002C-1371-GW	AQ	N							
				Acetone	10	10U		UJ	ug/L	Pj
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	U
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGLL7mw-003C-1372-GW	AQ	N							
				Acetone	10	10U		UJ	ug/L	Pj
				Chloroethane	1.0	1.0U		UJ	ug/L	H,J
				Chloromethane	1.0	1.0U		UJ	ug/L	U
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGLL7mw-004C-1373-GW	AQ	N							
				Acetone	10	10U		UJ	ug/L	Pj
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	U
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G140103										
8260B	FWGLL7mw-005C-1374-GW	AQ	N							
				Acetone	10	10U		UJ	ug/L	Pj
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	U
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGLL7mw-006C-1375-GW	AQ	N							
				Acetone	10	10U		UJ	ug/L	Pj
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	U
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGLL7mw-DUP1-1413-GW	AQ	FD							
				Acetone	10	10U		UJ	ug/L	Pj
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	U
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGTEAM1-TRIP	AQ	TB							
				Acetone	10	2.3J		J	ug/L	Pj,L
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	U
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGTEAM2-TRIP	AQ	TB							
				Acetone	10	1.9J		J	ug/L	Pj,L
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	U
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGTEAM3-TRIP	AQ	TB							
				Acetone	10	2.6J		J	ug/L	Pj,L
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	U
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G140103										
8270C	FWGEQUIPRINSE1-1423-GW	AQ	EB							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	1.9J B		JB	ug/L	L,F
8270C	FWGLL6mw-005C-1367-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
8270C	FWGLL6mw-006C-1368-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
8270C	FWGLL6mw-007C-1369-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	1.1J B		JB	ug/L	L,N,F
8270C	FWGLL7mw-001C-1370-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	3.6J B		JB	ug/L	L,N,F
8270C	FWGLL7mw-002C-1371-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	5.8J B		JB	ug/L	L,N,F
8270C	FWGLL7mw-003C-1372-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	3.3J B		JB	ug/L	L,N,F
8270C	FWGLL7mw-004C-1373-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	1.2J B		JB	ug/L	L,N,F
8270C	FWGLL7mw-005C-1374-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	1.3J B		JB	ug/L	L,N,F

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G140103										
8270C	FWGLL7mw-006C-1375-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	1.4J B		JB	ug/L	L,N,F
8270C	FWGLL7mw-DUP1-1413-GW	AQ	FD							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	1.7J B		JB	ug/L	L,N,F

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A9G140103 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGEQUIPRINSE1-1423	A9G140103019	6010B	AQ	Potassium	B J	150	1000	ug/L
		6020		Zinc	B J	3.4	10.0	ug/L
		8260B		2-Butanone	J	0.78	10	ug/L
				Acetone	J	5.9	10	ug/L
				Benzene	J	0.36	1.0	ug/L
				Ethylbenzene	J	0.32	1.0	ug/L
				o-Xylene	J	0.46	1.0	ug/L
				TOTAL XYLENES	J	1.8	2.0	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	1.9	10	ug/L
FWGLL6mw-005C-1367-G	A9G140103018	6020		Zinc	B J	3.2	10.0	ug/L
FWGLL6mw-006C-1368-G	A9G140103024	6010B		Selenium	B	4.3	5.0	ug/L
		6020		Zinc	B J	5.1	10.0	ug/L
FWGLL6mw-007C-1369-G	A9G140103007			Zinc	B J	3.7	10.0	ug/L
FWGLL6mw-007C-1369-G	A9G140103006	8270C		bis(2-Ethylhexyl) phthalate	J B	1.1	10	ug/L
FWGLL7mw-001C-1370-G	A9G140103005	6010B		Nickel	B	8.8	10.0	ug/L
				Potassium	B J	921	1000	ug/L
		6020		Thallium	B	0.18	1.0	ug/L
FWGLL7mw-001C-1370-G	A9G140103004	8270C		bis(2-Ethylhexyl) phthalate	J B	3.6	10	ug/L
FWGLL7mw-002C-1371-G	A9G140103016	6010B		Nickel	B	4.2	10.0	ug/L
		6020		Cadmium	B	0.18	0.50	ug/L
				Zinc	B J	8.1	10.0	ug/L
FWGLL7mw-002C-1371-G	A9G140103015	8081A		beta-BHC	J	0.027	0.030	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	5.8	10	ug/L
FWGLL7mw-003C-1372-G	A9G140103003	6010B		Nickel	B	6.1	10.0	ug/L
FWGLL7mw-003C-1372-G	A9G140103002	8270C		bis(2-Ethylhexyl) phthalate	J B	3.3	10	ug/L
FWGLL7mw-004C-1373-G	A9G140103014	6010B		Nickel	B	7.4	10.0	ug/L
FWGLL7mw-004C-1373-G	A9G140103013	8081A		beta-BHC	J	0.022	0.030	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	1.2	10	ug/L
FWGLL7mw-005C-1374-G	A9G140103022	6010B		Nickel	B	8.8	10.0	ug/L
				Potassium	B J	992	1000	ug/L
FWGLL7mw-005C-1374-G	A9G140103021	8270C		bis(2-Ethylhexyl) phthalate	J B	1.3	10	ug/L
FWGLL7mw-006C-1375-G	A9G140103010	6010B		Cobalt	B	1.8	5.0	ug/L
				Nickel	B	8.5	10.0	ug/L
				Potassium	B J	856	1000	ug/L
		6020		Cadmium	B	0.31	0.50	ug/L
FWGLL7mw-006C-1375-G	A9G140103009	8081A		beta-BHC	J	0.017	0.030	ug/L

Project Number and Name: **30240.0006 - RVAAP (OH)**

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A9G140103 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGLL7mw-006C-1375-G	A9G140103009	8270C	AQ	bis(2-Ethylhexyl) phthalate	J B	1.4	10	ug/L
FWGLL7mw-DUP1-1413-	A9G140103012	6010B		Cobalt	B	1.7	5.0	ug/L
				Nickel	B	7.1	10.0	ug/L
				Potassium	B J	892	1000	ug/L
		6020		Cadmium	B	0.23	0.50	ug/L
FWGLL7mw-DUP1-1413-	A9G140103011	8270C		bis(2-Ethylhexyl) phthalate	J B	1.7	10	ug/L
FWGTEAM1-TRIP	A9G140103001	8260B		Acetone	J	2.3	10	ug/L
FWGTEAM2-TRIP	A9G140103008			Acetone	J	1.9	10	ug/L
FWGTEAM3-TRIP	A9G140103020			Acetone	J	2.6	10	ug/L

QC Outlier Report: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: A9G140103 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGEQUIPRINSE1-1423	A9G140103019	6010B	AQ	Calcium	U	1000	100.00	ug/L
				Magnesium	U	1000	100.00	ug/L
				Sodium	U	1000	200.00	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: **30240.0006 - RVAAP (OH)**

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 9198160 **Analysis Method :** 8260B **Analysis Date :** 07/17/2009

Preparation Batch : 9198160 **Preparation Type :** 5030B **Preparation Date :** 07/17/2009

Lab Reporting Batch : A9G140103 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Matrix	Analyte Name	Reported * Percent Recovery	Reported * RPD	Project Limits (Percent) Rejection Point**	Lower Limit	Upper Limit	RPD
FWGLL7mw-003C-1372-	A9G140103002S	AQ	Bromomethane	55		0.00	70.00	130.00	30.00
			Chloroethane	69		0.00	70.00	130.00	30.00
			Chloromethane	54		0.00	70.00	130.00	30.00
FWGLL7mw-003C-1372-	A9G140103002D		Bromomethane	60		0.00	70.00	130.00	30.00
			Chloroethane	66		0.00	70.00	130.00	30.00
			Chloromethane	60		0.00	70.00	130.00	30.00

Associated Samples: Parent sample only

Client Sample ID	Lab Sample ID
FWGLL7mw-003C-1372-GW	A9G140103002

* Only those Percent Recovery and/or RPD values outside project limits are listed in this report.

** Metal are also assessed against an upper rejection point of 150 percent for waters and 200 percent for soils and sediments

Project Number and Name: 30240.0006 - RVAAP (OH)

Laboratory Control Sample / Laboratory Control Sample Duplicate Outlier Report

Method Batch : 9198160 **Analysis Method :** 8260B **Analysis Date :** 07/17/2009

Preparation Batch : 9198160 **Preparation Type :** 5030B **Preparation Date :** 07/17/2009

Lab Reporting Batch : A9G140103 **Lab ID:** TALCAN

			Reported Values		Project Limits (Percent)			
LCS Lab Sample ID	**Matrix**	**Analyte Name**	**Percent Recovery**	**RPD**	**Rejection Point**	**Lower Limit**	**Upper Limit**	**RPD**
A9G170000160C	AQ	Chloroethane	66		30.00	72.00	129.00	30.00
		Vinyl chloride	71		30.00	73.00	134.00	30.00
A9G170000160L		Chloroethane	70	6.0	30.00	72.00	129.00	30.00

Associated Samples

Client Sample ID	**Lab Sample ID**
FWGEQUIPRINSE1-1423-GW	A9G140103019
FWGLL6mw-005C-1367-GW	A9G140103017
FWGLL6mw-006C-1368-GW	A9G140103023
FWGLL6mw-007C-1369-GW	A9G140103006
FWGLL7mw-001C-1370-GW	A9G140103004
FWGLL7mw-002C-1371-GW	A9G140103015
FWGLL7mw-003C-1372-GW	A9G140103002
FWGLL7mw-004C-1373-GW	A9G140103013
FWGLL7mw-005C-1374-GW	A9G140103021
FWGLL7mw-006C-1375-GW	A9G140103009
FWGLL7mw-DUP1-1413-GW	A9G140103011
FWGTEAM1-TRIP	A9G140103001
FWGTEAM2-TRIP	A9G140103008
FWGTEAM3-TRIP	A9G140103020

Scope of Data Qualification: The outlier in the LCS qualifies that analyte in all samples with the same Preparation Batch ID as the LCS

Project Number and Name: 30240.0006 - RVAAP (OH)

QC Outlier Report: Trip Blank

Lab Reporting Batch : A9G140103
Method/Preparation Batch : 9198160 / 9198160
Client Sample ID : FWGTEAM1-TRIP
Lab Sample ID : A9G140103001

Lab ID: TALCAN
Analysis Date : 07/17/2009
Preparation Date : 07/17/2009
Preparation Type : 5030B

Analysis Method : 8260B

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	2.3	10	ug/L	J	Common Contaminant

Acetone contamination found in the trip blank did not qualify any samples.

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	1.9	10	ug/L	J	Common Contaminant

Acetone was qualified due to trip blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGEQUIPRINSE1-1423-G	A9G140103019	1	5.8	J	ug/L

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	2.6	10	ug/L	J	Common Contaminant

Acetone contamination found in the trip blank did not qualify any samples.

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 9195070 **Analysis Method :** 8270C **Analysis Date :** 07/23/2009

Preparation Batch : 9195070 **Preparation Type :** 3520C **Preparation Date :** 07/14/2009

Lab Reporting Batch : A9G140103 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Matrix	Analyte Name	Reported * Percent Recovery	Reported * RPD	Project Limits (Percent) Rejection Point**	Lower Limit	Upper Limit	RPD
FWGLL7mw-003C-1372-	A9G140103002S	AQ	Hexachlorocyclopentadiene	37		0.00	~~45.00~~ 10 AKO 8/24/09	135.00	40.00
			Hexachloroethane	37		0.00	45.00	135.00	40.00
FWGLL7mw-003C-1372-	A9G140103002D		1,3-Dichlorobenzene	43		0.00	45.00	135.00	40.00
			Hexachlorocyclopentadiene	41		0.00	~~45.00~~ 10	135.00	40.00
			Hexachloroethane	35		0.00	45.00 AKO 8/24/09	135.00	40.00

Associated Samples: Parent sample only	
Client Sample ID	**Lab Sample ID**
FWGLL7mw-003C-1372-GW	A9G140103002

* Only those Percent Recovery and/or RPD values outside project limits are listed in this report.

** Metal are also assessed against an upper rejection point of 150 percent for waters and 200 percent for soils and sediments

Project Number and Name: 30240.0006 - RVAAP (OH)

Method Blank Outlier Report

Lab Reporting Batch : A9G140103
Analysis Method : 8270C
Preparation Type : 3520C
Method Blank Lab Sample ID : A9G140000070B

Lab ID: TALCAN
Analysis Date : 07/23/2009
Preparation Date : 07/14/2009
Preparation Batch : 9195070

bis(2-Ethylhexyl) phthalate	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	1.1	10	ug/L	J	Common Contaminant

bis(2-Ethylhexyl) phthalate was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
FWGEQUIPRINSE1-1423-G	A9G140103019	1	1.9	J B	ug/L
FWGLL6mw-007C-1369-GW	A9G140103006	1	1.1	J B	ug/L
FWGLL7mw-001C-1370-GW	A9G140103004	1	3.6	J B	ug/L
FWGLL7mw-002C-1371-GW	A9G140103015	1	5.8	J B	ug/L
FWGLL7mw-003C-1372-GW	A9G140103002	1	3.3	J B	ug/L
FWGLL7mw-004C-1373-GW	A9G140103013	1	1.2	J B	ug/L
FWGLL7mw-005C-1374-GW	A9G140103021	1	1.3	J B	ug/L
FWGLL7mw-006C-1375-GW	A9G140103009	1	1.4	J B	ug/L
FWGLL7mw-DUP1-1413-GW	A9G140103011	1	1.7	J B	ug/L

Surrogate Recovery Outlier Report

Lab Report Batch: A9G140103 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Dilution	Matrix	Surrogate	Percent Recovery	Criteria (percent) Lower Limit	Upper Limit	Reject Point	Associated Target Analytes
FWGLL6mw-005C-1367-GW	A9G140103017	8081A	1	AQ	Decachlorobiphenyl	37	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	39	50.0	150.0	10.0	All Target
FWGLL7mw-001C-1370-GW	A9G140103004	8081A	1	AQ	Decachlorobiphenyl	44	50.0	150.0	10.0	All Target
FWGLL7mw-003C-1372-GW	A9G140103002	8081A	1	AQ	Decachlorobiphenyl	23	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	29	50.0	150.0	10.0	All Target
FWGLL7mw-003C-1372-GWMSD	A9G140103002D	8081A	2	AQ	Decachlorobiphenyl	35	50.0	150.0	10.0	All Target
FWGLL7mw-004C-1373-GW	A9G140103013	8081A	1	AQ	Decachlorobiphenyl	47	50.0	150.0	10.0	All Target
FWGLL7mw-005C-1374-GW	A9G140103021	8081A	1	AQ	Decachlorobiphenyl	42	50.0	150.0	10.0	All Target
FWGLL7mw-DUP1-1413-GW	A9G140103011	8081A	1	AQ	Decachlorobiphenyl	43	50.0	150.0	10.0	All Target

QC Outlier Report: Field Duplicates (Non-qualified Outliers)

Lab Report Batch: A9G140103 **Lab ID:** TALCAN

			Field Sample				Field Sample Duplicate						
Analysis Method	Matrix	Analyte Name	Client Sample ID	Ana Type	Result	Lab Qualifier	Client Sample Duplicate ID	Ana Type	Result	Lab Qualifier	RPD Dup* (%)	RPD Criteria (%)	Result Units
8081A	AQ	beta-BHC	FWGLL7mw-006C	RES	0.017	J	FWGLL7mw-DUP	RES	0.030	U	200.0	30	ug/L

**Note: Outlier report also includes analytes detected in one sample but not in the related sample, i.e., analyte was detected in the field sample but not in the field duplicate sample, or vice versa. In this case, RPD value assigned to the field duplicate sample is 200.*

Project Number and Name: ***30240.0006 - RVAAP (OH)***

Method Blank Outlier Report

Lab Reporting Batch : A9G140103
Analysis Method : 6010B
Preparation Type : 3005A
Method Blank Lab Sample ID : A9G150000012B

Lab ID: TALCAN
Analysis Date : 07/17/2009
Preparation Date : 07/15/2009
Preparation Batch : 9196012

Potassium	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	153	1000	ug/L	B	

Potassium was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
FWGEQUIPRINSE1-1423-G	A9G140103019	1	153	B J	ug/L

Zinc	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	6.7	10.0	ug/L	B	

Zinc was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
FWGEQUIPRINSE1-1423-G	A9G140103019	1	3.4	B J	ug/L
FWGLL6mw-005C-1367-GF	A9G140103018	1	3.2	B J	ug/L
FWGLL6mw-006C-1368-GF	A9G140103024	1	5.1	B J	ug/L
FWGLL6mw-007C-1369-GF	A9G140103007	1	3.7	B J	ug/L
FWGLL7mw-002C-1371-GF	A9G140103016	1	8.1	B J	ug/L
FWGLL7mw-003C-1372-GF	A9G140103003	1	16.2	J	ug/L
FWGLL7mw-004C-1373-GF	A9G140103014	1	16.8	J	ug/L
FWGLL7mw-005C-1374-GF	A9G140103022	1	11.4	J	ug/L
FWGLL7mw-006C-1375-GF	A9G140103010	1	14.0	J	ug/L
FWGLL7mw-DUP1-1413-GF	A9G140103012	1	16.8	J	ug/L

QC Outlier Report: Equipment Blank

Lab Reporting Batch : A9G140103
Method/Preparation Batch : 9196012 / 9196012
Client Sample ID : FWGEQUIPRINSE1-1423-GW
Lab Sample ID : A9G140103019

Lab ID: TALCAN
Analysis Date : 07/17/2009
Preparation Date : 07/15/2009
Preparation Type : 3005A

Analysis Method : 6010B

Potassium	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	150	1000	ug/L	B J	

Potassium contamination found in the equipment blank did not qualify any samples.

Zinc	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	3.4	10.0	ug/L	B J	

Zinc was qualified due to equipment blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGLL6mw-005C-1367-GF	A9G140103018	1	3.2	B J	ug/L
FWGLL6mw-006C-1368-GF	A9G140103024	1	5.1	B J	ug/L
FWGLL6mw-007C-1369-GF	A9G140103007	1	3.7	B J	ug/L
FWGLL7mw-002C-1371-GF	A9G140103016	1	8.1	B J	ug/L
FWGLL7mw-003C-1372-GF	A9G140103003	1	16.2	J	ug/L
FWGLL7mw-004C-1373-GF	A9G140103014	1	16.8	J	ug/L
FWGLL7mw-005C-1374-GF	A9G140103022	1	11.4	J	ug/L
FWGLL7mw-006C-1375-GF	A9G140103010	1	14.0	J	ug/L
FWGLL7mw-DUP1-1413-GF	A9G140103012	1	16.8	J	ug/L

2-Butanone	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	0.78	10	ug/L	J	Common Contaminant

2-Butanone contamination found in the equipment blank did not qualify any samples.

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	5.9	10	ug/L	J	Common Contaminant

Acetone contamination found in the equipment blank did not qualify any samples.

Benzene	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	0.36	1.0	ug/L	J	

Benzene contamination found in the equipment blank did not qualify any samples.

Ethylbenzene	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	0.32	1.0	ug/L	J	

QC Outlier Report: Equipment Blank

Lab Reporting Batch : A9G140103
Method/Preparation Batch : 9198160 / 9198160
Client Sample ID : FWGEQUIPRINSE1-1423-GW
Lab Sample ID : A9G140103019

Lab ID: TALCAN
Analysis Date : 07/17/2009
Preparation Date : 07/17/2009
Preparation Type : 5030B

Analysis Method : 8260B

Ethylbenzene contamination found in the equipment blank did not qualify any samples.

Methylene chloride	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	2.8	2.0	ug/L		Common Contaminant

Methylene chloride contamination found in the equipment blank did not qualify any samples.

o-Xylene	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	0.46	1.0	ug/L	J	Common Contaminant

o-Xylene contamination found in the equipment blank did not qualify any samples.

Toluene	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	1.9	1.0	ug/L		Common Contaminant

Toluene contamination found in the equipment blank did not qualify any samples.

TOTAL XYLENES	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	1.8	2.0	ug/L	J	Common Contaminant

TOTAL XYLENES contamination found in the equipment blank did not qualify any samples.

bis(2-Ethylhexyl) phthalate	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	1.9	10	ug/L	J B	Common Contaminant

bis(2-Ethylhexyl) phthalate was qualified due to equipment blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGLL6mw-007C-1369-GW	A9G140103006	1	1.1	J B	ug/L
FWGLL7mw-001C-1370-GW	A9G140103004	1	3.6	J B	ug/L
FWGLL7mw-002C-1371-GW	A9G140103015	1	5.8	J B	ug/L
FWGLL7mw-003C-1372-GW	A9G140103002	1	3.3	J B	ug/L
FWGLL7mw-004C-1373-GW	A9G140103013	1	1.2	J B	ug/L
FWGLL7mw-005C-1374-GW	A9G140103021	1	1.3	J B	ug/L
FWGLL7mw-006C-1375-GW	A9G140103009	1	1.4	J B	ug/L
FWGLL7mw-DUP1-1413-GW	A9G140103011	1	1.7	J B	ug/L

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGEQUIPRINSE1-1423-GW **Lab Report Batch :** A9G140103 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G140103019

Reviewed By / Date : Angye Dragotta 8/25/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
2-Butanone	0.78		ug/L	J	YES	J								J							L
Acetone	5.9		ug/L	J	YES	UJ								J		U					Pj,L,O
Benzene	0.36		ug/L	J	YES	J								J							L
Chloroethane	1.0		ug/L	U	YES	UJ				UJ											J
Chloromethane	1.0		ug/L	U	YES	UJ													UJ		U
Ethylbenzene	0.32		ug/L	J	YES	J								J							L
M&P-XYLENES	1.3		ug/L	J	YES	J								J							L
o-Xylene	0.46		ug/L	J	YES	J								J							L
TOTAL XYLENES	1.8		ug/L	J	YES	J								J							L
Vinyl chloride	1.0		ug/L	U	YES	UJ				UJ											J
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	UJ															Pj
bis(2-Ethylhexyl) phthalate	1.9		ug/L	J B	YES	UJ	JB		~~J~~ B					J							L,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGEQUIPRINSE1-1423-GW **Lab Report Batch :** A9G140103 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G140103019

Reviewed By / Date : Angye Dragotta 8/25/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Potassium	150		ug/L	B J	YES	UJ B			~~U~~ B					J							Cb,F,L
Analysis Method : 6020						**Dilution: 1**															
Zinc	3.4		ug/L	B J	YES	~~U~~ J B			~~U~~ B					J							Pj,F,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL6mw-005C-1367-GF **Lab Report Batch :** A9G140103 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G140103018

Reviewed By / Date : Angye Dragotta 8/25/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Selenium	5.8		ug/L		YES	U															Cb
Analysis Method : 6020						**Dilution: 1**															
Zinc	3.2		ug/L	B J	YES	~~UJ~~ B			~~U~~ B					J		~~U~~ B					Pj,N,F,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL6mw-005C-1367-GW **Lab Report Batch :** A9G140103 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G140103017

Reviewed By / Date : Angye Dragotta 8/25/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	UJ							UJ								G
Aldrin	0.030		ug/L	U	YES	UJ							UJ								G
alpha-BHC	0.030		ug/L	U	YES	UJ							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	UJ							UJ								G
beta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
delta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
Dieldrin	0.030		ug/L	U	YES	UJ							UJ								G
Endosulfan I	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	UJ							UJ								G
Endrin	0.030		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.030		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	UJ							UJ								G
Methoxychlor	0.10		ug/L	U	YES	UJ							UJ								G
Toxaphene	2.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1260	0.50		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8260B						**Dilution: 1**															
Acetone	10		ug/L	U	YES	UJ															Pj
Chloroethane	1.0		ug/L	U	YES	UJ				UJ											J

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL6mw-005C-1367-GW **Lab Report Batch :** A9G140103 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G140103017

Reviewed By / Date : Angye Dragotta 8/25/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Chloromethane	1.0		ug/L	U	YES	UJ													UJ		U
Vinyl chloride	1.0		ug/L	U	YES	UJ				UJ											J
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	UJ															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL6mw-006C-1368-GF **Lab Report Batch :** A9G140103 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G140103024

Reviewed By / Date : Angye Dragotta 8/25/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Selenium	4.3		ug/L	B	YES	UJ								J							Cb,L
Analysis Method : 6020						**Dilution: 1**															
Zinc	5.1		ug/L	B J	YES	~~UJ~~ JB			~~U~~ B					J		~~U~~ B					Pj,N,F,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL6mw-006C-1368-GW **Lab Report Batch :** A9G140103 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G140103023

Reviewed By / Date : Angye Dragotta 8/25/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Acetone	10		ug/L	U	YES	UJ															Pj
Chloroethane	1.0		ug/L	U	YES	UJ				UJ											J
Chloromethane	1.0		ug/L	U	YES	UJ													UJ		U
Vinyl chloride	1.0		ug/L	U	YES	UJ				UJ											J
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	UJ															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL6mw-007C-1369-GF **Lab Report Batch :** A9G140103 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G140103007

Reviewed By / Date : Angye Dragotta 8/25/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Selenium	5.0		ug/L		YES	U															Cb
Analysis Method : 6020						**Dilution: 1**															
Zinc	3.7		ug/L	B J	YES	~~U~~ JB			~~U~~ B					J		~~U~~ B					Pj,N,F,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL6mw-007C-1369-GW **Lab Report Batch :** A9G140103 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G140103006

Reviewed By / Date : Angye Dragotta 8/25/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Acetone	10		ug/L	U	YES	UJ															Pj
Chloroethane	1.0		ug/L	U	YES	UJ				UJ											J
Chloromethane	1.0		ug/L	U	YES	UJ													UJ		U
Vinyl chloride	1.0		ug/L	U	YES	UJ				UJ											J
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	UJ															Pj
bis(2-Ethylhexyl) phthalate	1.1		ug/L	J B	YES	~~UJ~~ JB			U/B					J		~~U~~ JB					L,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL7mw-001C-1370-GF **Lab Report Batch :** A9G140103 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G140103005

Reviewed By / Date : Angye Dragotta 8/25/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Nickel	8.8		ug/L	B	YES	J								J							L
Potassium	921		ug/L	B J	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Thallium	0.18		ug/L	B	YES	UJ								J							Cb,L
Zinc	53.9		ug/L	J	YES	J															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL7mw-001C-1370-GW **Lab Report Batch :** A9G140103 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G140103004

Reviewed By / Date : Angye Dragotta 8/25/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	**UJ**							UJ								G
Aldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	**UJ**							UJ								G
beta-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
delta-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
Dieldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endosulfan I	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan II	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin ketone	0.030		ug/L	U	YES	**UJ**							UJ								G
gamma-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	**UJ**							UJ								G
Heptachlor	0.030		ug/L	U	YES	**UJ**							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	**UJ**							UJ								G
Methoxychlor	0.10		ug/L	U	YES	**UJ**							UJ								G
Toxaphene	2.0		ug/L	U	YES	**UJ**							UJ								G
Analysis Method : 8260B						**Dilution: 1**															
Acetone	10		ug/L	U	YES	**UJ**															Pj
Chloroethane	1.0		ug/L	U	YES	**UJ**				UJ											J
Chloromethane	1.0		ug/L	U	YES	**UJ**													UJ		U
Vinyl chloride	1.0		ug/L	U	YES	**UJ**				UJ											J
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	**UJ**															Pj
bis(2-Ethylhexyl) phthalate	3.6		ug/L	J B	YES	~~UJ~~ J B			UB					J		UB					L,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL7mw-002C-1371-GF **Lab Report Batch :** A9G140103 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G140103016

Reviewed By / Date : Angye Dragotta 8/25/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Nickel	4.2		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Cadmium	0.18		ug/L	B	YES	J								J							L
Zinc	8.1		ug/L	B J	YES	~~UJ~~ JB			~~U~~ B					J		~~U~~ B					Pj,N,F,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL7mw-002C-1371-GW **Lab Report Batch :** A9G140103 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G140103015

Reviewed By / Date : Angye Dragotta 8/25/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
beta-BHC	0.027		ug/L	J	YES	**J**								J							L
Analysis Method : 8260B						**Dilution: 1**															
Acetone	10		ug/L	U	YES	**UJ**															Pj
Chloroethane	1.0		ug/L	U	YES	**UJ**				UJ											J
Chloromethane	1.0		ug/L	U	YES	**UJ**													UJ		U
Vinyl chloride	1.0		ug/L	U	YES	**UJ**				UJ											J
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	**UJ**															Pj
bis(2-Ethylhexyl) phthalate	5.8		ug/L	J B	YES	~~UJ~~ JB			~~U~~ B					J		~~U~~ B					L,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL7mw-003C-1372-GF **Lab Report Batch :** A9G140103 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G140103003

Reviewed By / Date : Angye Dragotta 8/25/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Nickel	6.1		ug/L	B	YES	J								J							L
Selenium	5.3		ug/L		YES	U															Cb
Analysis Method : 6020						**Dilution: 1**															
Zinc	16.2		ug/L	J	YES	~~U~~ JB			~~U~~ B							~~U~~ B					Pj,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL7mw-003C-1372-GW **Lab Report Batch :** A9G140103 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G140103002

Reviewed By / Date : Angye Dragotta 8/25/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	UJ							UJ								G
Aldrin	0.030		ug/L	U	YES	UJ							UJ								G
alpha-BHC	0.030		ug/L	U	YES	UJ							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	UJ							UJ								G
beta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
delta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
Dieldrin	0.030		ug/L	U	YES	UJ							UJ								G
Endosulfan I	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	UJ							UJ								G
Endrin	0.030		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.030		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	UJ							UJ								G
Methoxychlor	0.10		ug/L	U	YES	UJ							UJ								G
Toxaphene	2.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1260	0.50		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8260B						**Dilution: 1**															
Acetone	10		ug/L	U	YES	UJ															Pj
Chloroethane	1.0		ug/L	U	YES	UJ				UJ	UJ										H,J

Project Number and Name: **30240.0006 - RVAAP (OH)** **Library Used:** **Ravenna GW**

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL7mw-003C-1372-GW **Lab Report Batch :** A9G140103 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G140103002

Reviewed By / Date : Angye Dragotta 8/25/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Chloromethane	1.0		ug/L	U	YES	**UJ**													UJ		U
Vinyl chloride	1.0		ug/L	U	YES	**UJ**				UJ											J
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	**UJ**															Pj
bis(2-Ethylhexyl) phthalate	3.3		ug/L	J B	YES	~~U~~ JB			~~U~~ B					J		~~U~~ B					L,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL7mw-004C-1373-GF **Lab Report Batch :** A9G140103 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G140103014

Reviewed By / Date : Angye Dragotta 8/25/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Nickel	7.4		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Zinc	16.8		ug/L	J	YES	~~UJ~~ JB			~~U~~ B							~~U~~ B					Pj,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL7mw-004C-1373-GW **Lab Report Batch :** A9G140103 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G140103013

Reviewed By / Date : Angye Dragotta 8/25/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	UJ							UJ								G
Aldrin	0.030		ug/L	U	YES	UJ							UJ								G
alpha-BHC	0.030		ug/L	U	YES	UJ							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	UJ							UJ								G
beta-BHC	0.022		ug/L	J	YES	J							J	J							G,L
delta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
Dieldrin	0.030		ug/L	U	YES	UJ							UJ								G
Endosulfan I	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	UJ							UJ								G
Endrin	0.030		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.030		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	UJ							UJ								G
Methoxychlor	0.10		ug/L	U	YES	UJ							UJ								G
Toxaphene	2.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8260B						**Dilution: 1**															
Acetone	10		ug/L	U	YES	UJ															Pj
Chloroethane	1.0		ug/L	U	YES	UJ				UJ											J
Chloromethane	1.0		ug/L	U	YES	UJ													UJ		U
Vinyl chloride	1.0		ug/L	U	YES	UJ				UJ											J
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	UJ															Pj
bis(2-Ethylhexyl) phthalate	1.2		ug/L	J B	YES	~~UJ~~ JB			~~UJ~~ B					J		~~UJ~~ B					L,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL7mw-005C-1374-GF **Lab Report Batch :** A9G140103 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G140103022

Reviewed By / Date : Angye Dragotta 8/25/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Nickel	8.8		ug/L	B	YES	J								J							L
Potassium	992		ug/L	B J	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Zinc	11.4		ug/L	J	YES	~~U~~ JB			~~U~~ B							~~U~~ B					Pj,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL7mw-005C-1374-GW **Lab Report Batch :** A9G140103 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G140103021

Reviewed By / Date : Angye Dragotta 8/25/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	UJ							UJ								G
Aldrin	0.030		ug/L	U	YES	UJ							UJ								G
alpha-BHC	0.030		ug/L	U	YES	UJ							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	UJ							UJ								G
beta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
delta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
Dieldrin	0.030		ug/L	U	YES	UJ							UJ								G
Endosulfan I	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	UJ							UJ								G
Endrin	0.030		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.030		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	UJ							UJ								G
Methoxychlor	0.10		ug/L	U	YES	UJ							UJ								G
Toxaphene	2.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8260B						**Dilution: 1**															
Acetone	10		ug/L	U	YES	UJ															Pj
Chloroethane	1.0		ug/L	U	YES	UJ				UJ											J
Chloromethane	1.0		ug/L	U	YES	UJ													UJ		U
Vinyl chloride	1.0		ug/L	U	YES	UJ				UJ											J
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	1.3		ug/L	J B	YES	~~UJ~~ JB			UJB					J		UJB					L,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL7mw-006C-1375-GF **Lab Report Batch :** A9G140103 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G140103010

Reviewed By / Date : Angye Dragotta 8/25/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Cobalt	1.8		ug/L	B	YES	J								J							L
Nickel	8.5		ug/L	B	YES	J								J							L
Potassium	856		ug/L	B J	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Cadmium	0.31		ug/L	B	YES	J								J							L
Zinc	14.0		ug/L	J	YES	~~U~~ JB			~~U~~ B							~~U~~ B					PJ,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL7mw-006C-1375-GW **Lab Report Batch :** A9G140103 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G140103009

Reviewed By / Date : Angye Dragotta 8/25/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
beta-BHC	0.017		ug/L	J	YES	J								J							L,P
Analysis Method : 8260B						**Dilution: 1**															
Acetone	10		ug/L	U	YES	UJ															Pj
Chloroethane	1.0		ug/L	U	YES	UJ				UJ											J
Chloromethane	1.0		ug/L	U	YES	UJ													UJ		U
Vinyl chloride	1.0		ug/L	U	YES	UJ				UJ											J
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	UJ															Pj
bis(2-Ethylhexyl) phthalate	1.4		ug/L	J B	YES	~~UJ~~ JB			~~J~~ B					J		~~J~~ B					L,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL7mw-DUP1-1413-GF **Lab Report Batch :** A9G140103 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G140103012

Reviewed By / Date : Angye Dragotta 8/25/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Cobalt	1.7		ug/L	B	YES	J								J							L
Nickel	7.1		ug/L	B	YES	J								J							L
Potassium	892		ug/L	B J	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Cadmium	0.23		ug/L	B	YES	J								J							L
Zinc	16.8		ug/L	J	YES	~~UJ~~ JB			~~U~~ B							~~U~~ B					Pj,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL7mw-DUP1-1413-GW **Lab Report Batch :** A9G140103 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G140103011

Reviewed By / Date : Angye Dragotta 8/25/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	UJ							UJ								G
Aldrin	0.030		ug/L	U	YES	UJ							UJ								G
alpha-BHC	0.030		ug/L	U	YES	UJ							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	UJ							UJ								G
beta-BHC	0.030		ug/L	U	YES	UJ							UJ								G,P
delta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
Dieldrin	0.030		ug/L	U	YES	UJ							UJ								G
Endosulfan I	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	UJ							UJ								G
Endrin	0.030		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.030		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	UJ							UJ								G
Methoxychlor	0.10		ug/L	U	YES	UJ							UJ								G
Toxaphene	2.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8260B						**Dilution: 1**															
Acetone	10		ug/L	U	YES	UJ															Pj
Chloroethane	1.0		ug/L	U	YES	UJ				UJ											J
Chloromethane	1.0		ug/L	U	YES	UJ													UJ		U
Vinyl chloride	1.0		ug/L	U	YES	UJ				UJ											J
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	UJ															Pj
bis(2-Ethylhexyl) phthalate	1.7		ug/L	J B	YES	~~UJ~~ JB			~~UJ~~ B					J		~~UJ~~ B					L,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGTEAM1-TRIP **Lab Report Batch :** A9G140103 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G140103001

Reviewed By / Date : Angye Dragotta 8/25/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Acetone	2.3		ug/L	J	YES	**J**								J							Pj,L
Chloroethane	1.0		ug/L	U	YES	**UJ**				UJ											J
Chloromethane	1.0		ug/L	U	YES	**UJ**													UJ		U
Vinyl chloride	1.0		ug/L	U	YES	**UJ**				UJ											J

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGTEAM2-TRIP **Lab Report Batch :** A9G140103 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G140103008

Reviewed By / Date : Angye Dragotta 8/25/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Acetone	1.9		ug/L	J	YES	J								J							Pj,L
Chloroethane	1.0		ug/L	U	YES	UJ				UJ											J
Chloromethane	1.0		ug/L	U	YES	UJ													UJ		U
Vinyl chloride	1.0		ug/L	U	YES	UJ				UJ											J

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGTEAM3-TRIP **Lab Report Batch :** A9G140103 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G140103020

Reviewed By / Date : Angye Dragotta 8/25/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Acetone	2.6		ug/L	J	YES	**J**								J							Pj,L
Chloroethane	1.0		ug/L	U	YES	**UJ**				UJ											J
Chloromethane	1.0		ug/L	U	YES	**UJ**													UJ		U
Vinyl chloride	1.0		ug/L	U	YES	**UJ**				UJ											J

Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2009 **Date:** September 14, 2009
STL Sample Delivery Group: A9G140147 **Revision:** 0

Data Validator: Angye Dragotta/Environmental Quality Management, Inc. (EQM, Inc.)

QA/QC Summary

On July 13, 2009 the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A9G140147.

Field Sample ID	Analytes	Method
FWGLL7mw-003c-1372-GW	Explosives	SW846 8330
FWGLL7mw-001c-1370-GW	Nitroguanidine	SW846 M8330
FWGLL6mw-007c-1369-GW	Nitrocellulose	SW846 353.2
FWGLL7mw-006c-1375-GW		
FWGLL7mw-DUP1-1413-GW		
FWGLL7mw-004c-1373-GW		
FWGLL7mw-002c-1371-GW		
FWGLL6mw-005c-1367-GW		
FWGEQUIPRINSE1-1423-GW		
FWGLL7mw-005c-1374-GW		
FWGLL6mw-006c-1368-GW		

The data presented in this report were evaluated according to the *Final Quality Assurance Project Plan Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant Ravenna, OH, Portage Environmental, September 2004.* The following documents will be used as needed to supplement the project documentation: *Louisville Chemistry Guidelines, USACE, June 2002 version 5, EPA National Functional Guidelines (NFG) for Organic Data Review, EPA-540/R-99-008, October 1999, NFG for Inorganic Data Review, EPA-540/R-04-004, October 2004, Analytical Methods, and Laboratory Standard Operating Procedures*. These objectives represent accuracy and precision performance goals for each analytical method.

The coolers were received between 0.4 - 4.4 °C. Upon receipt, it was documented by the laboratory, that the samples were not frozen and in good condition. Therefore, no qualifications were made to sample results based on temperatures less than 2°C.

The completeness objective for the project was 90%. The completeness objective was met for this SDG, 100%. Limitations, if any, on the data are indicated with qualifiers detailed below.

All analytical results have been verified against compliance requirements specified in the project QAP, LCG, associated analytical methods and/or SOPs, as appropriate. Checklists used in review of the data have been inserted in the SDGs by parameter. Outliers have been noted below and results requiring qualification, as a result of this verification process, have been summarized in Appendix 1.

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2009 **Date:** September 14, 2009
STL Sample Delivery Group: A9G140147 **Revision:** 0

Explosives- 8330
The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- ICV and CCV criteria
- Retention time criteria
- MDL/MRL Level Verification
- Surrogate recovery criteria
- Equipment blank free from contamination
- LCS Recovery Criteria
- MS Recovery Criteria
- Field Duplicate RPD Criteria

4-Nitrotoluene appears to not have been spiked and/or recover in the calibration verifications; however the compound is co-eluting with 2-nitrotoluene. No qualifications made as LC9 was used as confirmation and the %D for 2-nitrotoluene were within criteria.

Initial Calibration Criteria
The initial calibration on LC10, as presented by the laboratory, had incorporated a reanalyzed STD3. While the laboratory analyzed an ICV following the first analysis of all the calibration standards, it was noted by EQM that the curve did not have a valid ICV following the re-analysis of STD 3. Since the laboratory reinjected STD3 because of problems associated with a target not required by this project, it was requested by EQM that the calibration with the initial analysis of STD 3 be used in the quantitation of the samples. The laboratory reprocessed the samples and submitted a revised data package for the reprocessed samples. EQM also requested a corrective action and the laboratory's corrective action response has been provided as part of the verification package.

Blanks
1,3,5-Trinitrobenzene was detected in the method blank at 0.035ug/L. Detected 1,3,5-trinitrobenzene results <5x contamination were qualified, "B".

Nitroguanidine- 8330M
The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- Retention time criteria
- MRL level verification criteria
- MDL verification criteria
- ICV and CCV criteria
- The method blank and equipment blanks were free from contamination
- LCS/LCSD percent recoveries and RPD value criteria
- Matrix spike recovery criteria

No QC outliers were noted.

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2009 **Date:** September 14, 2009
STL Sample Delivery Group: A9G140147 **Revision:** 0

Nitrocellulose - 353.2

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Sample preparation criteria
- Initial Calibration criteria
- ICV and CCV criteria
- The equipment rinse and method blanks were free from contamination
- MRL Level Verification criteria
- ICB and CCBs were free from contamination
- LCS/LCSD percent recoveries and RPD value criteria
- MS/MSD percent recoveries
- Nitrocellulose assay criteria

No QC outliers noted.

Data Validator: Angie Drag
Date: 9/15/09

2nd Level Data Review: Erik Corbin
Date: 9/16/09

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

John Miller
Environmental Quality Management, Inc.
1800 Carillon Boulevard
Cincinnati, Ohio 45240

September 15, 2009

Subject: Method 8330 Calibration Corrective Action

Dear Mr. Miller:

During your company's data validation of one of our packages (TAL West Sacramento lot A9G140147) it was noted that one of our EPA Method 8330 initial calibrations had a problem. The analyst had set up the run with the calibration points followed by a blank and initial calibration verification (ICV). After those points had run the analyst found a problem with the injection of the third calibration standard. He marked this in the run log but only entered "bad standard" as the technical justification for a reinjection of the point. He then re-injected the third calibration standard and used the re-injected standard in the calibration curve. The analyst did not re-inject the ICV after the re-injected calibration point. This error was not caught during the second level review of the calibration curve.

An interview with the analyst and an examination of the raw data from this run brought out several points. The analyst had originally rejected the 3rd calibration injection because they had observed that the septum had been pushed into the vial by the needle. They observed that the picric acid response was disproportional to the other peaks and felt this might be due to the injection issue. This was the reasoning for the reinjection of the standard. Our re-examination of the data for the original injection showed that all the other peaks in that injection appeared to be satisfactory.

This series of events highlighted two problems with the process of calibration curve running. The first was that the analyst was not aware that the ICV needed to be re-run again if re-injections of calibration points occur after the original ICV injection. Secondly, the analyst had not sufficiently documented on the run list the technical justification for the re-injection of the calibration.

The root cause of the problem was that the analyst was unaware that an ICV is valid only if it is run after all the calibration points that are going to be used have been run. They were aware of the rule in general but had not thought through the situation where a calibration point had been re-injected. The fact that the second level review did not catch this indicated the issue may go beyond one analyst.

Our corrective action plan involved several items:

1) The initial calibration was re-calculated using the original injection of the 3rd calibration standard. This produced a curve that passed all criteria for all analytes except picric acid. Picric acid is not a target analyte for your samples. The ICV run after this recalculated curve was re-processed against it and passed all criteria. The data for your projects associated with the original curve were reprocessed against the new curve and were reported to you.

2) A completely new calibration curve will be in place before any new samples from your company are run for Method 8330. Neither version of the curve discussed above will be used.
3) During the lab's all staff meeting of September 10, 2009 I used part of the QA portion of the program to discuss with all staff the issues that this event brought out. The need to run ICVs after all calibration points was highlighted. I also re-iterated to the staff when initial calibration point re-injections are allowable and the necessity of documenting on the run list and raw data the exact technical justification for the reinjection.
4) In future internal area audits I will be paying particular attention to run lists and any deviations from acceptable calibration practice and documentation.

I apologize for any inconvenience that this issue has caused you and your colleagues. We believe our corrective actions will assure there will be no repeat of this data issue. TestAmerica is dedicated to supplying our clients with accurate and defensible data and we look forward to demonstrating this in our future work with you.

If you have any questions, please feel free to call me at (916) 374-4389.

Sincerely,

Douglas Weir
Quality Assurance Manager
TestAmerica Laboratories West Sacramento

Subject: RE: EQM
From: "Weir, Douglas" <Douglas.Weir@testamericainc.com>
Date: Tue, 15 Sep 2009 19:01:17 -0600
To: <ecorbin@eqm.com>
CC: "Herbert, David" <David.Herbert@testamericainc.com>, "Dahl, Karen" <Karen.Dahl@testamericainc.com>, "West Sacramento - QA" <WestSacramento-QA@testamericainc.com>, "Allameh, David" <David.Allameh@testamericainc.com>

Erik,

This was a reprocessing of data. The samples were reprocessed first. The analyst realized the CCVs had not been reprocessed and did so ~1 hour later. Since all samples and CCVs were reprocessed against the same curve, the order of the reprocessing should not have any impact on the data. I hope this answers your question. If I'm missing the thrust of your question please let me know.

Karen Dahl sent the corrective action letter out today.

Sincerely,

Doug Weir

DOUGLAS WEIR, Ph.D.
Quality Assurance Manager
TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
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From: Dahl, Karen
Sent: Tuesday, September 15, 2009 12:44 PM
To: West Sacramento - QA; Allameh, David
Cc: Herbert, David
Subject: EQM
Importance: High

More followup questions. This needs a response today please.

Dave, have you had a chance to look at the corrective action letter?

From: Erik Corbin [mailto:ecorbin@eqm.com]
Sent: Tuesday, September 15, 2009 10:39 AM
To: Dahl, Karen
Cc: Angye Dragotta; Thurza, Michael; John Miller; Jackie Doan; Loeb, Mark
Subject: Re: A9G160265 Explosives

Karen,

Thanks for the response. We just have a few requests for clarification.

In previous packages we have received from this project, the Meth Date stamp has had exactly the same date and time for both sample and QC within a sequence (i.e., processed all at the same time). Why were samples reprocessed separately from QC in this instance? What is the reasoning for processing samples prior to processing QC?

Also, do you know when the corrective action for this issue is scheduled for completion? We would like to include a copy of the CA in our report.

Thanks,

Erik Corbin

Environmental Quality Management, Inc.
513-825-7500 (voice)
513-825-7495 (fax)
ecorbin@eqm.com

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Dahl, Karen wrote:

Hello everyone. I hope you are all having a good day. Please see the paragraph below from the laboratory. Please let me know if you have any questions or if you need any additional information. Thank you

The "Meth Date" line on the area percent report is a time stamp for when the method file was accessed. The method is accessed at the beginning of a run, when a CCV is processed and when the sample is reprocessed. So when the samples that were originally run on 7-26-09 where reprocessed on 9-4-09, the method date changes to 9-4-09 to reflect the new method access time stamp. Additionally the CCVs will also have a different time stamp since the method was accessed when the CCVs were

reprocessed on 9-4-09.

-----Original Message-----
From: Erik Corbin [mailto:ecorbin@eqm.com]
Sent: Monday, September 14, 2009 3:06 PM
To: Loeb, Mark
Cc: Angye Dragotta; Dahl, Karen; Thurza, Michael; John Miller; Jackie Doan
Subject: Re: A9G160265 Explosives

Mark,

Based on our conversation several hours ago, we understand that you are looking into this issue. We also understand that Sacramento is busy currently with an external audit. However, if EQ is to meet our commitment to our client, it is imperative we receive a response on this

issue - so that we may proceed with our evaluation of the data - at your

earliest possible convenience.

Please advise.

Regards,

Erik Corbin

Environmental Quality Management, Inc.
513-825-7500 (voice)
513-825-7495 (fax)
ecorbin@eqm.com

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Angye Dragotta wrote:

I was looking at the explosives data sent Fri. (thanks by the way)

and had a question regarding the reprocessing of the data. You will find attached a runlog that has the samples from this SDG highlighted. I was wondering why the the samples and instrument QC have different method dates and times. Could you please check with West Sac and let me know as soon as possible?

Thanks

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CASE NARRATIVE

A9G140147

The following report contains the analytical results for eleven water samples submitted to TestAmerica North Canton by Environmental Quality Mgt., Inc. from the RVAAP (OH) Site, project number 30240.0006. The samples were received July 14, 2009, according to documented sample acceptance procedures.

The 8330 Explosives, Nitroguanidine, and 353.2 Nitrocellulose as N analyses were performed at the TestAmerica West Sacramento laboratory. Refer to TestAmerica West Sacramento narrative included in their data package for additional information.

TestAmerica utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Angye Dragotta, Erik Corbin, Jackie Doan on July 29, 2009. A summary of QC data for these analyses is included at the back of the report.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Please refer to the Quality Control Elements Narrative following this case narrative for additional quality control information.

If you have any questions, please call the Project Manager, Mark J. Loeb, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT."

CASE NARRATIVE (continued)

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The coolers were received at temperatures ranging from 0.4 to 4.4°C.

NITROAROMATICS AND NITRAMINES-8330

The sample(s) that contained concentrations of target analyte(s) at a reportable level in the associated Method Blank(s) were flagged with "B". All target analytes in the Method Blank must be below the reporting limit (RL) or the associated sample(s) must be ND with the exception of common laboratory contaminants.

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

The analyses reported herein were performed using an instrument that has two columns(GC) or detectors(HPLC), one of which is used to confirm the results of the other. Peak interferences may result in some cases, which cause a quantitation difference between the two columns/detectors. If the difference between the two results is greater than 40%, the higher of the two results or the primary column/detector is normally reported. The reported results are flagged with "PG".

GENERAL CHEMISTRY

The sample(s) that contain results between the MDL and the RL were flagged with "B". There is the possibility of false positive or mis-identification at these quantitation levels. The acceptance criteria for the ICB, CCB, and Method Blank are +/- the standard reporting limit (SRL).

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

QUALITY CONTROL ELEMENTS NARRATIVE (continued)

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batcb is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may he included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

TestAmerica Certifications and Approvals:

The laboratory is certified for the analytes listed on the documents below. These are available upon request.

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225),
Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Nevada (#OH-000482008A), OhioVAP (#CL0024), Pennsylvania (#008), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit

N:\QAQC\Customer Service\Narrative - Combined RCRA _CWA 032609.doc

Case Narrative

TestAmerica West Sacramento Project Number A9G140147R

General Comments

This report contains revised 8330 results. As discussed, the original 8330 calibration curve included a point for the third calibration standard that had been acquired after the initial calibration verification (ICV) standard had been analyzed. The third calibration standard was originally analyzed before the ICV but was re-prepared and re-analyzed since it did not meet acceptance for picric acid. Per the laboratory's standard operating procedure the analyst should have re-analyzed the ICV after the third calibration standard was re-analyzed. Since all target analytes for this program met acceptance criteria in the original third calibration standard, the curve was reprocessed to include the original third calibration standard. The reprocessed curve passed all method criteria for all target analytes for this program. The ICV has now been acquired after all points of the initial calibration have been analyzed. All samples results have been reprocessed under this curve.

Following US EPA Region V guidelines, manual integrations were performed only when necessary and are in compliance with the laboratory's standard operating procedure, Acceptable Manual Integration Practices, SOP No.: S-Q-004, including Addendum 1. The reasons for manual integration have been documented on the affected chromatograms, which are provided in the raw data package. The raw data also includes the original chromatogram prior to any manual integrations being performed. The following samples and analytes required manual integration:

8330, LC10
Sample 1MSD - PETN
Sample 4 - HMX
Sample 5 - HMX

8330, LC9
MRL/MDL check - 2,4,6-Trinitrotoluene

There were no other anomalies associated with this project.

SAMPLE SUMMARY

A9G140147

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LGFR3	001	FWGLL7mw-003C-1372-GW	07/13/09	12:05
LGFTH	002	FWGLL7mw-001C-1370-GW	07/13/09	14:45
LGFTL	003	FWGLL6mw-007C-1369-GW	07/13/09	17:20
LGFTP	004	FWGLL7mw-006C-1375-GW	07/13/09	12:00
LGFTT	005	FWGLL7mw-DUP1-1413-GW	07/13/09	13:00
LGFT4	006	FWGLL7mw-004C-1373-GW	07/13/09	14:00
LGFT6	007	FWGLL7mw-002C-1371-GW	07/13/09	15:10
LGFT8	008	FWGLL6mw-005C-1367-GW	07/13/09	16:30
LGFVE	009	FWGEQUIPRINSE1-1423-GW	07/13/09	17:30
LGFVG	010	FWGLL7mw-005C-1374-GW	07/13/09	12:20
LGFVH	011	FWGLL6mw-006C-1368-GW	07/13/09	16:10

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 7-13-09	Chain of Custody Number: 003179
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513 825 7500 (fax 7495)	Lab Number: 3304979396	Page 1 of 1
City: Cincinnati; State: OH; Zip Code: 45240	Site Contact: E Corbin; Lab Contact: M Loeb		
Project Name and Location (State): RVAAP (OH) PN: 30240.0006	Carrier/Waybill Number: NA lab pickup		
Contract/Purchase Order/Quote No.: PO # 15660			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Propellants	Cyanide 9012	Metals 6010/6020 7470	Perchlorates	Explo 8330	Special Instructions/ Conditions of Receipt: Cooler ID #
FWG Team1 - Trip	7-13-09	10:00		X						2			X									C444
FWGLL7mw-003C-1372-GW	7-13-09	12:05		X			27			9	3		X	X	X	X	X	X			X	MSMSD A-1,405A,S1
FWGLL7mw-003C-1372-GF	7-13-09	12:05		X			3		3										X	X		MSMSD A-1,405A,S1
FWGLL7mw-001C-1370-GW	7-13-09	14:45		X			9			3	1		X	X	X	X	X	X			X	C10
FWGLL7mw-001C-1370-GF	7-13-09	14:45		X					1										X	X		C10
FWGLL6mw-007C-1369-GW	7-13-09	17:20		X			9			3	1		X	X	X	X	X	X			X	C444
FWGLL6mw-007C-1369-GF	7-13-09	17:20		X					1										X	X		C444

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other per SOW

QC Requirements (Specify): Metals / perchlorates were field filtered

	Date	Time		Date	Time
1. Relinquished By: [signature]	7/13/09	1800	1. Received By: RC Robison	7/13/09	1800
2. Relinquished By: RC Robison	7/13/09	1905	2. Received By: [signature]	7/14/09	0800
3. Relinquished By			3. Received By		

Comments: Temps may not meet requirements if sample collection is close to lab pickup time

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

AW 10/15/09 C444

North Canton

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 7-13-09	Chain of Custody Number: 003158
Address: 1800 CARILLON BLVD	Telephone Number (Area Code)/Fax Number: 513 825 7500 (fax 7495)	Lab Number: 3304979396	Page 1 of
City: Cincinnati; State: OH; Zip Code: 45240	Site Contact: E Corbin; Lab Contact: M Loen		
Project Name and Location (State): RVAAP (OH) PN 30240.0006	Carrier/Waybill Number: N/A LAB PICKUP		
Contract/Purchase Order/Quote No.: PO 15660			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC 8260	SVOC 8270	Pest 8081	PCB 8082	EXPLO 8330	Propellants	Cyanide 9012	Metals 6020	Perchlorates	Special Instructions/ Conditions of Receipt: Cooler ID #
FWG Team2-Trip	7-13-09	1000		X						2			X									C111
FWGLL7mw006C-1375-GW	↓	1200		X			9			3	1		X	X	X	X	X	X	X			179
FWGLL7mw006C-1375-GF	↓	↓		X			1		1											X	X	179
FWGLL7mw-DUP1-1413-GW	↓	1300		X			9			3	1		X	X	X	X	X	X	X			175
FWGLL7mw-DUP1-1413-GF	↓	↓		X			1		1											X	X	175
FWGLL7mw-004C-1373-GW	↓	1400		X			9			3	1		X	X	X	X	X	X	X			174
FWGLL7mw-004C-1373-GF	↓	↓		X			1		1											X	X	174
FWGLL7mw-002C-1371-GW	↓	1510		X			9			3	1		X	X	X	X	X	X	X			1D27
FWGLL7mw-002C-1371-GF	↓	1510		X			1		1											X	X	1D27
FWGLL6mw-005C-1367-GW	↓	1630		X			9			3	1		X	X	X	X	X	X	X			C111
FWGLL6mw-005C-1367-GF	↓	↓		X			1		1	Ice										X	X	C111
FWGEQUIPRinse1-1423-GW	7-13-09	1730		X			10		1	3	1		X	X	X	X	X	X	X	X	X	*NOT FILTERED C333

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other Per SOW

QC Requirements (Specify): Metal/Perchlorates were field filtered

	Date	Time		Date	Time
1. Relinquished By: [signature]	07/13/09	1800	1. Received By: R C Robison	7/13/09	1800
2. Relinquished By: [signature]	07/13/09	1800	2. Received By: Chris Lynch	7-14-09	8:00
3. Relinquished By: R Robison	7/13/09	1905	3. Received By:		

Comments: Temps may not meet requirements if sample collection close to lab pickup time. All VOAs in Cooler C111

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	EQM
Project Manager	JOHN MILLER
Date	07/13/2009
Chain of Custody Number	003166
Address	1800 CARILLON BLVD
Telephone Number (Area Code)/Fax Number	(513) 825-7500 (FAX - 7495)
Lab Number	(330) 497-9396
Page 1 of 1	
City	CINCINNATI
State	OH
Zip Code	45240
Site Contact	E CORBIN
Lab Contact	M. LOEB
Project Name and Location (State)	RVAAP (OH) 030240.0006
Carrier/Waybill Number	N/A - LAB PICKUP
Contract/Purchase Order/Quote No.	PO 156660

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil		Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		VOC 8260	SVOC 8270	PEST 8081	PCB 8082	EXPLO 8330	PROPELLANTS	CYANIDE 9012	METALS 6010/6020 7470	PERCHLORATES				Special Instructions/ Conditions of Receipt
FWG TRIP 3 TRIP	07/13/09	1100		X							2				X												MIN. VOLUME
FWG LL7MW-005C-1374-GW	07/13/09	1220		X				9			3	1			X	X	X	X	X	X	X						COOLER C119
FWG LL7MW-005C-1374-GF	07/13/09	1220		X				1		1												X	X				C119
FWG LL6MW-006C-1368-GW	07/13/09	1610		X				9			3	1			X	X	X	X	X	X	X						SB01
FWG LL6MW-006C-1368-GF	07/13/09	1610		X				1		1												X	X				SB01

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other PER SOW

QC Requirements (Specify): METALS/PERCHLORATE WHERE FIELD FILTERED

	Date	Time		Date	Time
1. Relinquished By	7/13/09	1800	1. Received By	7/13/09	1800
2. Relinquished By	7/13/09	1905	2. Received By	7/14/09	0800
3. Relinquished By			3. Received By		

Comments: TEMPS MAY NOT MEET REQUIREMENTS IF SAMPLE COLLECTION IS CLOSE TO LAB PICKUP TIME

ALL VOC'S IN COOLER SB01

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

16

TestAmerica Cooler Receipt Form/Narrative **Lot Number:** A9G140147
North Canton Facility

Client EQM Project RVAAP(OH) By: Chris Lingard (Signature)
Cooler Received on 7-14-09 Opened on 7-14-09
FedEx ☐ UPS ☐ DHL ☐ FAS ☐ Stetson ☐ Client Drop Off ☐ TestAmerica Courier ☒ Other _____
TestAmerica Cooler # _____ Multiple Coolers ☒ Foam Box ☐ Client Cooler ☐ Other _____

1. Were custody seals on the outside of the cooler(s)? Yes ☒ No ☐ Intact? Yes ☒ No ☐ NA ☐
   If YES, Quantity 6 Quantity Unsalvageable _____
   Were custody seals on the outside of cooler(s) signed and dated? Yes ☒ No ☐ NA ☐
   Were custody seals on the bottle(s)? Yes ☐ No ☒
   If YES, are there any exceptions? _____
2. Shippers' packing slip attached to the cooler(s)? Yes ☐ No ☒
3. Did custody papers accompany the sample(s)? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Were the custody papers signed in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☒ Foam ☐ None ☐ Other _____
6. Cooler temperature upon receipt _____ °C See back of form for multiple coolers/temps ☒
   METHOD: IR ☒ Other ☐ _____
   COOLANT: Wet Ice ☒ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐
7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels be reconciled with the COC? Yes ☒ No ☐
9. Were sample(s) at the correct pH upon receipt? Yes ☒ No ☐ NA ☐
10. Were correct bottle(s) used for the test(s) indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☒ NA ☐
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a trip blank present in the cooler(s)? Yes ☒ No ☐ Were VOAs on the COC? Yes ☒ No ☐

Contacted PM _____ Date _____ by _____ via Verbal ☐ Voice Mail ☐ Other ☐
Concerning _____

14. CHAIN OF CUSTODY

The following discrepancies occurred:

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in Sample Receiving to meet recommended pH level(s). *Nitric Acid Lot#* 031909-HNO_3; *Sulfuric Acid Lot#* 100108-H_2SO_4; *Sodium Hydroxide Lot#* 073007 -*NaOH; Hydrochloric Acid Lot#* 092006-*HCl; Sodium Hydroxide and Zinc Acetate Lot#* 050205-$(CH_3COO)_2ZN/NaOH$. What time was preservative added to sample(s)? _____

Client ID	GF GW pH	Date	Initials
1375 GW / GF	<2 >12	7-14-09	CSL
1413 GW / GF	<2 >12		
1373 GW / GF	<2 >12		
1371 GW / GF	<2 >12		
1367 GW / GF	<2 >12		
1423 GW / GF	<2 >12		
1372 GW / GF	<2 <2 <2 >12 >12 >12		
1370 GW / GF	<2 >12		

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials
1369 GW/GF	<2 >12	7/14/09	[illegible]
1374 GW/GF	<2 >12	↓	↓
1368 GW/GF	<2 >12	↓	↓

Cooler #	Temp. °C	Method	Coolant
179	3.2	IR	Ice
175	4.4	↓	↓
174	3.7	↓	↓
1D27	4.1	↓	↓
C111	4.4	↓	↓
C333	3.6	↓	↓
A1	2.2	↓	↓
405A	2.6	↓	↓
S1	4.4	↓	↓
C10	2.8	↓	↓
C444	2.6	↓	↓
C119	0.4°C	↓	↓

Discrepancies Cont'd:

SB01	2.8°C	↓	↓

8330 EXPLOSIVES DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ September 14, 2009

SDG: A9G140147 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.4 - 4.4 °C. Upon receipt, it was documented by the laboratory, that the samples were not frozen and in good condition. Therefore, no qualifications were made to sample results based on temperatures less than 2°C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Tale 3-7
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-7
7. Was a MDL Level Verification analyzed once per quarter with all target analytes detected?	✓			LC10 7/22/09 @1826 , LC9 7/24/09 @ 1556	LCG Table 5 R
8. Was a MRL Level verification run at the beginning and end of every daily sequence or every 12 hours? Was the %D < 30%?	✓				LCG Table 5 >30%=J
9. Does the initial calibration curve consist of 5 concentration levels? (6 stds for quadratic curves)	✓			ICAL: LC10 6/11/09, LC9 6/10/2009	STL SOP Section 10.2, LCG R
10. Were all target analytes %RSD ≤ 20%? OR was the average RSD ≤ 20%?	✓				LCG Table 5 >20% RSD=J/R
11. If a linear regression curve was used, was the correlation coefficient r≥0.995? (0.990 for Quadratic curve).			✓		STL SOP Section 10.4, LCG R<0.99=-J/R
12. Was a second source verification (ICV) analyzed after the ICAL and all analytes 85-115%?	✓			LC10 6/10/09 @ 2309 LC9 6/10/09 @ 0629- 4-Nitrotoluene appears to not have been spiked and/or recover; however the compound is co-eluting with 2-nitrotoluene. No qualifications made as LC9 was used as confirmation.	STL SOP Section 9.9 >115%=J; 80-85%=J/UJ; <80%=J/R
13. Was a CCV run at least every 10 samples and at the end of the analytical run?	✓				STL SOP Section 10.9

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ September 14, 2009

SDG: A9G140147 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
14. Was the average %D (difference or drift) for all target analytes < 15%?	✓			LC9- 4-Nitrotoluene appears to not have been spiked and/or recover; however the compound is co-eluting with 2-nitrotoluene. No qualifications made as LC9 was used as confirmation.	LCG Table 5 D>15% (neg) = J/R D>15% (pos) = J
15. Was a method blank prepared and analyzed with each batch?	✓				LCG Attachment A Section 5.6
16. Were target analytes in the method blank <1/2 the MRL?	✓			Checked by ADR. 1,3,5-Trinitrobenzene was detected in the method blank at 0.035ug/L. Detected 1,3,5-trinitrobenzene results <5x contamination were qualified, "B".	LCG Table 5 <5x = B
17. Was a field blank collected and analyzed?	✓			FWGEQUIPRinse1-1423-GW	
18. Were target analytes in the field blank analyses < ½ the MRL?	✓			Checked by ADR.	<5x=B
19. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓			Only detected results above the RL were evaluated. Sample FWGLL7mw-DUP1-1413-GW was the field duplicate for sample FWGLL7mw-006c-13775-GW.	QAPP Table 3-2 RPD >30=J
20. Were all positive results confirmed with a second column confirmation? Was the RPD ≤ 40%?		✓		The second column confirmation of RDX for sample FWGLL7mw-DUP1-1413-GW was above 40%. The RDX result for FWGLL7mw-DUP1-1413-GW was qualified as estimated, "J".	LCG Table 5 RPD>40%=J
21. Was an LCS prepared and analyzed with each batch?	✓				STL SOP Section 9.6
22. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR.	LCG Appendix C <UL=J; 30-LL=J/UJ; <30%=J/R
23. Was a MS/MSD pair prepared with each batch?	✓				STL SOP Section 9.7
24. Was the MS/MSD parent a Ravenna sample?	✓			Sample FWGLL7mw-003c-1372-GW was the parent MS/MSD sample from this SDG.	
25. Were MS/MSD recoveries 40-140% and RPD ≤20%?	✓			Checked by ADR.	QAPP Table 3-2 Pj
27. Were reported sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ September 14, 2009

SDG: A9G140147 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
29. Were lab comments included in report? If yes, summarize contents.	✓			See narrative regarding calibration and manual integrations.	

References: Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 5 and Attachment A "Data Validation Guidelines.

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

STL SOP SAC-LC-0009 Rev. 2.0- Determination of Nitroaromatic, Nitramines, and Specialty Explosives Based on Method 8330, SW-846.

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-003C-1372-GW

HPLC

Lot-Sample #...: A9G140147-001 **Work Order #...:** LGFR32AA **Matrix.....:** WG
Date Sampled...: 07/13/09 12:05 **Date Received..:** 07/14/09
Prep Date.....: 07/16/09 **Analysis Date..:** 07/22/09
Prep Batch #...: 9197257
Dilution Factor: 0.96 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	**0.041 J,B**	**0.096**	**ug/L**	**0.029**
1,3-Dinitrobenzene	ND	0.096	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.096	ug/L	0.096
2,4,6-Trinitrotoluene	ND	0.096	ug/L	0.048
2,4-Dinitrotoluene	ND	0.096	ug/L	0.048
2,6-Dinitrotoluene	ND	0.096	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.084
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.096	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.084
HMX	ND	0.096	ug/L	0.035
Nitrobenzene	ND	0.096	ug/L	0.048
Nitroglycerin	ND	0.62	ug/L	0.32
RDX	ND	0.096	ug/L	0.035
PETN	ND	0.62	ug/L	0.29
Tetryl	ND	0.096	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	99	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-001C-1370-GW

HPLC

Lot-Sample #...: A9G140147-002 **Work Order #...:** LGFTH2AA **Matrix.....:** WG
Date Sampled...: 07/13/09 14:45 **Date Received..:** 07/14/09
Prep Date.....: 07/16/09 **Analysis Date..:** 07/22/09
Prep Batch #...: 9197257
Dilution Factor: 0.96 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	**0.034 J,B**	**0.096**	**ug/L**	**0.029**
1,3-Dinitrobenzene	ND	0.096	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.096	ug/L	0.096
2,4,6-Trinitrotoluene	ND	0.096	ug/L	0.048
2,4-Dinitrotoluene	ND	0.096	ug/L	0.048
2,6-Dinitrotoluene	ND	0.096	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.084
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.096	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.084
HMX	ND	0.096	ug/L	0.035
Nitrobenzene	ND	0.096	ug/L	0.048
Nitroglycerin	ND	0.62	ug/L	0.32
RDX	ND	0.096	ug/L	0.035
PETN	ND	0.62	ug/L	0.29
Tetryl	ND	0.096	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	100	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-007C-1369-GW

HPLC

Lot-Sample #...: A9G140147-003 **Work Order #...:** LGFTL2AA **Matrix.....:** WG
Date Sampled...: 07/13/09 17:20 **Date Received..:** 07/14/09
Prep Date.....: 07/16/09 **Analysis Date..:** 07/23/09
Prep Batch #...: 9197257
Dilution Factor: 0.97 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.097	ug/L	0.029
1,3-Dinitrobenzene	ND	0.097	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.097	ug/L	0.097
2,4,6-Trinitrotoluene	ND	0.097	ug/L	0.048
2,4-Dinitrotoluene	ND	0.097	ug/L	0.048
2,6-Dinitrotoluene	ND	0.097	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.085
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.097	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.085
HMX	ND	0.097	ug/L	0.035
Nitrobenzene	ND	0.097	ug/L	0.048
Nitroglycerin	ND	0.63	ug/L	0.32
RDX	ND	0.097	ug/L	0.035
PETN	ND	0.63	ug/L	0.29
Tetryl	ND	0.097	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	102	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-006C-1375-GW

HPLC

Lot-Sample #...: A9G140147-004 **Work Order #...:** LGFTP2AA **Matrix.....:** WG
Date Sampled...: 07/13/09 12:00 **Date Received..:** 07/14/09
Prep Date.....: 07/16/09 **Analysis Date..:** 07/23/09
Prep Batch #...: 9197257
Dilution Factor: 0.96 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	**0.038 J,B**	**0.096**	**ug/L**	**0.029**
1,3-Dinitrobenzene	ND	0.096	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.096	ug/L	0.096
2,4,6-Trinitrotoluene	ND	0.096	ug/L	0.048
2,4-Dinitrotoluene	ND	0.096	ug/L	0.048
2,6-Dinitrotoluene	ND	0.096	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.084
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.096	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.084
HMX	**0.058 J**	**0.096**	**ug/L**	**0.035**
Nitrobenzene	ND	0.096	ug/L	0.048
Nitroglycerin	ND	0.62	ug/L	0.32
RDX	**0.57**	**0.096**	**ug/L**	**0.035**
PETN	ND	0.62	ug/L	0.29
Tetryl	ND	0.096	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	102	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-DUP1-1413-GW

HPLC

Lot-Sample #...: A9G140147-005 **Work Order #...:** LGFTT2AA **Matrix.....:** WG
Date Sampled...: 07/13/09 13:00 **Date Received..:** 07/14/09
Prep Date.....: 07/16/09 **Analysis Date..:** 07/23/09
Prep Batch #...: 9197257
Dilution Factor: 1.09 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	**0.049 J,B**	**0.11**	**ug/L**	**0.033**
1,3-Dinitrobenzene	ND	0.11	ug/L	0.054
2-Amino-4,6-dinitrotoluene	ND	0.11	ug/L	0.11
2,4,6-Trinitrotoluene	ND	0.11	ug/L	0.054
2,4-Dinitrotoluene	ND	0.11	ug/L	0.054
2,6-Dinitrotoluene	ND	0.11	ug/L	0.054
2-Nitrotoluene	ND	0.54	ug/L	0.096
3-Nitrotoluene	ND	0.54	ug/L	0.062
4-Amino-2,6-dinitrotoluene	ND	0.11	ug/L	0.054
4-Nitrotoluene	ND	0.54	ug/L	0.096
HMX	**0.045 J**	**0.11**	**ug/L**	**0.039**
Nitrobenzene	ND	0.11	ug/L	0.054
Nitroglycerin	ND	0.71	ug/L	0.36
RDX	**0.61 PG**	**0.11**	**ug/L**	**0.039**
PETN	ND	0.71	ug/L	0.33
Tetryl	ND	0.11	ug/L	0.054

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	102	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

PG The percent difference between the original and confirmation analyses is greater than 40%.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-004C-1373-GW

HPLC

Lot-Sample #...: A9G140147-006 **Work Order #...:** LGFT42AA **Matrix.....:** WG
Date Sampled...: 07/13/09 14:00 **Date Received..:** 07/14/09
Prep Date.....: 07/16/09 **Analysis Date..:** 07/23/09
Prep Batch #...: 9197257
Dilution Factor: 1.03 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	**0.049 J,B**	**0.10**	**ug/L**	**0.031**
1,3-Dinitrobenzene	ND	0.10	ug/L	0.052
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	0.10
2,4,6-Trinitrotoluene	ND	0.10	ug/L	0.052
2,4-Dinitrotoluene	ND	0.10	ug/L	0.052
2,6-Dinitrotoluene	ND	0.10	ug/L	0.052
2-Nitrotoluene	ND	0.52	ug/L	0.091
3-Nitrotoluene	ND	0.52	ug/L	0.059
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	0.052
4-Nitrotoluene	ND	0.52	ug/L	0.091
HMX	ND	0.10	ug/L	0.037
Nitrobenzene	ND	0.10	ug/L	0.052
Nitroglycerin	ND	0.67	ug/L	0.34
RDX	ND	0.10	ug/L	0.037
PETN	ND	0.67	ug/L	0.31
Tetryl	ND	0.10	ug/L	0.052

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	100	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-002C-1371-GW

HPLC

Lot-Sample #...: A9G140147-007 **Work Order #...:** LGFT62AA **Matrix.....:** WG
Date Sampled...: 07/13/09 15:10 **Date Received..:** 07/14/09
Prep Date.....: 07/16/09 **Analysis Date..:** 07/23/09
Prep Batch #...: 9197257
Dilution Factor: 1 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	**0.044 J,B**	**0.10**	**ug/L**	**0.030**
1,3-Dinitrobenzene	ND	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	0.10
2,4,6-Trinitrotoluene	ND	0.10	ug/L	0.050
2,4-Dinitrotoluene	ND	0.10	ug/L	0.050
2,6-Dinitrotoluene	ND	0.10	ug/L	0.050
2-Nitrotoluene	ND	0.50	ug/L	0.088
3-Nitrotoluene	ND	0.50	ug/L	0.057
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	0.050
4-Nitrotoluene	ND	0.50	ug/L	0.088
HMX	ND	0.10	ug/L	0.036
Nitrobenzene	ND	0.10	ug/L	0.050
Nitroglycerin	ND	0.65	ug/L	0.33
RDX	ND	0.10	ug/L	0.036
PETN	ND	0.65	ug/L	0.30
Tetryl	ND	0.10	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	102	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-005C-1367-GW

HPLC

Lot-Sample #...: A9G140147-008 **Work Order #...:** LGFT82AA **Matrix.....:** WG
Date Sampled...: 07/13/09 16:30 **Date Received..:** 07/14/09
Prep Date.....: 07/16/09 **Analysis Date..:** 07/23/09
Prep Batch #...: 9197257
Dilution Factor: 1.06 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	**0.035 J,B**	**0.11**	**ug/L**	**0.032**
1,3-Dinitrobenzene	ND	0.11	ug/L	0.053
2-Amino-4,6-dinitrotoluene	ND	0.11	ug/L	0.11
2,4,6-Trinitrotoluene	ND	0.11	ug/L	0.053
2,4-Dinitrotoluene	ND	0.11	ug/L	0.053
2,6-Dinitrotoluene	ND	0.11	ug/L	0.053
2-Nitrotoluene	ND	0.53	ug/L	0.093
3-Nitrotoluene	ND	0.53	ug/L	0.060
4-Amino-2,6-dinitrotoluene	ND	0.11	ug/L	0.053
4-Nitrotoluene	ND	0.53	ug/L	0.093
HMX	ND	0.11	ug/L	0.038
Nitrobenzene	ND	0.11	ug/L	0.053
Nitroglycerin	ND	0.69	ug/L	0.35
RDX	ND	0.11	ug/L	0.038
PETN	ND	0.69	ug/L	0.32
Tetryl	ND	0.11	ug/L	0.053

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	97	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1423-GW

HPLC

Lot-Sample #...: A9G140147-009 **Work Order #...:** LGFVE2AA **Matrix.....:** WQ
Date Sampled...: 07/13/09 17:30 **Date Received..:** 07/14/09
Prep Date.....: 07/16/09 **Analysis Date..:** 07/23/09
Prep Batch #...: 9197257
Dilution Factor: 1.06 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.11	ug/L	0.032
1,3-Dinitrobenzene	ND	0.11	ug/L	0.053
2-Amino-4,6-dinitrotoluene	ND	0.11	ug/L	0.11
2,4,6-Trinitrotoluene	ND	0.11	ug/L	0.053
2,4-Dinitrotoluene	ND	0.11	ug/L	0.053
2,6-Dinitrotoluene	ND	0.11	ug/L	0.053
2-Nitrotoluene	ND	0.53	ug/L	0.093
3-Nitrotoluene	ND	0.53	ug/L	0.060
4-Amino-2,6-dinitrotoluene	ND	0.11	ug/L	0.053
4-Nitrotoluene	ND	0.53	ug/L	0.093
HMX	ND	0.11	ug/L	0.038
Nitrobenzene	ND	0.11	ug/L	0.053
Nitroglycerin	ND	0.69	ug/L	0.35
RDX	**0.054 J**	**0.11**	**ug/L**	**0.038**
PETN	ND	0.69	ug/L	0.32
Tetryl	ND	0.11	ug/L	0.053

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	100	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-005C-1374-GW

HPLC

Lot-Sample #...: A9G140147-010 **Work Order #...:** LGFVG2AA **Matrix.....:** WG
Date Sampled...: 07/13/09 12:20 **Date Received..:** 07/14/09
Prep Date.....: 07/16/09 **Analysis Date..:** 07/23/09
Prep Batch #...: 9197257
Dilution Factor: 0.99 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.099	ug/L	0.030
1,3-Dinitrobenzene	ND	0.099	ug/L	0.050
2-Amino-4,6-dinitrotoluene	ND	0.099	ug/L	0.099
2,4,6-Trinitrotoluene	ND	0.099	ug/L	0.050
2,4-Dinitrotoluene	ND	0.099	ug/L	0.050
2,6-Dinitrotoluene	ND	0.099	ug/L	0.050
2-Nitrotoluene	ND	0.50	ug/L	0.087
3-Nitrotoluene	ND	0.50	ug/L	0.056
4-Amino-2,6-dinitrotoluene	ND	0.099	ug/L	0.050
4-Nitrotoluene	ND	0.50	ug/L	0.087
HMX	ND	0.099	ug/L	0.036
Nitrobenzene	ND	0.099	ug/L	0.050
Nitroglycerin	ND	0.64	ug/L	0.33
RDX	ND	0.099	ug/L	0.036
PETN	ND	0.64	ug/L	0.30
Tetryl	ND	0.099	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	93	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-006C-1368-GW

HPLC

Lot-Sample #...: A9G140147-011 **Work Order #...:** LGFVH2AA **Matrix.....:** WG
Date Sampled...: 07/13/09 16:10 **Date Received..:** 07/14/09
Prep Date.....: 07/16/09 **Analysis Date..:** 07/23/09
Prep Batch #...: 9197257
Dilution Factor: 1 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.10	ug/L	0.030
1,3-Dinitrobenzene	ND	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	0.10
2,4,6-Trinitrotoluene	ND	0.10	ug/L	0.050
2,4-Dinitrotoluene	ND	0.10	ug/L	0.050
2,6-Dinitrotoluene	ND	0.10	ug/L	0.050
2-Nitrotoluene	ND	0.50	ug/L	0.088
3-Nitrotoluene	ND	0.50	ug/L	0.057
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	0.050
4-Nitrotoluene	ND	0.50	ug/L	0.088
HMX	ND	0.10	ug/L	0.036
Nitrobenzene	ND	0.10	ug/L	0.050
Nitroglycerin	ND	0.65	ug/L	0.33
RDX	ND	0.10	ug/L	0.036
PETN	ND	0.65	ug/L	0.30
Tetryl	ND	0.10	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	100	(50 - 150)

METHOD BLANK REPORT

HPLC

Client Lot #...: A9G140147 **Work Order #...:** LGKVN1AD **Matrix.....:** WATER
MB Lot-Sample #: G9G160000-257

Prep Date.....: 07/16/09
Analysis Date..: 07/22/09 **Prep Batch #...:** 9197257
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
1,3,5-Trinitrobenzene	**0.035 J**	**0.10**	**ug/L**	**SW846 8330**
1,3-Dinitrobenzene	ND	0.10	ug/L	SW846 8330
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	SW846 8330
2,4,6-Trinitrotoluene	ND	0.10	ug/L	SW846 8330
2,4-Dinitrotoluene	ND	0.10	ug/L	SW846 8330
2,6-Dinitrotoluene	ND	0.10	ug/L	SW846 8330
2-Nitrotoluene	ND	0.50	ug/L	SW846 8330
3-Nitrotoluene	ND	0.50	ug/L	SW846 8330
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	SW846 8330
4-Nitrotoluene	ND	0.50	ug/L	SW846 8330
HMX	ND	0.10	ug/L	SW846 8330
Nitrobenzene	ND	0.10	ug/L	SW846 8330
Nitroglycerin	ND	0.65	ug/L	SW846 8330
RDX	ND	0.10	ug/L	SW846 8330
PETN	ND	0.65	ug/L	SW846 8330
Tetryl	ND	0.10	ug/L	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	101	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A9G140147 **Work Order #...:** LGKVN1AE **Matrix.....:** WATER
LCS Lot-Sample#: G9G160000-257
Prep Date.....: 07/16/09 **Analysis Date..:** 07/22/09
Prep Batch #...: 9197257
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,3,5-Trinitrobenzene	**107**	**(53 - 135)**	**SW846 8330**
1,3-Dinitrobenzene	**108**	**(54 - 120)**	**SW846 8330**
2-Amino-4,6-dinitrotoluene	**105**	**(53 - 120)**	**SW846 8330**
2,4,6-Trinitrotoluene	**96**	**(37 - 120)**	**SW846 8330**
2,4-Dinitrotoluene	**102**	**(58 - 136)**	**SW846 8330**
2,6-Dinitrotoluene	**104**	**(52 - 144)**	**SW846 8330**
2-Nitrotoluene	**96**	**(52 - 120)**	**SW846 8330**
3-Nitrotoluene	**97**	**(48 - 136)**	**SW846 8330**
4-Amino-2,6-dinitrotoluene	**99**	**(58 - 159)**	**SW846 8330**
4-Nitrotoluene	**97**	**(46 - 136)**	**SW846 8330**
HMX	**100**	**(45 - 140)**	**SW846 8330**
Nitrobenzene	**103**	**(49 - 120)**	**SW846 8330**
Nitroglycerin	**96**	**(60 - 120)**	**SW846 8330**
RDX	**107**	**(39 - 120)**	**SW846 8330**
PETN	**104**	**(60 - 120)**	**SW846 8330**
Tetryl	**88**	**(30 - 120)**	**SW846 8330**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	102	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A9G140147 **Work Order #...:** LGFR31AL-MS **Matrix.....:** WG
MS Lot-Sample #: A9G140147-001 LGFR31AM-MSD
Date Sampled...: 07/13/09 12:05 **Date Received..:** 07/14/09
Prep Date.....: 07/16/09 **Analysis Date..:** 07/22/09
Prep Batch #...: 9197257
Dilution Factor: 0.98

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3,5-Trinitrobenzene	102	(50 - 150)			SW846 8330
	101	(50 - 150)	2.5	(0-50)	SW846 8330
1,3-Dinitrobenzene	107	(50 - 150)			SW846 8330
	108	(50 - 150)	0.86	(0-50)	SW846 8330
2-Amino-4,6-dinitrotoluene	106	(50 - 150)			SW846 8330
	107	(50 - 150)	0.48	(0-50)	SW846 8330
2,4,6-Trinitrotoluene	94	(50 - 150)			SW846 8330
	96	(50 - 150)	0.10	(0-50)	SW846 8330
2,4-Dinitrotoluene	102	(50 - 150)			SW846 8330
	104	(50 - 150)	0.45	(0-50)	SW846 8330
2,6-Dinitrotoluene	103	(50 - 150)			SW846 8330
	105	(50 - 150)	0.59	(0-50)	SW846 8330
2-Nitrotoluene	95	(50 - 150)			SW846 8330
	99	(50 - 150)	3.2	(0-50)	SW846 8330
3-Nitrotoluene	93	(50 - 150)			SW846 8330
	96	(50 - 150)	1.8	(0-50)	SW846 8330
4-Amino-2,6-dinitrotoluene	100	(50 - 150)			SW846 8330
	100	(50 - 150)	1.0	(0-50)	SW846 8330
4-Nitrotoluene	94	(50 - 150)			SW846 8330
	97	(50 - 150)	1.2	(0-50)	SW846 8330
HMX	100	(50 - 150)			SW846 8330
	99	(50 - 150)	2.9	(0-50)	SW846 8330
Nitrobenzene	102	(50 - 150)			SW846 8330
	105	(50 - 150)	1.3	(0-50)	SW846 8330
Nitroglycerin	96	(50 - 150)			SW846 8330
	96	(50 - 150)	1.5	(0-50)	SW846 8330
RDX	124	(50 - 150)			SW846 8330
	124	(50 - 150)	1.6	(0-50)	SW846 8330
PETN	116	(50 - 150)			SW846 8330
	111	(50 - 150)	6.1	(0-50)	SW846 8330
Tetryl	84	(50 - 150)			SW846 8330
	86	(50 - 150)	0.82	(0-50)	SW846 8330

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A9G140147 **Work Order #...:** LGFR31AL-MS **Matrix.....:** WG
MS Lot-Sample #: A9G140147-001 LGFR31AM-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	102	(50 - 150)
	102	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

8330MOD NITROGUANIDINE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 25, 2009

SDG: A9G140147 R0
Analysis: SW846 8330M Nitroguanadine

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.4 - 4.4 °C. Upon receipt, it was documented by the laboratory, that the samples were not frozen and in good condition. Therefore, no qualifications were made to sample results based on temperatures less than 2°C.	QAPP Table 4-2
3. Were holding times met?	✓			Checked by ADR.	QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Tale 3-7
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-7
7. Was a MDL Level Verification analyzed once per quarter with all target analytes detected?	✓			7/21/09	LCG Table 5 R
8. Was a MRL Level verification run at the beginning and end of every daily sequence or every 12 hours? Was the %D < 30%?	✓				LCG Table 5 >30%=J
9. Does the initial calibration curve consist of 5 concentration levels? (6 stds for quadratic curves)	✓			Varian Star #1 ICAL: 1/29/09 primary column Stds: 20, 50, 100, 200, 500, 1000	STL SOP Section 10.2, LCG R
10. Were all target analytes %RSD ≤ 20%? OR was the average RSD ≤ 20%?	✓				LCG Table 5 >20% RSD=J/R
11. If a linear regression curve was used, was the correlation coefficient r≥0.995? (0.990 for Quadratic curve)	✓			Linear fit used. No qualifications were made as r>0.995.	STL SOP Section 10.4, LCG R<0.99=-J/R
12. Was a second source verification (ICV) analyzed after the ICAL and all analytes 85-115%?	✓			1/29/09 @ 2110	STL SOP Section 9.9 >115%=J; 80-85%=J/UJ; <80%=J/R
13. Was a CCV run at least every 10 samples and at the end of the analytical run?	✓				STL SOP Section 10.9

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 25, 2009

SDG: A9G140147 R0
Analysis: SW846 8330M Nitroguanadine

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
14. Was the average %D (difference or drift) for all target analytes < 15%?	✓				LCG Table 5 D>15% (neg) = J/R D>15% (pos) = J
15. Was a method blank prepared and analyzed with each batch?	✓				LCG Attachment A Section 5.6
16. Were target analytes reported in the method blank <1/2 the MRL?	✓				LCG Table 5 <5x = B
17. Was a field blank collected and analyzed?	✓			FWGEQUIPRinse1-1423-GW	
18. Were target analytes reported in the field blank analyses < ½ the MRL?	✓				<5x=B
19. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓			Sample FWGLL7mw-DUP1-1413-GW was the field duplicate for sample FWGLL7mw-006c-13775-GW.	QAPP Table 3-2 RPD >30=J
20. Were all positive results confirmed with a second column confirmation? Was the RPD ≤ 40%?			✓		LCG Table 5 RPD>40%=J
21. Was an LCS prepared and analyzed with each batch?	✓				STL SOP Section 9.6
22. Were the LCS recoveries within limits specified in LCG Appendix C?	✓				LCG Appendix C <UL=J; 30-LL=J/UJ; <30%=J/R
23. Was a MS/MSD pair prepared with each batch?	✓				STL SOP Section 9.7
24. Was the MS/MSD parent a Ravenna sample?	✓			Sample FWGLL7mw-003c-1372-GW was the parent MS/MSD sample from this SDG.	
25. Were MS/MSD recoveries 40-140% and RPD ≤20%?	✓				QAPP Table 3-2 Pj
27. Were reported sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
29. Were lab comments included in report?		✓			

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 25, 2009

SDG: A9G140147 R0
Analysis: SW846 8330M Nitroguanadine

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
If yes, summarize contents.					

References: Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 5 and Attachment A "Data Validation Guidelines.

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

STL SOP SAC-LC-0010 "Determination of Nitroguanidine Based on Method 8330, SW-846" April 2007, revision 2.0

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-003C-1372-GW

Dissolved HPLC

Lot-Sample #...:	A9G140147-001	**Work Order #...:**	LGFR31AH	**Matrix.....:**	WG
Date Sampled...:	07/13/09 12:05	**Date Received..:**	07/14/09		
Prep Date.....:	07/20/09	**Analysis Date..:**	07/22/09		
Prep Batch #...:	9201376				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-001C-1370-GW

Dissolved HPLC

Lot-Sample #...:	A9G140147-002	**Work Order #...:**	LGFTH1AD	**Matrix.....:**	WG
Date Sampled...:	07/13/09 14:45	**Date Received..:**	07/14/09		
Prep Date.....:	07/20/09	**Analysis Date..:**	07/22/09		
Prep Batch #...:	9201376				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-007C-1369-GW

Dissolved HPLC

Lot-Sample #...:	A9G140147-003	Work Order #...:	LGFTL1AD	Matrix.....:	WG
Date Sampled...:	07/13/09 17:20	Date Received..:	07/14/09		
Prep Date.....:	07/20/09	Analysis Date..:	07/22/09		
Prep Batch #...:	9201376				
Dilution Factor:	1	Method.....:	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-006C-1375-GW

Dissolved HPLC

Lot-Sample #...:	A9G140147-004	**Work Order #...:**	LGFTP1AD	**Matrix.....:**	WG
Date Sampled...:	07/13/09 12:00	**Date Received..:**	07/14/09		
Prep Date.....:	07/20/09	**Analysis Date..:**	07/22/09		
Prep Batch #...:	9201376				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-DUP1-1413-GW

Dissolved HPLC

Lot-Sample #...: A9G140147-005 Work Order #...: LGFTT1AD Matrix.....: WG
Date Sampled...: 07/13/09 13:00 Date Received..: 07/14/09
Prep Date.....: 07/20/09 Analysis Date..: 07/22/09
Prep Batch #...: 9201376
Dilution Factor: 1 Method.....: SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-004C-1373-GW

Dissolved HPLC

Lot-Sample #...:	A9G140147-006	Work Order #...:	LGFT41AD	Matrix.....:	WG
Date Sampled...:	07/13/09 14:00	Date Received..:	07/14/09		
Prep Date.....:	07/20/09	Analysis Date..:	07/22/09		
Prep Batch #...:	9201376				
Dilution Factor:	1	Method.....:	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-002C-1371-GW

Dissolved HPLC

Lot-Sample #...:	A9G140147-007	**Work Order #...:**	LGFT61AD	**Matrix.....:**	WG
Date Sampled...:	07/13/09 15:10	**Date Received..:**	07/14/09		
Prep Date.....:	07/20/09	**Analysis Date..:**	07/22/09		
Prep Batch #...:	9201376				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-005C-1367-GW

Dissolved HPLC

Lot-Sample #...:	A9G140147-008	**Work Order #...:**	LGFT81AD	**Matrix.....:**	WG
Date Sampled...:	07/13/09 16:30	**Date Received..:**	07/14/09		
Prep Date.....:	07/20/09	**Analysis Date..:**	07/22/09		
Prep Batch #...:	9201376				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1423-GW

Dissolved HPLC

Lot-Sample #...:	A9G140147-009	**Work Order #...:**	LGFVE1AD	**Matrix.....:**	WQ
Date Sampled...:	07/13/09 17:30	**Date Received..:**	07/14/09		
Prep Date.....:	07/20/09	**Analysis Date..:**	07/22/09		
Prep Batch #...:	9201376				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-005C-1374-GW

Dissolved HPLC

Lot-Sample #...:	A9G140147-010	**Work Order #...:**	LGFVG1AD	**Matrix.....:**	WG
Date Sampled...:	07/13/09 12:20	**Date Received..:**	07/14/09		
Prep Date.....:	07/20/09	**Analysis Date..:**	07/22/09		
Prep Batch #...:	9201376				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-006C-1368-GW

Dissolved HPLC

Lot-Sample #...:	A9G140147-011	**Work Order #...:**	LGFVH1AD	**Matrix.....:**	WG
Date Sampled...:	07/13/09 16:10	**Date Received..:**	07/14/09		
Prep Date.....:	07/20/09	**Analysis Date..:**	07/22/09		
Prep Batch #...:	9201376				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

METHOD BLANK REPORT

HPLC

Client Lot #...: A9G140147 **Work Order #...:** LGQHN1AA **Matrix.....:** WATER
MB Lot-Sample #: G9G200000-376

Prep Date.....: 07/20/09
Analysis Date..: 07/22/09 **Prep Batch #...:** 9201376
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Nitroguanidine	ND	20	ug/L	SW846 8330 (Modif

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A9G140147 **Work Order #...:** LGQHN1AC **Matrix.....:** WATER
LCS Lot-Sample#: G9G200000-376
Prep Date.....: 07/20/09 **Analysis Date..:** 07/22/09
Prep Batch #...: 9201376
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Nitroguanidine	**100**	**(73 - 117)**	**SW846 8330 (Modified**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A9G140147 **Work Order #...:** LGFR31AJ-MS **Matrix.....:** WG
MS Lot-Sample #: A9G140147-001 LGFR31AK-MSD
Date Sampled...: 07/13/09 12:05 **Date Received..:** 07/14/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/22/09
Prep Batch #...: 9201376
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Nitroguanidine	**104**	**(73 - 117)**			**SW846 8330 (Modified**
	104	**(73 - 117)**	**0.03**	**(0-15)**	**SW846 8330 (Modified**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

GENERAL CHEMISTRY DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 26, 2009

SDG: A9G140147 Rev 0
Analysis: EPA 353.2- Nitrocellulose

Review Questions:	Yes	No	N/A	Comments	Qualifier
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.4 - 4.4 °C. Upon receipt, it was documented by the laboratory, that the samples were not frozen and in good condition. Therefore, no qualifications were made to sample results based on temperatures less than 2°C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	✓				QAPP Table 3.7
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3.7
7. Was Acetone used to extract the samples? Was the Acetone evaporated using Nitrogen?	✓				STL SOP Sections 11.4
8. Does the initial calibration curve consist of 5 concentration levels with the low standard near but > MDL?	✓			Instrument FS4; ICAL 7/21/09 Stds- 0, 0.05, 0.2, 0.4, 1, 2	STL SOP Section 10.2 R
9. Was the correlation coefficient >0.995?	✓				STL SOP Section 10.2
10. Was a MRL Level Verification run at the beginning and end of every daily sequence or every 12 hours? Was the %D <30%?	✓				LCG Table 5 >30%=J
11. Was a second source verification (ICV) analyzed after the ICAL? Were all analytes 90-110%?	✓				STL SOP Section 9.8, 10.3, LCG >110%=J; 90-85%=J/UJ; <85%=J/R
12. Was the ICB analyzed after the ICV with results <1/2 the MRL?	✓				STL SOP Section 9.8, LCG < 5x = U
13. Was a CCV run every 10 samples and at the end of the analytical run?	✓				STL SOP Section 10.4
14. Was the ICV and CCV a mid-level standard from the initial calibration curve?	✓				STL SOP Section 10.3.1

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 26, 2009

SDG: A9G140147 Rev 0
Analysis: EPA 353.2- Nitrocellulose

Review Questions:	Yes	No	N/A	Comments	Qualifier
15. Were all CCV calibration analytes within 90-110%?	✓				STL SOP Section 10.4, LCG >110%=J; 85-90%=J/UJ; <85%=J/R
16. Was the ICB analyzed after the ICV with results <1/2 the MRL?	✓				STL SOP Section 10.4, LCG < 5x = U
17. Was the Nitrocellulose assay available and/or analyzed to be within 10%?	✓				STL SOP Section 7.14.1 R
18. Was a method blank prepared and analyzed with each batch?	✓				
19. Were target analytes reported in the method blank <1/2 the MRL?	✓			ADR checked section.	STL SOP Section 9.4, LCG <5x=B
20. Was a field blank collected and analyzed?	✓			FWGEQUIPRinse1-1423-GW	
21. Were target analytes reported in the field blank analyses <1/2 the MRL?	✓				<5x=B
22. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓			ADR checked section. Sample FWGLL7mw-DUP1-1413-GW was the field duplicate for sample FWGLL7mw-006c-13775-GW.	QAPP Table 3-2 RPD > 30% = J
23. Was an LCS prepared and analyzed with each batch? Was the LCS recovery within lab's in-house limits% (26-144%)?	✓				>UL%=J; 50-LL%=J/UJ; <50%=J/R
24. Was a MS/MSD pair prepared with each batch?	✓				
25. Was the MS/MSD parent a Ravenna sample?	✓			Sample FWGLL7mw-003c-1372-GW was the parent MS/MSD sample from this SDG.	
26. Were MS/MSD recoveries 26-144% and RPD ≤20?	✓			ADR checked section.	Method EPA 353.2 Section 9.4.2 >UL%=J; <LL%=J/UJ; RPD>20%=J/UJ
27. Were sample concentrations within calibration range?	✓				

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 26, 2009

SDG: A9G140147 Rev 0
Analysis: EPA 353.2- Nitrocellulose

Review Questions:	Yes	No	N/A	Comments	Qualifier
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
30. Were lab comments included in report? If yes, summarize contents.		✓			

References: *STL SOP SAC-WC-0050 "Preparation and Analysis of Nitrocellulose in Aqueous and Soil/Sediment Samples by Colorimetric Autoanalyzer", Jan 2007, rev. 2.0*

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-003C-1372-GW

General Chemistry

Lot-Sample #...: A9G140147-001 **Work Order #...:** LGFR3 **Matrix.....:** WG
Date Sampled...: 07/13/09 12:05 **Date Received..:** 07/14/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/20-07/21/09	9201388

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-001C-1370-GW

General Chemistry

Lot-Sample #...: A9G140147-002 Work Order #...: LGFTH Matrix.....: WG
Date Sampled...: 07/13/09 14:45 Date Received..: 07/14/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/20-07/21/09	9201388

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-007C-1369-GW

General Chemistry

Lot-Sample #...: A9G140147-003 **Work Order #...:** LGFTL **Matrix.....:** WG
Date Sampled...: 07/13/09 17:20 **Date Received..:** 07/14/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/20-07/21/09	9201388

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-006C-1375-GW

General Chemistry

Lot-Sample #...: A9G140147-004 **Work Order #...:** LGFTP **Matrix.....:** WG
Date Sampled...: 07/13/09 12:00 **Date Received..:** 07/14/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/20-07/21/09	9201388

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-DUP1-1413-GW

General Chemistry

Lot-Sample #...: A9G140147-005 **Work Order #...:** LGFTT **Matrix.....:** WG
Date Sampled...: 07/13/09 13:00 **Date Received..:** 07/14/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/20-07/21/09	9201388

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-004C-1373-GW

General Chemistry

Lot-Sample #...: A9G140147-006 **Work Order #...:** LGFT4 **Matrix.....:** WG
Date Sampled...: 07/13/09 14:00 **Date Received..:** 07/14/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/20-07/21/09	9201388

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-002C-1371-GW

General Chemistry

Lot-Sample #...: A9G140147-007 **Work Order #...:** LGFT6 **Matrix.....:** WG
Date Sampled...: 07/13/09 15:10 **Date Received..:** 07/14/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/20-07/21/09	9201388

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-005C-1367-GW

General Chemistry

Lot-Sample #...: A9G140147-008 **Work Order #...:** LGFT8 **Matrix.....:** WG
Date Sampled...: 07/13/09 16:30 **Date Received..:** 07/14/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/20-07/21/09	9201388

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1423-GW

General Chemistry

Lot-Sample #...: A9G140147-009 **Work Order #...:** LGFVE **Matrix.....:** WQ
Date Sampled...: 07/13/09 17:30 **Date Received..:** 07/14/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/20-07/21/09	9201388

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-005C-1374-GW

General Chemistry

Lot-Sample #...: A9G140147-010 Work Order #...: LGFVG Matrix.....: WG
Date Sampled...: 07/13/09 12:20 Date Received..: 07/14/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	0.12 B	0.50	mg/L	MCAWW 353.2	07/20-07/21/09	9201388

Dilution Factor: 1 MDL.....: 0.12

NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-006C-1368-GW

General Chemistry

Lot-Sample #...: A9G140147-011 **Work Order #...:** LGFVH **Matrix.....:** WG
Date Sampled...: 07/13/09 16:10 **Date Received..:** 07/14/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/20-07/21/09	9201388

Dilution Factor: 1 MDL.....: 0.12

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A9G140147 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		Work Order #: LGQJ41AA		MB Lot-Sample #:	G9G200000-388	
	ND	0.50	mg/L	MCAWW 353.2	07/20-07/21/09	9201388
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A9G140147 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		Work Order #: LGQJ41AC	LCS Lot-Sample#: G9G200000-388		
	90	(26 - 144)	MCAWW 353.2	07/20-07/21/09	9201388
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A9G140147 **Matrix.....:** WG
Date Sampled...: 07/13/09 12:05 **Date Received..:** 07/14/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		WO#:	LGFR31AF-MS/LGFR31AG-MSD			MS Lot-Sample #: A9G140147-001	
	85	(26 - 144)			MCAWW 353.2	07/20-07/21/09	9201388
	71	(26 - 144)	18	(0-45)	MCAWW 353.2	07/20-07/21/09	9201388
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Appendix I

Reason Code Library: Example 1

Category	Code
Low Bias Indicator	-
High Bias Indicator	+
Temperature	A
Holding Times	
Sampling to Analysis	C
Sampling to Extraction	D
Extaction to Analysis	E
Method Blanks	F
Surrogate Recovery	G
MS/MSD	
MS/MSD Recovery	H
MS/MSD RPD	I
LCS	
LCS Recovery	J
LCS RPD	K
Reporting Limits	L
Field QC	
Field Blank	M
Equipment Blank	N
Trip Blank	O
Field Duplicate	P

Category	Code
Initial Calibration	
Initial Calibration RRF	Q
Initial Calibration RSD	R
Initial Calibration Cor. Coef	S
Initial Calibration Verification	
Initial Calibration Verificaton RRF	T
Initial CalibrationVerification %D	U
Continuing Calibration	
Continuing Calibraiton RRF	V
Continuing Calibration %D	W
GC/MS Tune	
GC/MS Tune for Initial Calibration	X
GC/MS Tune for Continuing Calibration	Y
Laboratory Duplicate	Z
Categories not Assessed by Automated Data Review*	
Internal Standards	Is
Calibration Blanks	Cb
Resolution Check Mixture	Rm
Performance Evaluation Mixture	Pm
Professional Judgement	Pj

* Qualifiers for data-review categories not assessed by automated data review are manually entered by the user. The application automatically adds reason codes listed here when the user manually adds qualifiers for these categories if the option for applying reason codes was selected during automated data review.

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G140147										
353.2 Modified	FWGLL7mw-005C-1374-GW	AQ	N							
				Nitrocellulose	0.50	0.12B		J	mg/L	L
8330	FWGEQUIPRINSE1-1423-GW	AQ	EB							
				RDX	0.11	0.054J		J	ug/L	L
8330	FWGLL6mw-005C-1367-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.11	0.035J B		JB	ug/L	L,F
8330	FWGLL7mw-001C-1370-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.096	0.034J B		JB	ug/L	L,F
8330	FWGLL7mw-002C-1371-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.10	0.044J B		JB	ug/L	L,F
8330	FWGLL7mw-003C-1372-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.096	0.041J B		JB	ug/L	L,F
8330	FWGLL7mw-004C-1373-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.10	0.049J B		JB	ug/L	L,F
8330	FWGLL7mw-006C-1375-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.096	0.038J B		JB	ug/L	L,F
				HMX	0.096	0.058J		J	ug/L	L
8330	FWGLL7mw-DUP1-1413-GW	AQ	FD							
				1,3,5-Trinitrobenzene	0.11	0.049J B		JB	ug/L	L,F
				HMX	0.11	0.045J		J	ug/L	L
				RDX	0.11	0.61PG		J	ug/L	Pj

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGEQUIPRINSE1-1423-GW **Lab Report Batch :** A9G140147 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A9G140147009

Reviewed By / Date : _____ **Approved By / Date :** _____

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 1.06**															
RDX	0.054		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL6mw-005C-1367-GW
Lab Report Batch : A9G140147
Lab ID : TALCAN
Sample Date : 07/13/2009
Analysis Type: RE
Sample Matrix : AQ
Lab Sample ID: A9G140147008

Reviewed By / Date : _____
Approved By / Date : _____

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 1.06**															
1,3,5-Trinitrobenzene	0.035		ug/L	J B	YES	~~UJ~~ JB			JB					J							L,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL7mw-001C-1370-GW
Sample Date : 07/13/2009
Lab Sample ID: A9G140147002

Lab Report Batch : A9G140147
Analysis Type: RE

Lab ID : TALCAN
Sample Matrix : AQ

Reviewed By / Date : _____

Approved By / Date : _____

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 0.96**															
1,3,5-Trinitrobenzene	0.034		ug/L	J B	YES	~~UJ~~ JB			~~U~~ JB					J							L,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL7mw-002C-1371-GW **Lab Report Batch :** A9G140147 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A9G140147007

Reviewed By / Date : _____ **Approved By / Date :** _____

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 1**															
1,3,5-Trinitrobenzene	0.044		ug/L	J B	YES	~~UJ~~ JB			~~UB~~					J							L,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL7mw-003C-1372-GW **Lab Report Batch :** A9G140147 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A9G140147001

Reviewed By / Date : _____ **Approved By / Date :** _____

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 0.96**															
1,3,5-Trinitrobenzene	0.041		ug/L	J B	YES	~~U~~ JB			~~U~~ JB					J							L,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL7mw-004C-1373-GW **Lab Report Batch :** A9G140147 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A9G140147006

Reviewed By / Date : **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 1.03**															
1,3,5-Trinitrobenzene	0.049		ug/L	J B	YES	~~U~~ JB			~~J~~ B					J							L,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL7mw-005C-1374-GW
Lab Report Batch : A9G140147
Lab ID : TALCAN
Sample Date : 07/13/2009
Analysis Type: RES
Sample Matrix : AQ
Lab Sample ID: A9G140147010

Reviewed By / Date : _____

Approved By / Date : _____

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 353.2 Modified						**Dilution: 1**															
Nitrocellulose	0.12		mg/L	B	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL7mw-006C-1375-GW **Lab Report Batch :** A9G140147 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A9G140147004

Reviewed By / Date : _____ **Approved By / Date :** _____

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 0.96**															
1,3,5-Trinitrobenzene	0.038		ug/L	J B	YES	~~UJ~~ JB			~~U~~ JB					J							L,F
HMX	0.058		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL7mw-DUP1-1413-GW **Lab Report Batch :** A9G140147 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A9G140147005

Reviewed By / Date : **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 1.09**															
1,3,5-Trinitrobenzene	0.049		ug/L	J B	YES	~~UJ~~ JB			JB					J							L,F
HMX	0.045		ug/L	J	YES	J								J							L
RDX	0.61		ug/L	PG	YES	J															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Method Blank Outlier Report

Lab Reporting Batch : A9G140147
Analysis Method : 8330
Preparation Type : 3535
Method Blank Lab Sample ID : G9G160000257B

Lab ID: TALCAN
Analysis Date : 07/22/2009
Preparation Date : 07/16/2009
Preparation Batch : 9197257

1,3,5-Trinitrobenzene	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	**0.035**	**0.10**	**ug/L**	**J**	

1,3,5-Trinitrobenzene was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
FWGLL6mw-005C-1367-GW	A9G140147008	1.06	0.035	J B	ug/L
FWGLL7mw-001C-1370-GW	A9G140147002	0.96	0.034	J B	ug/L
FWGLL7mw-002C-1371-GW	A9G140147007	1	0.044	J B	ug/L
FWGLL7mw-003C-1372-GW	A9G140147001	0.96	0.041	J B	ug/L
FWGLL7mw-004C-1373-GW	A9G140147006	1.03	0.049	J B	ug/L
FWGLL7mw-006C-1375-GW	A9G140147004	0.96	0.038	J B	ug/L
FWGLL7mw-DUP1-1413-GW	A9G140147005	1.09	0.049	J B	ug/L

QC Outlier Report: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: A9G140147 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGEQUIPRINSE1-1423	A9G140147009	8330	AQ	2,4-Dinitrotoluene	U	0.11	0.11	ug/L
				2,6-Dinitrotoluene	U	0.11	0.11	ug/L
				2-Nitrotoluene	U	0.53	0.21	ug/L
				3-Nitrotoluene	U	0.53	0.21	ug/L
				4-Nitrotoluene	U	0.53	0.21	ug/L
FWGLL6mw-005C-1367-G	A9G140147008	8330	AQ	2,4-Dinitrotoluene	U	0.11	0.11	ug/L
				2,6-Dinitrotoluene	U	0.11	0.11	ug/L
				2-Nitrotoluene	U	0.53	0.21	ug/L
				3-Nitrotoluene	U	0.53	0.21	ug/L
				4-Nitrotoluene	U	0.53	0.21	ug/L
FWGLL6mw-006C-1368-G	A9G140147011	8330	AQ	2-Nitrotoluene	U	0.50	0.20	ug/L
				3-Nitrotoluene	U	0.50	0.20	ug/L
				4-Nitrotoluene	U	0.50	0.20	ug/L
FWGLL6mw-007C-1369-G	A9G140147003	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGLL7mw-001C-1370-G	A9G140147002	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGLL7mw-002C-1371-G	A9G140147007	8330	AQ	2-Nitrotoluene	U	0.50	0.20	ug/L
				3-Nitrotoluene	U	0.50	0.20	ug/L
				4-Nitrotoluene	U	0.50	0.20	ug/L
FWGLL7mw-003C-1372-G	A9G140147001	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGLL7mw-004C-1373-G	A9G140147006	8330	AQ	2-Nitrotoluene	U	0.52	0.21	ug/L
				3-Nitrotoluene	U	0.52	0.21	ug/L
				4-Nitrotoluene	U	0.52	0.21	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: **30240.0006 - RVAAP (OH)**

QC Outlier Report: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: A9G140147 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGLL7mw-005C-1374-G	A9G140147010	8330	AQ	2-Nitrotoluene	U	0.50	0.20	ug/L
				3-Nitrotoluene	U	0.50	0.20	ug/L
				4-Nitrotoluene	U	0.50	0.20	ug/L
FWGLL7mw-006C-1375-G	A9G140147004	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGLL7mw-DUP1-1413-	A9G140147005	8330	AQ	2,4-Dinitrotoluene	U	0.11	0.11	ug/L
				2,6-Dinitrotoluene	U	0.11	0.11	ug/L
				2-Nitrotoluene	U	0.54	0.22	ug/L
				3-Nitrotoluene	U	0.54	0.22	ug/L
				4-Nitrotoluene	U	0.54	0.22	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: **30240.0006 - RVAAP (OH)**

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A9G140147 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGEQUIPRINSE1-1423	A9G140147009	8330	AQ	RDX	J	0.054	0.11	ug/L
FWGLL6mw-005C-1367-G	A9G140147008			1,3,5-Trinitrobenzene	J B	0.035	0.11	ug/L
FWGLL7mw-001C-1370-G	A9G140147002			1,3,5-Trinitrobenzene	J B	0.034	0.096	ug/L
FWGLL7mw-002C-1371-G	A9G140147007			1,3,5-Trinitrobenzene	J B	0.044	0.10	ug/L
FWGLL7mw-003C-1372-G	A9G140147001			1,3,5-Trinitrobenzene	J B	0.041	0.096	ug/L
FWGLL7mw-004C-1373-G	A9G140147006			1,3,5-Trinitrobenzene	J B	0.049	0.10	ug/L
FWGLL7mw-005C-1374-G	A9G140147010	353.2 Modified		Nitrocellulose	B	0.12	0.50	mg/L
FWGLL7mw-006C-1375-G	A9G140147004	8330		1,3,5-Trinitrobenzene	J B	0.038	0.096	ug/L
				HMX	J	0.058	0.096	ug/L
FWGLL7mw-DUP1-1413-	A9G140147005			1,3,5-Trinitrobenzene	J B	0.049	0.11	ug/L
				HMX	J	0.045	0.11	ug/L

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2009 **Date:** September 1, 2009
STL Sample Delivery Group: A9G140154 **Revision:** 0

Data Validator: Angye Dragotta/Environmental Quality Management, Inc. (EQM, Inc.)

QA/QC Summary

On July 13, 2009, the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A9G140154.

Field Sample ID	Analytes	Method
FWGLL7mw-003c-1372-GF	Perchlorate	SW846 6860
FWGLL7mw-001c-1370-GF		
FWGLL6mw-007c-1369-GF		
FWGLL7mw-006c-1375-GF		
FWGLL7mw-DUP1-1413-GF		
FWGLL7mw-004c-1373-GF		
FWGLL7mw-002c-1371-GF		
FWGLL6mw-005c-1367-GF		
FWGEQUIPRINSE1-1423-GW		
FWGLL7mw-005c-1374-GF		
FWGLL6mw-006c-1368-GF		

The data presented in this report were evaluated according to the *Final Quality Assurance Project Plan Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant Ravenna, OH, Portage Environmental, September 2004.* The following documents will be used as needed to supplement the project documentation: *Louisville Chemistry Guidelines, USACE, June 2002 version 5, EPA National Functional Guidelines (NFG) for Organic Data Review, EPA-540/R-99-008, October 1999, NFG for Inorganic Data Review, EPA-540/R-04-004, October 2004,* Analytical Methods, and Laboratory Standard Operating Procedures. These objectives represent accuracy and precision performance goals for each analytical method.

The coolers were received between 0.4 - 4.4 °C. Upon receipt, it was documented by the laboratory, that the samples were not frozen and in good condition. Therefore, no qualifications were made to sample results based on temperatures less than 2°C.

The completeness objective for the project was 90%. The completeness objective was met for this SDG, 100%. Limitations, if any, on the data are indicated with qualifiers detailed below.

All analytical results have been verified against compliance requirements specified in the project QAP, LCG, associated analytical methods and/or SOPs, as appropriate. Checklists used in review of the data have been inserted in the SDGs by parameter. Outliers have been noted below and results requiring qualification, as a result of this verification process, have been summarized in Appendix 1.

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2009 **Date:** September 1, 2009
STL Sample Delivery Group: A9G140154 **Revision:** 0

Perchlorate - 6860

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Tuning criteria
- Initial Calibration Criteria
- Internal standard area and retention time criteria
- ICV and CCV criteria
- Limit of Detection Verification criteria
- Interference Check Sample criteria
- MRL verification criteria
- Method blank was free from contamination
- Equipment rinse was free from contamination
- Laboratory Reagent Blanks were free from contamination
- LCS recovery criteria
- MS/MSD recovery and RPD criteria
- Field duplicate RPD

No QC outliers were noted.

Data Reviewer: Angie Dragoo
Date: 9/16/09

2nd Level Data Review: Erik Carlson
Date: 9/16/09

SAMPLE SUMMARY

A9G140154

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LGFVX	001	FWGLL7mw-003C-1372-GF	07/13/09	12:05
LGFV2	002	FWGLL7mw-001C-1370-GF	07/13/09	14:45
LGFV4	003	FWGLL6mw-007C-1369-GF	07/13/09	17:20
LGFV5	004	FWGLL7mw-006C-1375-GF	07/13/09	12:00
LGFV8	005	FWGLL7mw-DUP1-1413-GF	07/13/09	13:00
LGFWA	006	FWGLL7mw-004C-1373-GF	07/13/09	14:00
LGFWC	007	FWGLL7mw-002C-1371-GF	07/13/09	15:10
LGFWG	008	FWGLL6mw-005C-1367-GF	07/13/09	16:30
LGFWJ	009	FWGEQUIPRINSE1-1423-GW	07/13/09	17:30
LGFWK	010	FWGLL7mw-005C-1374-GF	07/13/09	12:20
LGFWL	011	FWGLL6mw-006C-1368-GF	07/13/09	16:10

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 7-13-09	Chain of Custody Number: 003179
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513 825 7500 (fax 7495)	Lab Number: 3304979396	Page 1 of 1
City: Cincinnati; State: OH; Zip Code: 45240	Site Contact: E Corbin; Lab Contact: M Loeb		
Project Name and Location (State): RVAAP (OH) PN: 30240.0006	Carrier/Waybill Number: NA lab pickup		
Contract/Purchase Order/Quote No.: PO # 15660			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Propellants	Cyanide 9012	Metals 6010/6020 7470	Perchlorates	Explo 8330	Special Instructions/ Conditions of Receipt: Cooler ID #
FWG Team1 - Trip	7-13-09	10:00		X						2			X									C444
FWGLL7mw-003C-1372-GW	7-13-09	12:05		X			27			9	3		X	X	X	X	X	X			X	MSMSD A-1,405A,S1
FWGLL7mw-003C-1372-GF	7-13-09	12:05		X			3		3										X	X		MSMS DA-1,405A,S1
FWGLL7mw-001C-1370-GW	7-13-09	14:45		X			9			3	1		X	X	X	X	X	X			X	C10
FWGLL7mw-001C-1370-GF	7-13-09	14:45		X					1										X	X		C10
FWGLL6mw-007C-1369-GW	7-13-09	17:20		X			9			3	1		X	X	X	X	X	X			X	C444
FWGLL6mw-007C-1369-GF	7-13-09	17:20		X					1										X	X		C444

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other per SOW

QC Requirements (Specify): Metals / perchlorates were field filtered

	Date	Time		Date	Time
1. Relinquished By: [signature]	7/13/09	1800	1. Received By: RC Robison	7/13/09	1800
2. Relinquished By: RC Robison	7/13/09	1905	2. Received By: [signature]	7/14/09	0800
3. Relinquished By			3. Received By		

Comments: Temps may not meet requirements if sample collection is close to lab pickup time

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 7-13-09	Chain of Custody Number: 003158
Address: 1800 CARILLON BLVD	Telephone Number (Area Code)/Fax Number: 513 825 7500 (fax 7495)	Lab Number: 3304979396	Page 1 of
City: Cincinnati; State: OH; Zip Code: 45240	Site Contact: E Corbin; Lab Contact: M Loeb		
Project Name and Location (State): RVAAP (OH) PN 30240.0006	Carrier/Waybill Number: N/A LAB PICKUP		
Contract/Purchase Order/Quote No.: PO 15660			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC 8260	SVOC 8270	Pest 8081	PCB 8082	EXPLO 8330	Propellants	Cyanide 9012	Metals 6020	Perchlorates	Special Instructions/ Conditions of Receipt: Cooler ID #
FWG Team2-Trip	7-13-09	1000		X						2			X									C111
FWGLL7mw006C-1375-GW	↓	1200		X			9			3	1		X	X	X	X	X	X	X			179
FWGLL7mw006C-1375-GF	↓	↓		X			1		1											X	X	179
FWGLL7mw-DUP1-1413-GW	↓	1300		X			9			3	1		X	X	X	X	X	X	X			175
FWGLL7mw-DUP1-1413-GF	↓	↓		X			1		1											X	X	175
FWGLL7mw-004C-1373-GW	↓	1400		X			9			3	1		X	X	X	X	X	X	X			174
FWGLL7mw-004C-1373-GF	↓	↓		X			1		1											X	X	174
FWGLL7mw-002C-1371-GW	↓	1510		X			9			3	1		X	X	X	X	X	X	X			1D27
FWGLL7mw-002C-1371-GF	↓	1510		X			1		1											X	X	1D27
FWGLL6mw-005C-1367-GW	↓	1630		X			9			3	1		X	X	X	X	X	X	X			C111
FWGLL6mw-005C-1367-GF	↓	↓		X			1		1	Ice										X	X	C111
FWGEQUIPRinsel-1423-GW	7-13-09	1730		X			10		1	3	1		X	X	X	X	X	X	X	X	X	*NOT FILTERED C333

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other Person

QC Requirements (Specify): Metal/Perchlorates were field filtered

	Date	Time		Date	Time
1. Relinquished By: [signature]	07/13/09	1800	1. Received By: RC Robison	7/13/09	1800
2. Relinquished By: [signature]	07/13/09	1800	2. Received By: Chris [signature]	7-14-09	8:00
3. Relinquished By: RC Robison	7/13/09	1905	3. Received By:		

Comments: Temps may not meet requirements if sample collection close to lab pickup time. All VOAs in Cooler C111

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
EQM	JOHN MILLER	07/13/2009	003166
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
1800 CARILLON BLVD	(513) 825-7500 (FAX - 7495)	(330) 497-9396	

City	State	Zip Code	Site Contact	Lab Contact
CINCINNATI	OH	45240	E CORBIN	M. LOEB

Project Name and Location (State)	Carrier/Waybill Number
RVAAAP (OH) 030240.0006	N/A - LAB PICKUP

Contract/Purchase Order/Quote No.: PO 156660

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		Analysis (Attach list if more space is needed): VOC 8260	SVOC 8270	PEST 8081	PCB 8082	EXPLS 8330	PROPELLANTS	CYANIDE 9012	METALS 6010/6020 7470	PERCHLORATES				Special Instructions/ Conditions of Receipt
FWG TERM 3 TRIP	07/13/09	1100		X							2				X												MIN. VOLUME
FWG LL7MW-005C-1374-GW	07/13/09	1220		X				6			3	1			X	X	X	X	X	X	X						COOLER C119
FWG LL7MW-005C-1374-GF	07/13/09	1220		X				1		1												X	X				C119
FWG LL6MW-006C-1368-GW	07/13/09	1610		X				9			3	1			X	X	X	X	X	X	X						SB01
FWG LL6MW-006C-1368-GF	07/13/09	1610		X				1		1												X	X				SB01

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other PER SOW

QC Requirements (Specify): METALS/PERCHLORATE WHOLE FIELD FILTERED

	Date	Time		Date	Time
1. Relinquished By	7/13/09	1800	1. Received By	7/13/09	1800
2. Relinquished By	7/13/09	1905	2. Received By	7/14/09	0800
3. Relinquished By			3. Received By		

Comments: TEMPS MAY NOT MEET REQUIREMENTS IF SAMPLE COLLECTION IS CLOSE TO LAB PICKUP TIME

ALL VOC'S IN COOLER SB01

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

16

TestAmerica Cooler Receipt Form/Narrative **Lot Number:** AGG140154
North Canton Facility

Client EQM Project RVAAP (OH) By: Chris Dispard
Cooler Received on 7-14-09 Opened on 7-14-09 (Signature)
FedEx ☐ UPS ☐ DHL ☐ FAS ☐ Stetson ☐ Client Drop Off ☐ TestAmerica Courier ☒ Other ____
TestAmerica Cooler # ____ Multiple Coolers ☒ Foam Box ☐ Client Cooler ☐ Other ____

1. Were custody seals on the outside of the cooler(s)? Yes ☒ No ☐ Intact? Yes ☒ No ☐ NA ☐
   If YES, Quantity 6 Quantity Unsalvageable ____
   Were custody seals on the outside of cooler(s) signed and dated? Yes ☒ No ☐ NA ☐
   Were custody seals on the bottle(s)? Yes ☐ No ☒
   If YES, are there any exceptions? ____
2. Shippers' packing slip attached to the cooler(s)? Yes ☐ No ☒
3. Did custody papers accompany the sample(s)? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Were the custody papers signed in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☒ Foam ☐ None ☐ Other ____
6. Cooler temperature upon receipt ____ °C See back of form for multiple coolers/temps ☒
   METHOD: IR ☒ Other ☐ ____
   COOLANT: Wet Ice ☒ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐
7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels be reconciled with the COC? Yes ☒ No ☐
9. Were sample(s) at the correct pH upon receipt? Yes ☒ No ☐ NA ☐
10. Were correct bottle(s) used for the test(s) indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☒ NA ☐
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a trip blank present in the cooler(s)? Yes ☒ No ☐ Were VOAs on the COC? Yes ☒ No ☐

Contacted PM ____ Date ____ by ____ via Verbal ☐ Voice Mail ☐ Other ☐
Concerning ____

14. CHAIN OF CUSTODY

The following discrepancies occurred:

15. SAMPLE CONDITION

Sample(s) ____ were received after the recommended holding time had expired.
Sample(s) ____ were received in a broken container.
Sample(s) ____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) ____ were further preserved in Sample Receiving to meet recommended pH level(s). *Nitric Acid Lot# 031909-HNO_3; Sulfuric Acid Lot# 100108-H_2SO_4; Sodium Hydroxide Lot# 073007 -NaOH; Hydrochloric Acid Lot# 092006-HCl; Sodium Hydroxide and Zinc Acetate Lot# 050205-$(CH_3COO)_2ZN/NaOH$.* What time was preservative added to sample(s)? ____

Client ID	GF GW pH	Date	Initials
1375 GW / GF	<2 >12	7-14-09	CSL
1413 GW / GF	<2 >12	↓	↓
1373 GW / GF	<2 >12		
1371 GW / GF	<2 >12		
1367 GW / GF	<2 >12		
1423 GW / GF	<2 >12		
1372 GW / GF	<2 <2 <2 >12 >12 >12		
1370 GW / GF	<2 >12		

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials
1369 GW/GF	<2 >12	7/14/09	[illegible]
1374 GW/GF	<2 >12		
1368 GW/GF	<2 >12		

Cooler #	Temp. °C	Method	Coolant
179	3.2	IR	Ice
175	4.4		
174	3.7		
1D27	4.1		
C111	4.4		
C333	3.6		
A1	2.2		
40.5A	2.6		
S1	4.4		
C10	2.8		
C444	2.6		
C114	0.4°C		

Discrepancies Cont'd:

SB01	2.8°C		

2.1 -- LC
7/15/09
IR1

TestAmerica Laboratories, Inc.
SAMPLE ANALYSIS REQUISTION

Laboratory **TestAmerica AASG - Denver**
4955 YARROW

ARVADA, CO 80002

Lab Request SR113509

Report Package: **Expanded Deliverables**
Need Analytical Report 2009-07-28

Client Code: 14091

Project Manager: MARK LOEB

Sample I.D.	Work Order Number	Client Sample ID	Sampling Date	Analysis Required
A9G140154-1	LGFVX	FWGLL7mw-003C-1372-GF	2009-07-13 12:05	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G140154-1 S	LGFVX	FWGLL7mw-003C-1372-GF MS/MSD	2009-07-13 12:05	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G140154-1 D	LGFVX	FWGLL7mw-003C-1372-GF	2009-07-13 12:05	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G140154-2	LGFV2	FWGLL7mw-001C-1370-GF	2009-07-13 14:45	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G140154-3	LGFV4	FWGLL6mw-007C-1369-GF	2009-07-13 17:20	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G140154-4	LGFV5	FWGLL7mw-006C-1375-GF	2009-07-13 12:00	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G140154-5	LGFV8	FWGLL7mw-DUP1-1413-GF	2009-07-13 13:00	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G140154-6	LGFWA	FWGLL7mw-004C-1373-GF	2009-07-13 14:00	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G140154-7	LGFWC	FWGLL7mw-002C-1371-GF	2009-07-13 15:10	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G140154-8	LGFWG	FWGLL6mw-005C-1367-GF	2009-07-13 16:30	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G140154-9	LGFWJ	FWGEQUIPRINSE1-1423-GW	2009-07-13 17:30	WATER, 6860, SW846 6860 Perchlorate, Spe

Please use Client Sample ID for report
Call MARK LOEB with questions at 330-497-9396
at the TAL North Canton Laboratory

Shipping Method: FED EX

Need detection limit and analysis date included in report..

Please send a signed copy of this form with the report at completion of analysis.

Relinquished by: [signature] Date/Time: 7/14/09 1230

Relinquished by: _____ Date/Time: _____

Received for lab by: [signature] Date/Time: 7/15/9 0845

PLEASE RETURN ORIGINAL SAMPLE ANALYSIS REQUISITION

TestAmerica Laboratories, Inc.

SAMPLE ANALYSIS REQUISTION

Laboratory **TestAmerica AASG - Denver**
4955 YARROW

ARVADA, CO 80002

Lab Request SR113509

Report Package: **Expanded Deliverables**

Need Analytical Report 2009-07-28

Client Code: 14091

Project Manager: MARK LOEB

Sample I.D.	Work Order Number	Client Sample ID	Sampling Date	Analysis Required
A9G140154-10	LGFWK	FWGLL7mw-005C-1374-GF	2009-07-13 12:20	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G140154-11	LGFWL	FWGLL6mw-006C-1368-GF	2009-07-13 16:10	WATER, 6860, SW846 6860 Perchlorate, Spe

Please use Client Sample ID for report

Call MARK LOEB with questions at 330-497-9396

at the TAL North Canton Laboratory

Shipping Method: FED EX

Need detection limit and analysis date included in report.

Please send a signed copy of this form with the report at completion of analysis.

Relinquished by: [signature] Date/Time: 7/14/09 1230

Relinquished by: _____ Date/Time: _____

Received for lab by: [signature] Date/Time: 7/15/9 0845

PLEASE RETURN ORIGINAL SAMPLE ANALYSIS REQUISITION

CASE NARRATIVE

A9G140154

The following report contains the analytical results for eleven water samples submitted to TestAmerica North Canton by Environmental Quality Mgt., Inc. from the RVAAP (OH) Site, project number 30240.0006. The samples were received July 14, 2009, according to documented sample acceptance procedures.

The SW846 6860 Perchlorate analysis was performed at the TestAmerica Denver laboratory.

TestAmerica utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Angye Dragotta, Erik Corbin, and Jackie Doan on August 05, 2009. A summary of QC data for these analyses is included at the back of the report.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Please refer to the Quality Control Elements Narrative following this case narrative for additional quality control information.

If you have any questions, please call the Project Manager, Mark J. Loeb, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT."

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The coolers were received at temperatures ranging from 0.4 to 4.4°C.

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may he present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

QUALITY CONTROL ELEMENTS NARRATIVE (continued)

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic hlanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these hatch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

TestAmerica Certifications and Approvals:

The laboratory is certified for the analytes listed on the documents below. These are available upon request.

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225),
Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Nevada (#OH-000482008A), OhioVAP (#CL0024), Pennsylvania (#008), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit

N:\QAQC\Customer Service\Narrative - Combined RCRA _CWA 032609.doc

6860 PERCHLORATE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.12 **SDG**: A9G140154 R0
Sample Event: July 2009 **Analysis**: SW846 6860
Data Reviewer/Date: Angye Dragotta/September 1, 2009 Perchlorate

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.4 - 4.4 °C. Upon receipt, it was documented by the laboratory, that the samples were not frozen and in good condition. Therefore, no qualifications were made to sample results based on temperatures less than 2°C.	
3. Were holding times met (28 days)?	✓			Samples collected 7/13/09, extracted 8/4/09, and analyzed on 8/4/09.	UJ/J/R
4. Were sample storage requirements met?	✓				
5. Was the DOD specified PQLs of 0.5ug/L achieved?	✓				
6. Were all QAPP-specified target analytes reported?	✓				
7. Was the LC/MS/MS system mass calibration checked?	✓				R
8. Were the masses within 0.3 amu of ions 99, 101, and 107?	✓				R
9. Was the instrument tuned daily?	✓				
10. Was the tune within criteria? (per laboratory SOP)	✓				R
11. Did the initial calibration curve consist of 5 concentration levels?	✓			Ic19H02 8/2/2009 Standards(ng/L): 20, 50, 100, 200, 500, 1000	R
12. Was the correlation coefficient r≥0.995?	✓				R<0.995 =-J/R
13. Was a second source verification (SSCV) analyzed after the ICAL? Were results 90-110%?	✓				LCG Table 1 >120%=J; 60-80%=J/UJ; <60%=J/R
14. Was an ICV analyzed after the ICAL and daily before sample analysis?	✓			8/2/2009 @1425	R
15. Was the %Difference ≤ 15%?	✓				R
16. Was a CCV analyzed after every 10 samples?	✓				
17. Was the %Difference ≤ 15%?	✓				%D > 15% = UJ/J
18. Was a Limit of Detection Verification LODV) analyzed before and after every batch?	✓				

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.12 **SDG**: A9G140154 R0
Sample Event: July 2009 **Analysis**: SW846 6860
Data Reviewer/Date: Angye Dragotta/September 1, 2009 Perchlorate

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
19. Was the LODV recovery within 70-130%?	✓				>130%=J; 70-60%=J/UJ; <60%=J/R
20. Was an Interference Check Sample extracted and analyzed with every batch?	✓				
21.Was the ICS recovery within 70 to 130%?	✓				>120%=J; 50-79%=J/UJ; <50%=Pj/R
22. Was a method blank prepared and analyzed with each batch?	✓				
23. Were target analytes detected in the method blank at >1/2 the MRL?		✓		Checked by ADR.	<5X =B
24. Was a field blank (equipment) collected and analyzed?	✓			FWGEQUIPRINSE1-1423-GW	
25. Were target analytes detected in the field blank analyses >1/2 the MRL?		✓		Checked by ADR.	<5X =B
26. Was a LCS prepared and analyzed with each batch?	✓				
27. Were the LCS recoveries within 85-115%?	✓			Checked by ADR.	>115%=J; 50%-85%=J/UJ; <50%=J/R
28. Was a MS/MSD prepared with each batch?	✓				
29. Was the MS/MSD parent sample a Ravenna sample?	✓			Sample FWGLL7mw-003c-1372-GF was the parent for the MS/MSD evaluation.	
30. Were MS/MSD recoveries 75-125% and RPD values ≤20%?	✓			Checked by ADR.	>125% = J 30% - 75% = J/UJ <30% = J/R
31. Was a Laboratory Reagent Blank (LRB) analyzed prior to calibration and after high concentration samples?	✓				
32. Were target analytes detected in the LRB at >1/2 the MRL?		✓			<5X =B
33. Was a MRL Verification run with every ICAL?	✓				
34. Were the MRL recoveries 70-130%?	✓				R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.12
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/September 1, 2009

SDG: A9G140154 R0
Analysis: SW846 6860
Perchlorate

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
35. Were the internal standards added to every sample?	✓				
36. Were the retention times for all IS compounds within 0.98 and 1.02 seconds from the RT of the mid-point standard in the ICAL?	✓				R
37. Did the IS recover within 50% to150% of the ICAL mid-point standard?	✓				R
38. Was a field duplicate analyzed? Were the RPDs within ±30%?	✓			Sample FWGLL7mw-DUP1-1413-GF was the field duplicate for sample FWGLL7mw-006c-1375-GF.	RPD >30=J
39. Was the Isotope ratio between 99/101 and 83/85 monitored and fell between 2.3 and 3.08?	✓				J/UJ
40. Were reported sample concentrations within calibration range?	✓				
41. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
42. Were lab comments included in report? If yes, summarize contents.		✓			

References:

DOD Perchlorate Handbook, March 2006; Section G "Selecting Analytical Methods and Services"

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-003C-1372-GF

HPLC

Lot-Sample #...:	A9G140154-001	**Work Order #...:**	LGFVX1AA	**Matrix.....:**	WG
Date Sampled...:	07/13/09 12:05	**Date Received..:**	07/14/09		
Prep Date.....:	08/04/09	**Analysis Date..:**	08/04/09		
Prep Batch #...:	9216360				
Dilution Factor:	1	**Method.....:**	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	**0.0090 J**	**0.050**	**ug/L**	**0.0088**

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-001C-1370-GF

HPLC

Lot-Sample #...:	A9G140154-002	**Work Order #...:**	LGFV21AA	**Matrix.....:**	WG
Date Sampled...:	07/13/09 14:45	**Date Received..:**	07/14/09		
Prep Date.....:	08/04/09	**Analysis Date..:**	08/04/09		
Prep Batch #...:	9216360				
Dilution Factor:	1	**Method.....:**	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	0.017 J	0.050	ug/L	0.0088

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-007C-1369-GF

HPLC

Lot-Sample #...:	A9G140154-003	**Work Order #...:**	LGFV41AA	**Matrix.....:**	WG
Date Sampled...:	07/13/09 17:20	**Date Received..:**	07/14/09		
Prep Date.....:	08/04/09	**Analysis Date..:**	08/04/09		
Prep Batch #...:	9216360				
Dilution Factor:	1	**Method.....:**	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	**0.096**	**0.050**	**ug/L**	**0.0088**

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-006C-1375-GF

HPLC

Lot-Sample #...:	A9G140154-004	**Work Order #...:**	LGFV51AA	**Matrix.....:**	WG
Date Sampled...:	07/13/09 12:00	**Date Received..:**	07/14/09		
Prep Date.....:	08/04/09	**Analysis Date..:**	08/04/09		
Prep Batch #...:	9216360				
Dilution Factor:	1	**Method.....:**	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	**0.031 J**	**0.050**	**ug/L**	**0.0088**

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-DUP1-1413-GF

HPLC

Lot-Sample #...:	A9G140154-005	**Work Order #...:**	LGFV81AA	**Matrix.....:**	WG
Date Sampled...:	07/13/09 13:00	**Date Received..:**	07/14/09		
Prep Date.....:	08/04/09	**Analysis Date..:**	08/04/09		
Prep Batch #...:	9216360				
Dilution Factor:	1	**Method.....:**	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	**0.024 J**	**0.050**	**ug/L**	**0.0088**

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-004C-1373-GF

HPLC

Lot-Sample #...:	A9G140154-006	**Work Order #...:**	LGFWA1AA	**Matrix.....:**	WG
Date Sampled...:	07/13/09 14:00	**Date Received..:**	07/14/09		
Prep Date.....:	08/04/09	**Analysis Date..:**	08/05/09		
Prep Batch #...:	9216360				
Dilution Factor:	1	**Method.....:**	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	**0.023 J**	**0.050**	**ug/L**	**0.0088**

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-002C-1371-GF

HPLC

Lot-Sample #...:	A9G140154-007	**Work Order #...:**	LGFWC1AA	**Matrix.....:**	WG
Date Sampled...:	07/13/09 15:10	**Date Received..:**	07/14/09		
Prep Date.....:	08/04/09	**Analysis Date..:**	08/05/09		
Prep Batch #...:	9216360				
Dilution Factor:	1	**Method.....:**	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	**0.11**	**0.050**	**ug/L**	**0.0088**

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-005C-1367-GF

HPLC

Lot-Sample #...:	A9G140154-008	Work Order #...:	LGFWG1AA	Matrix.....:	WG
Date Sampled...:	07/13/09 16:30	Date Received..:	07/14/09		
Prep Date.....:	08/04/09	Analysis Date..:	08/05/09		
Prep Batch #...:	9216360				
Dilution Factor:	1	Method.....:	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	0.022 J	0.050	ug/L	0.0088

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1423-GW

HPLC

Lot-Sample #...:	A9G140154-009	**Work Order #...:**	LGFWJ1AA	**Matrix.....:**	WQ
Date Sampled...:	07/13/09 17:30	**Date Received..:**	07/14/09		
Prep Date.....:	08/04/09	**Analysis Date..:**	08/05/09		
Prep Batch #...:	9216360				
Dilution Factor:	1	**Method.....:**	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	ND	0.050	ug/L	0.0088

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL7mw-005C-1374-GF

HPLC

Lot-Sample #...:	A9G140154-010	**Work Order #...:**	LGFWK1AA	**Matrix.....:**	WG
Date Sampled...:	07/13/09 12:20	**Date Received..:**	07/14/09		
Prep Date.....:	08/04/09	**Analysis Date..:**	08/05/09		
Prep Batch #...:	9216360				
Dilution Factor:	1	**Method.....:**	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	**0.023 J**	**0.050**	**ug/L**	**0.0088**

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL6mw-006C-1368-GF

HPLC

Lot-Sample #...:	A9G140154-011	**Work Order #...:**	LGFWL1AA	**Matrix.....:**	WG
Date Sampled...:	07/13/09 16:10	**Date Received..:**	07/14/09		
Prep Date.....:	08/04/09	**Analysis Date..:**	08/05/09		
Prep Batch #...:	9216360				
Dilution Factor:	1	**Method.....:**	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	**0.027 J**	**0.050**	**ug/L**	**0.0088**

NOTE(S):

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

HPLC

Client Lot #...: A9G140154 **Work Order #...:** LHHHK1AA **Matrix.....:** WATER
MB Lot-Sample #: R9H040000-360

Prep Date.....: 08/04/09
Analysis Date..: 08/04/09 **Prep Batch #...:** 9216360
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Perchlorate	ND	0.050	ug/L	SW846 6860

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A9G140154 **Work Order #...:** LHHHK1AC **Matrix.....:** WATER
LCS Lot-Sample#: R9H040000-360
Prep Date.....: 08/04/09 **Analysis Date..:** 08/04/09
Prep Batch #...: 9216360
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Perchlorate	**103**	**(80 - 120)**	**SW846 6860**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A9G140154 **Work Order #...:** LGFVX1AC-MS **Matrix.....:** WG
MS Lot-Sample #: A9G140154-001 LGFVX1AD-MSD
Date Sampled...: 07/13/09 12:05 **Date Received..:** 07/14/09
Prep Date.....: 08/04/09 **Analysis Date..:** 08/04/09
Prep Batch #...: 9216360
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Perchlorate	**98**	**(80 - 120)**			**SW846 6860**
	98	**(80 - 120)**	**0.26**	**(0-15)**	**SW846 6860**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Appendix I

Reason Code Library: Example 1

Category	Code
Low Bias Indicator	-
High Bias Indicator	+
Temperature	A
Holding Times	
Sampling to Analysis	C
Sampling to Extraction	D
Extaction to Analysis	E
Method Blanks	F
Surrogate Recovery	G
MS/MSD	
MS/MSD Recovery	H
MS/MSD RPD	I
LCS	
LCS Recovery	J
LCS RPD	K
Reporting Limits	L
Field QC	
Field Blank	M
Equipment Blank	N
Trip Blank	O
Field Duplicate	P

Category	Code
Initial Calibration	
Initial Calibration RRF	Q
Initial Calibration RSD	R
Initial Calibration Cor. Coef	S
Initial Calibration Verification	
Initial Calibration Verificaton RRF	T
Initial CalibrationVerification %D	U
Continuing Calibration	
Continuing Calibraiton RRF	V
Continuing Calibration %D	W
GC/MS Tune	
GC/MS Tune for Initial Calibration	X
GC/MS Tune for Continuing Calibration	Y
Laboratory Duplicate	Z
Categories not Assessed by Automated Data Review*	
Internal Standards	Is
Calibration Blanks	Cb
Resolution Check Mixture	Rm
Performance Evaluation Mixture	Pm
Professional Judgement	Pj

* Qualifiers for data-review categories not assessed by automated data review are manually entered by the user. The application automaticallly adds reason codes listed here when the user manually adds qualifiers for these categories if the option for applying reason codes was selected during automated data review.

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G140154										
6860	FWGLL6mw-005C-1367-GF	AQ	N							
				Perchlorate	0.050	0.022J		J	ug/L	L
6860	FWGLL6mw-006C-1368-GF	AQ	N							
				Perchlorate	0.050	0.027J		J	ug/L	L
6860	FWGLL7mw-001C-1370-GF	AQ	N							
				Perchlorate	0.050	0.017J		J	ug/L	L
6860	FWGLL7mw-003C-1372-GF	AQ	N							
				Perchlorate	0.050	0.0090J		J	ug/L	L
6860	FWGLL7mw-004C-1373-GF	AQ	N							
				Perchlorate	0.050	0.023J		J	ug/L	L
6860	FWGLL7mw-005C-1374-GF	AQ	N							
				Perchlorate	0.050	0.023J		J	ug/L	L
6860	FWGLL7mw-006C-1375-GF	AQ	N							
				Perchlorate	0.050	0.031J		J	ug/L	L
6860	FWGLL7mw-DUP1-1413-GF	AQ	FD							
				Perchlorate	0.050	0.024J		J	ug/L	L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL6mw-005C-1367-GF **Lab Report Batch :** A9G140154 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G140154008

Reviewed By / Date : Angye Dragotta 9/1/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6860						**Dilution: 1**															
Perchlorate	0.022		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL6mw-006C-1368-GF **Lab Report Batch :** A9G140154 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G140154011

Reviewed By / Date : Angye Dragotta 9/1/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6860						**Dilution: 1**															
Perchlorate	0.027		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL7mw-001C-1370-GF **Lab Report Batch :** A9G140154 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G140154002

Reviewed By / Date : Angye Dragotta 9/1/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6860						**Dilution: 1**															
Perchlorate	0.017		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL7mw-003C-1372-GF **Lab Report Batch :** A9G140154 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G140154001

Reviewed By / Date : Angye Dragotta 9/1/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6860						**Dilution: 1**															
Perchlorate	0.0090		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL7mw-004C-1373-GF **Lab Report Batch :** A9G140154 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G140154006

Reviewed By / Date : Angye Dragotta 9/1/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6860						**Dilution: 1**															
Perchlorate	0.023		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL7mw-005C-1374-GF **Lab Report Batch :** A9G140154 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G140154010

Reviewed By / Date : Angye Dragotta 9/1/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6860						**Dilution: 1**															
Perchlorate	0.023		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL7mw-006C-1375-GF **Lab Report Batch :** A9G140154 **Lab ID :** TALCAN

Sample Date : 07/13/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G140154004

Reviewed By / Date : Angye Dragotta 9/1/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6860						**Dilution: 1**															
Perchlorate	0.031		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A9G140154 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGLL6mw-005C-1367-G	A9G140154008	6860	AQ	Perchlorate	J	0.022	0.050	ug/L
FWGLL6mw-006C-1368-G	A9G140154011			Perchlorate	J	0.027	0.050	ug/L
FWGLL7mw-001C-1370-G	A9G140154002			Perchlorate	J	0.017	0.050	ug/L
FWGLL7mw-003C-1372-G	A9G140154001			Perchlorate	J	0.0090	0.050	ug/L
FWGLL7mw-004C-1373-G	A9G140154006			Perchlorate	J	0.023	0.050	ug/L
FWGLL7mw-005C-1374-G	A9G140154010			Perchlorate	J	0.023	0.050	ug/L
FWGLL7mw-006C-1375-G	A9G140154004			Perchlorate	J	0.031	0.050	ug/L
FWGLL7mw-DUP1-1413-	A9G140154005			Perchlorate	J	0.024	0.050	ug/L

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2009 **Date:** September 15, 2009
STL Sample Delivery Group: A9G150109 **Revision:** 0

Data Validator: Angye Dragotta/Environmental Quality Management, Inc. (EQM, Inc.)

QA/QC Summary

On July 14, 2009 the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A9G150109.

Field Sample ID	Analytes	Method
FWGLL8mw-001c-1376-GW	Explosives	SW846 8330
FWGLL8mw-002c-1377-GW	Nitroguanidine	SW846 M8330
FWGLL9mw-001c-1382-GW	Nitrocellulose	SW846 353.2
FWGLL9mw-003c-1384-GW		
FWGLL10mw-003c-1391-GW		
FWGLL10mw-002c-1390-GW		
FWGLL8mw-006c-1381-GW		
FWGLL8mw-005c-1380-GW		
FWGLL8mw-DUP2-1414-GW		
FWGLL9mw-004c-1385-GW		
FWGLL9mw-DUP3-1415-GW		
FWGLL9mw-006c-1387-GW		
FWGLL10mw-001c-1389-GW		
FWGLL8mw-003c-1378-GW		
FWGLL8mw-004c-1379-GW		
FWGEQUIPRINSE2-1424-GW		
FWGLL9mw-007c-1388-GW		
FWGLL9mw-002c-1383-GW		
FWGLL9mw-005c-1386-GW		

The data presented in this report were evaluated according to the *Final Quality Assurance Project Plan Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant Ravenna, OH, Portage Environmental, September 2004.* The following documents will be used as needed to supplement the project documentation: *Louisville Chemistry Guidelines, USACE, June 2002 version 5, EPA National Functional Guidelines (NFG) for Organic Data Review, EPA-540/R-99-008, October 1999, NFG for Inorganic Data Review, EPA-540/R-04-004, October 2004, Analytical Methods, and Laboratory Standard Operating Procedures.* These objectives represent accuracy and precision performance goals for each analytical method.

The completeness objective for the project was 90%. The completeness objective was met for this SDG, 100%. Limitations, if any, on the data are indicated with qualifiers detailed below.

All analytical results have been verified against compliance requirements specified in the project QAP, LCG, associated analytical methods and/or SOPs, as appropriate. Checklists used in review of the data have been inserted in the SDGs by parameter. Outliers have been noted below and results requiring qualification, as a result of this verification process, have been summarized in Appendix 1.

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2009 **Date:** September 15, 2009
STL Sample Delivery Group: A9G150109 **Revision:** 0

Explosives- 8330

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- ICV and CCV criteria
- Retention time criteria
- MDL/MRL Level Verification
- Surrogate recovery criteria
- Equipment blank free from contamination
- LCS Recovery Criteria
- MS Recovery Criteria
- Field Duplicate RPD Criteria

4-Nitrotoluene appears to not have been spiked and/or recover in the calibration verifications; however the compound is co-eluting with 2-nitrotoluene. No qualifications made as LC9 was used as confirmation and the %D for 2-nitrotoluene were within criteria.

Initial Calibration Criteria

The initial calibration on LC10, as presented by the laboratory, had incorporated a reanalyzed STD3. While the laboratory analyzed an ICV following the first analysis of all the calibration standards, it was noted by EQM that the curve did not have a valid ICV following the re-analysis of STD 3. Since the laboratory reinjected STD3 because of problems associated with a target not required by this project, it was requested by EQM that the calibration with the initial analysis of STD 3 be used in the quantitation of the samples. The laboratory reprocessed the samples and submitted a revised data package for the reprocessed samples. EQM also requested a corrective action and the laboratory's corrective action response has been provided as part of the verification package.

Blanks

1,3,5-Trinitrobenzene was detected in the method blank at 0.049ug/L. Detected 1,3,5-trinitrobenzene results <5x contamination were qualified, "B".

Nitroguanidine- 8330M

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- Retention time criteria
- MRL level verification criteria
- MDL verification criteria
- ICV and CCV criteria
- The method blank and equipment blanks were free from contamination
- LCS/LCSD percent recoveries and RPD value criteria
- Matrix spike recovery criteria

No QC outliers were noted.

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2009 **Date:** September 15, 2009
STL Sample Delivery Group: A9G150109 **Revision:** 0

Nitrocellulose - 353.2

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Sample preparation criteria
- Initial Calibration criteria
- ICV and CCV criteria
- The equipment rinse and method blanks were free from contamination
- MRL Level Verification criteria
- ICB and CCBs were free from contamination
- LCS/LCSD percent recoveries and RPD value criteria
- MS/MSD percent recoveries
- Nitrocellulose assay criteria

No QC outliers noted.

Data Validator: [signature]
Date: 9/16/09

2nd Level Data Review: Erik Corbin
Date: 9/16/09

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

John Miller
Environmental Quality Management, Inc.
1800 Carillon Boulevard
Cincinnati, Ohio 45240

September 15, 2009

Subject: Method 8330 Calibration Corrective Action

Dear Mr. Miller:

During your company's data validation of one of our packages (TAL West Sacramento lot A9G140147) it was noted that one of our EPA Method 8330 initial calibrations had a problem. The analyst had set up the run with the calibration points followed by a blank and initial calibration verification (ICV). After those points had run the analyst found a problem with the injection of the third calibration standard. He marked this in the run log but only entered "bad standard" as the technical justification for a reinjection of the point. He then re-injected the third calibration standard and used the re-injected standard in the calibration curve. The analyst did not re-inject the ICV after the re-injected calibration point. This error was not caught during the second level review of the calibration curve.

An interview with the analyst and an examination of the raw data from this run brought out several points. The analyst had originally rejected the 3rd calibration injection because they had observed that the septum had been pushed into the vial by the needle. They observed that the picric acid response was disproportional to the other peaks and felt this might be due to the injection issue. This was the reasoning for the reinjection of the standard. Our re-examination of the data for the original injection showed that all the other peaks in that injection appeared to be satisfactory.

This series of events highlighted two problems with the process of calibration curve running. The first was that the analyst was not aware that the ICV needed to be re-run again if re-injections of calibration points occur after the original ICV injection. Secondly, the analyst had not sufficiently documented on the run list the technical justification for the re-injection of the calibration.

The root cause of the problem was that the analyst was unaware that an ICV is valid only if it is run after all the calibration points that are going to be used have been run. They were aware of the rule in general but had not thought through the situation where a calibration point had been re-injected. The fact that the second level review did not catch this indicated the issue may go beyond one analyst.

Our corrective action plan involved several items:

1) The initial calibration was re-calculated using the original injection of the 3rd calibration standard. This produced a curve that passed all criteria for all analytes except picric acid. Picric acid is not a target analyte for your samples. The ICV run after this recalculated curve was re-processed against it and passed all criteria. The data for your projects associated with the original curve were reprocessed against the new curve and were reported to you.

2) A completely new calibration curve will be in place before any new samples from your company are run for Method 8330. Neither version of the curve discussed above will be used.
3) During the lab's all staff meeting of September 10, 2009 I used part of the QA portion of the program to discuss with all staff the issues that this event brought out. The need to run ICVs after all calibration points was highlighted. I also re-iterated to the staff when initial calibration point re-injections are allowable and the necessity of documenting on the run list and raw data the exact technical justification for the reinjection.
4) In future internal area audits I will be paying particular attention to run lists and any deviations from acceptable calibration practice and documentation.

I apologize for any inconvenience that this issue has caused you and your colleagues. We believe our corrective actions will assure there will be no repeat of this data issue. TestAmerica is dedicated to supplying our clients with accurate and defensible data and we look forward to demonstrating this in our future work with you.

If you have any questions, please feel free to call me at (916) 374-4389.

Sincerely,

Douglas Weir
Quality Assurance Manager
TestAmerica Laboratories West Sacramento

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

John Miller
Environmental Quality Management, Inc.
1800 Carillon Boulevard
Cincinnati, Ohio 45240

September 15, 2009

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If you have any questions, please feel free to call me at (916) 374-4389.

Sincerely,

Douglas Weir
Quality Assurance Manager
TestAmerica Laboratories West Sacramento

Subject: RE: EQM
From: "Weir, Douglas" <Douglas.Weir@testamericainc.com>
Date: Tue, 15 Sep 2009 19:01:17 -0600
To: <ecorbin@eqm.com>
CC: "Herbert, David" <David.Herbert@testamericainc.com>, "Dahl, Karen" <Karen.Dahl@testamericainc.com>, "West Sacramento - QA" <WestSacramento-QA@testamericainc.com>, "Allameh, David" <David.Allameh@testamericainc.com>

Erik,

This was a reprocessing of data. The samples were reprocessed first. The analyst realized the CCVs had not been reprocessed and did so ~1 hour later. Since all samples and CCVs were reprocessed against the same curve, the order of the reprocessing should not have any impact on the data. I hope this answers your question. If I'm missing the thrust of your question please let me know.

Karen Dahl sent the corrective action letter out today.

Sincerely,

Doug Weir

DOUGLAS WEIR, Ph.D.
Quality Assurance Manager
TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
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West Sacramento, CA 95605
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From: Dahl, Karen
Sent: Tuesday, September 15, 2009 12:44 PM
To: West Sacramento - QA; Allameh, David
Cc: Herbert, David
Subject: EQM
Importance: High

More followup questions. This needs a response today please.

Dave, have you had a chance to look at the corrective action letter?

From: Erik Corbin [mailto:ecorbin@eqm.com]
Sent: Tuesday, September 15, 2009 10:39 AM
To: Dahl, Karen
Cc: Angye Dragotta; Thurza, Michael; John Miller; Jackie Doan; Loeb, Mark
Subject: Re: A9G160265 Explosives

Karen,

Thanks for the response. We just have a few requests for clarification.

In previous packages we have received from this project, the Meth Date stamp has had exactly the same date and time for both sample and QC within a sequence (i.e., processed all at the same time). Why were samples reprocessed separately from QC in this instance? What is the reasoning for processing samples prior to processing QC?

Also, do you know when the corrective action for this issue is scheduled for completion? We would like to include a copy of the CA in our report.

Thanks,

Erik Corbin

Environmental Quality Management, Inc.
513-825-7500 (voice)
513-825-7495 (fax)
ecorbin@eqm.com

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Dahl, Karen wrote:

Hello everyone. I hope you are all having a good day. Please see the paragraph below from the laboratory. Please let me know if you have any questions or if you need any additional information. Thank you

The "Meth Date" line on the area percent report is a time stamp for when the method file was accessed. The method is accessed at the beginning of a run, when a CCV is processed and when the sample is reprocessed. So when the samples that were originally run on 7-26-09 where reprocessed on 9-4-09, the method date changes to 9-4-09 to reflect the new method access time stamp. Additionally the CCVs will also have a different time stamp since the method was accessed when the CCVs were

reprocessed on 9-4-09.

-----Original Message-----
From: Erik Corbin [mailto:ecorbin@eqm.com]
Sent: Monday, September 14, 2009 3:06 PM
To: Loeb, Mark
Cc: Angye Dragotta; Dahl, Karen; Thurza, Michael; John Miller; Jackie Doan
Subject: Re: A9G160265 Explosives

Mark,

Based on our conversation several hours ago, we understand that you are looking into this issue. We also understand that Sacramento is busy currently with an external audit. However, if EQ is to meet our commitment to our client, it is imperative we receive a response on this

issue - so that we may proceed with our evaluation of the data - at your

earliest possible convenience.

Please advise.

Regards,

Erik Corbin

Environmental Quality Management, Inc.
513-825-7500 (voice)
513-825-7495 (fax)
ecorbin@eqm.com

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Angye Dragotta wrote:

I was looking at the explosives data sent Fri. (thanks by the way)

and had a question regarding the reprocessing of the data. You will find attached a runlog that has the samples from this SDG highlighted. I was wondering why the the samples and instrument QC have different method dates and times. Could you please check with West Sac and let me know as soon as possible?

Thanks

CASE NARRATIVE

A9G150109

The following report contains the analytical results for nineteen water samples submitted to TestAmerica North Canton by Environmental Quality Mgt., Inc. from the RVAAP (OH) Site, project number 30240.0006. The samples were received July 15, 2009, according to documented sample acceptance procedures.

The 8330 Explosvies, Nitroguanidine, and 353.2 Nitrocellulose as N analyses were performed at the TestAmerica West Sacramento laboratory. Refer to TestAmerica West Sacramento narrative included in their data package for additional information.

TestAmerica utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Angye Dragotta, Erik Corbin, Jackie Doan on July 29, 2009. A summary of QC data for these analyses is included at the back of the report.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Please refer to the Quality Control Elements Narrative following this case narrative for additional quality control information.

If you have any questions, please call the Project Manager, Mark J. Loeb, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT."

CASE NARRATIVE (continued)

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The coolers were received at temperatures ranging from 2.1 to 5.4°C.

NITROAROMATICS AND NITRAMINES-8330

The sample(s) that contained concentrations of target analyte(s) at a reportable level in the associated Method Blank(s) were flagged with "B". All target analytes in the Method Blank must be below the reporting limit (RL) or the associated sample(s) must be ND with the exception of common laboratory contaminants.

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

GENERAL CHEMISTRY

The sample(s) that contain results between the MDL and the RL were flagged with "B". There is the possibility of false positive or mis-identification at these quantitation levels. The acceptance criteria for the ICB, CCB, and Method Blank are +/- the standard reporting limit (SRL).

Case Narrative

TestAmerica West Sacramento Project Number A9G150109R

General Comments

This report contains revised 8330 results. As discussed, the original 8330 calibration curve included a point for the third calibration standard that had been acquired after the initial calibration verification (ICV) standard had been analyzed. The third calibration standard was originally analyzed before the ICV but was re-prepared and re-analyzed since it did not meet acceptance for picric acid. Per the laboratory's standard operating procedure the analyst should have re-analyzed the ICV after the third calibration standard was re-analyzed. Since all target analytes for this program met acceptance criteria in the original third calibration standard, the curve was reprocessed to include the original third calibration standard. The reprocessed curve passed all method criteria for all target analytes for this program. The ICV has now been acquired after all points of the initial calibration have been analyzed. All sample results have been reprocessed under this curve.

Following US EPA Region V guidelines, manual integrations were performed only when necessary and are in compliance with the laboratory's standard operating procedure, Acceptable Manual Integration Practices, SOP No.: S-Q-004, including Addendum 1. The reasons for manual integration have been documented on the affected chromatograms, which are provided in the raw data package. The raw data also includes the original chromatogram prior to any manual integrations being performed. The following samples and analytes required manual integration:

8330, LC10
MRL standard (analyzed on 7/25/09 @ 14:34) - PETN

8330, LC11
MRL standard (analyzed on 7/25/09) @ 19:29 - 3,4-Dinitrotoluene, HMX, RDX, 1,3,5-Trinitrobenzene, 2,4,6-Trinitrotoluene, 4-Amino-2,6-Dinitrotoluene, 2-Amino-4,6-Dinitrotoluene, 2,6-Dinitrotoluene, 2,4-Dinitrotoluene, 2-Nitrotoluene, 3-Nitrotoluene, & 3,5-Dinitroaniline

8330
MDL check standard (analyzed on 7/24/09 @ 15:56) - 2,4,6-Trinitrotoluene

Case Narrative

TestAmerica West Sacramento Project Number A9G150109R

WATER, 8330, Explosives
Sample(s): 8
Due to an instrument error, this sample was manually eluted onto the SPE cartridge using a vacuum manifold.

There were no other anomalies associated with this project.

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

QUALITY CONTROL ELEMENTS NARRATIVE (continued)

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

TestAmerica Certifications and Approvals:

The laboratory is certified for the analytes listed on the documents below. These are available ~~upon request.~~
California (#01144CA), Connecticut (#PH-0590), Florida (#E87225),
Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Nevada (#OH-000482008A), OhioVAP (#CL0024), Pennsylvania (#008), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit

N:\QAQC\Customer Service\Narrative - Combined RCRA _CWA 032609.doc

SAMPLE SUMMARY

A9G150109

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LGG4G	001	FWGLL8mw-001C-1376-GW	07/14/09	09:15
LGG4L	002	FWGLL8mw-002C-1377-GW	07/14/09	10:20
LGG4P	003	FWGLL9mw-001C-1382-GW	07/14/09	12:35
LGG4T	004	FWGLL9mw-003C-1384-GW	07/14/09	13:50
LGG4W	005	FWGLL10mw-003C-1391-GW	07/14/09	15:55
LGG4X	006	FWGLL10mw-002C-1390-GW	07/14/09	17:00
LGG5P	007	FWGLL8mw-006C-1381-GW	07/14/09	09:15
LGG5V	008	FWGLL8mw-005C-1380-GW	07/14/09	10:10
LGG5X	009	FWGLL8mw-DUP2-1414-GW	07/14/09	11:15
LGG51	010	FWGLL9mw-004C-1385-GW	07/14/09	12:15
LGG55	011	FWGLL9mw-DUP3-1415-GW	07/14/09	13:15
LGG6C	012	FWGLL9mw-006C-1387-GW	07/14/09	14:15
LGG6K	013	FWGLL10mw-001C-1389-GW	07/14/09	15:30
LGG6N	014	FWGLL8mw-003C-1378-GW	07/14/09	09:10
LGG6T	015	FWGLL8mw-004C-1379-GW	07/14/09	10:35
LGG6W	016	FWGEQUIPRINSE2-1424-GW	07/14/09	11:30
LGG6X	017	FWGLL9mw-007C-1388-GW	07/14/09	13:05
LGG61	018	FWGLL9mw-002C-1383-GW	07/14/09	14:25
LGG62	019	FWGLL9mw-005C-1386-GW	07/14/09	15:40

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

[redacted]

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

pg 2 COC # 003181

TAL-4142 (0408)

Client: Eam	Project Manager: John Miller	Date: 7-14-09	Chain of Custody Number: 003180
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513 825 7500 (fax 7495)	Lab Number: 3304979396	Page 1 of 2
City: Cincinnati; State: OH; Zip Code: 45240	Site Contact: E Corbin; Lab Contact: M Loeb		
Project Name and Location (State): RVAAP (OH) PN: 30240.0006	Carrier/Waybill Number: NA Lab Pickup		
Contract/Purchase Order/Quote No.: PO # 15660			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Explo 8330	Propellants	Cyanide 9012	Metals 6010/6020 7470	Perchlorates	Special Instructions/ Conditions of Receipt: Cooler ID
FWG Team1 - Trip	7-14-09	0800		X						2			X									OICU812
FWGLL8mw-001C-1376GW	7-14-09	0915		X			9			3	1		X	X	X	X	X	X	X			C222
FWGLL8mw-001C-1376GF	7-14-09	0915		X			1		1											X	X	C222
FWGLL8mw-002C-1377GW	7-14-09	1020		X			27			9	3		X	X	X	X	X	X	X			MSMSD 220,405,8
FWGLL8mw-002C-1377GF	7-14-09	1020		X			3		3											X	X	MSMSD 220,405,8
FWGLL9mw-001C-1382GW	7-14-09	1235		X			9			3	1		X	X	X	X	X	X	X			47
FWGLL9mw-001C-1382GF	7-14-09	1235		X			1		1											X	X	47
FWGLL9mw-003C-1384GW	7-14-09	1350		X			27			9	3		X	X	X	X	X	X	X			MSMSD OICU812, AD7, 54
FWGLL9mw-003C-1384GF	7-14-09	1350		X			3		3											X	X	MSMSD OICU812, AD7, 54
FWGLL10mw-003C-1391GW	7-14-09	1555		X			9			3	1		X	X	X	X	X	X	X			12
FWGLL10mw-003C-1391GF	7-14-09	1555		X			1		1											X	X	12
FWGLL10mw-002C-1390GW	7-14-09	1700		X			9			3	1		X	X	X	X	X	X	X			ASD3

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other per SOW

QC Requirements (Specify): Metals/Perchlorates were field filtered

	Date	Time		Date	Time
1. Relinquished By: Eric Corbin EQ	7/14/09	18:30	1. Received By: RC Robison	7/14/09	1830
2. Relinquished By: E Robison	7/14/09	1950	2. Received By: Chr Lugid	7-15-09	8:00
3. Relinquished By:			3. Received By:		

Comments: Temps may not meet requirements if sample collection is close to lab pick up time

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

All VOCs in cooler OICU812

North Canton

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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

pg 1 COC #003181

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
EQM	John Miller	7-14-09	003181
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 2 of 2**
1800 Carillon Blvd	513 825 7500 fax 7495	330 479 396	

City	State	Zip Code	Site Contact	Lab Contact
Cincinnati	OH	45240	E Corbin	M Loeb

Project Name and Location (State)	Carrier/Waybill Number
RVAAP (OH) PW1 30240.0006	NA Lab Pickup

Contract/Purchase Order/Quote No.: PO # 15660

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Explo 8330	Propellants	Cyanide 9012	Metals 6010/6020 7470	Perchlorates	Special Instructions/ Conditions of Receipt
FWGLL10mw-002C-13906F	7-14-09	1700		X			1		1											X	X	Cooler ID ASD3

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other per SOW

QC Requirements (Specify): Metals/Perchlorates were field filtered

1. Relinquished By	Date	Time	1. Received By	Date	Time
Erik Corbin EQ	7/14/09	18:30	RC Robison	7/14/09	1830
2. Relinquished By	**Date**	**Time**	**2. Received By**	**Date**	**Time**
RC Robison	7/14/09	1950	[illegible]	7-15-09	8:00
3. Relinquished By	**Date**	**Time**	**3. Received By**	**Date**	**Time**

Comments: Temps may not meet requirements if sample collection is close to lab pickup time

All VOCs in cooler 01CU812

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

pg 2 COC# = 003159

Client: EGM	Project Manager: John Miller	Date: 7-14-09	Chain of Custody Number: 003160
Address: 1800 CARILLON BLVD	Telephone Number (Area Code)/Fax Number: 513 825 7500 (Fax 7495)	Lab Number: 3304979396	Page 1 of 2
City: Cincinnati State: OH Zip Code: 45240	Site Contact: E Corbin	Lab Contact: M Loeb	
Project Name and Location (State): RVAAP Ravenna Oh	Carrier/Waybill Number: Lab pickup		
Contract/Purchase Order/Quote No.: PO#15660 Ph30240 0006			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC 8260	SVOC 8270	Pest 8081	PCB 8082	SVOC 8330	Propellants	Cyanide 9012	Metals 6010/7470	Perchlorates	Special Instructions/ Conditions of Receipt: Cooler ID #
FWG Team 2 Trip	7-14-09	0800		X						2			X									TS2
FWG LL8mw-00UC-1381-GW	↓	0915		X			9			3	1		X	X	X	X	X	X	X			TS2
FWG LL8mw-00UC-1381-GF	↓	↓		X			1		1											X	X	TS2
FWG LL8mw-005C-1380-GW	↓	1010		X			9			3	1		X	X	X	X	X	X	X			220
FWG LL8mw-005C-1380-GF	↓	1010		X			1		1											X	X	220
FWG LL8mw-DUP2-1414-GW	↓	1115		X			9			3	1		X	X	X	X	X	X	X			PH4
FWG LL8mw-DUP2-1414-GF	↓	1115		X			1		1											X	X	PH4
FWG LL9mw-00UC-1385-GW	↓	1215		X			9			3	1		X	X	X	X	X	X	X			B111
FWG LL9mw-00UC-1385-GF	↓	↓		X			1		1											X	X	B111
FWG LL9mw-DUP3-1415-GW	↓	1315		X			9			3	1		X	X	X	X	X	X	X			ACDC
FWG LL9mw-DUP3-1415-GF	↓	↓		X			1		1											X	X	ACDC

continued on page 2 COC # 003159

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other Per SOW

QC Requirements (Specify): Metals/Perchlorates were field filtered

	Date	Time		Date	Time
1. Relinquished By: Erik Corbin EQ	7/14/09	18:30	1. Received By: R Tobison	7/14/09	1830
2. Relinquished By: R Tobison	7/14/09	1950	2. Received By: [signature]	7/15/09	0800
3. Relinquished By:			3. Received By:		

Comments: Temps may not meet requirements if sample collection is close to lab pickup time. All VOAs in cooler TS2 FOR PG 1 & 2 OF COC

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

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[redacted]

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

pg1 COC# = 003160

Client	Project Manager	Date	Chain of Custody Number
EQM	John Miller	7-14-09	003159

Address	Telephone Number (Area Code)/Fax Number	Lab Number	Page
1800 CARILLON BLVD	513 825 7500 (fax 7495)	330497 9396	2 of 2

City	State	Zip Code	Site Contact	Lab Contact
Cincinnati	OH	45240	E Corbin	M Loeb

Project Name and Location (State): RVAAP Ravenna Oh

Carrier/Waybill Number: Lab pick up

Contract/Purchase Order/Quote No.: PO#15660 Pn 30240.0006

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Explo 8330	Propellants	Cyanide 9012	Metals 7470 6010 6020	Perchlorates	Special Instructions/ Conditions of Receipt: Cooler ID#
FWGLL9mw-006C-1387-GW	7-14-09	1415		X			9			3	1		X	X	X	X	X	X	X			ID
FWGLL9mw-006C-1387-GF	⊥	⊥		X			1		1											X	X	ID
FWGLL10mw-001C-1389-GW	⊥	1530		X			9			3	1		X	X	X	X	X	X	X			STL-1
FWGLL10mw-001C-1389-GF	⊥	1530		X			1		1											X	X	STL-1

Cal

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other Per SOW

QC Requirements (Specify): Metals/Perchlorates were field filtered

	Date	Time		Date	Time
1. Relinquished By: Erik Corbin EQ	7/14/09	18:30	1. Received By: TC Robison	7/14/09	1830
2. Relinquished By: TC Robison	7/14/09	1950	2. Received By: [signature]	7/15/09	8800
3. Relinquished By			3. Received By		

Comments: Temps may not meet requirements if sample collection is close to lab pick up time. All VOAs in cooler TS2 FOR PG 1+2 OF COC

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client: EQM	Project Manager: JOHN MILLER	Date: 07/14/2009	Chain of Custody Number: 003167
Address: 1800 CARILLON BLVD	Telephone Number (Area Code)/Fax Number: (513) 825-7500 (FX 7495)	Lab Number: (330) 497-9396	Page 1 of 1
City: CINCINNATI; State: OH; Zip Code: 45240	Site Contact: E. CORBIN	Lab Contact: M. LOEB	
Project Name and Location (State): RVAAP (OH) 030240.0006	Carrier/Waybill Number: N/A - LAB PICKUP		
Contract/Purchase Order/Quote No.: PO 15660			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC 8260	SVOC 8270	PEST 8081	PCB 8082	EXPLO 8330	PERCHLORATES	CYANIDE 9012	METALS 6010/6020 7470	PERCHLORATES	Special Instructions/ Conditions of Receipt
FWG TEAM 3-TRIP	07/14/09	0800		X						2			X									Cooler 0411
FWGLL8 MW-003C-1378-GW	07/14/09	0910		X			9			3	1		X	X	X	X	X	X	X			COOLER 465
FWGLL8 MW-003C-1378-GF	07/14/09	0910		X			1		1											X	X	" 465
FWG LL8MW-004C-1379-GW	07/14/09	1035		X			9			3	1		X	X	X	X	X	X	X			" B81
FWGLL8 MW-004C-1379-GF	07/14/09	1035		X			1		1											X	X	" B81
FWGEQUIPBLANK2-1424-GW	07/14/09	1130		X			10		1	3	1		X	X	X	X	X	X	X	X	X	" E115
FWGLL9MW-007C-1388-GW	07/14/09	1305		X			9			3	1		X	X	X	X	X	X	X			" E21
FWGLL9MW-007C-1388-GF	07/14/09	1305		X			1		1											X	X	" E21
FWGLL9MW-002C-1383-GW	07/14/09	1425		X			9			3	1		X	X	X	X	X	X	X			" A5D2
FWGLL9MW-002C-1383-GF	07/14/09	1425		X			1		1											X	X	" A5D2
FWGLL9MW-005C-1386-GW	07/14/09	1540		X			9			3	1		X	X	X	X	X	X	X			" Ø411
FWGLL9MW-005C-1386-GF	07/14/09	1540		X			1		1											X	X	" Ø411

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other PER SOW

QC Requirements (Specify): METALS/PERCHLORATES WERE FIELD FILTERED

1. Relinquished By: Eric Corbin EQ	Date: 7/14/09	Time: 18:30	1. Received By: RC Robison	Date: 7/14/09	Time: 1830
2. Relinquished By: RC Robison	Date: 7/14/09	Time: 1950	2. Received By: [signature]	Date: 7/15/09	Time: 0800
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments: TEMPS MAY NOT MEET REQUIREMENTS IF SAMPLE COLLECTION IS CLOSE TO LAB PICKUP TIME

ALL VOC'S IN COOLER Ø411

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

TestAmerica Cooler Receipt Form/Narrative **Lot Number:** A9G150109

North Canton Facility

Client E&M Project RVAAP By: [signature] (Signature)

Cooler Received on 7/15/09 Opened on 7/15/09

FedEx ☐ UPS ☐ DHL ☐ FAS ☐ Stetson ☐ Client Drop Off ☐ TestAmerica Courier ☒ Other ____

TestAmerica Cooler # ____ Multiple Coolers ☒ Foam Box ☐ Client Cooler ☐ Other ____

1. Were custody seals on the outside of the cooler(s)? Yes ☒ No ☐ Intact? Yes ☒ No ☐ NA ☐
   If YES, Quantity 23 Quantity Unsalvageable ____
   Were custody seals on the outside of cooler(s) signed and dated? Yes ☒ No ☐ NA ☐
   Were custody seals on the bottle(s)? Yes ☐ No ☒
   If YES, are there any exceptions? ____
2. Shippers' packing slip attached to the cooler(s)? Yes ☐ No ☒
3. Did custody papers accompany the sample(s)? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Were the custody papers signed in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☒ Foam ☐ None ☐ Other ____
6. Cooler temperature upon receipt See Attached °C See back of form for multiple coolers/temps ☒
   METHOD: IR ☒ Other ☐ ____
   COOLANT: Wet Ice ☒ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐
7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels be reconciled with the COC? Yes ☒ No ☐
9. Were sample(s) at the correct pH upon receipt? Yes ☒ No ☐ NA ☐
10. Were correct bottle(s) used for the test(s) indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☒ NA ☐
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a trip blank present in the cooler(s)? Yes ☒ No ☐ Were VOAs on the COC? Yes ☒ No ☐

Contacted PM ____ Date ____ by ____ via Verbal ☐ Voice Mail ☐ Other ☐

Concerning ____

14. CHAIN OF CUSTODY

The following discrepancies occurred:

____

15. SAMPLE CONDITION

Sample(s) ____ were received after the recommended holding time had expired.

Sample(s) ____ were received in a broken container.

Sample(s) ____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) ____ were further preserved in Sample Receiving to meet recommended pH level(s). *Nitric Acid Lot# 031909-HNO_3; Sulfuric Acid Lot# 100108-H_2SO_4; Sodium Hydroxide Lot# 073007 -NaOH; Hydrochloric Acid Lot# 092006-HCl; Sodium Hydroxide and Zinc Acetate Lot# 050205-$(CH_3COO)_2ZN$/NaOH.* What time was preservative added to sample(s)? ____

Client ID	pH	Date	Initials
	See Attached		

TestAmerica Multiple Cooler Receipt Form/Narrative Lot Number: A9G150109
North Canton Facility

Cooler #	Temp °C	Method	Coolant	Comments
C222	4.8	IR	Ice	
8	3.7			
405	4.2			
22C	4.6			
47	3.9			
CICU 812	2.9			
AD7	4.6			
54	3.8			
12	4.8			
ASD3	4.0			
TS2	4.9			
220	3.8			
PH4	4.7			
B111	5.4			
ACDC	3.1			
ID	2.3			
STL-1	3.3			
465	3.8			
B81	3.4			
E115	2.1			
E21	4.9			
ASD2	2.3			
041	5.3			

TestAmerica Multiple Cooler Receipt Form/Narrative Lot Number: A9G150109
North Canton Facility

Client ID	pH	Date	Initials
1376	<2 >12	7/15/09	gm
1377	<2 <2 <2 >12 >12 >12		
1382	<2 >12		
1384	<2 <2 <2 >12 >12 >12		
1391	<2 >12		
1390	<2 >12		
1381	<2 >12		
1380	<2 >12		
1414	<2 >12		
1385	<2 >12		
1415	<2 >12		
1387	<2 >12		
1389	<2 >12		
1378	<2 >12		
1379	<2 >12		
1424	<2 >12		
1388	<2 >12		
1383	<2 >12		
1386	<2 >12		

North Canton

TestAmerica Laboratories, Inc.
SAMPLE ANALYSIS REQUISTION

Laboratory **TestAmerica West Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605

Lab Request SR113540

Report Package: **Expanded Deliverables**
Need Analytical Report 2009-07-29

Client Code: 14091

Project Manager: MARK LOEB

Sample I.D.	Work Order Number	Client Sample ID	Sampling Date	Analysis Required
A9G150109-1	LGG4G	FWGLL8mw-001C-1376-GW	2009-07-14 9:15	WATER, 8330, Explosives (SAC)
A9G150109-1	LGG4G	FWGLL8mw-001C-1376-GW	2009-07-14 9:15	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G150109-1	LGG4G	FWGLL8mw-001C-1376-GW	2009-07-14 9:15	WATER, 353.2, Nitrocellulose as N (SAC)
A9G150109-2	LGG4L	FWGLL8mw-002C-1377-GW	2009-07-14 10:20	WATER, 8330, Explosives (SAC)
A9G150109-2	LGG4L	FWGLL8mw-002C-1377-GW	2009-07-14 10:20	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G150109-2	LGG4L	FWGLL8mw-002C-1377-GW	2009-07-14 10:20	WATER, 353.2, Nitrocellulose as N (SAC)
A9G150109-2 S	LGG4L	FWGLL8mw-002C-1377-GW MS/MSD	2009-07-14 10:20	WATER, 8330, Explosives (SAC)
A9G150109-2 S	LGG4L	FWGLL8mw-002C-1377-GW	2009-07-14 10:20	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G150109-2 S	LGG4L	FWGLL8mw-002C-1377-GW	2009-07-14 10:20	WATER, 353.2, Nitrocellulose as N (SAC)
A9G150109-2 D	LGG4L	FWGLL8mw-002C-1377-GW	2009-07-14 10:20	WATER, 8330, Explosives (SAC)
A9G150109-2 D	LGG4L	FWGLL8mw-002C-1377-GW	2009-07-14 10:20	WATER, UV/HPLC-SOP, Nitroguanidine (SA

Please use Client Sample ID for report
Call MARK LOEB with questions at 330-497-9396
at the TAL North Canton Laboratory

Shipping Method: FED EX

Need detection limit and analysis date included in report

Please send a signed copy of this form with the report at completion of analysis

Relinquished by: [signature] Date/Time: 7/15/09 0930

Relinquished by: Date/Time:

Received for lab by: [signature] Date/Time: 7-16-09 1500

PLEASE RETURN ORIGINAL SAMPLE ANALYSIS REQUISITION

North Canton

TestAmerica Laboratories, Inc.
SAMPLE ANALYSIS REQUISTION

Laboratory **TestAmerica West Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605

Lab Request SR113540

Report Package: **Expanded Deliverables**
Need Analytical Report 2009-07-29

Client Code: 14091

Project Manager: MARK LOEB

Sample I.D.	Work Order Number	Client Sample ID	Sampling Date	Analysis Required
A9G150109-2 D	LGG4L	FWGLL8mw-002C-1377-GW	2009-07-14 10:20	WATER, 353.2, Nitrocellulose as N (SAC)
A9G150109-3	LGG4P	FWGLL9mw-001C-1382-GW	2009-07-14 12:35	WATER, 8330, Explosives (SAC)
A9G150109-3	LGG4P	FWGLL9mw-001C-1382-GW	2009-07-14 12:35	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G150109-3	LGG4P	FWGLL9mw-001C-1382-GW	2009-07-14 12:35	WATER, 353.2, Nitrocellulose as N (SAC)
A9G150109-4	LGG4T	FWGLL9mw-003C-1384-GW	2009-07-14 13:50	WATER, 8330, Explosives (SAC)
A9G150109-4	LGG4T	FWGLL9mw-003C-1384-GW	2009-07-14 13:50	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G150109-4	LGG4T	FWGLL9mw-003C-1384-GW	2009-07-14 13:50	WATER, 353.2, Nitrocellulose as N (SAC)
A9G150109-4 S	LGG4T	FWGLL9mw-003C-1384-GW MS/MSD	2009-07-14 13:50	WATER, 8330, Explosives (SAC)
A9G150109-4 S	LGG4T	FWGLL9mw-003C-1384-GW	2009-07-14 13:50	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G150109-4 S	LGG4T	FWGLL9mw-003C-1384-GW	2009-07-14 13:50	WATER, 353.2, Nitrocellulose as N (SAC)
A9G150109-4 D	LGG4T	FWGLL9mw-003C-1384-GW	2009-07-14 13:50	WATER, 353.2, Nitrocellulose as N (SAC)

Please use Client Sample ID for report

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at the TAL North Canton Laboratory

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Relinquished by: Date/Time:

Received for lab by: [signature] Date/Time: 7-16-09 1500

PLEASE RETURN ORIGINAL SAMPLE ANALYSIS REQUISITION

692

North Canton

TestAmerica Laboratories, Inc.
SAMPLE ANALYSIS REQUISTION

Laboratory **TestAmerica West Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605

Lab Request SR113540

Report Package: **Expanded Deliverables**
Need Analytical Report 2009-07-29

Client Code: 14091

Project Manager: MARK LOEB

Sample I.D.	Work Order Number	Client Sample ID	Sampling Date	Analysis Required
A9G150109-4 D	LGG4T	FWGLL9mw-003C-1384-GW	2009-07-14 13:50	WATER, 8330, Explosives (SAC)
A9G150109-4 D	LGG4T	FWGLL9mw-003C-1384-GW	2009-07-14 13:50	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G150109-5	LGG4W	FWGLL10mw-003C-1391-GW	2009-07-14 15:55	WATER, 8330, Explosives (SAC)
A9G150109-5	LGG4W	FWGLL10mw-003C-1391-GW	2009-07-14 15:55	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G150109-5	LGG4W	FWGLL10mw-003C-1391-GW	2009-07-14 15:55	WATER, 353.2, Nitrocellulose as N (SAC)
A9G150109-6	LGG4X	FWGLL10mw-002C-1390-GW	2009-07-14 17:00	WATER, 8330, Explosives (SAC)
A9G150109-6	LGG4X	FWGLL10mw-002C-1390-GW	2009-07-14 17:00	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G150109-6	LGG4X	FWGLL10mw-002C-1390-GW	2009-07-14 17:00	WATER, 353.2, Nitrocellulose as N (SAC)
A9G150109-7	LGG5P	FWGLL8mw-006C-1381-GW	2009-07-14 9:15	WATER, 8330, Explosives (SAC)
A9G150109-7	LGG5P	FWGLL8mw-006C-1381-GW	2009-07-14 9:15	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G150109-7	LGG5P	FWGLL8mw-006C-1381-GW	2009-07-14 9:15	WATER, 353.2, Nitrocellulose as N (SAC)

Please use Client Sample ID for report

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at the TAL North Canton Laboratory

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PLEASE RETURN ORIGINAL SAMPLE ANALYSIS REQUISITION

North Canton

TestAmerica Laboratories, Inc.
SAMPLE ANALYSIS REQUISTION

Laboratory: TestAmerica West Sacramento
880 Riverside Parkway
West Sacramento, CA 95605

Lab Request: SR113540

Report Package: Expanded Deliverables
Need Analytical Report: 2009-07-29

Client Code: 14091

Project Manager: MARK LOEB

Sample I.D.	Work Order Number	Client Sample ID	Sampling Date	Analysis Required
A9G150109-8	LGG5V	FWGLL8mw-005C-1380-GW	2009-07-14 10:10	WATER, 8330, Explosives (SAC)
A9G150109-8	LGG5V	FWGLL8mw-005C-1380-GW	2009-07-14 10:10	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G150109-8	LGG5V	FWGLL8mw-005C-1380-GW	2009-07-14 10:10	WATER, 353.2, Nitrocellulose as N (SAC)
A9G150109-9	LGG5X	FWGLL8mw-DUP2-1414-GW	2009-07-14 11:15	WATER, 8330, Explosives (SAC)
A9G150109-9	LGG5X	FWGLL8mw-DUP2-1414-GW	2009-07-14 11:15	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G150109-9	LGG5X	FWGLL8mw-DUP2-1414-GW	2009-07-14 11:15	WATER, 353.2, Nitrocellulose as N (SAC)
A9G150109-10	LGG51	FWGLL9mw-004C-1385-GW	2009-07-14 12:15	WATER, 8330, Explosives (SAC)
A9G150109-10	LGG51	FWGLL9mw-004C-1385-GW	2009-07-14 12:15	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G150109-10	LGG51	FWGLL9mw-004C-1385-GW	2009-07-14 12:15	WATER, 353.2, Nitrocellulose as N (SAC)
A9G150109-11	LGG55	FWGLL9mw-DUP3-~~1385~~ 1415-GW	2009-07-14 13:15	WATER, 8330, Explosives (SAC)
A9G150109-11	LGG55	FWGLL9mw-DUP3-~~1385~~ 1415-GW	2009-07-14 13:15	WATER, UV/HPLC-SOP, Nitroguanidine (SA

7/15/09

Please use Client Sample ID for report

Call MARK LOEB with questions at 330-497-9396

at the TAL North Canton Laboratory

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Relinquished by: [signature] Date/Time: 7/15/09 0930

Relinquished by: _____ Date/Time: _____

Received for lab by: [signature] Date/Time: 7-16-09 1500

PLEASE RETURN ORIGINAL SAMPLE ANALYSIS REQUISITION

North Canton

TestAmerica Laboratories, Inc.
SAMPLE ANALYSIS REQUISTION

Laboratory: TestAmerica West Sacramento
880 Riverside Parkway
West Sacramento, CA 95605

Lab Request: SR113540

Report Package: Expanded Deliverables
Need Analytical Report: 2009-07-29

Client Code: 14091

Project Manager: MARK LOEB

Sample I.D.	Work Order Number	Client Sample ID	Sampling Date	Analysis Required
A9G150109-11	LGG55	FWGLL9mw-DUP3-~~1385~~ 1415-GW 7/15/09	2009-07-14 13:15	WATER, 353.2, Nitrocellulose as N (SAC)
A9G150109-12	LGG6C	FWGLL9mw-006C-1387-GW	2009-07-14 14:15	WATER, 8330, Explosives (SAC)
A9G150109-12	LGG6C	FWGLL9mw-006C-1387-GW	2009-07-14 14:15	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G150109-12	LGG6C	FWGLL9mw-006C-1387-GW	2009-07-14 14:15	WATER, 353.2, Nitrocellulose as N (SAC)
A9G150109-13	LGG6K	FWGLL10mw-001C-1389-GW	2009-07-14 15:30	WATER, 8330, Explosives (SAC)
A9G150109-13	LGG6K	FWGLL10mw-001C-1389-GW	2009-07-14 15:30	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G150109-13	LGG6K	FWGLL10mw-001C-1389-GW	2009-07-14 15:30	WATER, 353.2, Nitrocellulose as N (SAC)
A9G150109-14	LGG6N	FWGLL8mw-003C-1378-GW	2009-07-14 9:10	WATER, 8330, Explosives (SAC)
A9G150109-14	LGG6N	FWGLL8mw-003C-1378-GW	2009-07-14 9:10	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G150109-14	LGG6N	FWGLL8mw-003C-1378-GW	2009-07-14 9:10	WATER, 353.2, Nitrocellulose as N (SAC)
A9G150109-15	LGG6T	FWGLL8mw-004C-1379-GW	2009-07-14 10:35	WATER, 8330, Explosives (SAC)

Please use Client Sample ID for report

Call MARK LOEB with questions at 330-497-9396

at the TAL North Canton Laboratory

Shipping Method: FED EX

Need detection limit and analysis date included in report

Please send a signed copy of this form with the report at completion of analysis

Relinquished by: [signature] Date/Time: 7/15/09 0930

Relinquished by: Date/Time:

Received for lab by: [signature] Date/Time: 7-16-09 0500

PLEASE RETURN ORIGINAL SAMPLE ANALYSIS REQUISITION

North Canton

TestAmerica Laboratories, Inc.
SAMPLE ANALYSIS REQUISTION

Laboratory: TestAmerica West Sacramento
880 Riverside Parkway
West Sacramento, CA 95605

Lab Request: SR113540

Report Package: Expanded Deliverables
Need Analytical Report: 2009-07-29

Client Code: 14091

Project Manager: MARK LOEB

Sample I.D.	Work Order Number	Client Sample ID	Sampling Date	Analysis Required
A9G150109-15	LGG6T	FWGLL8mw-004C-1379-GW	2009-07-14 10:35	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G150109-15	LGG6T	FWGLL8mw-004C-1379-GW	2009-07-14 10:35	WATER, 353.2, Nitrocellulose as N (SAC)
A9G150109-16	LGG6W	FWGEQUIPRINSE2-1424-GW	2009-07-14 11:30	WATER, 8330, Explosives (SAC)
A9G150109-16	LGG6W	FWGEQUIPRINSE2-1424-GW	2009-07-14 11:30	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G150109-16	LGG6W	FWGEQUIPRINSE2-1424-GW	2009-07-14 11:30	WATER, 353.2, Nitrocellulose as N (SAC)
A9G150109-17	LGG6X	FWGLL9mw-007C-1388-GW	2009-07-14 13:05	WATER, 8330, Explosives (SAC)
A9G150109-17	LGG6X	FWGLL9mw-007C-1388-GW	2009-07-14 13:05	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G150109-17	LGG6X	FWGLL9mw-007C-1388-GW	2009-07-14 13:05	WATER, 353.2, Nitrocellulose as N (SAC)
A9G150109-18	LGG61	FWGLL9mw-002C-1383-GW	2009-07-14 14:25	WATER, 8330, Explosives (SAC)
A9G150109-18	LGG61	FWGLL9mw-002C-1383-GW	2009-07-14 14:25	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G150109-18	LGG61	FWGLL9mw-002C-1383-GW	2009-07-14 14:25	WATER, 353.2, Nitrocellulose as N (SAC)

Please use Client Sample ID for report

Call MARK LOEB with questions at 330-497-9396

at the TAL North Canton Laboratory

Shipping Method: FED EX

Need detection limit and analysis date included in report

Please send a signed copy of this form with the report at completion of analysis.

Relinquished by: [signature] Date/Time: 7/15/09 0930

Relinquished by: _____ Date/Time: _____

Received for lab by: [signature] Date/Time: 7-16-09 1500

PLEASE RETURN ORIGINAL SAMPLE ANALYSIS REQUISITION

North Canton

TestAmerica Laboratories, Inc.

SAMPLE ANALYSIS REQUISTION

Laboratory **TestAmerica West Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605

Lab Request SR113540

Report Package: **Expanded Deliverables**

Need Analytical Report 2009-07-29

Client Code: 14091

Project Manager: MARK LOEB

Sample I.D.	Work Order Number	Client Sample ID	Sampling Date	Analysis Required
A9G150109-19	LGG62	FWGLL9mw-005C-1386-GW	2009-07-14 15:40	WATER, 8330, Explosives (SAC)
A9G150109-19	LGG62	FWGLL9mw-005C-1386-GW	2009-07-14 15:40	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G150109-19	LGG62	FWGLL9mw-005C-1386-GW	2009-07-14 15:40	WATER, 353.2, Nitrocellulose as N (SAC)

Please use Client Sample ID for report

Call MARK LOEB with questions at 330-497-9396

at the TAL North Canton Laboratory

Shipping Method: FED EX

Need detection limit and analysis date included in report

Please send a signed copy of this form with the report at completion of analysis

Relinquished by: [signature] Date/Time: 7/15/09 0930

Relinquished by: Date/Time:

Received for lab by: [signature] Date/Time: 7/16-09 1500

PLEASE RETURN ORIGINAL SAMPLE ANALYSIS REQUISITION

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

LOT RECEIPT CHECKLIST
TestAmerica West Sacramento

CLIENT TAL - N Canton PM KO LOG # 59538

LOT# (QUANTIMS ID) A9G150109 QUOTE# NA LOCATION W5A, C

		Initials	Date
DATE RECEIVED 7-16-09 TIME RECEIVED 850		AV	7-16-09
DELIVERED BY	☑ FEDEX ☐ CA OVERNIGHT ☐ CLIENT ☐ AIRBORNE ☐ GOLDENSTATE ☐ DHL ☐ UPS ☐ BAX GLOBAL ☐ GO-GETTERS ☐ TAL COURIER ☐ VALLEY LOGISTICS ☐ MORGAN HILL COURIER ☐ OTHER		
CUSTODY SEAL STATUS	☑ INTACT ☐ BROKEN ☐ N/A		
CUSTODY SEAL #(S) Seal			
SHIPPPING CONTAINER(S)	☑ TAL ☐ CLIENT ☐ N/A		
TEMPERTURE RECORD (IN °C)	IR 4 ☐ 5 ☑ ☐ OTHER		
COC #(S) NA			
TEMPERATURE BLANK	Observed: — Corrected: —		
SAMPLE TEMPERATURE Observed: See temp. Sheets	Average: Corrected Average:		
COLLECTOR'S NAME:	☐ Verified from COC ☑ Not on COC		
pH MEASURED	☐ YES ☐ ANOMALY ☑ N/A		
LABELED BY			
LABELS CHECKED BY			
PEER REVIEW	☑ NA		
SHORT HOLD TEST NOTIFICATION	SAMPLE RECEIVING		
	WETCHEM ☑ N/A		
	VOA-ENCORES ☑ N/A		
☐ METALS NOTIFIED OF FILTER/PRESERVE VIA VERBAL & EMAIL	☑ N/A		
☑ COMPLETE SHIPMENT RECEIVED IN GOOD CONDITION WITH APPROPRIATE TEMPERATURES, CONTAINERS, PRESERVATIVES	☐ N/A		
☐ CLOUSEAU	☐ TEMPERATURE EXCEEDED (2 °C – 6 °C)*1 ☑ N/A		

☐ WET ICE ☐ BLUE ICE ☐ GEL PACK ☐ NO COOLING AGENTS USED ☐ PM NOTIFIED

Notes:

*1 Acceptable temperature range for State of Wisconsin samples is ≤4°C.

LEAVE NO SPACES BLANK. USE "N/A" IF NOT APPLICABLE.

QA-185 4/09 RKE

North Canton

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

MULTI COOLER RECEIPT CHECKLIST
TestAmerica West Sacramento

CLIENT: TAL-N Canton LOT# (QUANTIMS ID): A9G150109

	INITIALS	DATE
TEMPERTURE RECORD (IN °C) IR 4 ☐ 5 ☑ ☐ OTHER	AS	7-16-09

COOLER ID 1
CUSTODY SEAL STATUS ☑ INTACT ☐ BROKEN ☐ N/A
CUSTODY SEAL #(S) Seal
COC #(S) NA
TEMPERATURE BLANK. OBSERVED: 2 CORRECTED: 2
SAMPLE TEMPERATURE:
OBSERVED: 2 2 1 AVERAGE: 2 CORRECTED: 2
SAMPLES / TESTS (IF NCM REQUIRED):

COOLER ID 2
CUSTODY SEAL STATUS ☑ INTACT ☐ BROKEN ☐ N/A
CUSTODY SEAL #(S) Seal
COC #(S) NA
TEMPERATURE BLANK: OBSERVED: 2 CORRECTED: 2
SAMPLE TEMPERATURE:
OBSERVED: 2 2 2 AVERAGE: 2 CORRECTED: 2
SAMPLES / TESTS (IF NCM REQUIRED):

COOLER ID 3
CUSTODY SEAL STATUS ☑ INTACT ☐ BROKEN ☐ N/A
CUSTODY SEAL #(S) Seal
COC #(S) NA
TEMPERATURE BLANK: OBSERVED: CORRECTED:
SAMPLE TEMPERATURE:
OBSERVED: 1 2 3 AVERAGE: 2 CORRECTED: 2
SAMPLES / TESTS (IF NCM REQUIRED):

LEAVE NO SPACES BLANK USE "N/A" IF NOT APPLICABLE

QA-185 4/09 RKE

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

MULTI COOLER RECEIPT CHECKLIST
TestAmerica West Sacramento

CLIENT: TAL - N Canton LOT# (QUANTIMS ID): A9G150109

TEMPERTURE RECORD (IN °C) IR 4 ☐ 5 ☑ ☐ OTHER _____ INITIALS AF DATE 7-16-09

COOLER ID 4
CUSTODY SEAL STATUS ☑ INTACT ☐ BROKEN ☐ N/A
CUSTODY SEAL #(S) seal
COC #(S) NA
TEMPERATURE BLANK: OBSERVED: 2 CORRECTED: 2
SAMPLE TEMPERATURE:
OBSERVED: 2 2 3 AVERAGE: 2 CORRECTED: 2
SAMPLES / TESTS (IF NCM REQUIRED): _____

COOLER ID 5
CUSTODY SEAL STATUS ☑ INTACT ☐ BROKEN ☐ N/A
CUSTODY SEAL #(S) seal
COC #(S) NA
TEMPERATURE BLANK: OBSERVED. _____ CORRECTED: _____
SAMPLE TEMPERATURE:
OBSERVED: 2 2 2 AVERAGE: 2 CORRECTED: 2
SAMPLES / TESTS (IF NCM REQUIRED): _____

COOLER ID _____
CUSTODY SEAL STATUS ☐ INTACT ☐ BROKEN ☐ N/A
CUSTODY SEAL #(S) _____
COC #(S) _____
TEMPERATURE BLANK: OBSERVED: _____ CORRECTED: _____
SAMPLE TEMPERATURE:
OBSERVED: ___ ___ ___ AVERAGE. _____ CORRECTED: _____
SAMPLES / TESTS (IF NCM REQUIRED): _____

LEAVE NO SPACES BLANK USE "N/A" IF NOT APPLICABLE QA-185 4/09 RKE

8330 EXPLOSIVES DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ September 14, 2009

SDG: A9G150109 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.1- 5.4 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Tale 3-7
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-7
7. Was a MDL Level Verification analyzed once per quarter with all target analytes detected?	✓			LC10 7/22/09 @1826 , LC9 7/24/09 @ 1556	LCG Table 5 R
8. Was a MRL Level verification run at the beginning and end of every daily sequence or every 12 hours? Was the %D < 30%?	✓				LCG Table 5 >30%=J
9. Does the initial calibration curve consist of 5 concentration levels? (6 stds for quadratic curves)	✓			ICAL: LC10 6/11/09, LC9 6/10/2009	STL SOP Section 10.2, LCG R
10. Were all target analytes %RSD ≤ 20%? OR was the average RSD ≤ 20%?	✓				LCG Table 5 >20% RSD=J/R
11. If a linear regression curve was used, was the correlation coefficient r≥0.995? (0.990 for Quadratic curve).			✓		STL SOP Section 10.4, LCG R<0.99=-J/R
12. Was a second source verification (ICV) analyzed after the ICAL and all analytes 85-115%?	✓			LC9 6/10/09 @ 0629- 4-Nitrotoluene appears to not have been spiked and/or recover; however the compound is co-eluting with 2-nitrotoluene. No qualifications made as LC9 was used as confirmation.	STL SOP Section 9.9 >115%=J; 80-85%=J/UJ; <80%=J/R
13. Was a CCV run at least every 10 samples and at the end of the analytical run?	✓				STL SOP Section 10.9
14. Was the average %D (difference or drift) for all target analytes < 15%?	✓			LC9- 4-Nitrotoluene appears to not have been spiked and/or recover; however the compound is co-eluting with 2-nitrotoluene. No qualifications made as LC9 was used as confirmation.	LCG Table 5 D>15% (neg) = J/R D>15% (pos) = J

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ September 14, 2009

SDG: A9G150109 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
15. Was a method blank prepared and analyzed with each batch?	✓				LCG Attachment A Section 5.6
16. Were target analytes in the method blank <1/2 the MRL?	✓			Checked by ADR. 1,3,5-Trinitrobenzene was detected in the method blank at 0.049ug/L. Detected 1,3,5-trinitrobenzene results <5x contamination were qualified, "B".	LCG Table 5 <5x = B
17. Was a field blank collected and analyzed?	✓			FWGEQUIPRinse2-1424-GW	
18. Were target analytes in the field blank analyses < ½ the MRL?	✓			Checked by ADR.	<5x=B
19. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓			Only detected results above the RL were evaluated. Sample FWGLL8mw-DUP2-1414-GW was the field duplicate for sample FWGLL8mw-005c-1380-GW and FWGLL9mw-DUP3-1415-GW a field duplicate for sample FWGLL9mw-004c-1385-GW.	QAPP Table 3-2 RPD >30=J
20. Were all positive results confirmed with a second column confirmation? Was the RPD ≤ 40%?	✓				LCG Table 5 RPD>40%=J
21. Was an LCS prepared and analyzed with each batch?	✓				STL SOP Section 9.6
22. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR.	LCG Appendix C <UL=J; 30-LL=J/UJ; <30%=J/R
23. Was a MS/MSD pair prepared with each batch?	✓				STL SOP Section 9.7
24. Was the MS/MSD parent a Ravenna sample?	✓			Sample FWGLL8mw-002c-1377-GW and FWGLL9mw-003c-1384-GW were the parent MS/MSD samples from this SDG.	
25. Were MS/MSD recoveries 40-140% and RPD ≤20%?	✓			Checked by ADR.	QAPP Table 3-2 Pj
27. Were reported sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
29. Were lab comments included in report? If yes, summarize contents.	✓			See narrative regarding calibration and manual elution.	

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ September 14, 2009

SDG: A9G150109 R0
Analysis: SW846 8330 Explosives

References: Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 5 and Attachment A "Data Validation Guidelines.

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

STL SOP SAC-LC-0009 Rev. 2.0- Determination of Nitroaromatic, Nitramines, and Specialty Explosives Based on Method 8330, SW-846.

Additional Comments: Sample FWGLL8mw-005c-1380-GW was manually eluted, but no qualifications were made as the surrogate recovered within limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-001C-1376-GW

HPLC

Lot-Sample #...: A9G150109-001 **Work Order #...:** LGG4G2AA **Matrix.....:** WG
Date Sampled...: 07/14/09 09:15 **Date Received..:** 07/15/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/24/09
Prep Batch #...: 9201303
Dilution Factor: 0.97 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	**0.031 J,B**	**0.097**	**ug/L**	**0.029**
1,3-Dinitrobenzene	ND	0.097	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.097	ug/L	0.097
2,4,6-Trinitrotoluene	ND	0.097	ug/L	0.048
2,4-Dinitrotoluene	ND	0.097	ug/L	0.048
2,6-Dinitrotoluene	ND	0.097	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.085
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.097	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.085
HMX	ND	0.097	ug/L	0.035
Nitrobenzene	ND	0.097	ug/L	0.048
Nitroglycerin	ND	0.63	ug/L	0.32
RDX	ND	0.097	ug/L	0.035
PETN	ND	0.63	ug/L	0.29
Tetryl	ND	0.097	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-002C-1377-GW

HPLC

Lot-Sample #...: A9G150109-002 **Work Order #...:** LGG4L2AA **Matrix.....:** WG
Date Sampled...: 07/14/09 10:20 **Date Received..:** 07/15/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/24/09
Prep Batch #...: 9201303
Dilution Factor: 0.98 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	**0.037 J,B**	**0.098**	**ug/L**	**0.029**
1,3-Dinitrobenzene	ND	0.098	ug/L	0.049
2-Amino-4,6-dinitrotoluene	ND	0.098	ug/L	0.098
2,4,6-Trinitrotoluene	ND	0.098	ug/L	0.049
2,4-Dinitrotoluene	ND	0.098	ug/L	0.049
2,6-Dinitrotoluene	ND	0.098	ug/L	0.049
2-Nitrotoluene	ND	0.49	ug/L	0.086
3-Nitrotoluene	ND	0.49	ug/L	0.056
4-Amino-2,6-dinitrotoluene	ND	0.098	ug/L	0.049
4-Nitrotoluene	ND	0.49	ug/L	0.086
HMX	ND	0.098	ug/L	0.035
Nitrobenzene	ND	0.098	ug/L	0.049
Nitroglycerin	ND	0.64	ug/L	0.32
RDX	ND	0.098	ug/L	0.035
PETN	ND	0.64	ug/L	0.29
Tetryl	ND	0.098	ug/L	0.049

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	94	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-001C-1382-GW

HPLC

Lot-Sample #...: A9G150109-003 **Work Order #...:** LGG4P2AA **Matrix.....:** WG
Date Sampled...: 07/14/09 12:35 **Date Received..:** 07/15/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/24/09
Prep Batch #...: 9201303
Dilution Factor: 0.96 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.096	ug/L	0.029
1,3-Dinitrobenzene	ND	0.096	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.096	ug/L	0.096
2,4,6-Trinitrotoluene	ND	0.096	ug/L	0.048
2,4-Dinitrotoluene	ND	0.096	ug/L	0.048
2,6-Dinitrotoluene	ND	0.096	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.084
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.096	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.084
HMX	ND	0.096	ug/L	0.035
Nitrobenzene	ND	0.096	ug/L	0.048
Nitroglycerin	ND	0.62	ug/L	0.32
RDX	ND	0.096	ug/L	0.035
PETN	ND	0.62	ug/L	0.29
Tetryl	ND	0.096	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	94	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-003C-1384-GW

HPLC

Lot-Sample #...: A9G150109-004 **Work Order #...:** LGG4T2AA **Matrix.....:** WG
Date Sampled...: 07/14/09 13:50 **Date Received..:** 07/15/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/24/09
Prep Batch #...: 9201303
Dilution Factor: 0.99 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.099	ug/L	0.030
1,3-Dinitrobenzene	ND	0.099	ug/L	0.050
2-Amino-4,6-dinitrotoluene	ND	0.099	ug/L	0.099
2,4,6-Trinitrotoluene	ND	0.099	ug/L	0.050
2,4-Dinitrotoluene	ND	0.099	ug/L	0.050
2,6-Dinitrotoluene	ND	0.099	ug/L	0.050
2-Nitrotoluene	ND	0.50	ug/L	0.087
3-Nitrotoluene	ND	0.50	ug/L	0.056
4-Amino-2,6-dinitrotoluene	ND	0.099	ug/L	0.050
4-Nitrotoluene	ND	0.50	ug/L	0.087
HMX	ND	0.099	ug/L	0.036
Nitrobenzene	ND	0.099	ug/L	0.050
Nitroglycerin	ND	0.64	ug/L	0.33
RDX	ND	0.099	ug/L	0.036
PETN	ND	0.64	ug/L	0.30
Tetryl	ND	0.099	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	93	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-003C-1391-GW

HPLC

Lot-Sample #...: A9G150109-005 **Work Order #...:** LGG4W2AA **Matrix.....:** WG
Date Sampled...: 07/14/09 15:55 **Date Received..:** 07/15/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/25/09
Prep Batch #...: 9201303
Dilution Factor: 0.98 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.098	ug/L	0.029
1,3-Dinitrobenzene	ND	0.098	ug/L	0.049
2-Amino-4,6-dinitrotoluene	ND	0.098	ug/L	0.098
2,4,6-Trinitrotoluene	ND	0.098	ug/L	0.049
2,4-Dinitrotoluene	ND	0.098	ug/L	0.049
2,6-Dinitrotoluene	ND	0.098	ug/L	0.049
2-Nitrotoluene	ND	0.49	ug/L	0.086
3-Nitrotoluene	ND	0.49	ug/L	0.056
4-Amino-2,6-dinitrotoluene	ND	0.098	ug/L	0.049
4-Nitrotoluene	ND	0.49	ug/L	0.086
HMX	ND	0.098	ug/L	0.035
Nitrobenzene	ND	0.098	ug/L	0.049
Nitroglycerin	ND	0.64	ug/L	0.32
RDX	ND	0.098	ug/L	0.035
PETN	ND	0.64	ug/L	0.29
Tetryl	ND	0.098	ug/L	0.049

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	94	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-002C-1390-GW

HPLC

Lot-Sample #...: A9G150109-006 **Work Order #...:** LGG4X2AA **Matrix.....:** WG
Date Sampled...: 07/14/09 17:00 **Date Received..:** 07/15/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/25/09
Prep Batch #...: 9201303
Dilution Factor: 0.96 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.096	ug/L	0.029
1,3-Dinitrobenzene	ND	0.096	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.096	ug/L	0.096
2,4,6-Trinitrotoluene	ND	0.096	ug/L	0.048
2,4-Dinitrotoluene	ND	0.096	ug/L	0.048
2,6-Dinitrotoluene	ND	0.096	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.084
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.096	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.084
HMX	ND	0.096	ug/L	0.035
Nitrobenzene	ND	0.096	ug/L	0.048
Nitroglycerin	ND	0.62	ug/L	0.32
RDX	ND	0.096	ug/L	0.035
PETN	ND	0.62	ug/L	0.29
Tetryl	ND	0.096	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	93	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-006C-1381-GW

HPLC

Lot-Sample #...: A9G150109-007 **Work Order #...:** LGG5P2AA **Matrix.....:** WG
Date Sampled...: 07/14/09 09:15 **Date Received..:** 07/15/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/25/09
Prep Batch #...: 9201303
Dilution Factor: 1.06 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	**0.043 J,B**	**0.11**	**ug/L**	**0.032**
1,3-Dinitrobenzene	ND	0.11	ug/L	0.053
2-Amino-4,6-dinitrotoluene	ND	0.11	ug/L	0.11
2,4,6-Trinitrotoluene	ND	0.11	ug/L	0.053
2,4-Dinitrotoluene	ND	0.11	ug/L	0.053
2,6-Dinitrotoluene	ND	0.11	ug/L	0.053
2-Nitrotoluene	ND	0.53	ug/L	0.093
3-Nitrotoluene	ND	0.53	ug/L	0.060
4-Amino-2,6-dinitrotoluene	ND	0.11	ug/L	0.053
4-Nitrotoluene	ND	0.53	ug/L	0.093
HMX	ND	0.11	ug/L	0.038
Nitrobenzene	ND	0.11	ug/L	0.053
Nitroglycerin	ND	0.69	ug/L	0.35
RDX	ND	0.11	ug/L	0.038
PETN	ND	0.69	ug/L	0.32
Tetryl	ND	0.11	ug/L	0.053

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	96	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-005C-1380-GW

HPLC

Lot-Sample #...: A9G150109-008 **Work Order #...:** LGG5V2AA **Matrix.....:** WG
Date Sampled...: 07/14/09 10:10 **Date Received..:** 07/15/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/25/09
Prep Batch #...: 9201303
Dilution Factor: 1.08 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	**0.044 J,B**	**0.11**	**ug/L**	**0.032**
1,3-Dinitrobenzene	ND	0.11	ug/L	0.054
2-Amino-4,6-dinitrotoluene	ND	0.11	ug/L	0.11
2,4,6-Trinitrotoluene	ND	0.11	ug/L	0.054
2,4-Dinitrotoluene	ND	0.11	ug/L	0.054
2,6-Dinitrotoluene	ND	0.11	ug/L	0.054
2-Nitrotoluene	ND	0.54	ug/L	0.095
3-Nitrotoluene	ND	0.54	ug/L	0.062
4-Amino-2,6-dinitrotoluene	ND	0.11	ug/L	0.054
4-Nitrotoluene	ND	0.54	ug/L	0.095
HMX	ND	0.11	ug/L	0.039
Nitrobenzene	ND	0.11	ug/L	0.054
Nitroglycerin	ND	0.70	ug/L	0.36
RDX	ND	0.11	ug/L	0.039
PETN	ND	0.70	ug/L	0.32
Tetryl	ND	0.11	ug/L	0.054

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	94	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: **FWGLL8mw-DUP2-1414-GW**

HPLC

Lot-Sample #...: A9G150109-009 **Work Order #...:** LGG5X2AA **Matrix.....:** WG
Date Sampled...: 07/14/09 11:15 **Date Received..:** 07/15/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/25/09
Prep Batch #...: 9201303
Dilution Factor: 1 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	**0.036 J,B**	**0.10**	**ug/L**	**0.030**
1,3-Dinitrobenzene	ND	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	0.10
2,4,6-Trinitrotoluene	ND	0.10	ug/L	0.050
2,4-Dinitrotoluene	ND	0.10	ug/L	0.050
2,6-Dinitrotoluene	ND	0.10	ug/L	0.050
2-Nitrotoluene	ND	0.50	ug/L	0.088
3-Nitrotoluene	ND	0.50	ug/L	0.057
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	0.050
4-Nitrotoluene	ND	0.50	ug/L	0.088
HMX	ND	0.10	ug/L	0.036
Nitrobenzene	ND	0.10	ug/L	0.050
Nitroglycerin	ND	0.65	ug/L	0.33
RDX	ND	0.10	ug/L	0.036
PETN	ND	0.65	ug/L	0.30
Tetryl	ND	0.10	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-004C-1385-GW

HPLC

Lot-Sample #...: A9G150109-010 **Work Order #...:** LGG512AA **Matrix.....:** WG
Date Sampled...: 07/14/09 12:15 **Date Received..:** 07/15/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/25/09
Prep Batch #...: 9201303
Dilution Factor: 0.97 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	**0.031 J,B**	**0.097**	**ug/L**	**0.029**
1,3-Dinitrobenzene	ND	0.097	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.097	ug/L	0.097
2,4,6-Trinitrotoluene	ND	0.097	ug/L	0.048
2,4-Dinitrotoluene	ND	0.097	ug/L	0.048
2,6-Dinitrotoluene	ND	0.097	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.085
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.097	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.085
HMX	ND	0.097	ug/L	0.035
Nitrobenzene	ND	0.097	ug/L	0.048
Nitroglycerin	ND	0.63	ug/L	0.32
RDX	ND	0.097	ug/L	0.035
PETN	ND	0.63	ug/L	0.29
Tetryl	ND	0.097	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	93	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-DUP3-1415-GW

HPLC

Lot-Sample #...: A9G150109-011 **Work Order #...:** LGG552AA **Matrix.....:** WG
Date Sampled...: 07/14/09 13:15 **Date Received..:** 07/15/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/25/09
Prep Batch #...: 9201303
Dilution Factor: 1.02 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	**0.034 J,B**	**0.10**	**ug/L**	**0.031**
1,3-Dinitrobenzene	ND	0.10	ug/L	0.051
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	0.10
2,4,6-Trinitrotoluene	ND	0.10	ug/L	0.051
2,4-Dinitrotoluene	ND	0.10	ug/L	0.051
2,6-Dinitrotoluene	ND	0.10	ug/L	0.051
2-Nitrotoluene	ND	0.51	ug/L	0.090
3-Nitrotoluene	ND	0.51	ug/L	0.058
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	0.051
4-Nitrotoluene	ND	0.51	ug/L	0.090
HMX	ND	0.10	ug/L	0.037
Nitrobenzene	ND	0.10	ug/L	0.051
Nitroglycerin	ND	0.66	ug/L	0.34
RDX	ND	0.10	ug/L	0.037
PETN	ND	0.66	ug/L	0.31
Tetryl	ND	0.10	ug/L	0.051

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-006C-1387-GW

HPLC

Lot-Sample #...: A9G150109-012 **Work Order #...:** LGG6C2AA **Matrix.....:** WG
Date Sampled...: 07/14/09 14:15 **Date Received..:** 07/15/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/25/09
Prep Batch #...: 9201303
Dilution Factor: 1.08 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	**0.037 J,B**	**0.11**	**ug/L**	**0.032**
1,3-Dinitrobenzene	ND	0.11	ug/L	0.054
2-Amino-4,6-dinitrotoluene	ND	0.11	ug/L	0.11
2,4,6-Trinitrotoluene	ND	0.11	ug/L	0.054
2,4-Dinitrotoluene	ND	0.11	ug/L	0.054
2,6-Dinitrotoluene	ND	0.11	ug/L	0.054
2-Nitrotoluene	ND	0.54	ug/L	0.095
3-Nitrotoluene	ND	0.54	ug/L	0.062
4-Amino-2,6-dinitrotoluene	ND	0.11	ug/L	0.054
4-Nitrotoluene	ND	0.54	ug/L	0.095
HMX	ND	0.11	ug/L	0.039
Nitrobenzene	ND	0.11	ug/L	0.054
Nitroglycerin	ND	0.70	ug/L	0.36
RDX	ND	0.11	ug/L	0.039
PETN	ND	0.70	ug/L	0.32
Tetryl	ND	0.11	ug/L	0.054

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	93	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-001C-1389-GW

HPLC

Lot-Sample #...: A9G150109-013 **Work Order #...:** LGG6K2AA **Matrix.....:** WG
Date Sampled...: 07/14/09 15:30 **Date Received..:** 07/15/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/25/09
Prep Batch #...: 9201303
Dilution Factor: 1.05 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	**0.039 J,B**	**0.10**	**ug/L**	**0.032**
1,3-Dinitrobenzene	ND	0.10	ug/L	0.052
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	0.10
2,4,6-Trinitrotoluene	ND	0.10	ug/L	0.052
2,4-Dinitrotoluene	ND	0.10	ug/L	0.052
2,6-Dinitrotoluene	ND	0.10	ug/L	0.052
2-Nitrotoluene	ND	0.52	ug/L	0.092
3-Nitrotoluene	ND	0.52	ug/L	0.060
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	0.052
4-Nitrotoluene	ND	0.52	ug/L	0.092
HMX	ND	0.10	ug/L	0.038
Nitrobenzene	**0.073 J**	**0.10**	**ug/L**	**0.052**
Nitroglycerin	ND	0.68	ug/L	0.35
RDX	ND	0.10	ug/L	0.038
PETN	ND	0.68	ug/L	0.32
Tetryl	ND	0.10	ug/L	0.052

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	94	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-003C-1378-GW

HPLC

Lot-Sample #...: A9G150109-014 **Work Order #...:** LGG6N2AA **Matrix.....:** WG
Date Sampled...: 07/14/09 09:10 **Date Received..:** 07/15/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/25/09
Prep Batch #...: 9201303
Dilution Factor: 0.96 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.096	ug/L	0.029
1,3-Dinitrobenzene	ND	0.096	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.096	ug/L	0.096
2,4,6-Trinitrotoluene	ND	0.096	ug/L	0.048
2,4-Dinitrotoluene	ND	0.096	ug/L	0.048
2,6-Dinitrotoluene	ND	0.096	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.084
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.096	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.084
HMX	ND	0.096	ug/L	0.035
Nitrobenzene	ND	0.096	ug/L	0.048
Nitroglycerin	ND	0.62	ug/L	0.32
RDX	ND	0.096	ug/L	0.035
PETN	ND	0.62	ug/L	0.29
Tetryl	ND	0.096	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	93	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-004C-1379-GW

HPLC

Lot-Sample #...: A9G150109-015 **Work Order #...:** LGG6T2AA **Matrix.....:** WG
Date Sampled...: 07/14/09 10:35 **Date Received..:** 07/15/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/26/09
Prep Batch #...: 9201303
Dilution Factor: 0.97 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.097	ug/L	0.029
1,3-Dinitrobenzene	ND	0.097	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.097	ug/L	0.097
2,4,6-Trinitrotoluene	ND	0.097	ug/L	0.048
2,4-Dinitrotoluene	ND	0.097	ug/L	0.048
2,6-Dinitrotoluene	ND	0.097	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.085
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.097	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.085
HMX	ND	0.097	ug/L	0.035
Nitrobenzene	ND	0.097	ug/L	0.048
Nitroglycerin	ND	0.63	ug/L	0.32
RDX	ND	0.097	ug/L	0.035
PETN	ND	0.63	ug/L	0.29
Tetryl	ND	0.097	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	92	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1424-GW

HPLC

Lot-Sample #...: A9G150109-016 **Work Order #...:** LGG6W2AA **Matrix.....:** WQ
Date Sampled...: 07/14/09 11:30 **Date Received..:** 07/15/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/26/09
Prep Batch #...: 9201303
Dilution Factor: 1.1 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.11	ug/L	0.033
1,3-Dinitrobenzene	ND	0.11	ug/L	0.055
2-Amino-4,6-dinitrotoluene	ND	0.11	ug/L	0.11
2,4,6-Trinitrotoluene	ND	0.11	ug/L	0.055
2,4-Dinitrotoluene	ND	0.11	ug/L	0.055
2,6-Dinitrotoluene	ND	0.11	ug/L	0.055
2-Nitrotoluene	ND	0.55	ug/L	0.097
3-Nitrotoluene	ND	0.55	ug/L	0.063
4-Amino-2,6-dinitrotoluene	ND	0.11	ug/L	0.055
4-Nitrotoluene	ND	0.55	ug/L	0.097
HMX	ND	0.11	ug/L	0.040
Nitrobenzene	ND	0.11	ug/L	0.055
Nitroglycerin	ND	0.72	ug/L	0.36
RDX	ND	0.11	ug/L	0.040
PETN	ND	0.72	ug/L	0.33
Tetryl	ND	0.11	ug/L	0.055

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	94	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-007C-1388-GW

HPLC

Lot-Sample #...: A9G150109-017 **Work Order #...:** LGG6X2AA **Matrix.....:** WG
Date Sampled...: 07/14/09 13:05 **Date Received..:** 07/15/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/26/09
Prep Batch #...: 9201303
Dilution Factor: 1.03 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	**0.044 J,B**	**0.10**	**ug/L**	**0.031**
1,3-Dinitrobenzene	ND	0.10	ug/L	0.052
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	0.10
2,4,6-Trinitrotoluene	ND	0.10	ug/L	0.052
2,4-Dinitrotoluene	ND	0.10	ug/L	0.052
2,6-Dinitrotoluene	ND	0.10	ug/L	0.052
2-Nitrotoluene	ND	0.52	ug/L	0.091
3-Nitrotoluene	ND	0.52	ug/L	0.059
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	0.052
4-Nitrotoluene	ND	0.52	ug/L	0.091
HMX	ND	0.10	ug/L	0.037
Nitrobenzene	ND	0.10	ug/L	0.052
Nitroglycerin	ND	0.67	ug/L	0.34
RDX	ND	0.10	ug/L	0.037
PETN	ND	0.67	ug/L	0.31
Tetryl	ND	0.10	ug/L	0.052

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	94	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-002C-1383-GW

HPLC

Lot-Sample #...: A9G150109-018 **Work Order #...:** LGG612AA **Matrix.....:** WG
Date Sampled...: 07/14/09 14:25 **Date Received..:** 07/15/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/26/09
Prep Batch #...: 9201303
Dilution Factor: 1.01 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	**0.039 J,B**	**0.10**	**ug/L**	**0.030**
1,3-Dinitrobenzene	ND	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	0.10
2,4,6-Trinitrotoluene	ND	0.10	ug/L	0.050
2,4-Dinitrotoluene	ND	0.10	ug/L	0.050
2,6-Dinitrotoluene	ND	0.10	ug/L	0.050
2-Nitrotoluene	ND	0.50	ug/L	0.089
3-Nitrotoluene	ND	0.50	ug/L	0.058
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	0.050
4-Nitrotoluene	ND	0.50	ug/L	0.089
HMX	ND	0.10	ug/L	0.036
Nitrobenzene	ND	0.10	ug/L	0.050
Nitroglycerin	ND	0.66	ug/L	0.33
RDX	ND	0.10	ug/L	0.036
PETN	ND	0.66	ug/L	0.30
Tetryl	ND	0.10	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: **FWGLL9mw-005C-1386-GW**

HPLC

Lot-Sample #...: A9G150109-019 **Work Order #...:** LGG622AA **Matrix.....:** WG
Date Sampled...: 07/14/09 15:40 **Date Received..:** 07/15/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/26/09
Prep Batch #...: 9201303
Dilution Factor: 0.96 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	**0.037 J,B**	**0.096**	**ug/L**	**0.029**
1,3-Dinitrobenzene	ND	0.096	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.096	ug/L	0.096
2,4,6-Trinitrotoluene	ND	0.096	ug/L	0.048
2,4-Dinitrotoluene	ND	0.096	ug/L	0.048
2,6-Dinitrotoluene	ND	0.096	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.084
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.096	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.084
HMX	ND	0.096	ug/L	0.035
Nitrobenzene	ND	0.096	ug/L	0.048
Nitroglycerin	ND	0.62	ug/L	0.32
RDX	ND	0.096	ug/L	0.035
PETN	ND	0.62	ug/L	0.29
Tetryl	ND	0.096	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

METHOD BLANK REPORT

HPLC

Client Lot #...: A9G150109 **Work Order #...:** LGQC51AD **Matrix.....:** WATER
MB Lot-Sample #: G9G200000-303

Prep Date.....: 07/20/09
Analysis Date..: 07/24/09 **Prep Batch #...:** 9201303
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
1,3,5-Trinitrobenzene	**0.049 J**	**0.10**	**ug/L**	**SW846 8330**
1,3-Dinitrobenzene	ND	0.10	ug/L	SW846 8330
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	SW846 8330
2,4,6-Trinitrotoluene	ND	0.10	ug/L	SW846 8330
2,4-Dinitrotoluene	ND	0.10	ug/L	SW846 8330
2,6-Dinitrotoluene	ND	0.10	ug/L	SW846 8330
2-Nitrotoluene	ND	0.50	ug/L	SW846 8330
3-Nitrotoluene	ND	0.50	ug/L	SW846 8330
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	SW846 8330
4-Nitrotoluene	ND	0.50	ug/L	SW846 8330
HMX	ND	0.10	ug/L	SW846 8330
Nitrobenzene	ND	0.10	ug/L	SW846 8330
Nitroglycerin	ND	0.65	ug/L	SW846 8330
RDX	ND	0.10	ug/L	SW846 8330
PETN	ND	0.65	ug/L	SW846 8330
Tetryl	ND	0.10	ug/L	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A9G150109 Work Order #...: LGQC51AE Matrix.....: WATER
LCS Lot-Sample#: G9G200000-303
Prep Date.....: 07/20/09 Analysis Date..: 07/24/09
Prep Batch #...: 9201303
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,3,5-Trinitrobenzene	**91**	**(53 - 135)**	**SW846 8330**
1,3-Dinitrobenzene	**92**	**(54 - 120)**	**SW846 8330**
2-Amino-4,6-dinitrotoluene	**92**	**(53 - 120)**	**SW846 8330**
2,4,6-Trinitrotoluene	**87**	**(37 - 120)**	**SW846 8330**
2,4-Dinitrotoluene	**88**	**(58 - 136)**	**SW846 8330**
2,6-Dinitrotoluene	**90**	**(52 - 144)**	**SW846 8330**
2-Nitrotoluene	**88**	**(52 - 120)**	**SW846 8330**
3-Nitrotoluene	**87**	**(48 - 136)**	**SW846 8330**
4-Amino-2,6-dinitrotoluene	**88**	**(58 - 159)**	**SW846 8330**
4-Nitrotoluene	**88**	**(46 - 136)**	**SW846 8330**
HMX	**88**	**(45 - 140)**	**SW846 8330**
Nitrobenzene	**93**	**(49 - 120)**	**SW846 8330**
Nitroglycerin	**95**	**(60 - 120)**	**SW846 8330**
RDX	**93**	**(39 - 120)**	**SW846 8330**
PETN	**104**	**(60 - 120)**	**SW846 8330**
Tetryl	**81**	**(30 - 120)**	**SW846 8330**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	94	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A9G150109 **Work Order #...:** LGG4L1AL-MS **Matrix.....:** WG
MS Lot-Sample #: A9G150109-002 LGG4L1AM-MSD
Date Sampled...: 07/14/09 10:20 **Date Received..:** 07/15/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/24/09
Prep Batch #...: 9201303
Dilution Factor: 0.98

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3,5-Trinitrobenzene	86	(50 - 150)			SW846 8330
	84	(50 - 150)	4.4	(0-50)	SW846 8330
1,3-Dinitrobenzene	92	(50 - 150)			SW846 8330
	91	(50 - 150)	3.8	(0-50)	SW846 8330
2-Amino-4,6-dinitrotoluene	94	(50 - 150)			SW846 8330
	93	(50 - 150)	4.0	(0-50)	SW846 8330
2,4,6-Trinitrotoluene	88	(50 - 150)			SW846 8330
	87	(50 - 150)	3.7	(0-50)	SW846 8330
2,4-Dinitrotoluene	88	(50 - 150)			SW846 8330
	88	(50 - 150)	3.5	(0-50)	SW846 8330
2,6-Dinitrotoluene	92	(50 - 150)			SW846 8330
	90	(50 - 150)	4.6	(0-50)	SW846 8330
2-Nitrotoluene	91	(50 - 150)			SW846 8330
	87	(50 - 150)	7.0	(0-50)	SW846 8330
3-Nitrotoluene	89	(50 - 150)			SW846 8330
	88	(50 - 150)	4.3	(0-50)	SW846 8330
4-Amino-2,6-dinitrotoluene	89	(50 - 150)			SW846 8330
	89	(50 - 150)	3.1	(0-50)	SW846 8330
4-Nitrotoluene	89	(50 - 150)			SW846 8330
	88	(50 - 150)	4.6	(0-50)	SW846 8330
HMX	88	(50 - 150)			SW846 8330
	86	(50 - 150)	5.8	(0-50)	SW846 8330
Nitrobenzene	93	(50 - 150)			SW846 8330
	92	(50 - 150)	4.6	(0-50)	SW846 8330
Nitroglycerin	97	(50 - 150)			SW846 8330
	96	(50 - 150)	4.6	(0-50)	SW846 8330
RDX	117	(50 - 150)			SW846 8330
	116	(50 - 150)	4.7	(0-50)	SW846 8330
PETN	104	(50 - 150)			SW846 8330
	105	(50 - 150)	2.6	(0-50)	SW846 8330
Tetryl	79	(50 - 150)			SW846 8330
	78	(50 - 150)	4.3	(0-50)	SW846 8330

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A9G150109 **Work Order #...:** LGG4L1AL-MS **Matrix.....:** WG
MS Lot-Sample #: A9G150109-002 LGG4L1AM-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	96	(50 - 150)
	96	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A9G150109 Work Order #...: LGG4T1AL-MS Matrix.....: WG
MS Lot-Sample #: A9G150109-004 LGG4T1AM-MSD
Date Sampled...: 07/14/09 13:50 Date Received..: 07/15/09
Prep Date.....: 07/20/09 Analysis Date..: 07/24/09
Prep Batch #...: 9201303
Dilution Factor: 0.98

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3,5-Trinitrobenzene	89	(50 - 150)			SW846 8330
	88	(50 - 150)	0.47	(0-50)	SW846 8330
1,3-Dinitrobenzene	93	(50 - 150)			SW846 8330
	91	(50 - 150)	1.3	(0-50)	SW846 8330
2-Amino-4,6-dinitrotoluene	95	(50 - 150)			SW846 8330
	94	(50 - 150)	0.39	(0-50)	SW846 8330
2,4,6-Trinitrotoluene	88	(50 - 150)			SW846 8330
	87	(50 - 150)	0.40	(0-50)	SW846 8330
2,4-Dinitrotoluene	90	(50 - 150)			SW846 8330
	88	(50 - 150)	0.49	(0-50)	SW846 8330
2,6-Dinitrotoluene	93	(50 - 150)			SW846 8330
	91	(50 - 150)	1.4	(0-50)	SW846 8330
2-Nitrotoluene	91	(50 - 150)			SW846 8330
	89	(50 - 150)	1.2	(0-50)	SW846 8330
3-Nitrotoluene	91	(50 - 150)			SW846 8330
	89	(50 - 150)	0.83	(0-50)	SW846 8330
4-Amino-2,6-dinitrotoluene	90	(50 - 150)			SW846 8330
	88	(50 - 150)	0.89	(0-50)	SW846 8330
4-Nitrotoluene	90	(50 - 150)			SW846 8330
	88	(50 - 150)	0.83	(0-50)	SW846 8330
HMX	92	(50 - 150)			SW846 8330
	89	(50 - 150)	1.7	(0-50)	SW846 8330
Nitrobenzene	94	(50 - 150)			SW846 8330
	92	(50 - 150)	1.5	(0-50)	SW846 8330
Nitroglycerin	98	(50 - 150)			SW846 8330
	95	(50 - 150)	1.3	(0-50)	SW846 8330
RDX	92	(50 - 150)			SW846 8330
	90	(50 - 150)	1.1	(0-50)	SW846 8330
PETN	105	(50 - 150)			SW846 8330
	106	(50 - 150)	2.2	(0-50)	SW846 8330
Tetryl	82	(50 - 150)			SW846 8330
	81	(50 - 150)	0.69	(0-50)	SW846 8330

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A9G150109 **Work Order #...:** LGG4T1AL-MS **Matrix.....:** WG
MS Lot-Sample #: A9G150109-004 LGG4T1AM-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	96	(50 - 150)
	94	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

8330MOD NITROGUANIDINE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ September 2, 2009

SDG: A9G150109 R0
Analysis: SW846 8330M Nitroguanadine

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.1- 5.4 °C.	QAPP Table 4-2
3. Were holding times met?	✓			Checked by ADR.	QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Tale 3-7
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-7
7. Was a MDL Level Verification analyzed once per quarter with all target analytes detected?	✓			7/21/09	LCG Table 5 R
8. Was a MRL Level verification run at the beginning and end of every daily sequence or every 12 hours? Was the %D < 30%?	✓				LCG Table 5 >30%=J
9. Does the initial calibration curve consist of 5 concentration levels? (6 stds for quadratic curves)	✓			Varian Star #1 ICAL: 1/29/09 primary column Stds: 20, 50, 100, 200, 500, 1000	STL SOP Section 10.2, LCG R
10. Were all target analytes %RSD ≤ 20%? OR was the average RSD ≤ 20%?	✓				LCG Table 5 >20% RSD=J/R
11. If a linear regression curve was used, was the correlation coefficient r≥0.995? (0.990 for Quadratic curve)	✓			Linear fit used. No qualifications were made as r>0.995.	STL SOP Section 10.4, LCG R<0.99=-J/R
12. Was a second source verification (ICV) analyzed after the ICAL and all analytes 85-115%?	✓			1/29/09 @ 2110	STL SOP Section 9.9 >115%=J; 80-85%=J/UJ; <80%=J/R
13. Was a CCV run at least every 10 samples and at the end of the analytical run?	✓				STL SOP Section 10.9
14. Was the average %D (difference or drift) for all target analytes < 15%?	✓				LCG Table 5 D>15% (neg) = J/R D>15% (pos) = J

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ September 2, 2009

SDG: A9G150109 R0
Analysis: SW846 8330M Nitroguanadine

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
15. Was a method blank prepared and analyzed with each batch?	✓				LCG Attachment A Section 5.6
16. Were target analytes reported in the method blank <1/2 the MRL?	✓				LCG Table 5 <5x = B
17. Was a field blank collected and analyzed?	✓			FWGEQUIPRinse2-1424-GW	
18. Were target analytes reported in the field blank analyses < ½ the MRL?	✓				<5x=B
19. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓			Sample FWGLL8mw-DUP2-1414-GW was the field duplicate for sample FWGLL8mw-005c-1380-GW and FWGLL9mw-DUP3-1415-GW a field duplicate for sample FWGLL9mw-004c-1385-GW.	QAPP Table 3-2 RPD >30=J
20. Were all positive results confirmed with a second column confirmation? Was the RPD ≤ 40%?			✓		LCG Table 5 RPD>40%=J
21. Was an LCS prepared and analyzed with each batch?	✓				STL SOP Section 9.6
22. Were the LCS recoveries within limits specified in LCG Appendix C?	✓				LCG Appendix C <UL=J; 30-LL=J/UJ; <30%=J/R
23. Was a MS/MSD pair prepared with each batch?	✓				STL SOP Section 9.7
24. Was the MS/MSD parent a Ravenna sample?	✓			Sample FWGLL8mw-002c-1377-GW and FWGLL9mw-003c-1384-GW were the parent MS/MSD samples from this SDG.	
25. Were MS/MSD recoveries 40-140% and RPD ≤20%?	✓				QAPP Table 3-2 Pj
27. Were reported sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
29. Were lab comments included in report? If yes, summarize contents.		✓			

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ September 2, 2009

SDG: A9G150109 R0
Analysis: SW846 8330M Nitroguanadine

References: Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 5 and Attachment A "Data Validation Guidelines.

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

STL SOP SAC-LC-0010 "Determination of Nitroguanidine Based on Method 8330, SW-846" April 2007, revision 2.0

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-001C-1376-GW

Dissolved HPLC

Lot-Sample #...:	A9G150109-001	**Work Order #...:**	LGG4G1AD	**Matrix.....:**	WG
Date Sampled...:	07/14/09 09:15	**Date Received..:**	07/15/09		
Prep Date.....:	07/21/09	**Analysis Date..:**	07/22/09		
Prep Batch #...:	9202218				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-002C-1377-GW

Dissolved HPLC

Lot-Sample #...:	A9G150109-002	**Work Order #...:**	LGG4L1AH	**Matrix.....:**	WG
Date Sampled...:	07/14/09 10:20	**Date Received..:**	07/15/09		
Prep Date.....:	07/21/09	**Analysis Date..:**	07/22/09		
Prep Batch #...:	9202218				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-001C-1382-GW

Dissolved HPLC

Lot-Sample #...:	A9G150109-003	**Work Order #...:**	LGG4P1AD	**Matrix.....:**	WG
Date Sampled...:	07/14/09 12:35	**Date Received..:**	07/15/09		
Prep Date.....:	07/21/09	**Analysis Date..:**	07/22/09		
Prep Batch #...:	9202218				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-003C-1384-GW

Dissolved HPLC

Lot-Sample #...:	A9G150109-004	**Work Order #...:**	LGG4T1AH	**Matrix.....:**	WG
Date Sampled...:	07/14/09 13:50	**Date Received..:**	07/15/09		
Prep Date.....:	07/21/09	**Analysis Date..:**	07/22/09		
Prep Batch #...:	9202218				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-003C-1391-GW

Dissolved HPLC

Lot-Sample #...:	A9G150109-005	**Work Order #...:**	LGG4W1AD	**Matrix.....:**	WG
Date Sampled...:	07/14/09 15:55	**Date Received..:**	07/15/09		
Prep Date.....:	07/21/09	**Analysis Date..:**	07/22/09		
Prep Batch #...:	9202218				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-002C-1390-GW

Dissolved HPLC

Lot-Sample #...:	A9G150109-006	**Work Order #...:**	LGG4X1AD	**Matrix.....:**	WG
Date Sampled...:	07/14/09 17:00	**Date Received..:**	07/15/09		
Prep Date.....:	07/21/09	**Analysis Date..:**	07/22/09		
Prep Batch #...:	9202218				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-006C-1381-GW

Dissolved HPLC

Lot-Sample #...:	A9G150109-007	**Work Order #...:**	LGG5P1AD	**Matrix.....:**	WG
Date Sampled...:	07/14/09 09:15	**Date Received..:**	07/15/09		
Prep Date.....:	07/21/09	**Analysis Date..:**	07/22/09		
Prep Batch #...:	9202218				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-005C-1380-GW

Dissolved HPLC

Lot-Sample #...:	A9G150109-008	**Work Order #...:**	LGG5V1AD	**Matrix.....:**	WG
Date Sampled...:	07/14/09 10:10	**Date Received..:**	07/15/09		
Prep Date.....:	07/21/09	**Analysis Date..:**	07/22/09		
Prep Batch #...:	9202218				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-DUP2-1414-GW

Dissolved HPLC

Lot-Sample #...:	A9G150109-009	**Work Order #...:**	LGG5X1AD	**Matrix.....:**	WG
Date Sampled...:	07/14/09 11:15	**Date Received..:**	07/15/09		
Prep Date.....:	07/21/09	**Analysis Date..:**	07/22/09		
Prep Batch #...:	9202218				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-004C-1385-GW

Dissolved HPLC

Lot-Sample #...:	A9G150109-010	**Work Order #...:**	LGG511AD	**Matrix.....:**	WG
Date Sampled...:	07/14/09 12:15	**Date Received..:**	07/15/09		
Prep Date.....:	07/21/09	**Analysis Date..:**	07/22/09		
Prep Batch #...:	9202218				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-DUP3-1415-GW

Dissolved HPLC

Lot-Sample #...:	A9G150109-011	Work Order #...:	LGG551AD	Matrix.....:	WG
Date Sampled...:	07/14/09 13:15	Date Received..:	07/15/09		
Prep Date.....:	07/21/09	Analysis Date..:	07/22/09		
Prep Batch #...:	9202218				
Dilution Factor:	1	Method.....:	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-006C-1387-GW

Dissolved HPLC

Lot-Sample #...:	A9G150109-012	**Work Order #...:**	LGG6C1AD	**Matrix.....:**	WG
Date Sampled...:	07/14/09 14:15	**Date Received..:**	07/15/09		
Prep Date.....:	07/21/09	**Analysis Date..:**	07/22/09		
Prep Batch #...:	9202218				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-001C-1389-GW

Dissolved HPLC

Lot-Sample #...: A9G150109-013 **Work Order #...:** LGG6K1AD **Matrix.....:** WG
Date Sampled...: 07/14/09 15:30 **Date Received..:** 07/15/09
Prep Date.....: 07/21/09 **Analysis Date..:** 07/22/09
Prep Batch #...: 9202218
Dilution Factor: 1 **Method.....:** SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-003C-1378-GW

Dissolved HPLC

Lot-Sample #...:	A9G150109-014	**Work Order #...:**	LGG6N1AD	**Matrix.....:**	WG
Date Sampled...:	07/14/09 09:10	**Date Received..:**	07/15/09		
Prep Date.....:	07/21/09	**Analysis Date..:**	07/22/09		
Prep Batch #...:	9202218				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-004C-1379-GW

Dissolved HPLC

Lot-Sample #...:	A9G150109-015	**Work Order #...:**	LGG6T1AD	**Matrix.....:**	WG
Date Sampled...:	07/14/09 10:35	**Date Received..:**	07/15/09		
Prep Date.....:	07/21/09	**Analysis Date..:**	07/22/09		
Prep Batch #...:	9202218				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1424-GW

Dissolved HPLC

Lot-Sample #...:	A9G150109-016	**Work Order #...:**	LGG6W1AD	**Matrix.....:**	WQ
Date Sampled...:	07/14/09 11:30	**Date Received..:**	07/15/09		
Prep Date.....:	07/21/09	**Analysis Date..:**	07/23/09		
Prep Batch #...:	9202218				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-007C-1388-GW

Dissolved HPLC

Lot-Sample #...:	A9G150109-017	**Work Order #...:**	LGG6X1AD	**Matrix.....:**	WG
Date Sampled...:	07/14/09 13:05	**Date Received..:**	07/15/09		
Prep Date.....:	07/21/09	**Analysis Date..:**	07/23/09		
Prep Batch #...:	9202218				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-002C-1383-GW

Dissolved HPLC

Lot-Sample #...: A9G150109-018 **Work Order #...:** LGG611AD **Matrix.....:** WG
Date Sampled...: 07/14/09 14:25 **Date Received..:** 07/15/09
Prep Date.....: 07/21/09 **Analysis Date..:** 07/23/09
Prep Batch #...: 9202218
Dilution Factor: 1 **Method.....:** SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-005C-1386-GW

Dissolved HPLC

Lot-Sample #...:	A9G150109-019	**Work Order #...:**	LGG621AD	**Matrix.....:**	WG
Date Sampled...:	07/14/09 15:40	**Date Received..:**	07/15/09		
Prep Date.....:	07/21/09	**Analysis Date..:**	07/23/09		
Prep Batch #...:	9202218				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

METHOD BLANK REPORT

HPLC

Client Lot #...: A9G150109 **Work Order #...:** LGRTT1AA **Matrix.....:** WATER
MB Lot-Sample #: G9G210000-218

Prep Date.....: 07/21/09
Analysis Date..: 07/22/09 **Prep Batch #...:** 9202218
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Nitroguanidine	ND	20	ug/L	SW846 8330 (Modif

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A9G150109 **Work Order #...:** LGRTT1AC **Matrix.....:** WATER
LCS Lot-Sample#: G9G210000-218
Prep Date.....: 07/21/09 **Analysis Date..:** 07/22/09
Prep Batch #...: 9202218
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Nitroguanidine	**102**	**(73 - 117)**	**SW846 8330 (Modified**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A9G150109 Work Order #...: LGG4L1AJ-MS Matrix.....: WG
MS Lot-Sample #: A9G150109-002 LGG4L1AK-MSD
Date Sampled...: 07/14/09 10:20 Date Received..: 07/15/09
Prep Date.....: 07/21/09 Analysis Date..: 07/22/09
Prep Batch #...: 9202218
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Nitroguanidine	105	(73 - 117)			SW846 8330 (Modified
	108	(73 - 117)	2.8	(0-15)	SW846 8330 (Modified

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A9G150109 Work Order #...: LGG4T1AJ-MS Matrix.....: WG
MS Lot-Sample #: A9G150109-004 LGG4T1AK-MSD
Date Sampled...: 07/14/09 13:50 Date Received..: 07/15/09
Prep Date.....: 07/21/09 Analysis Date..: 07/22/09
Prep Batch #...: 9202218
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Nitroguanidine	107	(73 - 117)			SW846 8330 (Modified
	108	(73 - 117)	0.76	(0-15)	SW846 8330 (Modified

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

GENERAL CHEMISTRY DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ September 2, 2009

SDG: A9G150109 Rev 0
Analysis: EPA 353.2- Nitrocellulose

Review Questions:	Yes	No	N/A	Comments	Qualifier
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.1- 5.4 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	✓				QAPP Table 3.7
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3.7
7. Was Acetone used to extract the samples? Was the Acetone evaporated using Nitrogen?	✓				STL SOP Sections 11.4
8. Does the initial calibration curve consist of 5 concentration levels with the low standard near but > MDL?	✓			Instrument FS4; ICAL 7/23/09 Stds- 0, 0.05, 0.2, 0.4, 1, 2	STL SOP Section 10.2 R
9. Was the correlation coefficient >0.995?	✓				STL SOP Section 10.2
10. Was a MRL Level Verification run at the beginning and end of every daily sequence or every 12 hours? Was the %D <30%?	✓				LCG Table 5 >30%=J
11. Was a second source verification (ICV) analyzed after the ICAL? Were all analytes 90-110%?	✓				STL SOP Section 9.8, 10.3, LCG >110%=J; 90-85%=J/UJ; <85%=J/R
12. Was the ICB analyzed after the ICV with results <1/2 the MRL?	✓				STL SOP Section 9.8, LCG < 5x = U
13. Was a CCV run every 10 samples and at the end of the analytical run?	✓				STL SOP Section 10.4
14. Was the ICV and CCV a mid-level standard from the initial calibration curve?	✓				STL SOP Section 10.3.1

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ September 2, 2009

SDG: A9G150109 Rev 0
Analysis: EPA 353.2- Nitrocellulose

Review Questions:	Yes	No	N/A	Comments	Qualifier
15. Were all CCV calibration analytes within 90-110%?	✓				STL SOP Section 10.4, LCG >110%=J; 85-90%=J/UJ; <85%=J/R
16. Was the ICB analyzed after the ICV with results <1/2 the MRL?	✓				STL SOP Section 10.4, LCG < 5x = U
17. Was the Nitrocellulose assay available and/or analyzed to be within 10%?	✓				STL SOP Section 7.14.1 R
18. Was a method blank prepared and analyzed with each batch?	✓				
19. Were target analytes reported in the method blank <1/2 the MRL?	✓			ADR checked section.	STL SOP Section 9.4, LCG <5x=B
20. Was a field blank collected and analyzed?	✓			FWGEQUIPRinse2-1424-GW	
21. Were target analytes reported in the field blank analyses <1/2 the MRL?	✓				<5x=B
22. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓			ADR checked section. Sample FWGLL8mw-DUP2-1414-GW was the field duplicate for sample FWGLL8mw-005c-1380-GW and FWGLL9mw-DUP3-1415-GW a field duplicate for sample FWGLL9mw-004c-1385-GW.	QAPP Table 3-2 RPD > 30% = J
23. Was an LCS prepared and analyzed with each batch? Was the LCS recovery within lab's in-house limits% (26-144%)?	✓				>UL%=J; 50-LL%=J/UJ; <50%=J/R
24. Was a MS/MSD pair prepared with each batch?	✓				
25. Was the MS/MSD parent a Ravenna sample?	✓			Sample FWGLL8mw-002c-1377-GW and FWGLL9mw-003c-1384-GW were the parent MS/MSD samples from this SDG.	
26. Were MS/MSD recoveries 26-144% and RPD ≤20?	✓			ADR checked section.	Method EPA 353.2 Section 9.4.2 >UL%=J; <LL%=J/UJ; RPD>20%=J/UJ

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ September 2, 2009

SDG: A9G150109 Rev 0
Analysis: EPA 353.2- Nitrocellulose

Review Questions:	Yes	No	N/A	Comments	Qualifier
27. Were sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
30. Were lab comments included in report? If yes, summarize contents.		✓			

References: *STL SOP SAC-WC-0050 "Preparation and Analysis of Nitrocellulose in Aqueous and Soil/Sediment Samples by Colorimetric Autoanalyzer", Jan 2007, rev. 2.0*

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-001C-1376-GW

General Chemistry

Lot-Sample #...: A9G150109-001 **Work Order #...:** LGG4G **Matrix.....:** WG
Date Sampled...: 07/14/09 09:15 **Date Received..:** 07/15/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/22-07/23/09	9203324

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-002C-1377-GW

General Chemistry

Lot-Sample #...: A9G150109-002 **Work Order #...:** LGG4L **Matrix.....:** WG
Date Sampled...: 07/14/09 10:20 **Date Received..:** 07/15/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/22-07/23/09	9203324

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-001C-1382-GW

General Chemistry

Lot-Sample #...: A9G150109-003 **Work Order #...:** LGG4P **Matrix.....:** WG
Date Sampled...: 07/14/09 12:35 **Date Received..:** 07/15/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/22-07/23/09	9203324

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-003C-1384-GW

General Chemistry

Lot-Sample #...: A9G150109-004 **Work Order #...:** LGG4T **Matrix.....:** WG
Date Sampled...: 07/14/09 13:50 **Date Received..:** 07/15/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	**0.13 B**	**0.50**	**mg/L**	**MCAWW 353.2**	**07/22-07/23/09**	**9203324**

Dilution Factor: 1 MDL.....: 0.12

NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-003C-1391-GW

General Chemistry

Lot-Sample #...: A9G150109-005 **Work Order #...:** LGG4W **Matrix.....:** WG
Date Sampled...: 07/14/09 15:55 **Date Received..:** 07/15/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/22-07/23/09	9203324

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-002C-1390-GW

General Chemistry

Lot-Sample #...: A9G150109-006 **Work Order #...:** LGG4X **Matrix.....:** WG
Date Sampled...: 07/14/09 17:00 **Date Received..:** 07/15/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/22-07/23/09	9203324

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-006C-1381-GW

General Chemistry

Lot-Sample #...: A9G150109-007 **Work Order #...:** LGG5P **Matrix.....:** WG
Date Sampled...: 07/14/09 09:15 **Date Received..:** 07/15/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/22-07/23/09	9203324

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-005C-1380-GW

General Chemistry

Lot-Sample #...: A9G150109-008 **Work Order #...:** LGG5V **Matrix.....:** WG
Date Sampled...: 07/14/09 10:10 **Date Received..:** 07/15/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/22-07/23/09	9203324

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-DUP2-1414-GW

General Chemistry

Lot-Sample #...: A9G150109-009 **Work Order #...:** LGG5X **Matrix.....:** WG
Date Sampled...: 07/14/09 11:15 **Date Received..:** 07/15/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/22-07/23/09	9203324

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-004C-1385-GW

General Chemistry

Lot-Sample #...: A9G150109-010 **Work Order #...:** LGG51 **Matrix.....:** WG
Date Sampled...: 07/14/09 12:15 **Date Received..:** 07/15/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/22-07/23/09	9203324

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-DUP3-1415-GW

General Chemistry

Lot-Sample #...: A9G150109-011 **Work Order #...:** LGG55 **Matrix.....:** WG
Date Sampled...: 07/14/09 13:15 **Date Received..:** 07/15/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/22-07/23/09	9203324

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-006C-1387-GW

General Chemistry

Lot-Sample #...: A9G150109-012 **Work Order #...:** LGG6C **Matrix.....:** WG
Date Sampled...: 07/14/09 14:15 **Date Received..:** 07/15/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/22-07/23/09	9203324

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-001C-1389-GW

General Chemistry

Lot-Sample #...: A9G150109-013 **Work Order #...:** LGG6K **Matrix.....:** WG
Date Sampled...: 07/14/09 15:30 **Date Received..:** 07/15/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/22-07/23/09	9203324

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-003C-1378-GW

General Chemistry

Lot-Sample #...: A9G150109-014 **Work Order #...:** LGG6N **Matrix.....:** WG
Date Sampled...: 07/14/09 09:10 **Date Received..:** 07/15/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/22-07/23/09	9203324

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-004C-1379-GW

General Chemistry

Lot-Sample #...: A9G150109-015 Work Order #...: LGG6T Matrix.....: WG
Date Sampled...: 07/14/09 10:35 Date Received..: 07/15/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/22-07/23/09	9203324

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1424-GW

General Chemistry

Lot-Sample #...: A9G150109-016 **Work Order #...:** LGG6W **Matrix.....:** WQ
Date Sampled...: 07/14/09 11:30 **Date Received..:** 07/15/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/22-07/23/09	9203324

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-007C-1388-GW

General Chemistry

Lot-Sample #...: A9G150109-017 **Work Order #...:** LGG6X **Matrix.....:** WG
Date Sampled...: 07/14/09 13:05 **Date Received..:** 07/15/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/22-07/23/09	9203324

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-002C-1383-GW

General Chemistry

Lot-Sample #...: A9G150109-018 **Work Order #...:** LGG61 **Matrix.....:** WG
Date Sampled...: 07/14/09 14:25 **Date Received..:** 07/15/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/22-07/23/09	9203324

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-005C-1386-GW

General Chemistry

Lot-Sample #...: A9G150109-019 **Work Order #...:** LGG62 **Matrix.....:** WG
Date Sampled...: 07/14/09 15:40 **Date Received..:** 07/15/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/22-07/23/09	9203324

Dilution Factor: 1 MDL.....: 0.12

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A9G150109 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		Work Order #:	LGV431AA	MB Lot-Sample #:	G9G220000-324	
	ND	0.50	mg/L	MCAWW 353.2	07/22-07/23/09	9203324
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A9G150109 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		Work Order #: LGV431AC	LCS Lot-Sample#: G9G220000-324		
	85	(26 - 144)	MCAWW 353.2	07/22-07/23/09	9203324
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A9G150109 **Matrix.....:** WG
Date Sampled...: 07/14/09 13:50 **Date Received..:** 07/15/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		WO#: LGG4L1AF-MS/LGG4L1AG-MSD				MS Lot-Sample #: A9G150109-002	
	86	(26 - 144)			MCAWW 353.2	07/22-07/23/09	9203324
	82	(26 - 144)	4.7	(0-45)	MCAWW 353.2	07/22-07/23/09	9203324
		Dilution Factor: 1					
Nitrocellulose		WO#: LGG4T1AF-MS/LGG4T1AG-MSD				MS Lot-Sample #: A9G150109-004	
	69	(26 - 144)			MCAWW 353.2	07/22-07/23/09	9203324
	78	(26 - 144)	12	(0-45)	MCAWW 353.2	07/22-07/23/09	9203324
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Appendix I

Reason Code Library: Example 1

Category	Code
Low Bias Indicator	-
High Bias Indicator	+
Temperature	A
Holding Times	
Sampling to Analysis	C
Sampling to Extraction	D
Extaction to Analysis	E
Method Blanks	F
Surrogate Recovery	G
MS/MSD	
MS/MSD Recovery	H
MS/MSD RPD	I
LCS	
LCS Recovery	J
LCS RPD	K
Reporting Limits	L
Field QC	
Field Blank	M
Equipment Blank	N
Trip Blank	O
Field Duplicate	P

Category	Code
Initial Calibration	
Initial Calibration RRF	Q
Initial Calibration RSD	R
Initial Calibration Cor. Coef	S
Initial Calibration Verification	
Initial Calibration Verificaton RRF	T
Initial CalibrationVerification %D	U
Continuing Calibration	
Continuing Calibraiton RRF	V
Continuing Calibration %D	W
GC/MS Tune	
GC/MS Tune for Initial Calibration	X
GC/MS Tune for Continuing Calibration	Y
Laboratory Duplicate	Z
Categories not Assessed by Automated Data Review*	
Internal Standards	Is
Calibration Blanks	Cb
Resolution Check Mixture	Rm
Performance Evaluation Mixture	Pm
Professional Judgement	Pj

* Qualifiers for data-review categories not assessed by automated data review are manually entered by the user. The application automaticallly adds reason codes listed here when the user manually adds qualifiers for these categories if the option for applying reason codes was selected during automated data review.

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G150109										
353.2 Modified	FWGLL9mw-003C-1384-GW	AQ	N							
				Nitrocellulose	0.50	0.13B		J	mg/L	L
8330	FWGLL10mw-001C-1389-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.10	0.039J B		JB	ug/L	L,F
				Nitrobenzene	0.10	0.073J		J	ug/L	L
8330	FWGLL8mw-001C-1376-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.097	0.031J B		JB	ug/L	L,F
8330	FWGLL8mw-002C-1377-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.098	0.037J B		JB	ug/L	L,F
8330	FWGLL8mw-005C-1380-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.11	0.044J B		JB	ug/L	L,F
8330	FWGLL8mw-006C-1381-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.11	0.043J B		JB	ug/L	L,F
8330	FWGLL8mw-DUP2-1414-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.10	0.036J B		UJ	ug/L	L,F
8330	FWGLL9mw-002C-1383-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.10	0.039J B		JB	ug/L	L,F
8330	FWGLL9mw-004C-1385-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.097	0.031J B		JB	ug/L	L,F
8330	FWGLL9mw-005C-1386-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.096	0.037J B		JB	ug/L	L,F
8330	FWGLL9mw-006C-1387-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.11	0.037J B		JB	ug/L	L,F

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G150109										
8330	FWGLL9mw-007C-1388-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.10	0.044J B		JB	ug/L	L,F
8330	FWGLL9mw-DUP3-1415-GW	AQ	FD							
				1,3,5-Trinitrobenzene	0.10	0.034J B		UJ	ug/L	L,F

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL10mw-001C-1389-GW **Lab Report Batch :** A9G150109 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A9G150109013

Reviewed By / Date : Angye Dragotta 9/14/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 1.05**															
1,3,5-Trinitrobenzene	0.039		ug/L	J B	YES	~~UJ~~ JB			JB					J							L,F
Nitrobenzene	0.073		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL8mw-001C-1376-GW **Lab Report Batch :** A9G150109 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A9G150109001

Reviewed By / Date : Angye Dragotta 9/14/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 0.97**															
1,3,5-Trinitrobenzene	0.031		ug/L	J B	YES	~~U~~ JB			~~P~~B					J							L,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL8mw-002C-1377-GW **Lab Report Batch :** A9G150109 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A9G150109002

Reviewed By / Date : Angye Dragotta 9/14/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 0.98**															
1,3,5-Trinitrobenzene	0.037		ug/L	J B	YES	~~UJ~~ JB			~~UB~~					J							L,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL8mw-005C-1380-GW **Lab Report Batch :** A9G150109 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A9G150109008

Reviewed By / Date : Angye Dragotta 9/14/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 1.08**															
1,3,5-Trinitrobenzene	0.044		ug/L	J B	YES	~~UJ~~ JB			~~U~~ JB					J							L,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL8mw-006C-1381-GW **Lab Report Batch :** A9G150109 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A9G150109007

Reviewed By / Date : Angye Dragotta 9/14/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 1.06**															
1,3,5-Trinitrobenzene	0.043		ug/L	J B	YES	~~U~~ JB			~~U~~ B					J							L,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL9mw-002C-1383-GW **Lab Report Batch :** A9G150109 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A9G150109018

Reviewed By / Date : Angye Dragotta 9/14/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 1.01**															
1,3,5-Trinitrobenzene	0.039		ug/L	J B	YES	~~U~~ JB			~~U~~ B					J							L,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL9mw-003C-1384-GW **Lab Report Batch :** A9G150109 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G150109004

Reviewed By / Date : Angye Dragotta 9/14/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 353.2 Modified						**Dilution: 1**															
Nitrocellulose	0.13		mg/L	B	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL9mw-004C-1385-GW **Lab Report Batch :** A9G150109 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A9G150109010

Reviewed By / Date : Angye Dragotta 9/14/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 0.97**															
1,3,5-Trinitrobenzene	0.031		ug/L	J B	YES	~~UJ~~ JB			~~U~~ JB					J							L,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL9mw-005C-1386-GW **Lab Report Batch :** A9G150109 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A9G150109019

Reviewed By / Date : Angye Dragotta 9/14/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 0.96**															
1,3,5-Trinitrobenzene	0.037		ug/L	J B	YES	~~U~~ JB			~~U~~ B					J							L,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL9mw-006C-1387-GW **Lab Report Batch :** A9G150109 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A9G150109012

Reviewed By / Date : Angye Dragotta 9/14/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 1.08**															
1,3,5-Trinitrobenzene	0.037		ug/L	J B	YES	~~UJ~~	JB		~~U~~	JB				J							L,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL9mw-007C-1388-GW **Lab Report Batch :** A9G150109 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A9G150109017

Reviewed By / Date : Angye Dragotta 9/14/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 1.03**															
1,3,5-Trinitrobenzene	0.044		ug/L	J B	YES	~~UJ~~ JB			~~J~~ B					J							L,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

QC Outlier Report: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: A9G150109 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGEQUIPRINSE2-1424	A9G150109016	8330	AQ	2-Nitrotoluene	U	0.55	0.22	ug/L
				3-Nitrotoluene	U	0.55	0.22	ug/L
				4-Nitrotoluene	U	0.55	0.22	ug/L
FWGLL10mw-001C-1389-	A9G150109013	8330	AQ	2-Nitrotoluene	U	0.52	0.21	ug/L
				3-Nitrotoluene	U	0.52	0.21	ug/L
				4-Nitrotoluene	U	0.52	0.21	ug/L
FWGLL10mw-002C-1390-	A9G150109006	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGLL10mw-003C-1391-	A9G150109005	8330	AQ	2-Nitrotoluene	U	0.49	0.20	ug/L
				3-Nitrotoluene	U	0.49	0.20	ug/L
				4-Nitrotoluene	U	0.49	0.20	ug/L
FWGLL8mw-001C-1376-G	A9G150109001	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGLL8mw-002C-1377-G	A9G150109002	8330	AQ	2-Nitrotoluene	U	0.49	0.20	ug/L
				3-Nitrotoluene	U	0.49	0.20	ug/L
				4-Nitrotoluene	U	0.49	0.20	ug/L
FWGLL8mw-003C-1378-G	A9G150109014	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGLL8mw-004C-1379-G	A9G150109015	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGLL8mw-005C-1380-G	A9G150109008	8330	AQ	2,4-Dinitrotoluene	U	0.11	0.11	ug/L
				2,6-Dinitrotoluene	U	0.11	0.11	ug/L
				2-Nitrotoluene	U	0.54	0.22	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: **30240.0006 - RVAAP (OH)**

QC Outlier Report: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: A9G150109 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGLL8mw-005C-1380-G	A9G150109008	8330	AQ	3-Nitrotoluene	U	0.54	0.22	ug/L
				4-Nitrotoluene	U	0.54	0.22	ug/L
FWGLL8mw-006C-1381-G	A9G150109007	8330	AQ	2,4-Dinitrotoluene	U	0.11	0.11	ug/L
				2,6-Dinitrotoluene	U	0.11	0.11	ug/L
				2-Nitrotoluene	U	0.53	0.21	ug/L
				3-Nitrotoluene	U	0.53	0.21	ug/L
				4-Nitrotoluene	U	0.53	0.21	ug/L
FWGLL8mw-DUP2-1414-	A9G150109009	8330	AQ	2-Nitrotoluene	U	0.50	0.20	ug/L
				3-Nitrotoluene	U	0.50	0.20	ug/L
				4-Nitrotoluene	U	0.50	0.20	ug/L
FWGLL9mw-001C-1382-G	A9G150109003	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGLL9mw-002C-1383-G	A9G150109018	8330	AQ	2-Nitrotoluene	U	0.50	0.20	ug/L
				3-Nitrotoluene	U	0.50	0.20	ug/L
				4-Nitrotoluene	U	0.50	0.20	ug/L
FWGLL9mw-003C-1384-G	A9G150109004	8330	AQ	2-Nitrotoluene	U	0.50	0.20	ug/L
				3-Nitrotoluene	U	0.50	0.20	ug/L
				4-Nitrotoluene	U	0.50	0.20	ug/L
FWGLL9mw-004C-1385-G	A9G150109010	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGLL9mw-005C-1386-G	A9G150109019	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGLL9mw-006C-1387-G	A9G150109012	8330	AQ	2,4-Dinitrotoluene	U	0.11	0.11	ug/L
				2,6-Dinitrotoluene	U	0.11	0.11	ug/L
				2-Nitrotoluene	U	0.54	0.22	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: **30240.0006 - RVAAP (OH)**

QC Outlier Report: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: A9G150109 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGLL9mw-006C-1387-G	A9G150109012	8330	AQ	3-Nitrotoluene	U	0.54	0.22	ug/L
				4-Nitrotoluene	U	0.54	0.22	ug/L
FWGLL9mw-007C-1388-G	A9G150109017	8330	AQ	2-Nitrotoluene	U	0.52	0.21	ug/L
				3-Nitrotoluene	U	0.52	0.21	ug/L
				4-Nitrotoluene	U	0.52	0.21	ug/L
FWGLL9mw-DUP3-1415-	A9G150109011	8330	AQ	2-Nitrotoluene	U	0.51	0.20	ug/L
				3-Nitrotoluene	U	0.51	0.20	ug/L
				4-Nitrotoluene	U	0.51	0.20	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: **30240.0006 - RVAAP (OH)**

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A9G150109 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGLL10mw-001C-1389-	A9G150109013	8330	AQ	1,3,5-Trinitrobenzene	J B	0.039	0.10	ug/L
				Nitrobenzene	J	0.073	0.10	ug/L
FWGLL8mw-001C-1376-G	A9G150109001			1,3,5-Trinitrobenzene	J B	0.031	0.097	ug/L
FWGLL8mw-002C-1377-G	A9G150109002			1,3,5-Trinitrobenzene	J B	0.037	0.098	ug/L
FWGLL8mw-005C-1380-G	A9G150109008			1,3,5-Trinitrobenzene	J B	0.044	0.11	ug/L
FWGLL8mw-006C-1381-G	A9G150109007			1,3,5-Trinitrobenzene	J B	0.043	0.11	ug/L
FWGLL8mw-DUP2-1414-	A9G150109009			1,3,5-Trinitrobenzene	J B	0.036	0.10	ug/L
FWGLL9mw-002C-1383-G	A9G150109018			1,3,5-Trinitrobenzene	J B	0.039	0.10	ug/L
FWGLL9mw-003C-1384-G	A9G150109004	353.2 Modified		Nitrocellulose	B	0.13	0.50	mg/L
FWGLL9mw-004C-1385-G	A9G150109010	8330		1,3,5-Trinitrobenzene	J B	0.031	0.097	ug/L
FWGLL9mw-005C-1386-G	A9G150109019			1,3,5-Trinitrobenzene	J B	0.037	0.096	ug/L
FWGLL9mw-006C-1387-G	A9G150109012			1,3,5-Trinitrobenzene	J B	0.037	0.11	ug/L
FWGLL9mw-007C-1388-G	A9G150109017			1,3,5-Trinitrobenzene	J B	0.044	0.10	ug/L
FWGLL9mw-DUP3-1415-	A9G150109011			1,3,5-Trinitrobenzene	J B	0.034	0.10	ug/L

Method Blank Outlier Report

Lab Reporting Batch : A9G150109
Analysis Method : 8330
Preparation Type : 3535
Method Blank Lab Sample ID : G9G200000303B

Lab ID: TALCAN
Analysis Date : 07/24/2009
Preparation Date : 07/20/2009
Preparation Batch : 9201303

1,3,5-Trinitrobenzene	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	0.049	0.10	ug/L	J	

1,3,5-Trinitrobenzene was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
FWGLL10mw-001C-1389-G	A9G150109013	1.05	0.039	J B	ug/L
FWGLL8mw-001C-1376-GW	A9G150109001	0.97	0.031	J B	ug/L
FWGLL8mw-002C-1377-GW	A9G150109002	0.98	0.037	J B	ug/L
FWGLL8mw-005C-1380-GW	A9G150109008	1.08	0.044	J B	ug/L
FWGLL8mw-006C-1381-GW	A9G150109007	1.06	0.043	J B	ug/L
FWGLL8mw-DUP2-1414-GW	A9G150109009	1	0.036	J B	ug/L
FWGLL9mw-002C-1383-GW	A9G150109018	1.01	0.039	J B	ug/L
FWGLL9mw-004C-1385-GW	A9G150109010	0.97	0.031	J B	ug/L
FWGLL9mw-005C-1386-GW	A9G150109019	0.96	0.037	J B	ug/L
FWGLL9mw-006C-1387-GW	A9G150109012	1.08	0.037	J B	ug/L
FWGLL9mw-007C-1388-GW	A9G150109017	1.03	0.044	J B	ug/L
FWGLL9mw-DUP3-1415-GW	A9G150109011	1.02	0.034	J B	ug/L

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2009 **Date:** August 27, 2009
STL Sample Delivery Group: A9G150104 **Revision:** 0

Data Validator: Angye Dragotta/Environmental Quality Management, Inc. (EQM, Inc.)

QA/QC Summary

On July 14, 2009 the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A9G150104.

Field Sample ID	Analytes	Method
FWGLL8mw-001c-1376-GW	VOCs	SW846 8260B
FWGLL8mw-002c-1377-GW	SVOCs	SW846 8270C
FWGLL9mw-001c-1382-GW	Pesticides	SW846 8081A
FWGLL9mw-003c-1384-GW	PCBs	SW846 8082
FWGLL10mw-003c-1391-GW	Cyanide	SW846 9012A
FWGLL10mw-002c-1390-GW		
FWGLL8mw-006c-1381-GW		
FWGLL8mw-005c-1380-GW		
FWGLL8mw-DUP2-1414-GW		
FWGLL9mw-004c-1385-GW		
FWGLL9mw-DUP3-1415-GW		
FWGLL9mw-006c-1387-GW		
FWGLL10mw-001c-1389-GW		
FWGLL8mw-003c-1378-GW		
FWGLL8mw-004c-1379-GW		
FWGEQUIPRINSE2-1424-GW		
FWGLL9mw-007c-1388-GW		
FWGLL9mw-002c-1383-GW		
FWGLL9mw-005c-1386-GW		
FWGLL8mw-001c-1376-GF	TAL23 Metals	SW846 6010B/6020/7470A
FWGLL8mw-002c-1377-GF		
FWGLL9mw-001c-1382-GF		
FWGLL9mw-003c-1384-GF		
FWGLL10mw-003c-1391-GF		
FWGLL10mw-002c-1390-GF		
FWGLL8mw-006c-1381-GF		
FWGLL8mw-005c-1380-GF		
FWGLL8mw-DUP2-1414-GF		
FWGLL9mw-004c-1385-GF		
FWGLL9mw-DUP3-1415-GF		
FWGLL9mw-006c-1387-GF		
FWGLL10mw-001c-1389-GF		
FWGLL8mw-003c-1378-GF		
FWGLL8mw-004c-1379-GF		

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2009 **Date:** August 27, 2009
STL Sample Delivery Group: A9G150104 **Revision:** 0

Field Sample ID	Analytes	Method
FWGEQUIPRINSE2-1424-GW	TAL23 Metals	SW846 6010B/6020/7470A
FWGLL9mw-007c-1388-GF		
FWGLL9mw-002c-1383-GF		
FWGLL9mw-005c-1386-GF		
FWGLL9mw-005c-1386-GF		
FWGTEAM1-Trip	VOCs	SW846 8260B
FWGTEAM2-Trip		
FWGTEAM3-Trip		

The data presented in this report were evaluated according to the *Final Quality Assurance Project Plan Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant Ravenna, OH, Portage Environmental, September 2004.* The following documents will be used as needed to supplement the project documentation: *Louisville Chemistry Guidelines, USACE, June 2002 version 5, EPA National Functional Guidelines (NFG) for Organic Data Review, EPA-540/R-99-008, October 1999, NFG for Inorganic Data Review, EPA-540/R-04-004, October 2004,* Analytical Methods, and Laboratory Standard Operating Procedures. These objectives represent accuracy and precision performance goals for each analytical method.

The completeness objective for the project was 90%. The completeness objective was met for this SDG, 100%. Limitations, if any, on the data are indicated with qualifiers detailed below.

All analytical results have been verified against compliance requirements specified in the project QAP, LCG, associated analytical methods and/or SOPs, as appropriate. Checklists used in review of the data have been inserted in the SDGs by parameter. Outliers have been noted below and results requiring qualification, as a result of this verification process, have been summarized in Appendix 1.

VOAs - 8260B

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Tuning criteria
- CCV criteria
- Initial Calibration Criteria including SPCC and CCC compounds
- Internal standard area counts and retention times
- MDL verification criteria
- Surrogate recoveries
- Method blank free from contamination
- Field duplicate RPD criteria

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2009 **Date:** August 27, 2009
STL Sample Delivery Group: A9G150104 **Revision:** 0

QC/MRL

- The opening MRL check analyzed 7/17/09 at 1018 had dibromochloromethane recover above control limits at 152%, trans-1,3-dichloropropene at 135% and bromoform at 175%.
- The closing MRL check analyzed at 2106 had acetone recover below control limits at 59.8%, while dibromochloromethane recovered above control limits at 152%, trans-1,3-dichloropropene at 135% and bromoform at 175%.

The acetone results for samples FWGLL9mw-002c-1383-GW, FWGLL9mw-005c-1386-GW and FWGLL9mw-007c-1388-GW were qualified as estimated, "J/UJ". No additional qualifications were made as there were no detected concentrations of dibromochloromethane, trans-1,3-dichloropropene or bromoform. Documentation provided in SDG A9G140103.

- The opening MRL check analyzed 7/20/09 at 1208 had dibromochloromethane recover above control limits at 160%, trans-1,3-dichloropropene at 148% and bromoform at 198%.
- The closing MRL check analyzed at 2159 had dibromochloromethane recover above control limits at 151%, trans-1,3-dichloropropene at 135% and bromoform at 196%.

No qualifications were made as there were no detected concentrations of dibromochloromethane, trans-1,3-dichloropropene or bromoform.

- The opening MRL check analyzed 7/21/09 at 1656 had carbon disulfide recover below control limits at 62.2% and 2-hexanone at 64%. Dibromochloromethane recovered above control limits at 146%, trans-1,3-dichloropropene at 132% and bromoform at 183%.
- The closing MRL check analyzed at 1100 had carbon disulfide recover below control limits at 68.4% and methylene chloride at 66%. Dibromochloromethane recovered above control limits at 155%, trans-1,3-dichloropropene at 151% and bromoform at 201%.

The methylene chloride, carbon disulfide and 2-hexanone results for FWGEQUIPRinse2-1424-GW were qualified as estimated, "J/UJ". No qualifications were made for dibromochloromethane, trans-1,3-dichloropropene or bromoform as there were no detected concentrations of these targets.

ICV

Chloromethane recovered below control limits at 71.5% in the ICV. All chloromethane results were qualified as estimated, "J/UJ".

LCS Recovery

- Batch 9198160- The percent recovery was below control limits for vinyl chloride at 71% and in the LCS/LCD for chloroethane at 66% and 70%. Associated vinyl chloride and chloroethane results were qualified as estimated, "UJ".
- Batch 9201253- The LCD percent recovery was below control limits for vinyl chloride at 71% and at 54% for chloromethane. The LCS/LCD percent recovery for chloroethane was below control limits at 66% and 62%. Associated vinyl chloride, chloromethane and chloroethane results were qualified as estimated, "UJ".

- Batch 9202112- The LCD percent recovery was below control limits for chloromethane at 55%. The LCS/LCD percent recovery for chloroethane was below control limits at 65% and 64%. Associated chloromethane and chloroethane results were qualified as estimated, "UJ".

Blanks

- FWGEQUIPRinse2-1424-GW had acetone detected at 5.5ug/L and methylene chloride at 2.6ug/L. No qualifications were made as there were no detected concentrations of these contaminants in the associated field samples.
- Acetone was detected in all three trip blanks from 2.1ug/L to 2.4ug/L. Sample FWGEQUIPRinse2-1424-GW was qualified, "B".

Matrix Spike Recovery

FWGLL8mw-002c-1377-GW

- Chloromethane recovered below control limits in the MS/MSD at 53% and 55%. Bromomethane recovered below control limits in the MS/MSD at 58% and 59%. Chloroethane recovered below control limits in the MS at 60% and 62%.

FWGLL9mw-003c-1384-GW

- Chloromethane recovered below control limits in the MS/MSD at 57% and 60%. Bromomethane recovered below control limits in the MS/MSD at 61% and 65%. Chloroethane recovered below control limits in the MS at 62% and 68%. Acetone recovered below limits in the MSD at 66%.

No qualifications were made for acetone or bromomethane as the LCS recovered within limits. Chloroethane and chloromethane results were qualified as estimated, "UJ".

SVOCs- 8270C

The following QC criteria were reviewed with acceptable results:

- Holding time, preservation and sample handling
- Tuning criteria
- Initial Calibration criteria including CCC and SPCC compounds
- ICV/ CCV criteria
- MDL Level Verification
- Internal standard area counts and retention times
- LCS Recovery
- Field Duplicate RPD criteria
- Surrogate recovery criteria

MRL Recoveries

- The closing MRL check analyzed 7/23/09 at 2251 had 2,4-dinitrophenol recover below control limits at 67.9%. No qualifications were made as there were no field samples bracketed by this MRL check. MRL documentation provided in SDG A9G140103.

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2009 **Date:** August 27, 2009
STL Sample Delivery Group: A9G150104 **Revision:** 0

Blanks
Bis (2-Ethylhexyl) phthalate was detected in the method blank at 1.4ug/L. bis (2-Ethylhexyl) phthalate results <10x contamination were qualified, "B".
Bis (2-Ethylhexyl) phthalate was detected in FWGEQUIPRinse2-1424-GW at 2.3ug/L. bis (2-Ethylhexyl) phthalate results <10x contamination were qualified, "B".

Matrix Spike Recovery
Sample FWGLL8mw-002c-1377-GW and FWGLL9mw-003c-1384-GW were the parent MS/MSD samples from this SDG. Hexachloroethane recovered below control limits in the MS at 44% and 43% in the MSD while hexachlorocyclopentadiene recovered below control limits at 43% in the MSD (parent FWGLL9mw-003c-1384-GW). No qualifications were made as the associated LCS recovered within limits.

Pesticides- 8081A
The following QC criteria were reviewed with acceptable results:

- Preservation, holding time and sample handling
- Initial Calibration criteria
- DDT and Endrin breakdown criteria
- Retention time criteria
- ICV criteria
- The method blank was free from contamination
- Equipment Rinse was free from contamination
- LCS Recoveries
- Field Duplicate Criteria
- MDL verification criteria
- MRL Verification criteria
- Matrix Spike recovery criteria

CCV Recovery Criteria
The avg %D for the tox CCV analyzed on 7/20/09 @1442 and on the primary column was above limits at 20.8%. No qualifications were made as there were detected toxaphene concentrations. Documentation provided in SDG A9G140103.

Surrogate Recoveries
The surrogate, DCB, recovered below control limits in all samples with the exception of FWGLL9mw-001c-1382-GW, FWGLL9mw-006c-1387-GW, FWGLL10mw-001c-1389-GW, FWGEQUIPRinse2-1424-GW and FWGLL9mw-002c-1383-GW. The associated results were qualified as estimated, "UJ".

Second Column Confirmation Criteria
The confirmation analysis for the detected beta-BHC in sample FWGLL9mw-006c-1387-GW was above 40%. The beta-BHC result for FWGLL9mw-006c-1387-GW was qualified as estimated, "J".

PCBs- 8082
The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- Retention time criteria
- MDL verification criteria
- ICV/ CCV criteria
- The method blank was free from contamination
- Equipment Rinse was free from contamination
- LCS/ LCSD percent recoveries and RPD value criteria
- Matrix Spike Recovery and RPD Criteria
- Second Column confirmation criteria
- Field Duplicate RPD criteria
- MRL Verification Criteria

Surrogate Recovery
The surrogate, DCB, recovered below control limits in all samples with the exception of FWGLL9mw-001c-1382-GW, FWGLL9mw-006c-1387-GW, FWGLL10mw-001c-1389-GW, FWGEQUIPRinse2-1424-GW, FWGLL9mw-002c-1383-GW, FWGLL9mw-004c-1385-GW, FWGLL9mw-005c-1386-GW, FWGLL9mw-007c-1388-GW and FWGLL9mw-DUP3-1415-GW. The results associated with surrogate outliers were qualified as estimated, "UJ".

Metals - 6010B
The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- ICV criteria
- CCV criteria
- Interference Check Sample (ICSAB) criteria
- LCS recovery criteria
- MS recovery criteria
- MDL Verification criteria
- MRL verification criteria
- Field duplicate RPD

Blanks
The ICB analyzed 7/17/09 had detected calcium at 91.2ug/L, selenium at 3.9ug/L and potassium at 152ug/L. No qualifications were made for calcium as there were no detected results <5x ICB contamination.

- The potassium results for FWGLL10mw-003c-1391-GF, FWGLL8mw-005c-1380-GF, FWGLL8mw-DUP2-1414-GF, FWGLL9mw-004c-1385-GF, FWGEQUIPRinse2-1424-GW and FWGLL9mw-005c-1386-GF were qualified, "U", as the detected concentrations were <5x blank contamination.
- Selenium results for FWGEQUIPRinse2-1424-GW, FWGLL8mw-001c-1376-GF and FWGLL8mw-DUP2-1414-GF were qualified, "U", as the detected concentrations were <5x blank contamination.

The CCBs analyzed 7/17/09 had detected selenium at 4.1ug/L, potassium from 143ug/L to 153ug/L and calcium at 44.2ug/L and 44.3ug/L.

- The potassium results for FWGLL10mw-003c-1391-GF, FWGLL8mw-005c-1380-GF, FWGLL8mw-DUP2-1414-GF, FWGLL9mw-004c-1385-GF, FWGEQUIPRinse2-1424-GW and FWGLL9mw-005c-1386-GF were qualified, "U", as the detected concentrations were <5x blank contamination.
- The selenium result for FWGLL8mw-001c-1376-GF was qualified, "U", as the detected concentration was <5x blank contamination.
- No qualifications were made for calcium as there were no detected results <5x ICB contamination.

No qualifications were made for ICP results due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.

Potassium was detected in the method blank at 147ug/L. All detected potassium results <5x contamination were qualified, "B".

FWGEQUIPRinse2-1424-GW had potassium detected at 157ug/L and selenium at 4.6ug/L. All detected potassium and selenium results <5x contamination were qualified, "B".

Metals - 6020
The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Internal standard and tune criteria
- Initial Calibration criteria
- ICV criteria
- MDL Verification Data
- Interference Check Sample (ICSAB) criteria
- LCS Recovery Criteria
- MS recovery criteria
- Field duplicate RPD

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2009 **Date:** August 27, 2009
STL Sample Delivery Group: A9G150104 **Revision:** 0

MRL Verification
The MRL analyzed 7/27/09 @ 1111 had zinc recover above limits at 142%. Detected concentrations of zinc were qualified as estimated, "J".

Blanks
The CCBs analyzed 7/27/09 had detected aluminum at 10.4ug/L and 8.6ug/L, antimony from 0.059 to 0.071ug/L, beryllium from 0.045ug/L to 0.055ug/L, cadmium from 0.034ug/L to 0.089ug/L, iron from 16.9ug/L to 24.3 ug/L and thallium from 0.12ug/L to 0.15ug/L.

- The aluminum result for sample FWGLL8mw-006c-1381-GF was qualified, "U" as the result was <5x CCB contamination.
- The iron result for sample FWGLL8mw-001c-1376-GF was qualified, "U" as the result was <5x CCB contamination.
- No other qualifications were made as the all other contaminants were either nondetect or >5x contamination.

No qualifications were made due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.

Zinc was detected in the method blank at 8.8ug/L. All detected zinc results <5x contamination were qualified, "B".

FWGEQUIPRinse2-1424-GW had zinc detected at 3.5ug/L. All detected zinc results <5x contamination were qualified, "B".

Mercury - 7470A
The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- ICV and CCV criteria
- ICB /CCBs were free from contamination
- The method blank was free from contamination
- The equipment blank was free from contamination
- MRL and MDL verification criteria
- LCS percent recovery criteria
- MS percent recovery
- Matrix Duplicate RPD criteria
- Field duplicate RPD criteria

No QC outliers were noted.

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2009 **Date:** August 27, 2009
STL Sample Delivery Group: A9G150104 **Revision:** 0

Cyanide- 9012

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- ICV and CCV criteria
- MRL Verification Check criteria
- Method and Equipment Blank were free from contamination
- LCS/LCSD percent recoveries and RPD value criteria
- Field Duplicate RPD criteria

Matrix Spike Recovery Criteria

The matrix spike duplicate analyzed on sample FWGLL8mw-002c-1377-GW was above control limits at 128%. No qualifications were made as there were no detected cyanide concentrations.

Data Validator: Amy Rack
Date: 9/14/09

2nd Level Data Reviewer: Erik Corbin
Date: 9/14/09

CASE NARRATIVE

A9G150104

The following report contains the analytical results for thirty-seven water samples and three quality control samples submitted to TestAmerica North Canton by Environmental Quality Mgt., Inc. from the RVAAP (OH) Site, project number 30240.0006. The samples were received July 15, 2009, according to documented sample acceptance procedures.

TestAmerica utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Angye Dragotta, Erik Corbin, and Jackie Doan on August 01, 2009. A summary of QC data for these analyses is included at the back of the report.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Please refer to the Quality Control Elements Narrative following this case narrative for additional quality control information.

If you have any questions, please call the Project Manager, Mark J. Loeb, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT."

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The coolers were received at temperatures ranging from 2.1 to 5.4°C.

CASE NARRATIVE (continued)

GC/MS VOLATILES

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

The matrix spike/matrix spike duplicate(s) for FWGLL8mw-002C-1377-GW and FWGLL9mw-003C-1384-GW had recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

The matrix spike/matrix spike duplicate(s) for batch(es) 9198160 had recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

The LCS associated with QC Batch 9198160 shows recoveries for Vinyl Chloride (71<73) and Chloroethane (66<72) and the LCSD associated with QC Batch 9198160 shows recovery for Chloroethane (70<72) outside stated limits. Per LCG Guidelines, recoveries are greater than 30% and are reported.

The LCS associated with QC Batch 9201253 shows recoveries for Chloroethane (65<72) and Carbon disulfide (73<74) and the LCSD associated with QC Batch 9201253 shows recovery for Chloromethane (55<58), Chloroethane (64<72), and Carbon disulfide (71<74) outside stated limits. Per LCG Guidelines, recoveries are greater than 30% and are reported.

The LCS associated with QC Batch 9202112 shows recoveries for Chloroethane (66<72) and the LCSD associated with QC Batch 9202112 shows recovery for Chloromethane (54<58), Vinyl chloride (71<73) and Chloroethane (66<72). Per LCG Guidelines, recoveries are greater than 30% and are reported.

GC/MS SEMIVOLATILES

The sample(s) that contained concentrations of target analyte(s) at a reportable level in the associated Method Blank(s) were flagged with "B". All target analytes in the Method Blank must be below the reporting limit (RL) or the associated sample(s) must be ND with the exception of common laboratory contaminants.

CASE NARRATIVE (continued)

GC/MS SEMIVOLATILES (continued)

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

The matrix spike/matrix spike duplicate(s) for FWGLL8mw-002C-1377-GW and FWGLL9mw-003C-1384-GW had recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

PESTICIDES-8081

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

The analyses reported herein were performed using an instrument that has two columns(GC) or detectors(HPLC), one of which is used to confirm the results of the other. Peak interferences may result in some cases, which cause a quantitation difference between the two columns/detectors. If the difference between the two results is greater than 40%, the higher of the two results or the primary column/detector is normally reported. The reported results are flagged with "PG".

For sample(s) LCS in batch 9196098, FWGLL8mw-001C-1376-GW, FWGLL8mw-002C-1377-GW, FWGLL9mw-003C-1384-GW, FWGLL10mw-003C-1391-GW, FWGLL10mw-002C-1390-GW, FWGLL8mw-006C-1381-GW, FWGLL8mw-005C-1380-GW, FWGLL8mw-DUP2-1414-GW, FWGLL9mw-004C-1385-GW, FWGLL9mw-DUP3-1415-GW, FWGLL8mw-003C-1378-GW, FWGLL8mw-004C-1379-GW, FWGLL9mw-007C-1388-GW, and FWGLL9mw-005C-1386-GW the recovery for one surrogate compound is outside acceptance criteria. Since LCG criterion is that one of two surrogates must meet acceptance criteria, no corrective action is required. (Surrogate was below acceptance limit, but above 10%.)

The opening Toxaphene CCV failed high for sample(s) FWGLL9mw-003C-1384-GW; since the sample(s) were non-detect (or J flag values), no corrective action was necessary.

Sample(s) LCS in batch 9196096 had the recovery for surrogate Decachlorobiphenyl reported from the confirmation column.

CASE NARRATIVE (continued)

POLYCHLORINATED BIPHENYLS-8082

For sample(s) LCS in batch 9196099, FWGLL8mw-001C-1376-GW, FWGLL8mw-002C-1377-GW, FWGLL10mw-003C-1391-GW, FWGLL10mw-002C-1390-GW, FWGLL8mw-006C-1381-GW, FWGLL8mw-005C-1380-GW, FWGLL8mw-DUP2-1414-GW, FWGLL8mw-003C-1378-GW, and FWGLL8mw-004C-1379-GW the recovery for one surrogate compound is outside acceptance criteria. Since LCG criterion is that one of two surrogates must meet acceptance criteria, no corrective action is required. (Surrogate was below acceptance limit, but above 10%.)

METALS

The sample(s) that contain results between the MDL and the RL were flagged with "B". There is the possibility of false positive or mis-identification at these quantitation levels. The acceptance criteria for the ICB, CCB, and Method Blank are +/- the standard reporting limit (SRL).

Serial dilution of a sample in this lot indicates that physical and chemical interferences were present. Refer to the sample report pages for the affected analytes flagged with "E".

The sample(s) that contained concentrations of target analyte(s) at a reportable level in the associated Method Blank(s) were flagged with "J". Refer to the sample report pages for the affected analyte(s).

GENERAL CHEMISTRY

The matrix spike/matrix spike duplicate(s) for FWGLL8mw-002C-1377-GW had RPD's and recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

MANUAL INTEGRATION SUMMARY

Manual integrations were performed on sample(s) reported herein. A list of samples and analytes for which manual integration was necessary is provided following this Case Narrative.

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

QUALITY CONTROL ELEMENTS NARRATIVE (continued)

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will he accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC hatch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate hearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will he reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

TestAmerica Certifications and Approvals:

The laboratory is certified for the analytes listed on the documents below. These are available upon request.

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225),
Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Nevada (#OH-000482008A), OhioVAP (#CL0024), Pennsylvania (#008), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit

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MANUAL INTEGRATION SUMMARY

Lot A9G150104

Client ID: FWGLL8mw-002C-1377-
Compound Name: bis(2-Chloroethyl)ether
Instrument ID: a4hp7.i
File Name: LGG2H1AF.D
Inj. Date and Time: 29-JUL-2009 17:13
Manual Integration Reason: Poor Chromatography

Client ID: FWGLL8mw-002C-1377-
Compound Name: Benzoic Acid
Instrument ID: a4hp7.i
File Name: LGG2H1AF.D
Inj. Date and Time: 29-JUL-2009 17:13
Manual Integration Reason: Peak not found

Client ID: FWGLL8mw-002C-1377-
Compound Name: AROCLOR-1016
Instrument ID: a2hp2.i
File Name: 062F6201.D
Inj. Date and Time: 20-JUL-2009 18:44
Manual Integration Reason: Manually Assigned

Client ID: FWGLL8mw-002C-1377-
Compound Name: AROCLOR-1016
Instrument ID: a2hp2.i
File Name: 063F6301.D
Inj. Date and Time: 20-JUL-2009 18:59
Manual Integration Reason: Manually Assigned

Client ID: FWGLL9mw-003C-1384-
Compound Name: Benzoic Acid
Instrument ID: a4hp7.i
File Name: LGG2M1AF.D
Inj. Date and Time: 30-JUL-2009 11:16
Manual Integration Reason: Peak not found

Client ID: FWGLL9mw-002C-1383-
Compound Name: 1,4-Dichlorobenzene-d4
Instrument ID: a4hp7.i
File Name: LGG3Q1AC.D
Inj. Date and Time: 30-JUL-2009 14:16
Manual Integration Reason: Poor Chromatography

Client ID: FWGLL9mw-002C-1383-
Compound Name: 1,4-Dichlorobenzene-d4
Instrument ID: a4hp7.i
File Name: LGG3Q1AC.D
Inj. Date and Time: 30-JUL-2009 14:16
Manual Integration Reason: Poor Chromatography

SAMPLE SUMMARY

A9G150104

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LGG2C	001	FWGTEAM1-TRIP	07/14/09	08:00
LGG2D	002	FWGLL8mw-001C-1376-GW	07/14/09	09:15
LGG2G	003	FWGLL8mw-001C-1376-GF	07/14/09	09:15
LGG2H	004	FWGLL8mw-002C-1377-GW	07/14/09	10:20
LGG2J	005	FWGLL8mw-002C-1377-GF	07/14/09	10:20
LGG2K	006	FWGLL9mw-001C-1382-GW	07/14/09	12:35
LGG2L	007	FWGLL9mw-001C-1382-GF	07/14/09	12:35
LGG2M	008	FWGLL9mw-003C-1384-GW	07/14/09	13:50
LGG2N	009	FWGLL9mw-003C-1384-GF	07/14/09	13:50
LGG2P	010	FWGLL10mw-003C-1391-GW	07/14/09	15:55
LGG2Q	011	FWGLL10mw-003C-1391-GF	07/14/09	15:55
LGG2R	012	FWGLL10mw-002C-1390-GW	07/14/09	17:00
LGG2T	013	FWGLL10mw-002C-1390-GF	07/14/09	17:00
LGG2V	014	FWGTEAM2-TRIP	07/14/09	08:00
LGG2W	015	FWGLL8mw-006C-1381-GW	07/14/09	09:15
LGG2X	016	FWGLL8mw-006C-1381-GF	07/14/09	09:15
LGG20	017	FWGLL8mw-005C-1380-GW	07/14/09	10:10
LGG21	018	FWGLL8mw-005C-1380-GF	07/14/09	10:10
LGG23	019	FWGLL8mw-DUP2-1414-GW	07/14/09	11:15
LGG25	020	FWGLL8mw-DUP2-1414-GF	07/14/09	11:15
LGG26	021	FWGLL9mw-004C-1385-GW	07/14/09	12:15
LGG27	022	FWGLL9mw-004C-1385-GF	07/14/09	12:15
LGG28	023	FWGLL9mw-DUP3-1415-GW	07/14/09	13:15
LGG29	024	FWGLL9mw-DUP3-1415-GF	07/14/09	13:15
LGG3A	025	FWGLL9mw-006C-1387-GW	07/14/09	14:15
LGG3C	026	FWGLL9mw-006C-1387-GF	07/14/09	14:15
LGG3D	027	FWGLL10mw-001C-1389-GW	07/14/09	15:30
LGG3F	028	FWGLL10mw-001C-1389-GF	07/14/09	15:30
LGG3G	029	FWGTEAM3-TRIP	07/14/09	08:00
LGG3H	030	FWGLL8mw-003C-1378-GW	07/14/09	09:10
LGG3J	031	FWGLL8mw-003C-1378-GF	07/14/09	09:10
LGG3K	032	FWGLL8mw-004C-1379-GW	07/14/09	10:35
LGG3L	033	FWGLL8mw-004C-1379-GF	07/14/09	10:35
LGG3M	034	FWGEQUIPRINSE2-1424-GW	07/14/09	11:30
LGG3N	035	FWGLL9mw-007C-1388-GW	07/14/09	13:05
LGG3P	036	FWGLL9mw-007C-1388-GF	07/14/09	13:05

(Continued on next page)

SAMPLE SUMMARY

A9G150104

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LGG3Q	037	FWGLL9mw-002C-1383-GW	07/14/09	14:25
LGG3T	038	FWGLL9mw-002C-1383-GF	07/14/09	14:25
LGG3V	039	FWGLL9mw-005C-1386-GW	07/14/09	15:40
LGG3W	040	FWGLL9mw-005C-1386-GF	07/14/09	15:40

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

pg 2 COC # 003181

Client: EQM	Project Manager: John Miller	Date: 7-14-09	Chain of Custody Number: 003180
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513 825 7500 (fax 7495)	Lab Number: 330497396	Page 1 of 2
City: Cincinnati; State: OH; Zip Code: 45240	Site Contact: E Corbin	Lab Contact: M Loeb	
Project Name and Location (State): RVAAP (OH) PN: 30240.0006	Carrier/Waybill Number: NA Lab Pickup		
Contract/Purchase Order/Quote No.: PO # 15660			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC 8260	SVOC 8270	PCB 8081	PCB 8082	Explo 8330	Propellants	Cyanide 9012	Metals 6010/6020 7470	Perchlorates	Special Instructions/ Conditions of Receipt: Cooler ID
FWG Team 1 - Trip	7-14-09	0800		X						2			X									OICU812
FWGLL8mw-001C-1376GW	7-14-09	0915		X			9			3	1		X	X	X	X	X	X	X			C222
FWGLL8mw-001C-1376GF	7-14-09	0915		X			1		1											X	X	C222
FWGLL8mw-002C-1377GW	7-14-09	1020		X			27			9	3		X	X	X	X	X	X	X			MSMSD 220,405,8
FWGLL8mw-002C-1377GF	7-14-09	1020		X			3		3											X	X	MSMSD 220,405,8
FWGLL9mw-001C-1382GW	7-14-09	1235		X			9			3	1		X	X	X	X	X	X	X			47
FWGLL9mw-001C-1382GF	7-14-09	1235		X			1		1											X	X	47
FWGLL9mw-003C-1384GW	7-14-09	1350		X			27			9	3		X	X	X	X	X	X	X			MSMSD OICU812, AD7, 54
FWGLL9mw-003C-1384GF	7-14-09	1350		X			3		3											X	X	MSMSD OICU812, AD7, 54
FWGLL10mw-003C-1391GW	7-14-09	1555		X			9			3	1		X	X	X	X	X	X	X			12
FWGLL10mw-003C-1391GF	7-14-09	1555		X			1		1											X	X	12
FWGLL10mw-002C-1390GW	7-14-09	1700		X			9			3	1		X	X	X	X	X	X	X			ASD3

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other per SOW

QC Requirements (Specify): Metals/Perchlorates were field filtered

1. Relinquished By: Eric Corbin EQ	Date: 7/14/09	Time: 18:30	1. Received By: RC Robison	Date: 7/14/09	Time: 1830
2. Relinquished By: E Robison	Date: 7/14/09	Time: 1950	2. Received By: Chr Lyd	Date: 7-15-09	Time: 8:00
3. Relinquished By:	Date:	Time:	3. Received By:	Date:	Time:

Comments: Temps may not meet requirements if sample collection is close to lab pick up time

All VOCs in cooler OICU812

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Pg 1 COC #003180

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 7-14-09	Chain of Custody Number: 003181
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513 825 7500 fax 7495	Lab Number: 3304979396	Page 2 of 2
City: Cincinnati; State: OH; Zip Code: 45240	Site Contact: E Corbin	Lab Contact: M Loeb	
Project Name and Location (State): RVAAP (OH) PN 30240.0006	Carrier/Waybill Number: NA Lab Pickup		
Contract/Purchase Order/Quote No.: PO # 15660			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Explo 8330	Propellants	Cyanide 9012	Metals 6010/6020 7470	Perchlorates	Special Instructions/ Conditions of Receipt
FWGLL10mw-002C-13906F	7-14-09	1700		X			1		1											X	X	Cooler ID ASD3

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other per SOW

QC Requirements (Specify): Metals/Perchlorates were field filtered

1. Relinquished By: Eric Corbin EQ	Date: 7/14/09	Time: 18:30	1. Received By: TC Robison	Date: 7/14/09	Time: 1830
2. Relinquished By: TC Robison	Date: 7/14/09	Time: 1950	2. Received By: [illegible]	Date: 7-15-09	Time: 8:00
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments: Temps may not meet requirements if sample collection is close to lab pickup time

All VOCs in cooler 01CU812

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

pg 2 COC# = 003159

Client	Project Manager	Date	Chain of Custody Number
EQM	John Miller	7-14-09	003160

Address	Telephone Number (Area Code)/Fax Number	Lab Number	Page
1800 CARILLON BLVD	513 825 7500 (fax 7495)	3304979396	1 of 2

City	State	Zip Code	Site Contact	Lab Contact
Cincinnati	OH	45240	E Corbin	M Loeb

Project Name and Location (State): RVAAP Ravenna Oh

Carrier/Waybill Number: Lab pickup

Contract/Purchase Order/Quote No.: PO#15660 Ph 30240 0006

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Exp10 8330	Propellants	Cyanide 9012	Metals 7470 6010 6020	Perchlorates	Special Instructions/ Conditions of Receipt: Cooler ID #
FWG Team 2 Trip	7-14-09	0800		X						2			X									TS2
FWGLL8mw-006C-1381-GW	↓	0915		X			9			3	1		X	X	X	X	X	X	X			TS2
FWGLL8mw-006C-1381-GF	↓	↓		X			1		1											X	X	TS2
FWGLL8mw-005C-1380-GW	↓	1010		X			9			3	1		X	X	X	X	X	X	X			220
FWGLL8mw-005C-1380-GF	↓	1010		X			1		1											X	X	220
FWGLL8mw-DUP2-1414-GW	↓	1115		X			9			3	1		X	X	X	X	X	X	X			PH4
FWGLL8mw-DUP2-1414-GF	↓	1115		X			1		1											X	X	PH4
FWGLL9mw-004C-1385-GW	↓	1215		X			9			3	1		X	X	X	X	X	X	X			B111
FWGLL9mw-004C-1385-GF	↓	↓		X			1		1											X	X	B111
FWGLL9mw-DUP3-1415-GW	↓	1315		X			9			3	1		X	X	X	X	X	X	X			ACDC
FWGLL9mw-DUP3-1415-GF	↓	↓		X			1		1											X	X	ACDC

Cal continued on page 2 COC #003159

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other Per SOW

QC Requirements (Specify): Metals/Perchlorates were field filtered

	Date	Time		Date	Time
1. Relinquished By: Erik Corbin EQ	7/14/09	18:30	1. Received By: R Robison	7/14/09	1830
2. Relinquished By: R Robison	7/14/09	1950	2. Received By: [signature]	7/15/09	0800
3. Relinquished By			3. Received By		

Comments: Temps may not meet requirements if sample collection is close to lab pickup time. All VOAs in cooler TS2 FOR PG1+2 OF COC

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Pg1 COC# = 003160

Client: EQM	Project Manager: John Miller	Date: 7-14-09	Chain of Custody Number: 003159
Address: 1800 CARILLON BLVD	Telephone Number (Area Code)/Fax Number: 513 825 7500 (fax 7495)	Lab Number: 330497 9396	Page 2 of 2
City: Cincinnati; State: OH; Zip Code: 45240	Site Contact: E Corbin	Lab Contact: M Loeb	
Project Name and Location (State): RVAAP Ravenna Oh	Carrier/Waybill Number: Lab pick up.		
Contract/Purchase Order/Quote No.: PO# 151060 PN 30240.0006			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Explo 8330	Propellants	Cyanide 9012	Metals 7470 water	Perchlorates				Special Instructions/ Conditions of Receipt: Cooler ID#
FWGW9mw-001C-1387-GW	7-14-09	1415		Y			9			3	1		X	X	X	X	X	X	X						ID
FWGW9mw-001C-1387-GF	⊥	⊥		X			1		1											X	X				ID
FWGW10mw-001C-1389-GW	⊥	1530		X			9			3	1		X	X	X	X	X	X	X						STL-1
FWGW10mw-001C-1389-GF	⊥	1530		X			1		1											X	X				STL-1

Cal

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other Pearson

QC Requirements (Specify): Metals/Perchlorates were field filtered

1. Relinquished By: Eric Corbin EQ	Date: 7/14/09	Time: 18:30	1. Received By: TC Pearson	Date: 7/14/09	Time: 1830
2. Relinquished By: TC Pearson	Date: 7/14/09	Time: 1950	2. Received By: [signature]	Date: 7/15/09	Time: 8800
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments: Temps may not meet requirements if sample collection is close to lab pick up time. All VOAs in cooler TS2 FOR PG 1+2 OF COC

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client: EQM	Project Manager: JOHN MILLER	Date: 07/14/2009	Chain of Custody Number: 003167
Address: 1800 CARILLON BLVD	Telephone Number (Area Code)/Fax Number: (513) 825-7500 (FX 7495)	Lab Number: (330) 497-9396	Page 1 of 1
City: CINCINNATI; State: OH; Zip Code: 45240	Site Contact: E. CORBIN	Lab Contact: M. LOEB	
Project Name and Location (State): RVAAP (OH) 030240.0006	Carrier/Waybill Number: N/A - LAB PICKUP		
Contract/Purchase Order/Quote No.: PO 15660			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil		Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		VOC 8260	SVOC 8270	PEST 8081	PCB 8082	EXPD 8330	PROPELLANTS	CYANIDE 9012	METALS 6010/6020 7470	PERCHLORATES				Special Instructions/ Conditions of Receipt
FWG TEAM 3-TRIP	07/14/09	0800		X							2				X												Cooler 0411
FWGLL8 MW-003C-1378-GW	07/14/09	0910		X				9			3	1			X	X	X	X	X	X	X						COOLER 465
FWGLL8 MW-003C-1378-GF	07/14/09	0910		X				1		1												X	X				" 465
FWGLL8MW-004C-1379-GW	07/14/09	1035		X				9			3	1			X	X	X	X	X	X	X						" B81
FWGLL8 MW-004C-1379-GF	07/14/09	1035		X				1		1												X	X				" B81
FWGEQUIPRINSE2-1424-GW	07/14/09	1130		X				10		1	3	1			X	X	X	X	X	X	X	X	X				" E115
FWGLL9MW-007C-1388-GW	07/14/09	1305		X				9			3	1			X	X	X	X	X	X	X						" E21
FWGLL9MW-007C-1388-GF	07/14/09	1305		X				1		1												X	X				" E21
FWGLL9MW-002C-1383-GW	07/14/09	1425		X				9			3	1			X	X	X	X	X	X	X						" ASD2
FWGLL9MW-002C-1383-GF	07/14/09	1425		X				1		1												X	X				" ASD2
FWGLL9MW-005C-1386-GW	07/14/09	1540		X				9			3	1			X	X	X	X	X	X	X						" Ø411
FWGLL9MW-005C-1386-GF	07/14/09	1540		X				1		1												X	X				" Ø411

Analysis (Attach list if more space is needed)

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other PDF SOW

QC Requirements (Specify): METALS/PERCHLORATES WERE FIELD FILTERED

1. Relinquished By: Eric Corbin EQ	Date: 7/14/09	Time: 18:30	1. Received By: RC Robison	Date: 7/14/09	Time: 1830
2. Relinquished By: RC Robison	Date: 7/14/09	Time: 1950	2. Received By: [signature]	Date: 7/15/09	Time: 0800
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments: TEMPS MAY NOT MEET REQUIREMENTS IF SAMPLE COLLECTION IS CLOSE TO LAB PICKUP TIME

ALL VOC'S IN COOLER Ø411

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

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TestAmerica Cooler Receipt Form/Narrative **Lot Number:** A9G150109
North Canton Facility

Client EQM Project RVAAP By: [signature]
Cooler Received on 9/15/09 Opened on 9/15/09 (Signature)
FedEx ☐ UPS ☐ DHL ☐ FAS ☐ Stetson ☐ Client Drop Off ☐ TestAmerica Courier ☒ Other ____
TestAmerica Cooler # ____ Multiple Coolers ☒ Foam Box ☐ Client Cooler ☐ Other ____

1. Were custody seals on the outside of the cooler(s)? Yes ☒ No ☐ Intact? Yes ☒ No ☐ NA ☐
   If YES, Quantity 23 Quantity Unsalvageable ____
   Were custody seals on the outside of cooler(s) signed and dated? Yes ☒ No ☐ NA ☐
   Were custody seals on the bottle(s)? Yes ☐ No ☒
   If YES, are there any exceptions? ____
2. Shippers' packing slip attached to the cooler(s)? Yes ☐ No ☒
3. Did custody papers accompany the sample(s)? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Were the custody papers signed in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☒ Foam ☐ None ☐ Other ____
6. Cooler temperature upon receipt See Attached °C See back of form for multiple coolers/temps ☒
   METHOD: IR ☒ Other ☐ ____
   COOLANT: Wet Ice ☒ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐
7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels be reconciled with the COC? Yes ☒ No ☐
9. Were sample(s) at the correct pH upon receipt? Yes ☒ No ☐ NA ☐
10. Were correct bottle(s) used for the test(s) indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☒ NA ☐
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a trip blank present in the cooler(s)? Yes ☒ No ☐ Were VOAs on the COC? Yes ☒ No ☐

Contacted PM ____ Date ____ by ____ via Verbal ☐ Voice Mail ☐ Other ☐
Concerning ____

14. CHAIN OF CUSTODY

The following discrepancies occurred:

____

15. SAMPLE CONDITION

Sample(s) ____ were received after the recommended holding time had expired.
Sample(s) ____ were received in a broken container.
Sample(s) ____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) ____ were further preserved in Sample Receiving to meet recommended pH level(s). *Nitric Acid Lot# 031909-HNO_3; Sulfuric Acid Lot# 100108-H_2SO_4; Sodium Hydroxide Lot# 073007 -NaOH; Hydrochloric Acid Lot# 092006-HCl; Sodium Hydroxide and Zinc Acetate Lot# 050205-$(CH_3COO)_2ZN$/NaOH.* What time was preservative added to sample(s)? ____

Client ID	pH	Date	Initials
	See Attached		

TestAmerica Multiple Cooler Receipt Form/Narrative Lot Number: A9G150104
North Canton Facility

Cooler #	Temp °C	Method	Coolant	Comments
C222	4.8	IR	Ice	
8	3.7			
405	4.2			
220	4.6			
47	3.9			
CICU 812	2.9			
AD7	4.6			
54	3.8			
12	4.8			
ASD3	4.0			
TS2	4.9			
220	3.8			
PH4	4.7			
B111	5.4			
ACDC	3.1			
ID	2.3			
STL-1	3.3			
465	3.8			
B81	3.4			
E115	2.1			
E21	4.9			
ASD2	2.3			
041	5.3			

TestAmerica Multiple Cooler Receipt Form/Narrative Lot Number: A9G150104
North Canton Facility

Client ID	pH	Date	Initials
1376	<2 >12	7/15/09	gm
1377	<2 <2 <2 >12 >12 >12		
1382	<2 >12		
1384	<2 <2 <2 >12 >12 >12		
1391	<2 >12		
1390	<2 >12		
1381	<2 >12		
1380	<2 >12		
1414	<2 >12		
1385	<2 >12		
1415	<2 >12		
1387	<2 >12		
1389	<2 >12		
1378	<2 >12		
1379	<2 >12		
1424	<2 >12		
1388	<2 >12		
1383	<2 >12		
1386	<2 >12		

N:\QAQC\Lab_form\Receiving Forms\TestAmerica N.Canton Multiple Cooler Receipt_Narrative.doc
Revision 1, 06/18/07 JSE

GCMS VOLATILE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/August 26, 2009

SDG: A9G150104 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.1- 5.4 °C.	QAPP Table 4-2, NELAC
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3.3
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-3
7. Was the GC/MS system tuned with bromofluorobenzene (BFB)?	✓				LCG Table 1
8. Was the criteria met during each 12 hour shift (prior to ICAL and Cal Ver.)?	✓				SW846 8260B 7.3.1
9. Did the initial calibration curve consist of 5 concentration levels?	✓			Instrument A3UX11 – 6/22/09 stds – 5, 10, 25, 50, 100, 200 ng on column	LCG Table 1 R
10. Did the Calibration Check Compounds (CCCs) (see Table 1 below) relative standard deviations (%RSD) ≤ 30%?	✓				LCG Table 1 R
11. Were the minimum response factors (RFs) for the System Performance Check Compounds (SPCCs) (see Table 2 below) met?	✓				LCG Table 1
12. Were all other target analytes ≤ 15% RSD? OR Was the average RSD ≤ 15%? Was a different calibration option used?	✓			Acetone, methylene chloride, cis-1,3-dichloropropene, trans-1,3-dichloropropene, dibromochloromethane and bromoform used weighted linear curves.	LCG Table 1 15% <RSD< 20% = J/UJ
13. If a linear regression curve was used, was the correlation coefficient r≥0.99?	✓			All correlation coefficients were ≥0.99. No qualifications were made since the correlation coefficients were acceptable.	LCG Table 1 R<0.99=-J/R
14. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓			7/21/09 @1719	LCG Table 1 R
15. Was a MRL Level Verification run at the beginning and end of every daily sequence or every 12 hours?	✓				LCG Table 1

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/August 26, 2009

SDG: A9G150104 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
16. Were the QC/MRL recoveries 70-130%?		✓		• The opening MRL check analyzed 7/17/09 at 1018 had dibromochloromethane recover above control limits at 152%, trans-1,3-dichloropropene at 135% and bromoform at 175%. • The closing MRL check analyzed at 2106 had acetone recover below control limits at 59.8%, while dibromochloromethane recovered above control limits at 152%, trans-1,3-dichloropropene at 135% and bromoform at 175%. The acetone results for samples FWGLL9mw-002c-1383-GW, FWGLL9mw-005c-1386-GW and FWGLL9mw-007c-1388-GW were qualified as estimated, "J/UJ". No additional qualifications were made as there were no detected concentrations of dibromochloromethane, trans-1,3-dichloropropene or bromoform. Documentation provided in SDG A9G140103. • The opening MRL check analyzed 7/20/09 at 1208 had dibromochloromethane recover above control limits at 160%, trans-1,3-dichloropropene at 148% and bromoform at 198%. • The closing MRL check analyzed at 2159 had dibromochloromethane recover above control limits at 151%, trans-1,3-dichloropropene at 135% and bromoform at 196%. No qualifications were made as there were no detected concentrations of dibromochloromethane, trans-1,3-dichloropropene or bromoform. • The opening MRL check analyzed 7/21/09 at 1656 had carbon disulfide recover below control limits at 62.2% and 2-hexanone at 64%. Dibromochloromethane recovered above control limits at 146%, trans-1,3-dichloropropene at 132% and bromoform at 183%. • The closing MRL check analyzed at 1100 had carbon disulfide recover below control limits at 68.4% and methylene chloride at 66%. Dibromochloromethane recovered above control limits at 155%, trans-1,3-dichloropropene at 151% and bromoform at 201%. The methylene chloride, carbon disulfide and 2-hexanone results for FWGEQUIPRinse2-1424-GW were qualified as estimated, "J/UJ". No qualifications were made for dibromochloromethane, trans-1,3-dichloropropene or bromoform as there were no detected concentrations of these targets.	LCG Table 1 >130%=J; 70-60%=J/UJ; <60%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/August 26, 2009

SDG: A9G150104 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
17. Was a second source verification (ICV) analyzed after the ICAL? Were results 80-120%?	✓			6/22/09 @ 1345 Chloromethane recovered below control limits at 71.5%. All Chloromethane results were qualified as estimated, "J/UJ".	LCG Table 1 >120%=J; 60-80%=J/UJ; <60%=J/R
18. Was a CCV run every 12 hours?	✓				LCG Table 1
19. Did the CCCs have a %Difference < 20%?	✓				LCG Table 1
20. Were the minimum RFs for the SPCCs within limits?	✓				LCG Table 1
21. Was the average of all target analytes ≤ 20%D with a maximum D for each target analyte ≤30%?	✓				LCG Table 1 Avg D>20% and D>30% =R; Avg %D<20% and D>30% =J D>20% (neg) = J/R D>30% (pos) = J
22. Were the internal standards added to every sample?	✓				LCG Table 1
23. Were the retention times for all IS compounds within ±30 seconds from the RT of the mid-point standard in the ICAL?	✓				LCG Table 1 R
24. Was the EICP area between -50% and +100% of the ICAL mid-point standard?	✓				LCG Table 1 R
25. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 1
26. Were target analytes detected in the method blank >1/2 the MRL?		✓		Checked by ADR.	LCG Table 1 <5/10X =B
27. Was a field blank (equipment and/or trip) collected and analyzed?	✓			FWGEQUIPRinse2-1424-GW	
28. Were target analytes detected in the field blank analyses >1/2 the MRL?	✓			FWGEQUIPRinse2-1424-GW had acetone detected at 5.5ug/L and methylene chloride at 2.6ug/L. No qualifications were made as there were no detected concentrations of these contaminants in the associated field samples Acetone was detected in all three trip blanks from 2.1ug/L to 2.4ug/L. Sample FWGEQUIPRinse2-1424-GW was qualified, "B".	<5/10X =B

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/August 26, 2009

SDG: A9G150104 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
29. Was a field duplicate analyzed?	✓			Sample FWGLL8mw-DUP2-1414-GW was the field duplicate for sample FWGLL8mw-005c-1380-GW and FWGLL9mw-DUP3-1415-GW a field duplicate for sample FWGLL9mw-004c-1385-GW.	
30. Were the Field duplicates RPDs within ±30%?	✓			ADR checked section; Only targets detected above the RL were evaluated.	QAPP Table 3-2 RPD >30=J
31. Was a LCS prepared and analyzed with each batch?	✓				LCG Table 1
32. Were the LCS recoveries within limits specified in Appendix C of the LCG?	✓			ADR checked section; Batch 9198160- The percent recovery was below control limits for vinyl chloride at 71% and in the LCS/LCD for chloroethane at 66% and 70%. Associated vinyl chloride and chloroethane results were qualified as estimated, "UJ". Batch 9201253- The LCD percent recovery was below control limits for vinyl chloride at 71% and at 54% for chloromethane. The LCS/LCD percent recovery for chloroethane was below control limits at 66% and 62%. Associated vinyl chloride, chloromethane and chloroethane results were qualified as estimated, "UJ". Batch 9202112- The LCD percent recovery was below control limits for chloromethane at 55%. The LCS/LCD percent recovery for chloroethane was below control limits at 65% and 64%. Associated chloromethane and chloroethane results were qualified as estimated, "UJ".	LCG Appendix C >UL=J; 30%-LL=J/UJ; <30%=J/R
33. Was a MS/MSD prepared with each batch?	✓				LCG Table 1
34. Was the MS/MSD parent a Ravenna sample?	✓			Sample FWGLL8mw-002c-1377-GW and FWGLL9mw-003c-1384-GW were the parent MS/MSD samples from this SDG.	
35. Were MS/MSD recoveries 70-130% and RPD values ≤20%?		✓		ADR checked section. **FWGLL8mw-002c-1377-GW** -Chloromethane recovered below control limits in the MS/MSD at 53% and 55%. Bromomethane recovered below control limits in the MS/MSD at 58% and 59%. Chloroethane recovered below control limits in the MS at 60% and 62%. **FWGLL9mw-003c-1384-GW** -Chloromethane recovered below control limits in the MS/MSD at 57% and 60%. Bromomethane recovered below control limits in the MS/MSD at 61% and 65%. Chloroethane recovered below control limits in the MS at 62% and 68%. Acetone recovered below limits in the MSD at 66%. No qualifications were made for acetone or bromomethane as the LCS recovered within limits. Chloroethane and chloromethane results were qualified as estimated, "UJ".	LCG Table 1 Pj

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/August 26, 2009

SDG: A9G150104 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
36. Were surrogate recoveries 50-150%?	✓				LCG Table 1 >150%=J; 10% -50%=J/UJ; <10%=J/R
37. Were reported sample concentrations within calibration range?	✓				
38. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
39. Were lab comments included in report? If yes, summarize contents.		✓			

References:

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 1 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Table1- CCCs

Analyte
1,1-Dichloroethene
Chloroform
1,2-Dichloropropane
Toluene
Ethylbenzene
Vinyl chloride

Table 2- SPCCs

Analyte	Minimum RF
Chloromethane	0.10
1,1-Dichlorethane	0.10
Bromoform	0.10
Chlorobenzene	0.30
1,1,2,2-Tetrachloroethane	0.30

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM1-TRIP

GC/MS Volatiles

Lot-Sample #...: A9G150104-001 **Work Order #...:** LGG2C1AA **Matrix.....:** WQ
Date Sampled...: 07/14/09 08:00 **Date Received..:** 07/15/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9201253
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	**2.4 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM1-TRIP

GC/MS Volatiles

Lot-Sample #...: A9G150104-001 **Work Order #...:** LGG2C1AA **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	96	(50 - 150)
1,2-Dichloroethane-d4	91	(50 - 150)
Toluene-d8	92	(50 - 150)
4-Bromofluorobenzene	87	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-001C-1376-GW

GC/MS Volatiles

Lot-Sample #...: A9G150104-002 Work Order #...: LGG2D1AA Matrix.....: WG
Date Sampled...: 07/14/09 09:15 Date Received..: 07/15/09
Prep Date.....: 07/20/09 Analysis Date..: 07/20/09
Prep Batch #...: 9201253
Dilution Factor: 1 Initial Wgt/Vol: 5 mL Final Wgt/Vol..: 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-001C-1376-GW

GC/MS Volatiles

Lot-Sample #...: A9G150104-002 **Work Order #...:** LGG2D1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
1,2-Dichloroethane-d4	95	(50 - 150)
Toluene-d8	91	(50 - 150)
4-Bromofluorobenzene	86	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-002C-1377-GW

GC/MS Volatiles

Lot-Sample #...: A9G150104-004 **Work Order #...:** LGG2H1AA **Matrix.....:** WG
Date Sampled...: 07/14/09 10:20 **Date Received..:** 07/15/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9201253
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-002C-1377-GW

GC/MS Volatiles

Lot-Sample #...: A9G150104-004 **Work Order #...:** LGG2H1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	95	(50 - 150)
1,2-Dichloroethane-d4	96	(50 - 150)
Toluene-d8	95	(50 - 150)
4-Bromofluorobenzene	90	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-001C-1382-GW

GC/MS Volatiles

Lot-Sample #...: A9G150104-006 Work Order #...: LGG2K1AA Matrix.....: WG
Date Sampled...: 07/14/09 12:35 Date Received..: 07/15/09
Prep Date.....: 07/20/09 Analysis Date..: 07/20/09
Prep Batch #...: 9201253
Dilution Factor: 1 Initial Wgt/Vol: 5 mL Final Wgt/Vol..: 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-001C-1382-GW

GC/MS Volatiles

Lot-Sample #...: A9G150104-006 **Work Order #...:** LGG2K1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	95	(50 - 150)
1,2-Dichloroethane-d4	92	(50 - 150)
Toluene-d8	91	(50 - 150)
4-Bromofluorobenzene	82	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-003C-1384-GW

GC/MS Volatiles

Lot-Sample #...: A9G150104-008 **Work Order #...:** LGG2M1AA **Matrix.....:** WG
Date Sampled...: 07/14/09 13:50 **Date Received..:** 07/15/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9201253
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-003C-1384-GW

GC/MS Volatiles

Lot-Sample #...: A9G150104-008 Work Order #...: LGG2M1AA Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
1,2-Dichloroethane-d4	91	(50 - 150)
Toluene-d8	94	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-003C-1391-GW

GC/MS Volatiles

Lot-Sample #...: A9G150104-010 **Work Order #...:** LGG2P1AA **Matrix.....:** WG
Date Sampled...: 07/14/09 15:55 **Date Received..:** 07/15/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9201253
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	**0.29 J**	**1.0**	**ug/L**	**0.16**
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	**2.4**	**1.0**	**ug/L**	**0.13**
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-003C-1391-GW

GC/MS Volatiles

Lot-Sample #...: A9G150104-010 **Work Order #...:** LGG2P1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
1,2-Dichloroethane-d4	92	(50 - 150)
Toluene-d8	91	(50 - 150)
4-Bromofluorobenzene	89	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-002C-1390-GW

GC/MS Volatiles

Lot-Sample #...: A9G150104-012 **Work Order #...:** LGG2R1AA **Matrix.....:** WG
Date Sampled...: 07/14/09 17:00 **Date Received..:** 07/15/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9201253
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-002C-1390-GW

GC/MS Volatiles

Lot-Sample #...: A9G150104-012 **Work Order #...:** LGG2R1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
1,2-Dichloroethane-d4	88	(50 - 150)
Toluene-d8	92	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM2-TRIP

GC/MS Volatiles

Lot-Sample #...: A9G150104-014 **Work Order #...:** LGG2V1AA **Matrix.....:** WQ
Date Sampled...: 07/14/09 08:00 **Date Received..:** 07/15/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9201253
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	**2.1 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM2-TRIP

GC/MS Volatiles

Lot-Sample #...: A9G150104-014 **Work Order #...:** LGG2V1AA **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
1,2-Dichloroethane-d4	89	(50 - 150)
Toluene-d8	92	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-006C-1381-GW

GC/MS Volatiles

Lot-Sample #...: A9G150104-015 Work Order #...: LGG2W1AA Matrix.....: WG
Date Sampled...: 07/14/09 09:15 Date Received..: 07/15/09
Prep Date.....: 07/20/09 Analysis Date..: 07/20/09
Prep Batch #...: 9201253
Dilution Factor: 1 Initial Wgt/Vol: 5 mL Final Wgt/Vol..: 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-006C-1381-GW

GC/MS Volatiles

Lot-Sample #...: A9G150104-015 **Work Order #...:** LGG2W1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	95	(50 - 150)
1,2-Dichloroethane-d4	95	(50 - 150)
Toluene-d8	91	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-005C-1380-GW

GC/MS Volatiles

Lot-Sample #...: A9G150104-017 **Work Order #...:** LGG201AA **Matrix.....:** WG
Date Sampled...: 07/14/09 10:10 **Date Received..:** 07/15/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9201253
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-005C-1380-GW

GC/MS Volatiles

Lot-Sample #...: A9G150104-017 **Work Order #...:** LGG201AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	93	(50 - 150)
1,2-Dichloroethane-d4	92	(50 - 150)
Toluene-d8	91	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-DUP2-1414-GW

GC/MS Volatiles

Lot-Sample #...: A9G150104-019 **Work Order #...:** LGG231AA **Matrix.....:** WG
Date Sampled...: 07/14/09 11:15 **Date Received..:** 07/15/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9201253
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-DUP2-1414-GW

GC/MS Volatiles

Lot-Sample #...: A9G150104-019 **Work Order #...:** LGG231AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	93	(50 - 150)
1,2-Dichloroethane-d4	92	(50 - 150)
Toluene-d8	91	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-004C-1385-GW

GC/MS Volatiles

Lot-Sample #...: A9G150104-021 **Work Order #...:** LGG261AA **Matrix.....:** WG
Date Sampled...: 07/14/09 12:15 **Date Received..:** 07/15/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9201253
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-004C-1385-GW

GC/MS Volatiles

Lot-Sample #...: A9G150104-021 **Work Order #...:** LGG261AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
1,2-Dichloroethane-d4	91	(50 - 150)
Toluene-d8	97	(50 - 150)
4-Bromofluorobenzene	86	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-DUP3-1415-GW

GC/MS Volatiles

Lot-Sample #...: A9G150104-023 **Work Order #...:** LGG281AA **Matrix.....:** WG
Date Sampled...: 07/14/09 13:15 **Date Received..:** 07/15/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9201253
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-DUP3-1415-GW

GC/MS Volatiles

Lot-Sample #...: A9G150104-023 **Work Order #...:** LGG281AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
1,2-Dichloroethane-d4	95	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	82	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-006C-1387-GW

GC/MS Volatiles

Lot-Sample #...: A9G150104-025 **Work Order #...:** LGG3A1AA **Matrix.....:** WG
Date Sampled...: 07/14/09 14:15 **Date Received..:** 07/15/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9201253
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-006C-1387-GW

GC/MS Volatiles

Lot-Sample #...: A9G150104-025 **Work Order #...:** LGG3A1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	97	(50 - 150)
1,2-Dichloroethane-d4	96	(50 - 150)
Toluene-d8	88	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-001C-1389-GW

GC/MS Volatiles

Lot-Sample #...: A9G150104-027 **Work Order #...:** LGG3D1AA **Matrix.....:** WG
Date Sampled...: 07/14/09 15:30 **Date Received..:** 07/15/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9201253
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	**0.22 J**	**1.0**	**ug/L**	**0.16**
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	**1.3**	**1.0**	**ug/L**	**0.13**
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-001C-1389-GW

GC/MS Volatiles

Lot-Sample #...: A9G150104-027 Work Order #...: LGG3D1AA Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	96	(50 - 150)
1,2-Dichloroethane-d4	96	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	81	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM3-TRIP

GC/MS Volatiles

Lot-Sample #...: A9G150104-029 **Work Order #...:** LGG3G1AA **Matrix.....:** WQ
Date Sampled...: 07/14/09 08:00 **Date Received..:** 07/15/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9201253
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	**2.4 J**	**10**	**ug/L**	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM3-TRIP

GC/MS Volatiles

Lot-Sample #...: A9G150104-029 **Work Order #...:** LGG3G1AA **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	95	(50 - 150)
1,2-Dichloroethane-d4	92	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	82	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-003C-1378-GW

GC/MS Volatiles

Lot-Sample #...: A9G150104-030 **Work Order #...:** LGG3H1AA **Matrix.....:** WG
Date Sampled...: 07/14/09 09:10 **Date Received..:** 07/15/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9201253
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-003C-1378-GW

GC/MS Volatiles

Lot-Sample #...: A9G150104-030 **Work Order #...:** LGG3H1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	97	(50 - 150)
1,2-Dichloroethane-d4	97	(50 - 150)
Toluene-d8	93	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-004C-1379-GW

GC/MS Volatiles

Lot-Sample #...: A9G150104-032 **Work Order #...:** LGG3K1AA **Matrix.....:** WG
Date Sampled...: 07/14/09 10:35 **Date Received..:** 07/15/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9201253
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-004C-1379-GW

GC/MS Volatiles

Lot-Sample #...: A9G150104-032 **Work Order #...:** LGG3K1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	96	(50 - 150)
1,2-Dichloroethane-d4	93	(50 - 150)
Toluene-d8	93	(50 - 150)
4-Bromofluorobenzene	82	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1424-GW

GC/MS Volatiles

Lot-Sample #...: A9G150104-034 **Work Order #...:** LGG3M1AA **Matrix.....:** WQ
Date Sampled...: 07/14/09 11:30 **Date Received..:** 07/15/09
Prep Date.....: 07/21/09 **Analysis Date..:** 07/21/09
Prep Batch #...: 9202112
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	**2.6**	**2.0**	**ug/L**	**0.33**
Acetone	**5.5 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1424-GW

GC/MS Volatiles

Lot-Sample #...: A9G150104-034 **Work Order #...:** LGG3M1AA **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	93	(50 - 150)
1,2-Dichloroethane-d4	90	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-007C-1388-GW

GC/MS Volatiles

Lot-Sample #...: A9G150104-035 Work Order #...: LGG3N1AA Matrix.....: WG
Date Sampled...: 07/14/09 13:05 Date Received..: 07/15/09
Prep Date.....: 07/17/09 Analysis Date..: 07/17/09
Prep Batch #...: 9198160
Dilution Factor: 1 Initial Wgt/Vol: 5 mL Final Wgt/Vol..: 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-007C-1388-GW

GC/MS Volatiles

Lot-Sample #...: A9G150104-035 **Work Order #...:** LGG3N1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	92	(50 - 150)
1,2-Dichloroethane-d4	92	(50 - 150)
Toluene-d8	92	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-002C-1383-GW

GC/MS Volatiles

Lot-Sample #...: A9G150104-037 **Work Order #...:** LGG3Q1AA **Matrix.....:** WG
Date Sampled...: 07/14/09 14:25 **Date Received..:** 07/15/09
Prep Date.....: 07/17/09 **Analysis Date..:** 07/17/09
Prep Batch #...: 9198160
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-002C-1383-GW

GC/MS Volatiles

Lot-Sample #...: A9G150104-037 **Work Order #...:** LGG3Q1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
1,2-Dichloroethane-d4	94	(50 - 150)
Toluene-d8	91	(50 - 150)
4-Bromofluorobenzene	81	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-005C-1386-GW

GC/MS Volatiles

Lot-Sample #...: A9G150104-039 **Work Order #...:** LGG3V1AA **Matrix.....:** WG
Date Sampled...: 07/14/09 15:40 **Date Received..:** 07/15/09
Prep Date.....: 07/17/09 **Analysis Date..:** 07/17/09
Prep Batch #...: 9198160
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-005C-1386-GW

GC/MS Volatiles

Lot-Sample #...: A9G150104-039 **Work Order #...:** LGG3V1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	98	(50 - 150)
1,2-Dichloroethane-d4	94	(50 - 150)
Toluene-d8	91	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A9G150104 **Work Order #...:** LGMJ21AA **Matrix.....:** WATER
MB Lot-Sample #: A9G170000-160

Prep Date.....: 07/17/09 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 07/17/09 **Prep Batch #...:** 9198160
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dibromoethane	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
o-Xylene	ND	1.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	ND	2.0	ug/L	SW846 8260B
Chloromethane	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	2.0	ug/L	SW846 8260B
Acetone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	10	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B
2-Hexanone	ND	10	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	2.0	ug/L	SW846 8260B

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GC/MS Volatiles

Client Lot #...: A9G150104 **Work Order #...:** LGMJ21AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	92	(50 - 150)
1,2-Dichloroethane-d4	92	(50 - 150)
Toluene-d8	92	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A9G150104 **Work Order #...:** LGP7A1AA **Matrix.....:** WATER
MB Lot-Sample #: A9G200000-253

Prep Date.....: 07/20/09 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 07/20/09 **Prep Batch #...:** 9201253
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dibromoethane	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
o-Xylene	ND	1.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	ND	2.0	ug/L	SW846 8260B
Chloromethane	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	2.0	ug/L	SW846 8260B
Acetone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	10	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B
2-Hexanone	ND	10	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	2.0	ug/L	SW846 8260B

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GC/MS Volatiles

Client Lot #...: A9G150104 **Work Order #...:** LGP7A1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	96	(50 - 150)
1,2-Dichloroethane-d4	92	(50 - 150)
Toluene-d8	91	(50 - 150)
4-Bromofluorobenzene	81	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A9G150104 **Work Order #...:** LGRAC1AA **Matrix.....:** WATER
MB Lot-Sample #: A9G210000-112

Prep Date.....: 07/21/09 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 07/21/09 **Prep Batch #...:** 9202112
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
1,2-Dibromoethane	ND	1.0	ug/L	SW846 8260B
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
o-Xylene	ND	1.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	ND	2.0	ug/L	SW846 8260B
Chloromethane	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	2.0	ug/L	SW846 8260B
Acetone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	10	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B
2-Hexanone	ND	10	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	2.0	ug/L	SW846 8260B

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A9G150104 **Work Order #...:** LGRAC1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	96	(50 - 150)
1,2-Dichloroethane-d4	93	(50 - 150)
Toluene-d8	91	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G150104 Work Order #...: LGMJ21AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A9G170000-160 LGMJ21AD-LCSD
Prep Date.....: 07/17/09 Analysis Date..: 07/17/09
Prep Batch #...: 9198160
Dilution Factor: 1 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Bromochloromethane	94	(75 - 127)			SW846 8260B
	105	(75 - 127)	11	(0-30)	SW846 8260B
m-Xylene & p-Xylene	98	(75 - 122)			SW846 8260B
	110	(75 - 122)	12	(0-30)	SW846 8260B
o-Xylene	95	(75 - 118)			SW846 8260B
	107	(75 - 118)	12	(0-30)	SW846 8260B
cis-1,2-Dichloroethene	92	(73 - 133)			SW846 8260B
	107	(73 - 133)	15	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	88	(75 - 134)			SW846 8260B
	91	(75 - 134)	4.1	(0-30)	SW846 8260B
1,2-Dibromoethane	93	(75 - 127)			SW846 8260B
	106	(75 - 127)	13	(0-30)	SW846 8260B
Chloromethane	58	(58 - 135)			SW846 8260B
	61	(58 - 135)	5.7	(0-30)	SW846 8260B
Bromomethane	57	(35 - 153)			SW846 8260B
	61	(35 - 153)	7.4	(0-30)	SW846 8260B
Vinyl chloride	71 a	(73 - 134)			SW846 8260B
	77	(73 - 134)	8.3	(0-30)	SW846 8260B
Chloroethane	66 a	(72 - 129)			SW846 8260B
	70 a	(72 - 129)	6.0	(0-30)	SW846 8260B
Methylene chloride	82	(69 - 118)			SW846 8260B
	94	(69 - 118)	14	(0-30)	SW846 8260B
Acetone	90	(51 - 157)			SW846 8260B
	91	(51 - 157)	1.9	(0-30)	SW846 8260B
Carbon disulfide	75	(74 - 123)			SW846 8260B
	81	(74 - 123)	7.7	(0-30)	SW846 8260B
1,1-Dichloroethene	82	(75 - 125)			SW846 8260B
	87	(75 - 125)	5.4	(0-30)	SW846 8260B
1,1-Dichloroethane	88	(75 - 133)			SW846 8260B
	104	(75 - 133)	17	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	90	(85 - 111)			SW846 8260B
	99	(85 - 111)	10	(0-30)	SW846 8260B
Chloroform	92	(74 - 127)			SW846 8260B
	104	(74 - 127)	12	(0-30)	SW846 8260B
1,2-Dichloroethane	92	(67 - 132)			SW846 8260B
	106	(67 - 132)	14	(0-30)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G150104 Work Order #...: LGMJ21AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A9G170000-160 LGMJ21AD-LCSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Butanone	90	(45 - 150)			SW846 8260B
	95	(45 - 150)	5.6	(0-30)	SW846 8260B
1,1,1-Trichloroethane	95	(70 - 127)			SW846 8260B
	107	(70 - 127)	13	(0-30)	SW846 8260B
Carbon tetrachloride	100	(71 - 132)			SW846 8260B
	110	(71 - 132)	10	(0-30)	SW846 8260B
Bromodichloromethane	94	(70 - 130)			SW846 8260B
	110	(70 - 130)	16	(0-30)	SW846 8260B
1,2-Dichloropropane	90	(75 - 127)			SW846 8260B
	100	(75 - 127)	10	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	80	(73 - 132)			SW846 8260B
	90	(73 - 132)	12	(0-30)	SW846 8260B
Trichloroethene	92	(67 - 128)			SW846 8260B
	101	(67 - 128)	9.3	(0-30)	SW846 8260B
Dibromochloromethane	94	(74 - 145)			SW846 8260B
	107	(74 - 145)	13	(0-30)	SW846 8260B
1,1,2-Trichloroethane	93	(75 - 136)			SW846 8260B
	102	(75 - 136)	9.3	(0-30)	SW846 8260B
Benzene	87	(75 - 126)			SW846 8260B
	100	(75 - 126)	13	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	82	(74 - 131)			SW846 8260B
	92	(74 - 131)	12	(0-30)	SW846 8260B
Bromoform	98	(72 - 136)			SW846 8260B
	106	(72 - 136)	8.0	(0-30)	SW846 8260B
4-Methyl-2-pentanone	86	(59 - 150)			SW846 8260B
	94	(59 - 150)	8.1	(0-30)	SW846 8260B
2-Hexanone	86	(53 - 139)			SW846 8260B
	96	(53 - 139)	11	(0-30)	SW846 8260B
Tetrachloroethene	103	(75 - 129)			SW846 8260B
	111	(75 - 129)	7.3	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	85	(68 - 129)			SW846 8260B
	95	(68 - 129)	11	(0-30)	SW846 8260B
Toluene	91	(75 - 125)			SW846 8260B
	101	(75 - 125)	10	(0-30)	SW846 8260B
Chlorobenzene	92	(75 - 127)			SW846 8260B
	104	(75 - 127)	13	(0-30)	SW846 8260B
Ethylbenzene	96	(75 - 120)			SW846 8260B
	106	(75 - 120)	9.4	(0-30)	SW846 8260B
Styrene	98	(75 - 130)			SW846 8260B
	112	(75 - 130)	13	(0-30)	SW846 8260B
Xylenes (total)	97	(90 - 114)			SW846 8260B
	109	(90 - 114)	12	(0-30)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G150104 **Work Order #...:** LGMJ21AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A9G170000-160 LGMJ21AD-LCSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	92	(50 - 150)
	93	(50 - 150)
1,2-Dichloroethane-d4	92	(50 - 150)
	88	(50 - 150)
Toluene-d8	92	(50 - 150)
	93	(50 - 150)
4-Bromofluorobenzene	96	(50 - 150)
	101	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G150104 Work Order #...: LGP7A1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A9G200000-253 LGP7A1AD-LCSD
Prep Date.....: 07/20/09 Analysis Date..: 07/20/09
Prep Batch #...: 9201253
Dilution Factor: 1 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
cis-1,2-Dichloroethene	93	(73 - 133)			SW846 8260B
	95	(73 - 133)	1.8	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	91	(75 - 134)			SW846 8260B
	91	(75 - 134)	1.0	(0-30)	SW846 8260B
1,2-Dibromoethane	96	(75 - 127)			SW846 8260B
	96	(75 - 127)	0.50	(0-30)	SW846 8260B
Bromochloromethane	97	(75 - 127)			SW846 8260B
	91	(75 - 127)	5.8	(0-30)	SW846 8260B
m-Xylene & p-Xylene	100	(75 - 122)			SW846 8260B
	101	(75 - 122)	1.0	(0-30)	SW846 8260B
o-Xylene	97	(75 - 118)			SW846 8260B
	97	(75 - 118)	0.020	(0-30)	SW846 8260B
Chloromethane	59	(58 - 135)			SW846 8260B
	54 a	(58 - 135)	7.9	(0-30)	SW846 8260B
Bromomethane	63	(35 - 153)			SW846 8260B
	59	(35 - 153)	6.6	(0-30)	SW846 8260B
Vinyl chloride	74	(73 - 134)			SW846 8260B
	71 a	(73 - 134)	3.6	(0-30)	SW846 8260B
Chloroethane	66 a	(72 - 129)			SW846 8260B
	62 a	(72 - 129)	6.4	(0-30)	SW846 8260B
Methylene chloride	93	(69 - 118)			SW846 8260B
	93	(69 - 118)	0.11	(0-30)	SW846 8260B
Acetone	75	(51 - 157)			SW846 8260B
	73	(51 - 157)	2.2	(0-30)	SW846 8260B
Carbon disulfide	79	(74 - 123)			SW846 8260B
	77	(74 - 123)	3.2	(0-30)	SW846 8260B
1,1-Dichloroethene	88	(75 - 125)			SW846 8260B
	86	(75 - 125)	2.3	(0-30)	SW846 8260B
1,1-Dichloroethane	92	(75 - 133)			SW846 8260B
	92	(75 - 133)	0.95	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	92	(85 - 111)			SW846 8260B
	93	(85 - 111)	1.4	(0-30)	SW846 8260B
Chloroform	93	(74 - 127)			SW846 8260B
	94	(74 - 127)	0.73	(0-30)	SW846 8260B
1,2-Dichloroethane	92	(67 - 132)			SW846 8260B
	98	(67 - 132)	5.6	(0-30)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G150104 Work Order #...: LGP7A1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A9G200000-253 LGP7A1AD-LCSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Butanone	87	(45 - 150)			SW846 8260B
	84	(45 - 150)	2.7	(0-30)	SW846 8260B
1,1,1-Trichloroethane	97	(70 - 127)			SW846 8260B
	99	(70 - 127)	1.8	(0-30)	SW846 8260B
Carbon tetrachloride	106	(71 - 132)			SW846 8260B
	103	(71 - 132)	2.8	(0-30)	SW846 8260B
Bromodichloromethane	102	(70 - 130)			SW846 8260B
	104	(70 - 130)	1.8	(0-30)	SW846 8260B
1,2-Dichloropropane	93	(75 - 127)			SW846 8260B
	93	(75 - 127)	0.020	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	84	(73 - 132)			SW846 8260B
	85	(73 - 132)	1.9	(0-30)	SW846 8260B
Trichloroethene	95	(67 - 128)			SW846 8260B
	92	(67 - 128)	2.4	(0-30)	SW846 8260B
Dibromochloromethane	102	(74 - 145)			SW846 8260B
	103	(74 - 145)	0.72	(0-30)	SW846 8260B
1,1,2-Trichloroethane	93	(75 - 136)			SW846 8260B
	93	(75 - 136)	0.13	(0-30)	SW846 8260B
Benzene	90	(75 - 126)			SW846 8260B
	92	(75 - 126)	2.1	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	87	(74 - 131)			SW846 8260B
	87	(74 - 131)	0.19	(0-30)	SW846 8260B
Bromoform	115	(72 - 136)			SW846 8260B
	107	(72 - 136)	7.4	(0-30)	SW846 8260B
4-Methyl-2-pentanone	90	(59 - 150)			SW846 8260B
	86	(59 - 150)	3.7	(0-30)	SW846 8260B
2-Hexanone	86	(53 - 139)			SW846 8260B
	83	(53 - 139)	3.6	(0-30)	SW846 8260B
Tetrachloroethene	101	(75 - 129)			SW846 8260B
	98	(75 - 129)	2.9	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	85	(68 - 129)			SW846 8260B
	88	(68 - 129)	4.4	(0-30)	SW846 8260B
Toluene	92	(75 - 125)			SW846 8260B
	94	(75 - 125)	2.6	(0-30)	SW846 8260B
Chlorobenzene	94	(75 - 127)			SW846 8260B
	98	(75 - 127)	3.8	(0-30)	SW846 8260B
Ethylbenzene	96	(75 - 120)			SW846 8260B
	95	(75 - 120)	0.80	(0-30)	SW846 8260B
Styrene	101	(75 - 130)			SW846 8260B
	100	(75 - 130)	1.4	(0-30)	SW846 8260B
Xylenes (total)	99	(90 - 114)			SW846 8260B
	100	(90 - 114)	0.69	(0-30)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G150104 **Work Order #...:** LGP7A1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A9G200000-253 LGP7A1AD-LCSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	98	(50 - 150)
	93	(50 - 150)
1,2-Dichloroethane-d4	91	(50 - 150)
	90	(50 - 150)
Toluene-d8	93	(50 - 150)
	92	(50 - 150)
4-Bromofluorobenzene	97	(50 - 150)
	101	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G150104 Work Order #...: LGRAC1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A9G210000-112 LGRAC1AD-LCSD
Prep Date.....: 07/21/09 Analysis Date..: 07/21/09
Prep Batch #...: 9202112
Dilution Factor: 1 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
cis-1,2-Dichloroethene	93	(73 - 133)			SW846 8260B
	90	(73 - 133)	3.3	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	87	(75 - 134)			SW846 8260B
	89	(75 - 134)	2.1	(0-30)	SW846 8260B
1,2-Dibromoethane	90	(75 - 127)			SW846 8260B
	95	(75 - 127)	5.4	(0-30)	SW846 8260B
Bromochloromethane	92	(75 - 127)			SW846 8260B
	92	(75 - 127)	0.24	(0-30)	SW846 8260B
m-Xylene & p-Xylene	97	(75 - 122)			SW846 8260B
	94	(75 - 122)	3.1	(0-30)	SW846 8260B
o-Xylene	95	(75 - 118)			SW846 8260B
	93	(75 - 118)	2.0	(0-30)	SW846 8260B
Chloromethane	68	(58 - 135)			SW846 8260B
	55 a	(58 - 135)	21	(0-30)	SW846 8260B
Bromomethane	66	(35 - 153)			SW846 8260B
	63	(35 - 153)	5.4	(0-30)	SW846 8260B
Vinyl chloride	73	(73 - 134)			SW846 8260B
	73	(73 - 134)	0.0	(0-30)	SW846 8260B
Chloroethane	65 a	(72 - 129)			SW846 8260B
	64 a	(72 - 129)	1.2	(0-30)	SW846 8260B
Methylene chloride	82	(69 - 118)			SW846 8260B
	79	(69 - 118)	4.6	(0-30)	SW846 8260B
Acetone	93	(51 - 157)			SW846 8260B
	97	(51 - 157)	4.2	(0-30)	SW846 8260B
Carbon disulfide	73 a	(74 - 123)			SW846 8260B
	71 a	(74 - 123)	2.0	(0-30)	SW846 8260B
1,1-Dichloroethene	84	(75 - 125)			SW846 8260B
	81	(75 - 125)	3.4	(0-30)	SW846 8260B
1,1-Dichloroethane	88	(75 - 133)			SW846 8260B
	90	(75 - 133)	1.4	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	90	(85 - 111)			SW846 8260B
	90	(85 - 111)	0.67	(0-30)	SW846 8260B
Chloroform	91	(74 - 127)			SW846 8260B
	90	(74 - 127)	0.41	(0-30)	SW846 8260B
1,2-Dichloroethane	94	(67 - 132)			SW846 8260B
	90	(67 - 132)	4.7	(0-30)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G150104 Work Order #...: LGRAC1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A9G210000-112 LGRAC1AD-LCSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Butanone	90	(45 - 150)			SW846 8260B
	88	(45 - 150)	1.8	(0-30)	SW846 8260B
1,1,1-Trichloroethane	95	(70 - 127)			SW846 8260B
	96	(70 - 127)	1.3	(0-30)	SW846 8260B
Carbon tetrachloride	100	(71 - 132)			SW846 8260B
	100	(71 - 132)	0.080	(0-30)	SW846 8260B
Bromodichloromethane	98	(70 - 130)			SW846 8260B
	96	(70 - 130)	2.4	(0-30)	SW846 8260B
1,2-Dichloropropane	90	(75 - 127)			SW846 8260B
	89	(75 - 127)	1.0	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	80	(73 - 132)			SW846 8260B
	80	(73 - 132)	0.54	(0-30)	SW846 8260B
Trichloroethene	91	(67 - 128)			SW846 8260B
	93	(67 - 128)	2.2	(0-30)	SW846 8260B
Dibromochloromethane	97	(74 - 145)			SW846 8260B
	95	(74 - 145)	1.6	(0-30)	SW846 8260B
1,1,2-Trichloroethane	91	(75 - 136)			SW846 8260B
	90	(75 - 136)	1.2	(0-30)	SW846 8260B
Benzene	90	(75 - 126)			SW846 8260B
	90	(75 - 126)	0.33	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	84	(74 - 131)			SW846 8260B
	83	(74 - 131)	0.92	(0-30)	SW846 8260B
Bromoform	109	(72 - 136)			SW846 8260B
	105	(72 - 136)	3.4	(0-30)	SW846 8260B
4-Methyl-2-pentanone	87	(59 - 150)			SW846 8260B
	86	(59 - 150)	1.2	(0-30)	SW846 8260B
2-Hexanone	83	(53 - 139)			SW846 8260B
	82	(53 - 139)	1.1	(0-30)	SW846 8260B
Tetrachloroethene	95	(75 - 129)			SW846 8260B
	94	(75 - 129)	0.45	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	81	(68 - 129)			SW846 8260B
	83	(68 - 129)	2.5	(0-30)	SW846 8260B
Toluene	89	(75 - 125)			SW846 8260B
	88	(75 - 125)	1.4	(0-30)	SW846 8260B
Chlorobenzene	91	(75 - 127)			SW846 8260B
	90	(75 - 127)	1.3	(0-30)	SW846 8260B
Ethylbenzene	90	(75 - 120)			SW846 8260B
	92	(75 - 120)	2.8	(0-30)	SW846 8260B
Styrene	96	(75 - 130)			SW846 8260B
	94	(75 - 130)	1.4	(0-30)	SW846 8260B
Xylenes (total)	96	(90 - 114)			SW846 8260B
	94	(90 - 114)	2.8	(0-30)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G150104 **Work Order #...:** LGRAC1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A9G210000-112 LGRAC1AD-LCSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	93	(50 - 150)
	94	(50 - 150)
1,2-Dichloroethane-d4	90	(50 - 150)
	98	(50 - 150)
Toluene-d8	91	(50 - 150)
	92	(50 - 150)
4-Bromofluorobenzene	100	(50 - 150)
	98	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G150104 Work Order #...: LGE9E1AC-MS Matrix.....: WATER
MS Lot-Sample #: A9G140103-002 LGE9E1AD-MSD
Date Sampled...: 07/13/09 12:05 Date Received..: 07/14/09
Prep Date.....: 07/17/09 Analysis Date..: 07/17/09
Prep Batch #...: 9198160
Dilution Factor: 1 Initial Wgt/Vol: 5 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
cis-1,2-Dichloroethene	88	(70 - 130)			SW846 8260B
	95	(70 - 130)	7.9	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	86	(70 - 130)			SW846 8260B
	88	(70 - 130)	2.3	(0-30)	SW846 8260B
1,2-Dibromoethane	90	(70 - 130)			SW846 8260B
	95	(70 - 130)	5.0	(0-30)	SW846 8260B
Bromochloromethane	88	(70 - 130)			SW846 8260B
	94	(70 - 130)	6.8	(0-30)	SW846 8260B
m-Xylene & p-Xylene	94	(70 - 130)			SW846 8260B
	96	(70 - 130)	2.6	(0-30)	SW846 8260B
o-Xylene	91	(70 - 130)			SW846 8260B
	99	(70 - 130)	8.6	(0-30)	SW846 8260B
Chloromethane	54 a	(70 - 130)			SW846 8260B
	60 a	(70 - 130)	9.4	(0-30)	SW846 8260B
Bromomethane	55 a	(70 - 130)			SW846 8260B
	60 a	(70 - 130)	8.0	(0-30)	SW846 8260B
Vinyl chloride	72	(70 - 130)			SW846 8260B
	79	(70 - 130)	8.9	(0-30)	SW846 8260B
Chloroethane	69 a	(70 - 130)			SW846 8260B
	66 a	(70 - 130)	4.9	(0-30)	SW846 8260B
Methylene chloride	78	(70 - 130)			SW846 8260B
	83	(70 - 130)	6.1	(0-30)	SW846 8260B
Acetone	73	(70 - 130)			SW846 8260B
	86	(70 - 130)	17	(0-30)	SW846 8260B
Carbon disulfide	72	(70 - 130)			SW846 8260B
	76	(70 - 130)	5.9	(0-30)	SW846 8260B
1,1-Dichloroethene	83	(70 - 130)			SW846 8260B
	86	(70 - 130)	3.6	(0-30)	SW846 8260B
1,1-Dichloroethane	85	(70 - 130)			SW846 8260B
	90	(70 - 130)	6.4	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	87	(70 - 130)			SW846 8260B
	92	(70 - 130)	5.2	(0-30)	SW846 8260B
Chloroform	87	(70 - 130)			SW846 8260B
	95	(70 - 130)	8.6	(0-30)	SW846 8260B
1,2-Dichloroethane	87	(70 - 130)			SW846 8260B
	94	(70 - 130)	7.1	(0-30)	SW846 8260B
2-Butanone	82	(70 - 130)			SW846 8260B
	88	(70 - 130)	7.4	(0-30)	SW846 8260B

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G150104 Work Order #...: LGE9E1AC-MS Matrix.....: WATER
MS Lot-Sample #: A9G140103-002 LGE9E1AD-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1,1-Trichloroethane	92	(70 - 130)			SW846 8260B
	98	(70 - 130)	6.2	(0-30)	SW846 8260B
Carbon tetrachloride	95	(70 - 130)			SW846 8260B
	100	(70 - 130)	5.3	(0-30)	SW846 8260B
Bromodichloromethane	89	(70 - 130)			SW846 8260B
	96	(70 - 130)	8.1	(0-30)	SW846 8260B
1,2-Dichloropropane	85	(70 - 130)			SW846 8260B
	90	(70 - 130)	6.2	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	74	(70 - 130)			SW846 8260B
	79	(70 - 130)	6.4	(0-30)	SW846 8260B
Trichloroethene	92	(70 - 130)			SW846 8260B
	96	(70 - 130)	4.9	(0-30)	SW846 8260B
Dibromochloromethane	91	(70 - 130)			SW846 8260B
	92	(70 - 130)	0.95	(0-30)	SW846 8260B
1,1,2-Trichloroethane	88	(70 - 130)			SW846 8260B
	89	(70 - 130)	1.3	(0-30)	SW846 8260B
Benzene	84	(70 - 130)			SW846 8260B
	90	(70 - 130)	7.0	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	76	(70 - 130)			SW846 8260B
	82	(70 - 130)	7.4	(0-30)	SW846 8260B
Bromoform	94	(70 - 130)			SW846 8260B
	96	(70 - 130)	2.5	(0-30)	SW846 8260B
4-Methyl-2-pentanone	84	(70 - 130)			SW846 8260B
	88	(70 - 130)	5.1	(0-30)	SW846 8260B
2-Hexanone	85	(70 - 130)			SW846 8260B
	82	(70 - 130)	3.7	(0-30)	SW846 8260B
Tetrachloroethene	95	(70 - 130)			SW846 8260B
	101	(70 - 130)	6.0	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	84	(70 - 130)			SW846 8260B
	86	(70 - 130)	1.6	(0-30)	SW846 8260B
Toluene	86	(70 - 130)			SW846 8260B
	91	(70 - 130)	5.5	(0-30)	SW846 8260B
Chlorobenzene	90	(70 - 130)			SW846 8260B
	93	(70 - 130)	3.7	(0-30)	SW846 8260B
Ethylbenzene	89	(70 - 130)			SW846 8260B
	93	(70 - 130)	4.9	(0-30)	SW846 8260B
Styrene	95	(70 - 130)			SW846 8260B
	97	(70 - 130)	2.6	(0-30)	SW846 8260B
Xylenes (total)	93	(70 - 130)			SW846 8260B
	97	(70 - 130)	4.6	(0-30)	SW846 8260B

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G150104 **Work Order #...:** LGE9E1AC-MS **Matrix.....:** WATER
MS Lot-Sample #: A9G140103-002 LGE9E1AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
	94	(50 - 150)
1,2-Dichloroethane-d4	93	(50 - 150)
	88	(50 - 150)
Toluene-d8	93	(50 - 150)
	91	(50 - 150)
4-Bromofluorobenzene	100	(50 - 150)
	98	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G150104 Work Order #...: LGG2H1AC-MS Matrix.....: WG
MS Lot-Sample #: A9G150104-004 LGG2H1AD-MSD
Date Sampled...: 07/14/09 10:20 Date Received..: 07/15/09
Prep Date.....: 07/20/09 Analysis Date..: 07/20/09
Prep Batch #...: 9201253
Dilution Factor: 1 Initial Wgt/Vol: 5 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
cis-1,2-Dichloroethene	86	(70 - 130)			SW846 8260B
	91	(70 - 130)	6.3	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	85	(70 - 130)			SW846 8260B
	85	(70 - 130)	0.63	(0-30)	SW846 8260B
1,2-Dibromoethane	89	(70 - 130)			SW846 8260B
	89	(70 - 130)	0.05	(0-30)	SW846 8260B
Bromochloromethane	85	(70 - 130)			SW846 8260B
	88	(70 - 130)	3.5	(0-30)	SW846 8260B
m-Xylene & p-Xylene	93	(70 - 130)			SW846 8260B
	94	(70 - 130)	0.31	(0-30)	SW846 8260B
o-Xylene	88	(70 - 130)			SW846 8260B
	90	(70 - 130)	2.4	(0-30)	SW846 8260B
Chloromethane	53 a	(70 - 130)			SW846 8260B
	55 a	(70 - 130)	4.3	(0-30)	SW846 8260B
Bromomethane	58 a	(70 - 130)			SW846 8260B
	59 a	(70 - 130)	2.0	(0-30)	SW846 8260B
Vinyl chloride	73	(70 - 130)			SW846 8260B
	78	(70 - 130)	5.9	(0-30)	SW846 8260B
Chloroethane	60 a	(70 - 130)			SW846 8260B
	62 a	(70 - 130)	2.5	(0-30)	SW846 8260B
Methylene chloride	79	(70 - 130)			SW846 8260B
	85	(70 - 130)	7.4	(0-30)	SW846 8260B
Acetone	71	(70 - 130)			SW846 8260B
	80	(70 - 130)	11	(0-30)	SW846 8260B
Carbon disulfide	72	(70 - 130)			SW846 8260B
	74	(70 - 130)	2.7	(0-30)	SW846 8260B
1,1-Dichloroethene	84	(70 - 130)			SW846 8260B
	83	(70 - 130)	0.77	(0-30)	SW846 8260B
1,1-Dichloroethane	86	(70 - 130)			SW846 8260B
	88	(70 - 130)	1.8	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	85	(70 - 130)			SW846 8260B
	88	(70 - 130)	3.5	(0-30)	SW846 8260B
Chloroform	88	(70 - 130)			SW846 8260B
	90	(70 - 130)	2.1	(0-30)	SW846 8260B
1,2-Dichloroethane	87	(70 - 130)			SW846 8260B
	92	(70 - 130)	4.8	(0-30)	SW846 8260B
2-Butanone	84	(70 - 130)			SW846 8260B
	87	(70 - 130)	4.0	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G150104 Work Order #...: LGG2H1AC-MS Matrix.....: WG
MS Lot-Sample #: A9G150104-004 LGG2H1AD-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1,1-Trichloroethane	92	(70 - 130)			SW846 8260B
	94	(70 - 130)	2.7	(0-30)	SW846 8260B
Carbon tetrachloride	100	(70 - 130)			SW846 8260B
	102	(70 - 130)	1.8	(0-30)	SW846 8260B
Bromodichloromethane	90	(70 - 130)			SW846 8260B
	92	(70 - 130)	2.8	(0-30)	SW846 8260B
1,2-Dichloropropane	82	(70 - 130)			SW846 8260B
	85	(70 - 130)	3.6	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	74	(70 - 130)			SW846 8260B
	76	(70 - 130)	2.7	(0-30)	SW846 8260B
Trichloroethene	88	(70 - 130)			SW846 8260B
	88	(70 - 130)	0.30	(0-30)	SW846 8260B
Dibromochloromethane	96	(70 - 130)			SW846 8260B
	92	(70 - 130)	3.6	(0-30)	SW846 8260B
1,1,2-Trichloroethane	86	(70 - 130)			SW846 8260B
	85	(70 - 130)	1.6	(0-30)	SW846 8260B
Benzene	84	(70 - 130)			SW846 8260B
	86	(70 - 130)	2.4	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	80	(70 - 130)			SW846 8260B
	79	(70 - 130)	0.85	(0-30)	SW846 8260B
Bromoform	101	(70 - 130)			SW846 8260B
	101	(70 - 130)	0.14	(0-30)	SW846 8260B
4-Methyl-2-pentanone	81	(70 - 130)			SW846 8260B
	82	(70 - 130)	1.5	(0-30)	SW846 8260B
2-Hexanone	80	(70 - 130)			SW846 8260B
	82	(70 - 130)	2.4	(0-30)	SW846 8260B
Tetrachloroethene	93	(70 - 130)			SW846 8260B
	97	(70 - 130)	4.2	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	79	(70 - 130)			SW846 8260B
	85	(70 - 130)	8.1	(0-30)	SW846 8260B
Toluene	87	(70 - 130)			SW846 8260B
	86	(70 - 130)	1.9	(0-30)	SW846 8260B
Chlorobenzene	88	(70 - 130)			SW846 8260B
	89	(70 - 130)	1.8	(0-30)	SW846 8260B
Ethylbenzene	88	(70 - 130)			SW846 8260B
	88	(70 - 130)	0.37	(0-30)	SW846 8260B
Styrene	93	(70 - 130)			SW846 8260B
	93	(70 - 130)	0.33	(0-30)	SW846 8260B
Xylenes (total)	92	(70 - 130)			SW846 8260B
	93	(70 - 130)	0.99	(0-30)	SW846 8260B

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G150104 **Work Order #...:** LGG2H1AC-MS **Matrix.....:** WG
MS Lot-Sample #: A9G150104-004 LGG2H1AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
	94	(50 - 150)
1,2-Dichloroethane-d4	95	(50 - 150)
	95	(50 - 150)
Toluene-d8	94	(50 - 150)
	94	(50 - 150)
4-Bromofluorobenzene	98	(50 - 150)
	97	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G150104 Work Order #...: LGG2M1AC-MS Matrix.....: WG
MS Lot-Sample #: A9G150104-008 LGG2M1AD-MSD
Date Sampled...: 07/14/09 13:50 Date Received..: 07/15/09
Prep Date.....: 07/20/09 Analysis Date..: 07/20/09
Prep Batch #...: 9201253
Dilution Factor: 1 Initial Wgt/Vol: 5 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
cis-1,2-Dichloroethene	94	(70 - 130)			SW846 8260B
	96	(70 - 130)	1.6	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	86	(70 - 130)			SW846 8260B
	86	(70 - 130)	0.31	(0-30)	SW846 8260B
1,2-Dibromoethane	96	(70 - 130)			SW846 8260B
	95	(70 - 130)	1.0	(0-30)	SW846 8260B
Bromochloromethane	91	(70 - 130)			SW846 8260B
	99	(70 - 130)	8.2	(0-30)	SW846 8260B
m-Xylene & p-Xylene	99	(70 - 130)			SW846 8260B
	100	(70 - 130)	1.6	(0-30)	SW846 8260B
o-Xylene	98	(70 - 130)			SW846 8260B
	98	(70 - 130)	0.58	(0-30)	SW846 8260B
Chloromethane	57 a	(70 - 130)			SW846 8260B
	60 a	(70 - 130)	5.4	(0-30)	SW846 8260B
Bromomethane	61 a	(70 - 130)			SW846 8260B
	65 a	(70 - 130)	7.7	(0-30)	SW846 8260B
Vinyl chloride	73	(70 - 130)			SW846 8260B
	78	(70 - 130)	6.7	(0-30)	SW846 8260B
Chloroethane	62 a	(70 - 130)			SW846 8260B
	68 a	(70 - 130)	8.9	(0-30)	SW846 8260B
Methylene chloride	78	(70 - 130)			SW846 8260B
	78	(70 - 130)	0.06	(0-30)	SW846 8260B
Acetone	78	(70 - 130)			SW846 8260B
	66 a	(70 - 130)	16	(0-30)	SW846 8260B
Carbon disulfide	73	(70 - 130)			SW846 8260B
	76	(70 - 130)	4.9	(0-30)	SW846 8260B
1,1-Dichloroethene	78	(70 - 130)			SW846 8260B
	84	(70 - 130)	7.3	(0-30)	SW846 8260B
1,1-Dichloroethane	92	(70 - 130)			SW846 8260B
	94	(70 - 130)	1.8	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	90	(70 - 130)			SW846 8260B
	91	(70 - 130)	0.97	(0-30)	SW846 8260B
Chloroform	94	(70 - 130)			SW846 8260B
	94	(70 - 130)	0.58	(0-30)	SW846 8260B
1,2-Dichloroethane	92	(70 - 130)			SW846 8260B
	94	(70 - 130)	2.5	(0-30)	SW846 8260B
2-Butanone	81	(70 - 130)			SW846 8260B
	81	(70 - 130)	0.17	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G150104 Work Order #...: LGG2M1AC-MS Matrix.....: WG
MS Lot-Sample #: A9G150104-008 LGG2M1AD-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1,1-Trichloroethane	95	(70 - 130)			SW846 8260B
	98	(70 - 130)	3.3	(0-30)	SW846 8260B
Carbon tetrachloride	103	(70 - 130)			SW846 8260B
	98	(70 - 130)	4.6	(0-30)	SW846 8260B
Bromodichloromethane	98	(70 - 130)			SW846 8260B
	101	(70 - 130)	3.1	(0-30)	SW846 8260B
1,2-Dichloropropane	88	(70 - 130)			SW846 8260B
	92	(70 - 130)	4.0	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	82	(70 - 130)			SW846 8260B
	82	(70 - 130)	0.42	(0-30)	SW846 8260B
Trichloroethene	92	(70 - 130)			SW846 8260B
	97	(70 - 130)	5.1	(0-30)	SW846 8260B
Dibromochloromethane	98	(70 - 130)			SW846 8260B
	99	(70 - 130)	0.66	(0-30)	SW846 8260B
1,1,2-Trichloroethane	92	(70 - 130)			SW846 8260B
	89	(70 - 130)	3.2	(0-30)	SW846 8260B
Benzene	91	(70 - 130)			SW846 8260B
	93	(70 - 130)	1.8	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	83	(70 - 130)			SW846 8260B
	86	(70 - 130)	3.9	(0-30)	SW846 8260B
Bromoform	103	(70 - 130)			SW846 8260B
	104	(70 - 130)	0.65	(0-30)	SW846 8260B
4-Methyl-2-pentanone	84	(70 - 130)			SW846 8260B
	79	(70 - 130)	6.1	(0-30)	SW846 8260B
2-Hexanone	81	(70 - 130)			SW846 8260B
	81	(70 - 130)	0.35	(0-30)	SW846 8260B
Tetrachloroethene	103	(70 - 130)			SW846 8260B
	105	(70 - 130)	1.7	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	84	(70 - 130)			SW846 8260B
	80	(70 - 130)	4.8	(0-30)	SW846 8260B
Toluene	92	(70 - 130)			SW846 8260B
	93	(70 - 130)	1.8	(0-30)	SW846 8260B
Chlorobenzene	94	(70 - 130)			SW846 8260B
	98	(70 - 130)	4.3	(0-30)	SW846 8260B
Ethylbenzene	97	(70 - 130)			SW846 8260B
	97	(70 - 130)	0.56	(0-30)	SW846 8260B
Styrene	96	(70 - 130)			SW846 8260B
	98	(70 - 130)	1.8	(0-30)	SW846 8260B
Xylenes (total)	98	(70 - 130)			SW846 8260B
	100	(70 - 130)	1.3	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G150104 **Work Order #...:** LGG2M1AC-MS **Matrix.....:** WG
MS Lot-Sample #: A9G150104-008 LGG2M1AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
	92	(50 - 150)
1,2-Dichloroethane-d4	93	(50 - 150)
	87	(50 - 150)
Toluene-d8	94	(50 - 150)
	93	(50 - 150)
4-Bromofluorobenzene	102	(50 - 150)
	98	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

5A
VOLATILE ORGANIC GC/MS TUNING AND MASS
CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: NORTH CANTON Contract:

Lab Code: TALCAN Case No.: SAS No.: SDG No.: A9G150104

Lab File ID: BFB117 BFB Injection Date: 07/17/09

Instrument ID: A3UX11 BFB Injection Time: 0931

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.4
75	30.0 - 60.0% of mass 95	50.9
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.2
173	Less than 2.0% of mass 174	0.6 (0.7)1
174	50.0 - 100.0% of mass 95	82.5
175	5.0 - 9.0% of mass 174	6.4 (7.7)1
176	Greater than 95.0%, but less than 101.0% of mass 174	79.9 (96.8)1
177	5.0 - 9.0% of mass 176	5.7 (7.2)2

1-Value is % of mass 174 2-Value is % of mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD010	50NG-CC	UXJ3163	07/17/09	1002
02	LGMJ2-CHK	LGMJ21AC	UXJ3165	07/17/09	1049
03	LGMJ2-BLK	LGMJ21AA	UXJ3167	07/17/09	1136
04	LGMJ2-CKDUP	LGMJ21AD	UXJ3168	07/17/09	1200
05	FWGLL9MW-007	LGG3N1AA	UXJ3188	07/17/09	1955
06	FWGLL9MW-002	LGG3Q1AA	UXJ3189	07/17/09	2018
07	FWGLL9MW-005	LGG3V1AA	UXJ3190	07/17/09	2042
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page 1 of 1

FORM V VOA 1/87 Rev.

5A
VOLATILE ORGANIC GC/MS TUNING AND MASS
CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: NORTH CANTON Contract:

Lab Code: TALCAN Case No.: SAS No.: SDG No.: A9G150104

Lab File ID: BFB118 BFB Injection Date: 07/20/09

Instrument ID: A3UX11 BFB Injection Time: 1035

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.3
75	30.0 - 60.0% of mass 95	51.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.4
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 100.0% of mass 95	70.8
175	5.0 - 9.0% of mass 174	5.5 (7.8)1
176	Greater than 95.0%, but less than 101.0% of mass 174	70.1 (99.1)1
177	5.0 - 9.0% of mass 176	5.0 (7.2)2

1-Value is % of mass 174 2-Value is % of mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD010	50NG-CC	UXJ3193	07/20/09	1057
02	LGP7A-CHK	LGP7A1AC	UXJ3195	07/20/09	1144
03	LGP7A-BLK	LGP7A1AA	UXJ3197	07/20/09	1231
04	LGP7A-CKDUP	LGP7A1AD	UXJ3198	07/20/09	1255
05	FWGTEAM1-TRI	LGG2C1AA	UXJ3199	07/20/09	1319
06	FWGLL8MW-001	LGG2D1AA	UXJ3200	07/20/09	1342
07	FWGLL8MW-002	LGG2H1AA	UXJ3201	07/20/09	1406
08	FWGLL8MW-002	LGG2H1AC	UXJ3202	07/20/09	1430
09	FWGLL8MW-002	LGG2H1AD	UXJ3203	07/20/09	1454
10	FWGLL9MW-001	LGG2K1AA	UXJ3204	07/20/09	1518
11	FWGLL9MW-003	LGG2M1AA	UXJ3205	07/20/09	1541
12	FWGLL9MW-003	LGG2M1AC	UXJ3206	07/20/09	1605
13	FWGLL9MW-003	LGG2M1AD	UXJ3207	07/20/09	1629
14	FWGLL10MW-00	LGG2P1AA	UXJ3208	07/20/09	1653
15	FWGLL10MW-00	LGG2R1AA	UXJ3209	07/20/09	1715
16	FWGTEAM2-TRI	LGG2V1AA	UXJ3210	07/20/09	1739
17	FWGLL8MW-006	LGG2W1AA	UXJ3211	07/20/09	1802
18	FWGLL8MW-005	LGG201AA	UXJ3212	07/20/09	1826
19	FWGLL8MW-DUP	LGG231AA	UXJ3213	07/20/09	1850
20	FWGLL9MW-004	LGG261AA	UXJ3214	07/20/09	1914
21	FWGLL9MW-DUP	LGG281AA	UXJ3215	07/20/09	1937
22	FWGLL9MW-006	LGG3A1AA	UXJ3216	07/20/09	2001

5A
VOLATILE ORGANIC GC/MS TUNING AND MASS
CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: NORTH CANTON Contract:

Lab Code: TALCAN Case No.: SAS No.: SDG No.: A9G150104

Lab File ID: BFB118 BFB Injection Date: 07/20/09

Instrument ID: A3UX11 BFB Injection Time: 1035

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.3
75	30.0 - 60.0% of mass 95	51.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.4
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 100.0% of mass 95	70.8
175	5.0 - 9.0% of mass 174	5.5 (7.8)1
176	Greater than 95.0%, but less than 101.0% of mass 174	70.1 (99.1)1
177	5.0 - 9.0% of mass 176	5.0 (7.2)2

1-Value is % of mass 174 2-Value is % of mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	FWGLL10MW-00	LGG3D1AA	UXJ3217	07/20/09	2024
02	FWGTEAM3-TRI	LGG3G1AA	UXJ3218	07/20/09	2048
03	FWGLL8MW-003	LGG3H1AA	UXJ3219	07/20/09	2112
04	FWGLL8MW-004	LGG3K1AA	UXJ3220	07/20/09	2135
05					
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Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J90720A.b\UXJ3196.D
Report Date: 20-Jul-2009 12:32

7/20/09 @ 1208 QCMRL Opener

TestAmerica North Canton

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: QCMRL
Level: LOW
Data Type: MS DATA
SpikeList File: MRL.spk
Sublist File: 2-8260.sub

Client SDG: SDGa01304
Fraction: VOA

Operator: 43582
SampleType: METHSPIKE
Quant Type: ISTD

Method File: \\cansvr11\dd\chem\MSV\a3ux11.i\J90720A.b\8260LLUX11.m
Misc Info: J90720A,8260LLUX11,,43582,3

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	17 1,1-Dichloroethene	1.000	1.015	101.47	70-130
	42 Trichloroethene	1.000	1.029	102.90	70-130
	59 Chlorobenzene	1.000	1.066	106.56	70-130
	50 Toluene	1.000	1.095	109.50	70-130
	41 Benzene	1.000	1.139	113.88	70-130
	16 Acetone	2.000	2.266	113.30	70-130
	20 Carbon Disulfide	1.000	0.7866	78.66	70-130
	9 Chloromethane	1.000	1.063	106.28	70-130
	11 Bromomethane	1.000	0.8249	82.49	70-130
	10 Vinyl Chloride	1.000	1.063	106.27	70-130
	12 Chloroethane	1.000	0.8503	85.03	70-130
	21 Methylene Chloride	1.000	1.036	103.62	70-130
	28 1,1-Dichloroethane	1.000	1.003	100.27	70-130
M	31 1,2-Dichloroethene	2.000	2.022	101.13	70-130
	35 Chloroform	1.000	1.077	107.71	70-130
	40 1,2-Dichloroethane	1.000	1.075	107.48	70-130
	30 2-Butanone	2.000	2.018	100.93	70-130
	37 1,1,1-Trichloroeth	1.000	1.018	101.80	70-130
	39 Carbon Tetrachlori	1.000	0.9105	91.05	70-130
	46 Bromodichlorometha	1.000	0.9177	91.77	70-130
	43 1,2-Dichloropropan	1.000	0.9789	97.89	70-130
	48 cis-1,3-Dichloropr	1.000	1.264	126.42	70-130
	54 1,3-Dichloropropan	1.000	0.9390	93.90	70-130
	57 Dibromochlorometha	1.000	1.599	159.91*	70-130
	53 1,1,2-Trichloroeth	1.000	1.063	106.34	70-130
	51 trans-1,3-Dichloro	1.000	1.480	148.01*	70-130
	49 4-Methyl-2-pentano	2.000	1.673	83.65	70-130
	56 2-Hexanone	2.000	1.512	75.61	70-130
	55 Tetrachloroethene	1.000	1.114	111.43	70-130
	68 1,1,2,2-Tetrachlor	1.000	1.012	101.21	70-130
	66 Bromoform	1.000	1.983	198.33*	70-130
	61 Ethylbenzene	1.000	0.9667	96.67	70-130
	65 Styrene	1.000	0.9422	94.22	70-130
M	63 Xylenes (total)	3.000	2.801	93.37	70-130
	32 cis-1,2-dichloroet	1.000	0.9409	94.09	70-130
	25 trans-1,2-Dichloro	1.000	1.082	108.16	70-130
	8 Dichlorodifluorome	1.000	0.8961	89.61	70-130
	13 Trichlorofluoromet	1.000	0.9777	97.77	70-130
	70 1,2,3-Trichloropro	1.000	0.9710	97.10	70-130
	18 Freon-113	1.000	1.044	104.38	70-130

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J90720A.b\UXJ3196.D
Report Date: 20-Jul-2009 12:32

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
24 Methyl tert-butyl	1.000	0.8939	89.39	70-130
58 1,2-Dibromoethane	1.000	0.9644	96.45	70-130
67 Isopropylbenzene	1.000	0.8646	86.46	70-130
80 1,3-Dichlorobenzen	1.000	1.111	111.10	70-130
81 1,4-Dichlorobenzen	1.000	1.083	108.35	70-130
83 1,2-Dichlorobenzen	1.000	1.111	111.08	70-130
84 1,2-Dibromo-3-chlo	1.000	1.531	NT 153.13*	70-130
85 1,2,4-Trichloroben	1.000	1.123	112.29	70-130
98 Cyclohexane	1.000	0.8237	82.37	70-130
143 Methyl Acetate	2.000	1.959	97.96	70-130
144 Methylcyclohexane	1.000	0.8353	83.53	70-130
71 Bromobenzene	1.000	1.162	116.20	70-130
34 Bromochloromethane	1.000	1.006	100.61	70-130
82 n-Butylbenzene	1.000	0.9674	96.74	70-130
78 sec-Butylbenzene	1.000	0.9680	96.80	70-130
76 tert-Butylbenzene	1.000	1.127	112.71	70-130
73 2-Chlorotoluene	1.000	1.008	100.80	70-130
75 4-Chlorotoluene	1.000	1.076	107.64	70-130
45 Dibromomethane	1.000	0.9716	97.16	70-130
33 2,2-Dichloropropan	1.000	1.103	110.33	70-130
38 1,1-Dichloropropen	1.000	0.9967	99.67	70-130
86 Hexachlorobutadien	1.000	1.134	113.37	70-130
19 Iodomethane	1.000	0.9668	96.69	70-130
79 4-Isopropyltoluene	1.000	0.8896	88.96	70-130
87 Naphthalene	1.000	0.8789	87.89	70-130
72 n-Propylbenzene	1.000	0.9116	91.17	70-130
60 1,1,1,2-Tetrachlor	1.000	1.063	106.31	70-130
88 1,2,3-Trichloroben	1.000	1.254	125.43	70-130
77 1,2,4-Trimethylben	1.000	0.9070	90.70	70-130
74 1,3,5-Trimethylben	1.000	0.8595	85.95	70-130
150 Vinyl Acetate-86	1.000	0.9386	93.86	70-130
62 m + p-Xylene	2.000	1.914	95.69	70-130
64 Xylene-o	1.000	0.8874	88.74	70-130
49 4-Methyl-2-pentano	2.000	1.673	83.65	70-130
27 Vinyl acetate	1.000	1.048	104.78	70-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Dibromofluorometha	10.000	9.647	96.47	73-122
$ 5 1,2-Dichloroethane	10.000	8.972	89.72	61-128
$ 6 Toluene-d8	10.000	9.193	91.93	76-110
$ 7 Bromofluorobenzene	10.000	9.181	91.81	74-116

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J90720A.b\UXJ3221.D
Report Date: 21-Jul-2009 07:37

7/20/09 @ 2159
QCMRL closer

TestAmerica North Canton

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: QCMRL
Level: LOW
Data Type: MS DATA
SpikeList File: MRL.spk
Sublist File: 4-8260+IX.sub
Method File: \\cansvr11\dd\chem\MSV\a3ux11.i\J90720A.b\8260LLUX11.m
Misc Info: J90720A,8260LLUX11,,43582,3

Client SDG: SDGa01304
Fraction: VOA

Operator: 43582
SampleType: METHSPIKE
Quant Type: ISTD

	SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	17	1,1-Dichloroethene	1.000	1.023	102.33	70-130
	42	Trichloroethene	1.000	1.028	102.77	70-130
	59	Chlorobenzene	1.000	0.9736	97.36	70-130
	50	Toluene	1.000	0.9712	97.13	70-130
	41	Benzene	1.000	0.9458	94.58	70-130
	16	Acetone	2.000	1.975	98.74	70-130
	20	Carbon Disulfide	1.000	0.7209	72.09	70-130
	9	Chloromethane	1.000	0.9214	92.14	70-130
	11	Bromomethane	1.000	0.9559	95.59	70-130
	10	Vinyl Chloride	1.000	1.092	109.19	70-130
	12	Chloroethane	1.000	0.9173	91.73	70-130
	21	Methylene Chloride	1.000	1.002	100.18	70-130
	28	1,1-Dichloroethane	1.000	0.9433	94.33	70-130
M	31	1,2-Dichloroethene	2.000	1.920	95.98	70-130
	35	Chloroform	1.000	1.020	101.95	70-130
	40	1,2-Dichloroethane	1.000	1.086	108.66	70-130
	30	2-Butanone	2.000	1.689	84.47	70-130
	37	1,1,1-Trichloroeth	1.000	0.9271	92.71	70-130
	39	Carbon Tetrachlori	1.000	0.9646	96.46	70-130
	46	Bromodichlorometha	1.000	0.8136	81.36	70-130
	43	1,2-Dichloropropan	1.000	0.9981	99.81	70-130
	48	cis-1,3-Dichloropr	1.000	1.166	116.65	70-130
	54	1,3-Dichloropropan	1.000	0.9745	97.45	70-130
	57	Dibromochlorometha	1.000	1.512	~~151.20~~*	70-130
	53	1,1,2-Trichloroeth	1.000	1.031	103.13	70-130
	51	trans-1,3-Dichloro	1.000	1.347	~~134.66~~*	70-130
	49	4-Methyl-2-pentano	2.000	1.611	80.54	70-130
	56	2-Hexanone	2.000	1.493	74.64	70-130
	55	Tetrachloroethene	1.000	0.9325	93.25	70-130
	68	1,1,2,2-Tetrachlor	1.000	0.8693	86.93	70-130
	66	Bromoform	1.000	1.962	~~196.19~~*	70-130
	61	Ethylbenzene	1.000	0.8048	80.48	70-130
	65	Styrene	1.000	0.8203	82.03	70-130
M	63	Xylenes (total)	3.000	2.509	83.65	70-130
	32	cis-1,2-dichloroet	1.000	0.9180	91.80	70-130
	25	trans-1,2-Dichloro	1.000	1.002	100.17	70-130
	8	Dichlorodifluorome	1.000	0.7564	75.64	70-130
	13	Trichlorofluoromet	1.000	0.8863	88.63	70-130
	70	1,2,3-Trichloropro	1.000	1.021	102.08	70-130
	18	Freon-113	1.000	0.9313	93.13	70-130

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J90720A.b\UXJ3221.D
Report Date: 21-Jul-2009 07:37

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
24 Methyl tert-butyl	1.000	0.8509	85.09	70-130
58 1,2-Dibromoethane	1.000	0.8699	86.99	70-130
67 Isopropylbenzene	1.000	0.8247	82.47	70-130
80 1,3-Dichlorobenzen	1.000	0.8816	88.16	70-130
81 1,4-Dichlorobenzen	1.000	0.9420	94.20	70-130
83 1,2-Dichlorobenzen	1.000	0.8671	86.71	70-130
84 1,2-Dibromo-3-chlo	1.000	0.9886	98.86	70-130
85 1,2,4-Trichloroben	1.000	0.7973	79.73	70-130
98 Cyclohexane	1.000	0.7046	70.46	70-130
143 Methyl Acetate	2.000	1.850	92.51	70-130
144 Methylcyclohexane	1.000	0.7279	72.79	70-130
71 Bromobenzene	1.000	0.0000	NT *	70-130
34 Bromochloromethane	1.000	0.9629	96.29	70-130
82 n-Butylbenzene	1.000	0.6728	NT ~~67.28*~~	70-130
78 sec-Butylbenzene	1.000	0.6961	69.61*	70-130
76 tert-Butylbenzene	1.000	0.7345	73.45	70-130
73 2-Chlorotoluene	1.000	0.8137	81.37	70-130
75 4-Chlorotoluene	1.000	0.7359	73.59	70-130
45 Dibromomethane	1.000	1.027	102.67	70-130
33 2,2-Dichloropropan	1.000	0.7062	70.62	70-130
38 1,1-Dichloropropen	1.000	0.8750	87.50	70-130
86 Hexachlorobutadien	1.000	0.6032	NT 60.32*	70-130
19 Iodomethane	1.000	0.8962	89.62	70-130
79 4-Isopropyltoluene	1.000	0.6834	NT 68.34*	70-130
87 Naphthalene	1.000	0.4790	47.90*	70-130
72 n-Propylbenzene	1.000	0.7402	74.03	70-130
60 1,1,1,2-Tetrachlor	1.000	0.8224	82.24	70-130
88 1,2,3-Trichloroben	1.000	0.6522	NT 65.22*	70-130
77 1,2,4-Trimethylben	1.000	0.7360	73.60	70-130
74 1,3,5-Trimethylben	1.000	0.7102	71.02	70-130
150 Vinyl Acetate-86	1.000	0.5755	NT 57.55*	70-130
62 m + p-Xylene	2.000	1.657	82.86	70-130
64 Xylene-o	1.000	0.8522	85.22	70-130
49 4-Methyl-2-pentano	2.000	1.611	80.54	70-130
27 Vinyl acetate	1.000	0.7608	76.08	70-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Dibromofluorometha	10.000	9.736	97.36	73-122
$ 5 1,2-Dichloroethane	10.000	9.618	96.18	61-128
$ 6 Toluene-d8	10.000	9.128	91.28	76-110
$ 7 Bromofluorobenzene	10.000	9.079	90.79	74-116

5A
VOLATILE ORGANIC GC/MS TUNING AND MASS
CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: NORTH CANTON Contract:

Lab Code: TALCAN Case No.: SAS No.: SDG No.: A9G150104

Lab File ID: BFB119 BFB Injection Date: 07/21/09

Instrument ID: A3UX11 BFB Injection Time: 0925

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.9
75	30.0 - 60.0% of mass 95	52.8
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.4
173	Less than 2.0% of mass 174	0.2 (0.2)1
174	50.0 - 100.0% of mass 95	83.5
175	5.0 - 9.0% of mass 174	5.8 (6.9)1
176	Greater than 95.0%, but less than 101.0% of mass 174	80.5 (96.4)1
177	5.0 - 9.0% of mass 176	5.5 (6.8)2

1-Value is % of mass 174 2-Value is % of mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD010	50NG-CC	UXJ3223	07/21/09	0949
02	LGRAC-CHK	LGRAC1AC	UXJ3225	07/21/09	1036
03	LGRAC-BLK	LGRAC1AA	UXJ3227	07/21/09	1123
04	LGRAC-CKDUP	LGRAC1AD	UXJ3228	07/21/09	1147
05	FWGEQUIPRINS	LGG3M1AA	UXJ3229	07/21/09	1211
06					
07					
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21					
22					

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J90721A.b\UXJ3241.D
Report Date: 22-Jul-2009 07:59

TestAmerica North Canton

RECOVERY REPORT

QCMRL Closer 7/21/09 @1656

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: QCMRL
Level: LOW
Data Type: MS DATA
SpikeList File: MRL.spk
Sublist File: 4-8260+IX.sub
Method File: \\cansvr11\dd\chem\MSV\a3ux11.i\J90721A.b\8260LLUX11.m
Misc Info: J90721A,8260LLUX11,,43582,3

Client SDG: SDGa01304
Fraction: VOA

Operator: 43582
SampleType: METHSPIKE
Quant Type: ISTD

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	17 1,1-Dichloroethene	1.000	0.8609	86.09	70-130
	42 Trichloroethene	1.000	0.8847	88.47	70-130
	59 Chlorobenzene	1.000	0.9781	97.81	70-130
	50 Toluene	1.000	0.9282	92.82	70-130
	41 Benzene	1.000	0.9370	93.70	70-130
	16 Acetone	2.000	1.887	94.34	70-130
	20 Carbon Disulfide	1.000	0.6218	62.18*	70-130
	9 Chloromethane	1.000	0.8863	88.63	70-130
	11 Bromomethane	1.000	0.7387	73.87	70-130
	10 Vinyl Chloride	1.000	0.9994	99.94	70-130
	12 Chloroethane	1.000	0.7566	75.66	70-130
	21 Methylene Chloride	1.000	0.7362	73.62	70-130
	28 1,1-Dichloroethane	1.000	0.9148	91.48	70-130
M	31 1,2-Dichloroethene	2.000	1.753	87.65	70-130
	35 Chloroform	1.000	0.9775	97.75	70-130
	40 1,2-Dichloroethane	1.000	1.007	100.72	70-130
	30 2-Butanone	2.000	1.521	76.04	70-130
	37 1,1,1-Trichloroeth	1.000	0.9360	93.61	70-130
	39 Carbon Tetrachlori	1.000	0.8242	82.42	70-130
	46 Bromodichlorometha	1.000	0.8225	82.25	70-130
	43 1,2-Dichloropropan	1.000	0.9359	93.59	70-130
	48 cis-1,3-Dichloropr	1.000	1.183	118.34	70-130
	54 1,3-Dichloropropan	1.000	0.9868	98.68	70-130
	57 Dibromochlorometha	1.000	1.461	146.08*	70-130
	53 1,1,2-Trichloroeth	1.000	1.001	100.11	70-130
	51 trans-1,3-Dichloro	1.000	1.316	131.64*	70-130
	49 4-Methyl-2-pentano	2.000	1.509	75.47	70-130
	56 2-Hexanone	2.000	1.280	63.98*	70-130
	55 Tetrachloroethene	1.000	0.8969	89.69	70-130
	68 1,1,2,2-Tetrachlor	1.000	0.8253	82.53	70-130
	66 Bromoform	1.000	1.831	183.13*	70-130
	61 Ethylbenzene	1.000	0.8581	85.81	70-130
	65 Styrene	1.000	0.7105	71.05	70-130
M	63 Xylenes (total)	3.000	2.235	74.51	70-130
	32 cis-1,2-dichloroet	1.000	0.8550	85.50	70-130
	25 trans-1,2-Dichloro	1.000	0.8980	89.80	70-130
	8 Dichlorodifluorome	1.000	1.069	106.88	70-130
	13 Trichlorofluoromet	1.000	0.8653	86.53	70-130
	70 1,2,3-Trichloropro	1.000	0.8891	88.91	70-130
	18 Freon-113	1.000	0.9561	95.61	70-130

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J90721A.b\UXJ3241.D
Report Date: 22-Jul-2009 07:59

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
24 Methyl tert-butyl	1.000	0.7983	79.83	70-130
58 1,2-Dibromoethane	1.000	0.8740	87.40	70-130
67 Isopropylbenzene	1.000	0.6915	NT 69.15*	70-130
80 1,3-Dichlorobenzen	1.000	0.8835	88.35	70-130
81 1,4-Dichlorobenzen	1.000	0.9457	94.57	70-130
83 1,2-Dichlorobenzen	1.000	1.106	110.58	70-130
84 1,2-Dibromo-3-chl	1.000	0.0000	NT *	70-130
85 1,2,4-Trichloroben	1.000	0.6754	NT 67.54*	70-130
98 Cyclohexane	1.000	0.6250	NT 62.50*	70-130
143 Methyl Acetate	2.000	1.816	90.81	70-130
144 Methylcyclohexane	1.000	0.6883	NT 68.83*	70-130
71 Bromobenzene	1.000	1.058	105.83	70-130
34 Bromochloromethane	1.000	1.074	107.38	70-130
82 n-Butylbenzene	1.000	0.6794	NT 67.94*	70-130
78 sec-Butylbenzene	1.000	0.7169	71.69	70-130
76 tert-Butylbenzene	1.000	0.6651	66.51*	70-130
73 2-Chlorotoluene	1.000	0.8018	80.18	70-130
75 4-Chlorotoluene	1.000	0.8209	82.09	70-130
45 Dibromomethane	1.000	0.8966	89.66	70-130
33 2,2-Dichloropropan	1.000	0.8263	82.63	70-130
38 1,1-Dichloropropen	1.000	0.8215	82.15	70-130
86 Hexachlorobutadien	1.000	0.9072	90.73	70-130
19 Iodomethane	1.000	0.7610	76.10	70-130
79 4-Isopropyltoluene	1.000	0.7012	70.12	70-130
87 Naphthalene	1.000	0.5232	NT 52.32*	70-130
72 n-Propylbenzene	1.000	0.5918	NT 59.18*	70-130
60 1,1,1,2-Tetrachlor	1.000	0.8841	88.41	70-130
88 1,2,3-Trichloroben	1.000	0.6699	NT 66.99*	70-130
77 1,2,4-Trimethylben	1.000	0.7021	70.21	70-130
74 1,3,5-Trimethylben	1.000	0.7163	71.63	70-130
150 Vinyl Acetate-86	1.000	0.7164	71.64	70-130
62 m + p-Xylene	2.000	1.527	76.33	70-130
64 Xylene-o	1.000	0.7086	70.87	70-130
49 4-Methyl-2-pentano	2.000	1.509	75.47	70-130
27 Vinyl acetate	1.000	0.7610	76.10	70-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Dibromofluorometha	10.000	9.573	95.73	73-122
$ 5 1,2-Dichloroethane	10.000	9.452	94.52	61-128
$ 6 Toluene-d8	10.000	9.264	92.64	76-110
$ 7 Bromofluorobenzene	10.000	9.064	90.64	74-116

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Report Date: 21-Jul-2009 11:32

7/21/09 @1100 QCMRL Opener

TestAmerica North Canton

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: QCMRL
Level: LOW
Data Type: MS DATA
SpikeList File: MRL.spk
Sublist File: 4-8260+IX.sub
Method File: \\cansvr11\dd\chem\MSV\a3ux11.i\J90721A.b\8260LLUX11.m
Misc Info: J90721A,8260LLUX11,,43582,3

Client SDG: SDGa01304
Fraction: VOA

Operator: 43582
SampleType: METHSPIKE
Quant Type: ISTD

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	17 1,1-Dichloroethene	1.000	1.042	104.19	70-130
	42 Trichloroethene	1.000	1.021	102.07	70-130
	59 Chlorobenzene	1.000	0.9414	94.14	70-130
	50 Toluene	1.000	0.9667	96.67	70-130
	41 Benzene	1.000	1.040	104.00	70-130
	16 Acetone	2.000	2.531	126.56	70-130
	20 Carbon Disulfide	1.000	0.6842	68.42*	70-130
	9 Chloromethane	1.000	0.9704	97.04	70-130
	11 Bromomethane	1.000	1.002	100.22	70-130
	10 Vinyl Chloride	1.000	1.027	102.70	70-130
	12 Chloroethane	1.000	1.013	101.31	70-130
	21 Methylene Chloride	1.000	0.6603	66.03*	70-130
	28 1,1-Dichloroethane	1.000	0.9311	93.11	70-130
M	31 1,2-Dichloroethene	2.000	1.982	99.09	70-130
	35 Chloroform	1.000	1.051	105.13	70-130
	40 1,2-Dichloroethane	1.000	1.114	111.41	70-130
	30 2-Butanone	2.000	2.204	110.21	70-130
	37 1,1,1-Trichloroeth	1.000	1.054	105.43	70-130
	39 Carbon Tetrachlori	1.000	0.9207	92.07	70-130
	46 Bromodichlorometha	1.000	0.8857	88.57	70-130
	43 1,2-Dichloropropan	1.000	1.030	102.99	70-130
	48 cis-1,3-Dichloropr	1.000	1.265	126.53	70-130
	54 1,3-Dichloropropan	1.000	0.9815	98.15	70-130
	57 Dibromochlorometha	1.000	1.553	155.33*	70-130
	53 1,1,2-Trichloroeth	1.000	0.9734	97.34	70-130
	51 trans-1,3-Dichloro	1.000	1.515	151.48*	70-130
	49 4-Methyl-2-pentano	2.000	1.696	84.82	70-130
	56 2-Hexanone	2.000	1.690	84.48	70-130
	55 Tetrachloroethene	1.000	1.072	107.16	70-130
	68 1,1,2,2-Tetrachlor	1.000	0.8526	85.26	70-130
	66 Bromoform	1.000	2.011	201.08*	70-130
	61 Ethylbenzene	1.000	0.8847	88.47	70-130
	65 Styrene	1.000	0.8675	86.75	70-130
M	63 Xylenes (total)	3.000	2.612	87.06	70-130
	32 cis-1,2-dichloroet	1.000	0.9887	98.87	70-130
	25 trans-1,2-Dichloro	1.000	0.9932	99.32	70-130
	8 Dichlorodifluorome	1.000	1.281	128.08	70-130
	13 Trichlorofluoromet	1.000	1.020	102.00	70-130
	70 1,2,3-Trichloropro	1.000	0.9564	95.64	70-130
	18 Freon-113	1.000	1.007	100.71	70-130

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J90721A.b\UXJ3226.D
Report Date: 21-Jul-2009 11:32

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
24 Methyl tert-butyl	1.000	0.8720	87.20	70-130
58 1,2-Dibromoethane	1.000	1.034	103.39	70-130
67 Isopropylbenzene	1.000	0.8409	84.09	70-130
80 1,3-Dichlorobenzen	1.000	1.021	102.15	70-130
81 1,4-Dichlorobenzen	1.000	1.013	101.28	70-130
83 1,2-Dichlorobenzen	1.000	1.151	115.11	70-130
84 1,2-Dibromo-3-chlo	1.000	1.415	M 141.48*	70-130
85 1,2,4-Trichloroben	1.000	1.078	107.77	70-130
98 Cyclohexane	1.000	0.8494	84.94	70-130
143 Methyl Acetate	2.000	1.941	97.07	70-130
144 Methylcyclohexane	1.000	0.8358	83.58	70-130
71 Bromobenzene	1.000	0.0000	M *	70-130
34 Bromochloromethane	1.000	1.086	108.57	70-130
82 n-Butylbenzene	1.000	0.8739	87.39	70-130
78 sec-Butylbenzene	1.000	0.8668	86.68	70-130
76 tert-Butylbenzene	1.000	0.9657	96.57	70-130
73 2-Chlorotoluene	1.000	0.8632	86.32	70-130
75 4-Chlorotoluene	1.000	0.8429	84.29	70-130
45 Dibromomethane	1.000	1.005	100.48	70-130
33 2,2-Dichloropropan	1.000	0.8757	87.57	70-130
38 1,1-Dichloropropen	1.000	0.9048	90.48	70-130
86 Hexachlorobutadien	1.000	1.205	120.53	70-130
19 Iodomethane	1.000	0.8377	83.77	70-130
79 4-Isopropyltoluene	1.000	0.8158	81.58	70-130
87 Naphthalene	1.000	0.7795	77.95	70-130
72 n-Propylbenzene	1.000	1.054	105.41	70-130
60 1,1,1,2-Tetrachlor	1.000	1.010	101.00	70-130
88 1,2,3-Trichloroben	1.000	1.056	105.56	70-130
77 1,2,4-Trimethylben	1.000	0.8303	83.03	70-130
74 1,3,5-Trimethylben	1.000	0.8368	83.68	70-130
150 Vinyl Acetate-86	1.000	0.7995	79.95	70-130
62 m + p-Xylene	2.000	1.758	87.92	70-130
64 Xylene-o	1.000	0.8534	85.34	70-130
49 4-Methyl-2-pentano	2.000	1.696	84.82	70-130
27 Vinyl acetate	1.000	1.034	103.45	70-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Dibromofluorometha	10.000	9.520	95.20	73-122
$ 5 1,2-Dichloroethane	10.000	8.878	88.78	61-128
$ 6 Toluene-d8	10.000	9.242	92.42	76-110
$ 7 Bromofluorobenzene	10.000	8.882	88.82	74-116

GCMS SEMIVOLATILE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 26, 2009

SDG: A9G150104 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.1- 5.4 °C.	QAPP Table 4-2
3. Were samples extracted using the correct preparation, clean-up methods?	✓				QAPP Table 4-2
4. Were samples extracted within required holding times (7 days - water)?	✓				QAPP Table 4-2 J/UJ/R
5. Were samples analyzed within required holding times (40 days after extraction)?	✓				QAPP Table 4-2 J/UJ/R
6. Were sample storage requirements met?	✓				QAPP Table 4-2
7. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-4 and 3-6
8. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-4 and 3-6
9. Was the GC/MS system tuned with decafluorotriphenylphosphine (DFTPP)?	✓				LCG Table 2
10. Were the criteria met during each 12 hour shift?	✓				LCG Table 2
11. Did the initial calibration curve consist of 5 concentration levels, with the low standard near but above the MDL?	✓			A4HP7-7/22/09, 7/29/09 stds = 0.05, 0.25, 0.50, 1.0, 2.5, 5.0, 7.5, 10.0, 12.5 ng on column	LCG Table 2 R
12. Did the Calibration Check Compounds (CCCs) (see Table 1 below) relative standard deviation (%RSD) ≤ 30%?	✓				LCG Table 2 R
13. Were the minimum response factors (RFs) for the System Performance Check Compounds (SPCCs) (see Table 2 below) met?	✓				LCG Table 2 R
14. Was each target analyte <15 % RSD, or was the average RSD <15%?	✓				LCG Table 2 15% <RSD< 30% = J/UJ

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 26, 2009

SDG: A9G150104 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
15. If a different calibration option was used, was the correlation coefficient (r^2) or the coefficient of determination ≥0.99?	✓			7/22/09- Benzoic acid and 2,4-dinitrophenol, used a quadratic fit. 7/29/09- Benzoic acid, 2,4-dinitrophenol, 4,6-dinitro-2-methylphenol and pentachlorophenol used a quadratic fit. No qualifications were made as coefficients of determination (COD) (r) were≥0.99.	LCG Table 2 r<0.99=-J/R
16. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓			7/7/09	LCG Table 2 R
17. Was a MRL Level Verification run at the beginning and end of the sequence or every 12 hours?	✓				LCG Table 2
18. Were the QC/MRL recoveries 70-130%?		✓		The closing MRL check analyzed 7/23/09 at 2251 had 2,4-dinitrophenol recover below control limits at 67.9%. No qualifications were made as there were no field samples bracketed by this MRL check. Documentation provided in SDG A9G140103.	LCG Table 2 >130%=J; 50-70%=J/UJ; <50%=J/R
19. Was a second source (ICV) verification analyzed after the ICAL? Were results 70-130%?	✓			7/22/09, 7/29/09	LCG Table 2 >130%=J; 50-70%=J/UJ; <50%=J/R
20. Was a CCV analyzed every 12 hours?			✓		LCG Table 2
21. Was the percent difference (% D) for the CCCs ≤ 20%? (see Table 1) (% drift if regression fit model used)			✓		LCG Table 2
22. Were the minimum RFs for the SPCCs met? (see Table 2)			✓		LCG Table 2
23. Was the %Difference or %Drift ≤20% for all target analytes? OR was the average %D ≤20% with no individual analyte ≥30%D?			✓		LCG Table 2 Avg D>20% and D>30% =R; Avg %D<20% and D>30% =J D>30% (neg) = J/R D>30% (pos) = J
24. Were the internal standards added to every sample?	✓				LCG Table 2

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 26, 2009

SDG: A9G150104 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
25. Were the retention times for all IS compounds within ±30 seconds from the RT of the mid-point ICAL std?	✓				LCG Table 2 R
26. Did the areas of all IS compounds vary by no more than -50% to +100% from the ICAL EICP area?	✓				LCG Table 2 R
27. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 2
28. Were all target analytes in the method blank <1/2 the MRL?	✓			Checked by ADR. Bis (2-Ethylhexyl) phthalate was detected in the method blank at 1.4ug/L. bis (2-Ethylhexyl) phthalate results <10x contamination were qualified, "B".	LCG Table 2 <5/10x blank = B
29. Was a field blank collected and analyzed?	✓			FWGEQUIPRinse2-1424-GW	
30. Were all target analytes in the field blank analysis <1/2 the MRL?	✓			Checked by ADR. Bis (2-Ethylhexyl) phthalate was detected in FWGEQUIPRinse2-1424-GW at 2.3ug/L. bis (2-Ethylhexyl) phthalate results <10x contamination were qualified, "B".	<5/10x blank = B
31. Was a field duplicate analyzed?	✓			Sample FWGLL8mw-DUP2-1414-GW was the field duplicate for sample FWGLL8mw-005c-1380-GW and FWGLL9mw-DUP3-1415-GW a field duplicate for sample FWGLL9mw-004c-1385-GW.	
32. Were the field duplicate RPDs ≤30%?	✓			Checked by ADR. Only detected results above the RL were evaluated.	QAPP Table 3-2 RPD >30=J
33. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 2
34. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR.	LCG Appendix C >UL=J; 30%-LL=J/UJ; <30%=J/R
35. Was a MS/MSD pair prepared with each batch?	✓				LCG Table 2
36. Was the MS/MSD parent a Ravenna sample?	✓			Sample FWGLL8mw-002c-1377-GW and FWGLL9mw-003c-1384-GW were the parent MS/MSD samples from this SDG.	
37. Were MS/MSD recoveries 45-135% and RPD value ≤40%?		✓		Hexachloroethane recovered below control limits in the MS at 44% and 43% in the MSD while hexachlorocyclopentadiene recovered below control limits at 43% in the MSD (parent FWGLL9mw-003c-1384-GW). No qualifications were made as the associated LCS recovered within limits.	LCG Table 2 Pj

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 26, 2009

SDG: A9G150104 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
38. Were surrogate recoveries within 50-150%?	✓				LCG Table 2 >150%=J; 10% -50%=J/UJ; <10%=J/R
39. Were reported sample concentrations within calibration range?	✓				
40. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
41. Were lab comments included in report? If yes, summarize contents.	✓			See narrative regarding MS outliers.	

References:
Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 2 and Attachment A "Data Validation Guidelines:
Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Table 1: CCCs

Base / Neutral Compunds	Acid Compounds
Acenaphthalene	4-Chloro-3-methylphenol
1,4-Dichlorobenzene	2,4-Dichlorophenol
Hexachlorobutadiene	2-Nitrophenol
N-Nitrosodiphehylamine	Phenol
Di-n-octylphthalate	Pentachlorophenol
Fluoroanthene	2,4,6-Trichlorophenol
Benzo(a)pyrene	

(All analytes if CCCs not included in standard)

Table 2: SPCCs

N-Nitroso-di-n-propylamine	0.050
Hexachlorocyclopentadiene	0.050
2,4-Dinitrophenol	0.050

4-Nitrophenol	0.050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-001C-1376-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-002 Work Order #...: LGG2D1AC Matrix.....: WG
Date Sampled...: 07/14/09 09:15 Date Received..: 07/15/09
Prep Date.....: 07/15/09 Analysis Date..: 07/29/09
Prep Batch #...: 9196104
Dilution Factor: 1 Initial Wgt/Vol: 1050 mL Final Wgt/Vol..: 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**2.9 J**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-001C-1376-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-002 **Work Order #...:** LGG2D1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-001C-1376-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-002 **Work Order #...:** LGG2D1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	67	(50 - 150)
2-Fluorobiphenyl	62	(50 - 150)
Terphenyl-d14	75	(50 - 150)
Phenol-d5	66	(50 - 150)
2-Fluorophenol	64	(50 - 150)
2,4,6-Tribromophenol	67	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-002C-1377-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-004 **Work Order #...:** LGG2H1AE **Matrix.....:** WG
Date Sampled...: 07/14/09 10:20 **Date Received..:** 07/15/09
Prep Date.....: 07/15/09 **Analysis Date..:** 07/29/09
Prep Batch #...: 9196104
Dilution Factor: 1 **Initial Wgt/Vol:** 1010 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.5 J**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-002C-1377-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-004 **Work Order #...:** LGG2H1AE **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-002C-1377-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-004 **Work Order #...:** LGG2H1AE **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	68	(50 - 150)
2-Fluorobiphenyl	63	(50 - 150)
Terphenyl-d14	77	(50 - 150)
Phenol-d5	67	(50 - 150)
2-Fluorophenol	60	(50 - 150)
2,4,6-Tribromophenol	62	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-001C-1382-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-006 Work Order #...: LGG2K1AC Matrix.....: WG
Date Sampled...: 07/14/09 12:35 Date Received..: 07/15/09
Prep Date.....: 07/15/09 Analysis Date..: 07/29/09
Prep Batch #...: 9196104
Dilution Factor: 1 Initial Wgt/Vol: 980 mL Final Wgt/Vol..: 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-001C-1382-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-006 **Work Order #...:** LGG2K1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
bis(2-Ethylhexyl) phthalate	**1.2 J**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-001C-1382-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-006 Work Order #...: LGG2K1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	75	(50 - 150)
2-Fluorobiphenyl	69	(50 - 150)
Terphenyl-d14	89	(50 - 150)
Phenol-d5	74	(50 - 150)
2-Fluorophenol	73	(50 - 150)
2,4,6-Tribromophenol	71	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-003C-1384-GW

GC/MS Semivolatiles

Lot-Sample #...:	A9G150104-008	**Work Order #...:**	LGG2M1AE	**Matrix.....:**	WG
Date Sampled...:	07/14/09 13:50	**Date Received..:**	07/15/09		
Prep Date.....:	07/16/09	**Analysis Date..:**	07/30/09		
Prep Batch #...:	9197123				
Dilution Factor:	1	**Initial Wgt/Vol:**	1000 mL	**Final Wgt/Vol..:**	2 mL
		Method.....:	SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.8 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-003C-1384-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-008 **Work Order #...:** LGG2M1AE **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-003C-1384-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-008 **Work Order #...:** LGG2M1AE **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	69	(50 - 150)
2-Fluorobiphenyl	57	(50 - 150)
Terphenyl-d14	76	(50 - 150)
Phenol-d5	69	(50 - 150)
2-Fluorophenol	66	(50 - 150)
2,4,6-Tribromophenol	70	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-003C-1391-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-010 Work Order #...: LGG2P1AC Matrix.....: WG
Date Sampled...: 07/14/09 15:55 Date Received..: 07/15/09
Prep Date.....: 07/15/09 Analysis Date..: 07/29/09
Prep Batch #...: 9196104
Dilution Factor: 1 Initial Wgt/Vol: 970 mL Final Wgt/Vol..: 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-003C-1391-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-010 **Work Order #...:** LGG2P1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
bis(2-Ethylhexyl) phthalate	**0.83 J**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-003C-1391-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-010 **Work Order #...:** LGG2P1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	67	(50 - 150)
2-Fluorobiphenyl	62	(50 - 150)
Terphenyl-d14	82	(50 - 150)
Phenol-d5	67	(50 - 150)
2-Fluorophenol	67	(50 - 150)
2,4,6-Tribromophenol	62	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-002C-1390-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-012 **Work Order #...:** LGG2R1AC **Matrix.....:** WG
Date Sampled...: 07/14/09 17:00 **Date Received..:** 07/15/09
Prep Date.....: 07/15/09 **Analysis Date..:** 07/29/09
Prep Batch #...: 9196104
Dilution Factor: 1 **Initial Wgt/Vol:** 960 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**4.0 J**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-002C-1390-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-012 Work Order #...: LGG2R1AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-002C-1390-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-012 Work Order #...: LGG2R1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	69	(50 - 150)
2-Fluorobiphenyl	63	(50 - 150)
Terphenyl-d14	83	(50 - 150)
Phenol-d5	68	(50 - 150)
2-Fluorophenol	67	(50 - 150)
2,4,6-Tribromophenol	65	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-006C-1381-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-015 **Work Order #...:** LGG2W1AC **Matrix.....:** WG
Date Sampled...: 07/14/09 09:15 **Date Received..:** 07/15/09
Prep Date.....: 07/15/09 **Analysis Date..:** 07/29/09
Prep Batch #...: 9196104
Dilution Factor: 1 **Initial Wgt/Vol:** 970 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**0.83 J**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-006C-1381-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-015 Work Order #...: LGG2W1AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-006C-1381-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-015 **Work Order #...:** LGG2W1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	70	(50 - 150)
2-Fluorobiphenyl	64	(50 - 150)
Terphenyl-d14	72	(50 - 150)
Phenol-d5	69	(50 - 150)
2-Fluorophenol	67	(50 - 150)
2,4,6-Tribromophenol	70	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-005C-1380-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-017 Work Order #...: LGG201AC Matrix.....: WG
Date Sampled...: 07/14/09 10:10 Date Received..: 07/15/09
Prep Date.....: 07/15/09 Analysis Date..: 07/29/09
Prep Batch #...: 9196104
Dilution Factor: 1 Initial Wgt/Vol: 1050 mL Final Wgt/Vol..: 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	0.80
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-005C-1380-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-017 **Work Order #...:** LGG201AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-005C-1380-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-017 Work Order #...: LGG201AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	68	(50 - 150)
2-Fluorobiphenyl	63	(50 - 150)
Terphenyl-d14	72	(50 - 150)
Phenol-d5	67	(50 - 150)
2-Fluorophenol	70	(50 - 150)
2,4,6-Tribromophenol	66	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-DUP2-1414-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-019 Work Order #...: LGG231AC Matrix.....: WG
Date Sampled...: 07/14/09 11:15 Date Received..: 07/15/09
Prep Date.....: 07/15/09 Analysis Date..: 07/29/09
Prep Batch #...: 9196104
Dilution Factor: 1 Initial Wgt/Vol: 940 mL Final Wgt/Vol..: 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**2.4 J**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-DUP2-1414-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-019 Work Order #...: LGG231AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-DUP2-1414-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-019 **Work Order #...:** LGG231AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	70	(50 - 150)
2-Fluorobiphenyl	66	(50 - 150)
Terphenyl-d14	75	(50 - 150)
Phenol-d5	70	(50 - 150)
2-Fluorophenol	69	(50 - 150)
2,4,6-Tribromophenol	69	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-004C-1385-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-021 Work Order #...: LGG261AC Matrix.....: WG
Date Sampled...: 07/14/09 12:15 Date Received..: 07/15/09
Prep Date.....: 07/15/09 Analysis Date..: 07/29/09
Prep Batch #...: 9196104
Dilution Factor: 1 Initial Wgt/Vol: 940 mL Final Wgt/Vol..: 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**0.94 J**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-004C-1385-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-021 **Work Order #...:** LGG261AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-004C-1385-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-021 **Work Order #...:** LGG261AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	69	(50 - 150)
2-Fluorobiphenyl	63	(50 - 150)
Terphenyl-d14	81	(50 - 150)
Phenol-d5	67	(50 - 150)
2-Fluorophenol	66	(50 - 150)
2,4,6-Tribromophenol	69	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-DUP3-1415-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-023 **Work Order #...:** LGG281AC **Matrix.....:** WG
Date Sampled...: 07/14/09 13:15 **Date Received..:** 07/15/09
Prep Date.....: 07/16/09 **Analysis Date..:** 07/30/09
Prep Batch #...: 9197123
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.5 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-DUP3-1415-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-023 **Work Order #...:** LGG281AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propylamine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichlorobenzene	ND	1.0	ug/L	0.28
2,4,5-Trichlorophenol	ND	5.0	ug/L	0.30
2,4,6-Trichlorophenol	ND	5.0	ug/L	0.80
Hexachlorocyclopentadiene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-DUP3-1415-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-023 **Work Order #...:** LGG281AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	76	(50 - 150)
2-Fluorobiphenyl	66	(50 - 150)
Terphenyl-d14	81	(50 - 150)
Phenol-d5	76	(50 - 150)
2-Fluorophenol	69	(50 - 150)
2,4,6-Tribromophenol	74	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-006C-1387-GW

GC/MS Semivolatiles

Lot-Sample #...:	A9G150104-025	**Work Order #...:**	LGG3A1AC	**Matrix.....:**	WG
Date Sampled...:	07/14/09 14:15	**Date Received..:**	07/15/09		
Prep Date.....:	07/16/09	**Analysis Date..:**	07/30/09		
Prep Batch #...:	9197123				
Dilution Factor:	1	**Initial Wgt/Vol:**	1000 mL	**Final Wgt/Vol..:**	2 mL
		Method.....:	SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**0.95 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-006C-1387-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-025 **Work Order #...:** LGG3A1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-006C-1387-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-025 **Work Order #...:** LGG3A1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	75	(50 - 150)
2-Fluorobiphenyl	62	(50 - 150)
Terphenyl-d14	81	(50 - 150)
Phenol-d5	71	(50 - 150)
2-Fluorophenol	68	(50 - 150)
2,4,6-Tribromophenol	72	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-001C-1389-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-027 Work Order #...: LGG3D1AC Matrix.....: WG
Date Sampled...: 07/14/09 15:30 Date Received..: 07/15/09
Prep Date.....: 07/16/09 Analysis Date..: 07/30/09
Prep Batch #...: 9197123
Dilution Factor: 1 Initial Wgt/Vol: 1000 mL Final Wgt/Vol..: 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.8 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-001C-1389-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-027 **Work Order #...:** LGG3D1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-001C-1389-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-027 **Work Order #...:** LGG3D1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	78	(50 - 150)
2-Fluorobiphenyl	69	(50 - 150)
Terphenyl-d14	86	(50 - 150)
Phenol-d5	79	(50 - 150)
2-Fluorophenol	72	(50 - 150)
2,4,6-Tribromophenol	76	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-003C-1378-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-030 **Work Order #...:** LGG3H1AC **Matrix.....:** WG
Date Sampled...: 07/14/09 09:10 **Date Received..:** 07/15/09
Prep Date.....: 07/16/09 **Analysis Date..:** 07/30/09
Prep Batch #...: 9197123
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Pyrene	ND	0.20	ug/L	0.10
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**4.3 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-003C-1378-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-030 Work Order #...: LGG3H1AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dimethyl phthalate	ND	1.0	ug/L	0.29
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propylamine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
1,2,4-Trichlorobenzene	ND	1.0	ug/L	0.28
2,4,5-Trichlorophenol	ND	5.0	ug/L	0.30
2,4,6-Trichlorophenol	ND	5.0	ug/L	0.80
Hexachlorocyclopentadiene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-003C-1378-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-030 **Work Order #...:** LGG3H1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	73	(50 - 150)
2-Fluorobiphenyl	65	(50 - 150)
Terphenyl-d14	75	(50 - 150)
Phenol-d5	73	(50 - 150)
2-Fluorophenol	67	(50 - 150)
2,4,6-Tribromophenol	72	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-004C-1379-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-032 Work Order #...: LGG3K1AC Matrix.....: WG
Date Sampled...: 07/14/09 10:35 Date Received..: 07/15/09
Prep Date.....: 07/16/09 Analysis Date..: 07/30/09
Prep Batch #...: 9197123
Dilution Factor: 1 Initial Wgt/Vol: 1050 mL Final Wgt/Vol..: 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**2.9 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-004C-1379-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-032 **Work Order #...:** LGG3K1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-004C-1379-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-032 **Work Order #...:** LGG3K1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	73	(50 - 150)
2-Fluorobiphenyl	66	(50 - 150)
Terphenyl-d14	77	(50 - 150)
Phenol-d5	73	(50 - 150)
2-Fluorophenol	68	(50 - 150)
2,4,6-Tribromophenol	76	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1424-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-034 **Work Order #...:** LGG3M1AC **Matrix.....:** WQ
Date Sampled...: 07/14/09 11:30 **Date Received..:** 07/15/09
Prep Date.....: 07/16/09 **Analysis Date..:** 07/30/09
Prep Batch #...: 9197123
Dilution Factor: 1 **Initial Wgt/Vol:** 940 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**2.3 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1424-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-034 **Work Order #...:** LGG3M1AC **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1424-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-034 **Work Order #...:** LGG3M1AC **Matrix.....:** WQ

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	77	(50 - 150)
2-Fluorobiphenyl	67	(50 - 150)
Terphenyl-d14	85	(50 - 150)
Phenol-d5	75	(50 - 150)
2-Fluorophenol	72	(50 - 150)
2,4,6-Tribromophenol	65	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-007C-1388-GW

GC/MS Semivolatiles

Lot-Sample #...:	A9G150104-035	**Work Order #...:**	LGG3N1AC	**Matrix.....:**	WG
Date Sampled...:	07/14/09 13:05	**Date Received..:**	07/15/09		
Prep Date.....:	07/16/09	**Analysis Date..:**	07/30/09		
Prep Batch #...:	9197123				
Dilution Factor:	1	**Initial Wgt/Vol:**	1010 mL	**Final Wgt/Vol..:**	2 mL
		Method.....:	SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**4.1 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-007C-1388-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-035 Work Order #...: LGG3N1AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-007C-1388-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-035 **Work Order #...:** LGG3N1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	76	(50 - 150)
2-Fluorobiphenyl	67	(50 - 150)
Terphenyl-d14	83	(50 - 150)
Phenol-d5	77	(50 - 150)
2-Fluorophenol	70	(50 - 150)
2,4,6-Tribromophenol	80	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-002C-1383-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-037 **Work Order #...:** LGG3Q1AC **Matrix.....:** WG
Date Sampled...: 07/14/09 14:25 **Date Received..:** 07/15/09
Prep Date.....: 07/16/09 **Analysis Date..:** 07/30/09
Prep Batch #...: 9197123
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.0 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-005C-1386-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-039 Work Order #...: LGG3V1AC Matrix.....: WG
Date Sampled...: 07/14/09 15:40 Date Received..: 07/15/09
Prep Date.....: 07/16/09 Analysis Date..: 07/30/09
Prep Batch #...: 9197123
Dilution Factor: 1 Initial Wgt/Vol: 1050 mL Final Wgt/Vol..: 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.2 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-005C-1386-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-039 **Work Order #...:** LGG3V1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-005C-1386-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G150104-039 **Work Order #...:** LGG3V1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	70	(50 - 150)
2-Fluorobiphenyl	58	(50 - 150)
Terphenyl-d14	70	(50 - 150)
Phenol-d5	69	(50 - 150)
2-Fluorophenol	63	(50 - 150)
2,4,6-Tribromophenol	70	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A9G150104
MB Lot-Sample #: A9G150000-104
Analysis Date..: 07/23/09
Dilution Factor: 1

Work Order #...: LGG9X1AA
Prep Date.....: 07/15/09
Prep Batch #...: 9196104
Initial Wgt/Vol: 1000 mL

Matrix.....: WATER
Final Wgt/Vol..: 2 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	0.20	ug/L	SW846 8270C
Acenaphthylene	ND	0.20	ug/L	SW846 8270C
Anthracene	ND	0.20	ug/L	SW846 8270C
Benzo(a)anthracene	ND	0.20	ug/L	SW846 8270C
Benzo(b)fluoranthene	ND	0.20	ug/L	SW846 8270C
Benzo(k)fluoranthene	ND	0.20	ug/L	SW846 8270C
Benzoic acid	ND	10	ug/L	SW846 8270C
Benzo(ghi)perylene	ND	0.20	ug/L	SW846 8270C
Benzo(a)pyrene	ND	0.20	ug/L	SW846 8270C
Benzyl alcohol	ND	5.0	ug/L	SW846 8270C
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	SW846 8270C
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	SW846 8270C
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	SW846 8270C
4-Bromophenyl phenyl ether	ND	2.0	ug/L	SW846 8270C
Butyl benzyl phthalate	ND	1.0	ug/L	SW846 8270C
4-Chloroaniline	ND	2.0	ug/L	SW846 8270C
4-Chloro-3-methylphenol	ND	2.0	ug/L	SW846 8270C
2-Chloronaphthalene	ND	1.0	ug/L	SW846 8270C
2-Chlorophenol	ND	1.0	ug/L	SW846 8270C
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	SW846 8270C
Chrysene	ND	0.20	ug/L	SW846 8270C
Dibenz(a,h)anthracene	ND	0.20	ug/L	SW846 8270C
Dibenzofuran	ND	1.0	ug/L	SW846 8270C
Di-n-butyl phthalate	ND	1.0	ug/L	SW846 8270C
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8270C
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8270C
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8270C
3,3'-Dichlorobenzidine	ND	5.0	ug/L	SW846 8270C
2,4-Dichlorophenol	ND	2.0	ug/L	SW846 8270C
Diethyl phthalate	ND	1.0	ug/L	SW846 8270C
2,4-Dimethylphenol	ND	2.0	ug/L	SW846 8270C
Dimethyl phthalate	ND	1.0	ug/L	SW846 8270C
Di-n-octyl phthalate	ND	1.0	ug/L	SW846 8270C
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	SW846 8270C
2,4-Dinitrophenol	ND	5.0	ug/L	SW846 8270C

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A9G150104 **Work Order #...:** LGG9X1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,4-Dinitrotoluene	ND	5.0	ug/L	SW846 8270C
2,6-Dinitrotoluene	ND	5.0	ug/L	SW846 8270C
Fluoranthene	ND	0.20	ug/L	SW846 8270C
Fluorene	ND	0.20	ug/L	SW846 8270C
Hexachlorobenzene	ND	0.20	ug/L	SW846 8270C
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8270C
Hexachlorocyclopenta-diene	ND	10	ug/L	SW846 8270C
Hexachloroethane	ND	1.0	ug/L	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	SW846 8270C
Isophorone	ND	1.0	ug/L	SW846 8270C
2-Methylnaphthalene	ND	0.20	ug/L	SW846 8270C
2-Methylphenol	ND	1.0	ug/L	SW846 8270C
4-Methylphenol	ND	1.0	ug/L	SW846 8270C
Naphthalene	ND	0.20	ug/L	SW846 8270C
2-Nitroaniline	ND	2.0	ug/L	SW846 8270C
3-Nitroaniline	ND	2.0	ug/L	SW846 8270C
4-Nitroaniline	ND	2.0	ug/L	SW846 8270C
Nitrobenzene	ND	1.0	ug/L	SW846 8270C
2-Nitrophenol	ND	2.0	ug/L	SW846 8270C
4-Nitrophenol	ND	5.0	ug/L	SW846 8270C
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	SW846 8270C
N-Nitrosodiphenylamine	ND	1.0	ug/L	SW846 8270C
Pentachlorophenol	ND	5.0	ug/L	SW846 8270C
Phenanthrene	ND	0.20	ug/L	SW846 8270C
Phenol	ND	1.0	ug/L	SW846 8270C
Pyrene	ND	0.20	ug/L	SW846 8270C
1,2,4-Trichloro-benzene	ND	1.0	ug/L	SW846 8270C
2,4,5-Trichloro-phenol	ND	5.0	ug/L	SW846 8270C
2,4,6-Trichloro-phenol	ND	5.0	ug/L	SW846 8270C
Carbazole	ND	1.0	ug/L	SW846 8270C
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	80	(50 - 150)
2-Fluorobiphenyl	72	(50 - 150)
Terphenyl-d14	109	(50 - 150)
Phenol-d5	75	(50 - 150)
2-Fluorophenol	75	(50 - 150)

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A9G150104 **Work Order #...:** LGG9X1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,4,6-Tribromophenol	92	(50 - 150)		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A9G150104 **Work Order #...:** LGKJC1AA **Matrix.....:** WATER
MB Lot-Sample #: A9G160000-123

Prep Date.....: 07/16/09 **Final Wgt/Vol..:** 2 mL
Analysis Date..: 07/29/09 **Prep Batch #...:** 9197123
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2-Chloronaphthalene	ND	1.0	ug/L	SW846 8270C
2-Chlorophenol	ND	1.0	ug/L	SW846 8270C
Fluorene	ND	0.20	ug/L	SW846 8270C
2-Nitrophenol	ND	2.0	ug/L	SW846 8270C
4-Nitrophenol	ND	5.0	ug/L	SW846 8270C
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	SW846 8270C
N-Nitrosodiphenylamine	ND	1.0	ug/L	SW846 8270C
Pentachlorophenol	ND	5.0	ug/L	SW846 8270C
Phenanthrene	ND	0.20	ug/L	SW846 8270C
Acenaphthene	ND	0.20	ug/L	SW846 8270C
Acenaphthylene	ND	0.20	ug/L	SW846 8270C
Anthracene	ND	0.20	ug/L	SW846 8270C
Benzo(a)anthracene	ND	0.20	ug/L	SW846 8270C
Benzo(b)fluoranthene	ND	0.20	ug/L	SW846 8270C
Benzo(k)fluoranthene	ND	0.20	ug/L	SW846 8270C
Benzoic acid	ND	10	ug/L	SW846 8270C
Benzo(ghi)perylene	ND	0.20	ug/L	SW846 8270C
Benzo(a)pyrene	ND	0.20	ug/L	SW846 8270C
Benzyl alcohol	ND	5.0	ug/L	SW846 8270C
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	SW846 8270C
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	SW846 8270C
bis(2-Ethylhexyl) phthalate	**1.4 J**	10	**ug/L**	**SW846 8270C**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	SW846 8270C
Butyl benzyl phthalate	ND	1.0	ug/L	SW846 8270C
4-Chloroaniline	ND	2.0	ug/L	SW846 8270C
4-Chloro-3-methylphenol	ND	2.0	ug/L	SW846 8270C
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	SW846 8270C
Chrysene	ND	0.20	ug/L	SW846 8270C
Dibenz(a,h)anthracene	ND	0.20	ug/L	SW846 8270C
Dibenzofuran	ND	1.0	ug/L	SW846 8270C
Di-n-butyl phthalate	ND	1.0	ug/L	SW846 8270C
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8270C
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8270C
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8270C
3,3'-Dichlorobenzidine	ND	5.0	ug/L	SW846 8270C

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A9G150104 **Work Order #...:** LGKJC1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,4-Dichlorophenol	ND	2.0	ug/L	SW846 8270C
Diethyl phthalate	ND	1.0	ug/L	SW846 8270C
2,4-Dimethylphenol	ND	2.0	ug/L	SW846 8270C
Dimethyl phthalate	ND	1.0	ug/L	SW846 8270C
Di-n-octyl phthalate	ND	1.0	ug/L	SW846 8270C
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	SW846 8270C
2,4-Dinitrophenol	ND	5.0	ug/L	SW846 8270C
2,4-Dinitrotoluene	ND	5.0	ug/L	SW846 8270C
2,6-Dinitrotoluene	ND	5.0	ug/L	SW846 8270C
Fluoranthene	ND	0.20	ug/L	SW846 8270C
Hexachlorobenzene	ND	0.20	ug/L	SW846 8270C
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8270C
Hexachlorocyclopentadiene	ND	10	ug/L	SW846 8270C
Hexachloroethane	ND	1.0	ug/L	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	SW846 8270C
Isophorone	ND	1.0	ug/L	SW846 8270C
2-Methylnaphthalene	ND	0.20	ug/L	SW846 8270C
2-Methylphenol	ND	1.0	ug/L	SW846 8270C
4-Methylphenol	ND	1.0	ug/L	SW846 8270C
Naphthalene	ND	0.20	ug/L	SW846 8270C
2-Nitroaniline	ND	2.0	ug/L	SW846 8270C
3-Nitroaniline	ND	2.0	ug/L	SW846 8270C
4-Nitroaniline	ND	2.0	ug/L	SW846 8270C
Nitrobenzene	ND	1.0	ug/L	SW846 8270C
Phenol	ND	1.0	ug/L	SW846 8270C
Pyrene	ND	0.20	ug/L	SW846 8270C
1,2,4-Trichlorobenzene	ND	1.0	ug/L	SW846 8270C
2,4,5-Trichlorophenol	ND	5.0	ug/L	SW846 8270C
2,4,6-Trichlorophenol	ND	5.0	ug/L	SW846 8270C
Carbazole	ND	1.0	ug/L	SW846 8270C
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	69	(50 - 150)
2-Fluorobiphenyl	59	(50 - 150)
Terphenyl-d14	80	(50 - 150)
Phenol-d5	69	(50 - 150)
2-Fluorophenol	68	(50 - 150)

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A9G150104 **Work Order #...:** LGKJC1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,4,6-Tribromophenol	54	(50 - 150)		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G150104 Work Order #...: LGG9X1AC Matrix.....: WATER
LCS Lot-Sample#: A9G150000-104
Prep Date.....: 07/15/09 Analysis Date..: 07/23/09
Prep Batch #...: 9196104
Dilution Factor: 1 Final Wgt/Vol..: 2 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
3,3'-Dichlorobenzidine	64	(30 - 160)	SW846 8270C
3-Nitroaniline	82	(30 - 138)	SW846 8270C
1,2,4-Trichloro-benzene	56	(30 - 120)	SW846 8270C
Acenaphthene	77	(31 - 120)	SW846 8270C
2,4-Dinitrotoluene	88	(34 - 151)	SW846 8270C
Pyrene	84	(35 - 139)	SW846 8270C
N-Nitrosodi-n-propyl-amine	83	(30 - 132)	SW846 8270C
1,4-Dichlorobenzene	57	(30 - 115)	SW846 8270C
Pentachlorophenol	41	(30 - 150)	SW846 8270C
Phenol	68	(30 - 115)	SW846 8270C
2-Chlorophenol	72	(30 - 120)	SW846 8270C
4-Chloro-3-methylphenol	74	(31 - 121)	SW846 8270C
4-Nitrophenol	76	(30 - 138)	SW846 8270C
1,2-Dichlorobenzene	56	(30 - 120)	SW846 8270C
1,3-Dichlorobenzene	53	(30 - 120)	SW846 8270C
2,4,5-Trichloro-phenol	69	(36 - 135)	SW846 8270C
4-Methylphenol	71	(31 - 115)	SW846 8270C
4-Nitroaniline	82	(30 - 140)	SW846 8270C
Acenaphthylene	81	(37 - 115)	SW846 8270C
Anthracene	91	(45 - 118)	SW846 8270C
Benzo(a)anthracene	81	(43 - 138)	SW846 8270C
Benzo(a)pyrene	76	(38 - 144)	SW846 8270C
Benzo(b)fluoranthene	78	(31 - 146)	SW846 8270C
Benzo(ghi)perylene	87	(35 - 129)	SW846 8270C
Benzo(k)fluoranthene	82	(40 - 127)	SW846 8270C
bis(2-Chloroethoxy) methane	74	(30 - 115)	SW846 8270C
bis(2-Chloroethyl)-ether	72	(30 - 115)	SW846 8270C
bis(2-Chloroisopropyl) ether	65	(50 - 150)	SW846 8270C

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G150104 Work Order #...: LGG9X1AC Matrix.....: WATER
LCS Lot-Sample#: A9G150000-104

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
bis(2-Ethylhexyl) phthalate	101	(30 - 154)	SW846 8270C
2,4,6-Trichloro-phenol	70	(39 - 115)	SW846 8270C
2,4-Dichlorophenol	74	(34 - 115)	SW846 8270C
2,4-Dimethylphenol	60	(31 - 120)	SW846 8270C
2,4-Dinitrophenol	49	(29 - 146)	SW846 8270C
2,6-Dinitrotoluene	88	(43 - 122)	SW846 8270C
2-Chloronaphthalene	74	(35 - 115)	SW846 8270C
2-Methylnaphthalene	73	(32 - 115)	SW846 8270C
2-Methylphenol	71	(30 - 116)	SW846 8270C
2-Nitroaniline	85	(36 - 140)	SW846 8270C
2-Nitrophenol	72	(33 - 115)	SW846 8270C
4,6-Dinitro-2-methylphenol	67	(42 - 144)	SW846 8270C
4-Bromophenyl phenyl ether	93	(43 - 118)	SW846 8270C
4-Chloroaniline	68	(30 - 133)	SW846 8270C
4-Chlorophenyl phenyl ether	77	(40 - 115)	SW846 8270C
Butyl benzyl phthalate	96	(37 - 136)	SW846 8270C
Carbazole	89	(49 - 126)	SW846 8270C
Chrysene	80	(42 - 142)	SW846 8270C
Dibenz(a,h)anthracene	89	(38 - 130)	SW846 8270C
Dibenzofuran	82	(40 - 115)	SW846 8270C
Diethyl phthalate	91	(43 - 132)	SW846 8270C
Dimethyl phthalate	87	(42 - 116)	SW846 8270C
Di-n-octyl phthalate	94	(36 - 151)	SW846 8270C
Fluoranthene	91	(47 - 132)	SW846 8270C
Fluorene	83	(41 - 115)	SW846 8270C
Hexachlorobenzene	87	(42 - 123)	SW846 8270C
Hexachlorobutadiene	44	(30 - 120)	SW846 8270C
Hexachloroethane	44	(30 - 120)	SW846 8270C
Isophorone	81	(33 - 115)	SW846 8270C
Naphthalene	69	(30 - 119)	SW846 8270C
Nitrobenzene	82	(31 - 115)	SW846 8270C
N-Nitrosodiphenylamine	79	(35 - 124)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G150104 **Work Order #...:** LGG9X1AC **Matrix.....:** WATER
LCS Lot-Sample#: A9G150000-104

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Phenanthrene	**86**	**(45 - 117)**	**SW846 8270C**
Indeno(1,2,3-cd)pyrene	**88**	**(37 - 130)**	**SW846 8270C**
Di-n-butyl phthalate	**96**	**(46 - 123)**	**SW846 8270C**
Hexachlorocyclopenta-diene	**43**	**(30 - 115)**	**SW846 8270C**
Benzoic acid	**61**	**(30 - 136)**	**SW846 8270C**
Benzyl alcohol	**72**	**(29 - 115)**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	79	(50 - 150)
2-Fluorobiphenyl	75	(50 - 150)
Terphenyl-d14	101	(50 - 150)
Phenol-d5	75	(50 - 150)
2-Fluorophenol	72	(50 - 150)
2,4,6-Tribromophenol	101	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G150104 Work Order #...: LGKJC1AC Matrix.....: WATER
LCS Lot-Sample#: A9G160000-123
Prep Date.....: 07/16/09 Analysis Date..: 07/29/09
Prep Batch #...: 9197123
Dilution Factor: 1 Final Wgt/Vol..: 2 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,2,4-Trichloro-benzene	63	(30 - 120)	SW846 8270C
Acenaphthene	88	(31 - 120)	SW846 8270C
2,4-Dinitrotoluene	101	(34 - 151)	SW846 8270C
Pyrene	91	(35 - 139)	SW846 8270C
N-Nitrosodi-n-propyl-amine	96	(30 - 132)	SW846 8270C
1,4-Dichlorobenzene	66	(30 - 115)	SW846 8270C
Pentachlorophenol	56	(30 - 150)	SW846 8270C
Phenol	88	(30 - 115)	SW846 8270C
2-Chlorophenol	87	(30 - 120)	SW846 8270C
4-Chloro-3-methylphenol	89	(31 - 121)	SW846 8270C
4-Nitrophenol	80	(30 - 138)	SW846 8270C
1,2-Dichlorobenzene	67	(30 - 120)	SW846 8270C
1,3-Dichlorobenzene	59	(30 - 120)	SW846 8270C
2,4,5-Trichloro-phenol	87	(36 - 135)	SW846 8270C
4-Methylphenol	89	(31 - 115)	SW846 8270C
4-Nitroaniline	95	(30 - 140)	SW846 8270C
Acenaphthylene	96	(37 - 115)	SW846 8270C
Anthracene	96	(45 - 118)	SW846 8270C
Benzo(a)anthracene	91	(43 - 138)	SW846 8270C
Benzo(a)pyrene	86	(38 - 144)	SW846 8270C
Benzo(b)fluoranthene	90	(31 - 146)	SW846 8270C
Benzo(ghi)perylene	96	(35 - 129)	SW846 8270C
Benzo(k)fluoranthene	96	(40 - 127)	SW846 8270C
bis(2-Chloroethoxy) methane	92	(30 - 115)	SW846 8270C
bis(2-Chloroethyl)-ether	90	(30 - 115)	SW846 8270C
bis(2-Chloroisopropyl) ether	94	(50 - 150)	SW846 8270C
bis(2-Ethylhexyl) phthalate	104	(30 - 154)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G150104 Work Order #...: LGKJC1AC Matrix.....: WATER
LCS Lot-Sample#: A9G160000-123

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
2,4,6-Trichloro-phenol	85	(39 - 115)	SW846 8270C
2,4-Dichlorophenol	87	(34 - 115)	SW846 8270C
2,4-Dimethylphenol	71	(31 - 120)	SW846 8270C
2,4-Dinitrophenol	71	(29 - 146)	SW846 8270C
2,6-Dinitrotoluene	100	(43 - 122)	SW846 8270C
2-Chloronaphthalene	82	(35 - 115)	SW846 8270C
2-Methylnaphthalene	84	(32 - 115)	SW846 8270C
2-Methylphenol	84	(30 - 116)	SW846 8270C
2-Nitroaniline	95	(36 - 140)	SW846 8270C
2-Nitrophenol	89	(33 - 115)	SW846 8270C
3,3'-Dichlorobenzidine	61	(30 - 160)	SW846 8270C
3-Nitroaniline	91	(30 - 138)	SW846 8270C
4,6-Dinitro-2-methylphenol	77	(42 - 144)	SW846 8270C
4-Bromophenyl phenyl ether	96	(43 - 118)	SW846 8270C
4-Chloroaniline	77	(30 - 133)	SW846 8270C
4-Chlorophenyl phenyl ether	89	(40 - 115)	SW846 8270C
Butyl benzyl phthalate	96	(37 - 136)	SW846 8270C
Carbazole	96	(49 - 126)	SW846 8270C
Chrysene	94	(42 - 142)	SW846 8270C
Dibenz(a,h)anthracene	97	(38 - 130)	SW846 8270C
Dibenzofuran	92	(40 - 115)	SW846 8270C
Diethyl phthalate	97	(43 - 132)	SW846 8270C
Dimethyl phthalate	95	(42 - 116)	SW846 8270C
Di-n-octyl phthalate	108	(36 - 151)	SW846 8270C
Fluoranthene	100	(47 - 132)	SW846 8270C
Fluorene	90	(41 - 115)	SW846 8270C
Hexachlorobenzene	89	(42 - 123)	SW846 8270C
Hexachlorobutadiene	47	(30 - 120)	SW846 8270C
Hexachloroethane	48	(30 - 120)	SW846 8270C
Isophorone	99	(33 - 115)	SW846 8270C
Naphthalene	83	(30 - 119)	SW846 8270C
Nitrobenzene	94	(31 - 115)	SW846 8270C
N-Nitrosodiphenylamine	87	(35 - 124)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G150104 **Work Order #...:** LGKJC1AC **Matrix.....:** WATER
LCS Lot-Sample#: A9G160000-123

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Phenanthrene	**91**	**(45 - 117)**	**SW846 8270C**
Indeno(1,2,3-cd)pyrene	**97**	**(37 - 130)**	**SW846 8270C**
Di-n-butyl phthalate	**106**	**(46 - 123)**	**SW846 8270C**
Hexachlorocyclopenta-diene	**53**	**(30 - 115)**	**SW846 8270C**
Benzoic acid	**80**	**(30 - 136)**	**SW846 8270C**
Benzyl alcohol	**95**	**(29 - 115)**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	79	(50 - 150)
2-Fluorobiphenyl	71	(50 - 150)
Terphenyl-d14	83	(50 - 150)
Phenol-d5	80	(50 - 150)
2-Fluorophenol	80	(50 - 150)
2,4,6-Tribromophenol	80	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G150104 Work Order #...: LGG2H1AF-MS Matrix.....: WG
MS Lot-Sample #: A9G150104-004 LGG2H1AG-MSD
Date Sampled...: 07/14/09 10:20 Date Received..: 07/15/09
Prep Date.....: 07/15/09 Analysis Date..: 07/29/09
Prep Batch #...: 9196104
Dilution Factor: 1 Initial Wgt/Vol: 505 mL Final Wgt/Vol..: 2 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,2,4-Trichloro-benzene	60	(45 - 135)			SW846 8270C
	62	(45 - 135)	2.3	(0-40)	SW846 8270C
Acenaphthene	71	(45 - 135)			SW846 8270C
	74	(45 - 135)	3.6	(0-40)	SW846 8270C
2,4-Dinitrotoluene	80	(45 - 135)			SW846 8270C
	87	(45 - 135)	9.0	(0-40)	SW846 8270C
Pyrene	72	(45 - 135)			SW846 8270C
	79	(45 - 135)	9.0	(0-40)	SW846 8270C
N-Nitrosodi-n-propyl-amine	79	(45 - 135)			SW846 8270C
	79	(45 - 135)	0.24	(0-40)	SW846 8270C
1,4-Dichlorobenzene	63	(45 - 135)			SW846 8270C
	66	(45 - 135)	4.1	(0-40)	SW846 8270C
Pentachlorophenol	39 a	(45 - 135)			SW846 8270C
	54	(45 - 135)	33	(0-40)	SW846 8270C
Phenol	69	(45 - 135)			SW846 8270C
	73	(45 - 135)	5.2	(0-40)	SW846 8270C
2-Chlorophenol	70	(45 - 135)			SW846 8270C
	73	(45 - 135)	4.4	(0-40)	SW846 8270C
4-Chloro-3-methylphenol	68	(45 - 135)			SW846 8270C
	74	(45 - 135)	7.7	(0-40)	SW846 8270C
4-Nitrophenol	62	(45 - 135)			SW846 8270C
	69	(45 - 135)	11	(0-40)	SW846 8270C
Acenaphthylene	78	(45 - 135)			SW846 8270C
	81	(45 - 135)	4.3	(0-40)	SW846 8270C
Anthracene	75	(45 - 135)			SW846 8270C
	81	(45 - 135)	7.7	(0-40)	SW846 8270C
Benzo(a)anthracene	73	(45 - 135)			SW846 8270C
	82	(45 - 135)	12	(0-40)	SW846 8270C
Benzo(b)fluoranthene	69	(45 - 135)			SW846 8270C
	79	(45 - 135)	14	(0-40)	SW846 8270C
Benzo(k)fluoranthene	76	(45 - 135)			SW846 8270C
	79	(45 - 135)	3.9	(0-40)	SW846 8270C
Benzo(ghi)perylene	75	(45 - 135)			SW846 8270C
	81	(45 - 135)	8.5	(0-40)	SW846 8270C
Benzo(a)pyrene	67	(45 - 135)			SW846 8270C
	73	(45 - 135)	7.6	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G150104 Work Order #...: LGG2H1AF-MS Matrix.....: WG
MS Lot-Sample #: A9G150104-004 LGG2H1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
bis(2-Chloroethoxy) methane	74	(45 - 135)			SW846 8270C
	77	(45 - 135)	3.4	(0-40)	SW846 8270C
bis(2-Chloroethyl)-ether	78	(45 - 135)			SW846 8270C
	77	(45 - 135)	1.2	(0-40)	SW846 8270C
bis(2-Chloroisopropyl) ether	81	(45 - 135)			SW846 8270C
	79	(45 - 135)	2.8	(0-40)	SW846 8270C
bis(2-Ethylhexyl) phthalate	79	(45 - 135)			SW846 8270C
	91	(45 - 135)	13	(0-40)	SW846 8270C
4-Bromophenyl phenyl ether	76	(45 - 135)			SW846 8270C
	80	(45 - 135)	5.4	(0-40)	SW846 8270C
Butyl benzyl phthalate	78	(45 - 135)			SW846 8270C
	85	(45 - 135)	9.0	(0-40)	SW846 8270C
Carbazole	74	(45 - 135)			SW846 8270C
	82	(45 - 135)	10	(0-40)	SW846 8270C
4-Chloroaniline	62	(45 - 135)			SW846 8270C
	63	(45 - 135)	2.2	(0-40)	SW846 8270C
2-Chloronaphthalene	68	(45 - 135)			SW846 8270C
	70	(45 - 135)	3.8	(0-40)	SW846 8270C
4-Chlorophenyl phenyl ether	71	(45 - 135)			SW846 8270C
	75	(45 - 135)	5.2	(0-40)	SW846 8270C
Chrysene	76	(45 - 135)			SW846 8270C
	81	(45 - 135)	6.6	(0-40)	SW846 8270C
Dibenz(a,h)anthracene	75	(45 - 135)			SW846 8270C
	81	(45 - 135)	7.4	(0-40)	SW846 8270C
Dibenzofuran	74	(45 - 135)			SW846 8270C
	78	(45 - 135)	4.5	(0-40)	SW846 8270C
Di-n-butyl phthalate	85	(45 - 135)			SW846 8270C
	93	(45 - 135)	9.7	(0-40)	SW846 8270C
1,2-Dichlorobenzene	65	(45 - 135)			SW846 8270C
	65	(45 - 135)	0.65	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G150104 Work Order #...: LGG2H1AF-MS Matrix.....: WG
MS Lot-Sample #: A9G150104-004 LGG2H1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3-Dichlorobenzene	59	(45 - 135)			SW846 8270C
	60	(45 - 135)	1.1	(0-40)	SW846 8270C
3,3'-Dichlorobenzidine	46	(45 - 135)			SW846 8270C
	51	(45 - 135)	10	(0-40)	SW846 8270C
2,4-Dichlorophenol	69	(45 - 135)			SW846 8270C
	73	(45 - 135)	4.8	(0-40)	SW846 8270C
Diethyl phthalate	77	(45 - 135)			SW846 8270C
	82	(45 - 135)	6.2	(0-40)	SW846 8270C
2,4-Dimethylphenol	57	(45 - 135)			SW846 8270C
	62	(45 - 135)	7.5	(0-40)	SW846 8270C
Dimethyl phthalate	75	(45 - 135)			SW846 8270C
	80	(45 - 135)	5.8	(0-40)	SW846 8270C
4,6-Dinitro-2-methylphenol	58	(45 - 135)			SW846 8270C
	66	(45 - 135)	14	(0-40)	SW846 8270C
2,4-Dinitrophenol	59	(45 - 135)			SW846 8270C
	66	(45 - 135)	12	(0-40)	SW846 8270C
2,6-Dinitrotoluene	80	(45 - 135)			SW846 8270C
	85	(45 - 135)	6.1	(0-40)	SW846 8270C
Di-n-octyl phthalate	84	(45 - 135)			SW846 8270C
	91	(45 - 135)	8.2	(0-40)	SW846 8270C
Fluoranthene	77	(45 - 135)			SW846 8270C
	84	(45 - 135)	8.5	(0-40)	SW846 8270C
Fluorene	72	(45 - 135)			SW846 8270C
	77	(45 - 135)	5.5	(0-40)	SW846 8270C
Hexachlorobenzene	70	(45 - 135)			SW846 8270C
	76	(45 - 135)	8.2	(0-40)	SW846 8270C
Hexachlorobutadiene	51	(45 - 135)			SW846 8270C
	52	(45 - 135)	2.3	(0-40)	SW846 8270C
Hexachlorocyclopentadiene	49	(45 - 135)			SW846 8270C
	52	(45 - 135)	5.4	(0-40)	SW846 8270C
Hexachloroethane	54	(45 - 135)			SW846 8270C
	54	(45 - 135)	0.26	(0-40)	SW846 8270C
Indeno(1,2,3-cd)pyrene	75	(45 - 135)			SW846 8270C
	82	(45 - 135)	8.0	(0-40)	SW846 8270C
Isophorone	79	(45 - 135)			SW846 8270C
	82	(45 - 135)	3.5	(0-40)	SW846 8270C
2-Methylnaphthalene	72	(45 - 135)			SW846 8270C
	74	(45 - 135)	2.9	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G150104 **Work Order #...:** LGG2H1AF-MS **Matrix.....:** WG
MS Lot-Sample #: A9G150104-004 LGG2H1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Methylphenol	68	(45 - 135)			SW846 8270C
	70	(45 - 135)	4.0	(0-40)	SW846 8270C
4-Methylphenol	73	(45 - 135)			SW846 8270C
	73	(45 - 135)	0.34	(0-40)	SW846 8270C
Naphthalene	71	(45 - 135)			SW846 8270C
	73	(45 - 135)	3.7	(0-40)	SW846 8270C
2-Nitroaniline	75	(45 - 135)			SW846 8270C
	80	(45 - 135)	5.6	(0-40)	SW846 8270C
3-Nitroaniline	70	(45 - 135)			SW846 8270C
	77	(45 - 135)	9.2	(0-50)	SW846 8270C
4-Nitroaniline	74	(45 - 135)			SW846 8270C
	82	(45 - 135)	9.8	(0-40)	SW846 8270C
Nitrobenzene	76	(45 - 135)			SW846 8270C
	79	(45 - 135)	4.2	(0-40)	SW846 8270C
2-Nitrophenol	71	(45 - 135)			SW846 8270C
	75	(45 - 135)	5.4	(0-40)	SW846 8270C
N-Nitrosodiphenylamine	68	(45 - 135)			SW846 8270C
	74	(45 - 135)	8.0	(0-40)	SW846 8270C
Phenanthrene	72	(45 - 135)			SW846 8270C
	78	(45 - 135)	8.2	(0-40)	SW846 8270C
2,4,5-Trichloro-phenol	63	(45 - 135)			SW846 8270C
	74	(45 - 135)	17	(0-40)	SW846 8270C
2,4,6-Trichloro-phenol	68	(45 - 135)			SW846 8270C
	71	(45 - 135)	3.8	(0-40)	SW846 8270C
Benzoic acid	70	(45 - 135)			SW846 8270C
	81	(45 - 135)	14	(0-40)	SW846 8270C
Benzyl alcohol	76	(45 - 135)			SW846 8270C
	79	(45 - 135)	3.5	(0-40)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	75	(50 - 150)
	77	(50 - 150)
2-Fluorobiphenyl	69	(50 - 150)
	71	(50 - 150)
Terphenyl-d14	76	(50 - 150)
	85	(50 - 150)

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G150104 **Work Order #...:** LGG2H1AF-MS **Matrix.....:** WG
MS Lot-Sample #: A9G150104-004 LGG2H1AG-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Phenol-d5	74	(50 - 150)
	77	(50 - 150)
2-Fluorophenol	73	(50 - 150)
	78	(50 - 150)
2,4,6-Tribromophenol	74	(50 - 150)
	80	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G150104 Work Order #...: LGG2M1AF-MS Matrix.....: WG
MS Lot-Sample #: A9G150104-008 LGG2M1AG-MSD
Date Sampled...: 07/14/09 13:50 Date Received..: 07/15/09
Prep Date.....: 07/16/09 Analysis Date..: 07/30/09
Prep Batch #...: 9197123
Dilution Factor: 1 Initial Wgt/Vol: 525 mL Final Wgt/Vol..: 2 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,2,4-Trichloro-benzene	56	(45 - 135)			SW846 8270C
	53	(45 - 135)	5.2	(0-40)	SW846 8270C
Acenaphthene	80	(45 - 135)			SW846 8270C
	75	(45 - 135)	5.8	(0-40)	SW846 8270C
2,4-Dinitrotoluene	94	(45 - 135)			SW846 8270C
	88	(45 - 135)	7.1	(0-40)	SW846 8270C
Pyrene	82	(45 - 135)			SW846 8270C
	78	(45 - 135)	5.8	(0-40)	SW846 8270C
N-Nitrosodi-n-propyl-amine	95	(45 - 135)			SW846 8270C
	88	(45 - 135)	8.0	(0-40)	SW846 8270C
1,4-Dichlorobenzene	59	(45 - 135)			SW846 8270C
	57	(45 - 135)	3.2	(0-40)	SW846 8270C
Pentachlorophenol	64	(45 - 135)			SW846 8270C
	56	(45 - 135)	15	(0-40)	SW846 8270C
Phenol	85	(45 - 135)			SW846 8270C
	79	(45 - 135)	7.0	(0-40)	SW846 8270C
2-Chlorophenol	83	(45 - 135)			SW846 8270C
	78	(45 - 135)	6.6	(0-40)	SW846 8270C
4-Chloro-3-methylphenol	83	(45 - 135)			SW846 8270C
	80	(45 - 135)	4.6	(0-40)	SW846 8270C
4-Nitrophenol	85	(45 - 135)			SW846 8270C
	77	(45 - 135)	9.5	(0-40)	SW846 8270C
Acenaphthylene	87	(45 - 135)			SW846 8270C
	83	(45 - 135)	5.1	(0-40)	SW846 8270C
Anthracene	86	(45 - 135)			SW846 8270C
	80	(45 - 135)	6.4	(0-40)	SW846 8270C
Benzo(a)anthracene	83	(45 - 135)			SW846 8270C
	78	(45 - 135)	6.1	(0-40)	SW846 8270C
Benzo(b)fluoranthene	79	(45 - 135)			SW846 8270C
	78	(45 - 135)	1.2	(0-40)	SW846 8270C
Benzo(k)fluoranthene	93	(45 - 135)			SW846 8270C
	83	(45 - 135)	11	(0-40)	SW846 8270C
Benzo(ghi)perylene	85	(45 - 135)			SW846 8270C
	82	(45 - 135)	3.4	(0-40)	SW846 8270C
Benzo(a)pyrene	79	(45 - 135)			SW846 8270C
	75	(45 - 135)	5.1	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G150104 Work Order #...: LGG2M1AF-MS Matrix.....: WG
MS Lot-Sample #: A9G150104-008 LGG2M1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
bis(2-Chloroethoxy) methane	84	(45 - 135)			SW846 8270C
	80	(45 - 135)	5.0	(0-40)	SW846 8270C
bis(2-Chloroethyl)-ether	81	(45 - 135)			SW846 8270C
	78	(45 - 135)	4.0	(0-40)	SW846 8270C
bis(2-Chloroisopropyl) ether	96	(45 - 135)			SW846 8270C
	88	(45 - 135)	8.8	(0-40)	SW846 8270C
bis(2-Ethylhexyl) phthalate	102	(45 - 135)			SW846 8270C
	85	(45 - 135)	17	(0-40)	SW846 8270C
4-Bromophenyl phenyl ether	84	(45 - 135)			SW846 8270C
	80	(45 - 135)	4.7	(0-40)	SW846 8270C
Butyl benzyl phthalate	91	(45 - 135)			SW846 8270C
	85	(45 - 135)	7.8	(0-40)	SW846 8270C
Carbazole	87	(45 - 135)			SW846 8270C
	81	(45 - 135)	6.9	(0-40)	SW846 8270C
4-Chloroaniline	79	(45 - 135)			SW846 8270C
	76	(45 - 135)	3.8	(0-40)	SW846 8270C
2-Chloronaphthalene	74	(45 - 135)			SW846 8270C
	70	(45 - 135)	5.7	(0-40)	SW846 8270C
4-Chlorophenyl phenyl ether	83	(45 - 135)			SW846 8270C
	77	(45 - 135)	6.5	(0-40)	SW846 8270C
Chrysene	85	(45 - 135)			SW846 8270C
	81	(45 - 135)	4.9	(0-40)	SW846 8270C
Dibenz(a,h)anthracene	88	(45 - 135)			SW846 8270C
	84	(45 - 135)	4.6	(0-40)	SW846 8270C
Dibenzofuran	84	(45 - 135)			SW846 8270C
	79	(45 - 135)	6.4	(0-40)	SW846 8270C
Di-n-butyl phthalate	102	(45 - 135)			SW846 8270C
	95	(45 - 135)	7.0	(0-40)	SW846 8270C
1,2-Dichlorobenzene	62	(45 - 135)			SW846 8270C
	59	(45 - 135)	4.6	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G150104 Work Order #...: LGG2M1AF-MS Matrix.....: WG
MS Lot-Sample #: A9G150104-008 LGG2M1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3-Dichlorobenzene	53	(45 - 135)			SW846 8270C
	52	(45 - 135)	2.9	(0-40)	SW846 8270C
3,3'-Dichlorobenzidine	50	(45 - 135)			SW846 8270C
	45	(45 - 135)	11	(0-40)	SW846 8270C
2,4-Dichlorophenol	82	(45 - 135)			SW846 8270C
	78	(45 - 135)	5.3	(0-40)	SW846 8270C
Diethyl phthalate	90	(45 - 135)			SW846 8270C
	84	(45 - 135)	6.6	(0-40)	SW846 8270C
2,4-Dimethylphenol	68	(45 - 135)			SW846 8270C
	65	(45 - 135)	4.0	(0-40)	SW846 8270C
Dimethyl phthalate	87	(45 - 135)			SW846 8270C
	82	(45 - 135)	5.8	(0-40)	SW846 8270C
4,6-Dinitro-2-methylphenol	78	(45 - 135)			SW846 8270C
	72	(45 - 135)	7.6	(0-40)	SW846 8270C
2,4-Dinitrophenol	83	(45 - 135)			SW846 8270C
	77	(45 - 135)	7.3	(0-40)	SW846 8270C
2,6-Dinitrotoluene	92	(45 - 135)			SW846 8270C
	87	(45 - 135)	5.5	(0-40)	SW846 8270C
Di-n-octyl phthalate	101	(45 - 135)			SW846 8270C
	96	(45 - 135)	5.2	(0-40)	SW846 8270C
Fluoranthene	92	(45 - 135)			SW846 8270C
	85	(45 - 135)	7.1	(0-40)	SW846 8270C
Fluorene	84	(45 - 135)			SW846 8270C
	79	(45 - 135)	6.2	(0-40)	SW846 8270C
Hexachlorobenzene	80	(45 - 135)			SW846 8270C
	75	(45 - 135)	6.5	(0-40)	SW846 8270C
Hexachlorobutadiene	43 a	(45 - 135)			SW846 8270C
	42 a	(45 - 135)	2.8	(0-40)	SW846 8270C
Hexachlorocyclopentadiene	47	(45 - 135)			SW846 8270C
	42 a	(45 - 135)	12	(0-40)	SW846 8270C
Hexachloroethane	44 a	(45 - 135)			SW846 8270C
	43 a	(45 - 135)	0.42	(0-40)	SW846 8270C
Indeno(1,2,3-cd)pyrene	87	(45 - 135)			SW846 8270C
	84	(45 - 135)	3.3	(0-40)	SW846 8270C
Isophorone	92	(45 - 135)			SW846 8270C
	88	(45 - 135)	4.4	(0-40)	SW846 8270C
2-Methylnaphthalene	76	(45 - 135)			SW846 8270C
	72	(45 - 135)	6.2	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G150104 **Work Order #...:** LGG2M1AF-MS **Matrix.....:** WG
MS Lot-Sample #: A9G150104-008 LGG2M1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Methylphenol	81	(45 - 135)			SW846 8270C
	75	(45 - 135)	7.6	(0-40)	SW846 8270C
4-Methylphenol	86	(45 - 135)			SW846 8270C
	79	(45 - 135)	8.6	(0-40)	SW846 8270C
Naphthalene	75	(45 - 135)			SW846 8270C
	72	(45 - 135)	4.8	(0-40)	SW846 8270C
2-Nitroaniline	92	(45 - 135)			SW846 8270C
	87	(45 - 135)	5.4	(0-40)	SW846 8270C
3-Nitroaniline	86	(45 - 135)			SW846 8270C
	81	(45 - 135)	6.2	(0-50)	SW846 8270C
4-Nitroaniline	90	(45 - 135)			SW846 8270C
	85	(45 - 135)	6.5	(0-40)	SW846 8270C
Nitrobenzene	87	(45 - 135)			SW846 8270C
	83	(45 - 135)	4.0	(0-40)	SW846 8270C
2-Nitrophenol	86	(45 - 135)			SW846 8270C
	82	(45 - 135)	4.6	(0-40)	SW846 8270C
N-Nitrosodiphenylamine	74	(45 - 135)			SW846 8270C
	70	(45 - 135)	5.5	(0-40)	SW846 8270C
Phenanthrene	81	(45 - 135)			SW846 8270C
	77	(45 - 135)	5.8	(0-40)	SW846 8270C
2,4,5-Trichloro-phenol	77	(45 - 135)			SW846 8270C
	78	(45 - 135)	0.83	(0-40)	SW846 8270C
2,4,6-Trichloro-phenol	82	(45 - 135)			SW846 8270C
	77	(45 - 135)	6.4	(0-40)	SW846 8270C
Benzoic acid	90	(45 - 135)			SW846 8270C
	83	(45 - 135)	6.9	(0-40)	SW846 8270C
Benzyl alcohol	93	(45 - 135)			SW846 8270C
	85	(45 - 135)	9.3	(0-40)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	75	(50 - 150)
	77	(50 - 150)
2-Fluorobiphenyl	65	(50 - 150)
	64	(50 - 150)
Terphenyl-d14	78	(50 - 150)
	77	(50 - 150)

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G150104 **Work Order #...:** LGG2M1AF-MS **Matrix.....:** WG
MS Lot-Sample #: A9G150104-008 LGG2M1AG-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Phenol-d5	78	(50 - 150)
	78	(50 - 150)
2-Fluorophenol	75	(50 - 150)
	77	(50 - 150)
2,4,6-Tribromophenol	79	(50 - 150)
	78	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

PESTICIDE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 27, 2009

SDG: A9G150104 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.1- 5.4 °C.	QAPP Table 4-2, NELAC
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-5
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-5
7. Was a DDT standard analyzed every 12 hours? Was the DDT %breakdown < 15%?	✓				LCG Table 4 >15%=J/R
8. Was an endrin standard analyzed every 12 hours? Was endrin %breakdown <15%?	✓				LCG Table 4 >15%=J/R
9. Does the initial calibration curve consist of 5 concentration levels?	✓			Instrument A2HP3 7/07/09, 7/17/09 stds = 0.05, 0.25, 0.50, 1.0, 2.5, 5.0, 7.5, 10.0, 12.5 ng on column	LCG Table 4 R
10. Were the %RSDs for each analyte ≤ 20%? OR was the average %RSD ≤ 20% with the r^2 >0.990?	✓				LCG Table 4 RSD>20% or r<0.99=J/R
11. Was a blank run prior to the initial calibration?			✓	No data provided to evaluate.	
12. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓			7/18/09	LCG Table 4 R
13. Was a MRL Verification performed at the beginning and end of the sequence or every 12 hours with results 70-130%?	✓				LCG Table 4 >130%=J; 65-70%%=J/UJ; <65%=J/R
14. Was a second source (ICV) verification analyzed after the ICAL? Were results 85-115%?	✓			7/20/09@1308	LCG Table 4 >115%=J; 80-85%=J/UJ; <80%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 27, 2009

SDG: A9G150104 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
15. Was a CCV run every 12 hours?	✓				LCG Table 4
16. Was the %D for all target analytes ≤15%? OR was the average %D ≤ 15% with no individual analyte >30%?		✓		The avg %D for the tox CCV analyzed on 7/20/09 @1442 and on the primary column was above limits at 20.8%. No qualifications were made as there were no detected toxaphene concentrations. Documentation provided in SDG A9G140103.	LCG Table 4 D>30% (neg) =J/R D>30% (pos) = J
17. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 4
18. Were target analytes < ½ the MRL?	✓				LCG Table 4 <5x=B
20. Was a field blank collected and analyzed?	✓			FWGEQUIPRinse2-1424-GW	
20. Were target analytes in the field blank analyses (equipment) <1/2 the MRL?	✓				<5x =B
21. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 4
22. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR.	LCG Appendix C >UL=J; 30%-LL=J/UJ; <30%=J/R
23. Was a MS/MSD pair prepared with each batch?	✓				LCG Table 4
24. Was the MS/MSD parent a Ravenna sample?	✓			Sample FWGLL8mw-002c-1377-GW and FWGLL9mw-003c-1384-GW were the parent MS/MSD samples from this SDG.	
25. Were MS/MSD recoveries 40-140% and RPD ≤20%?	✓			Checked by ADR	*Was QAPP Table 3-2,* Pj
26. Were surrogate recoveries 50-150%?		✓		The surrogate, DCB, recovered below control limits in all samples with the exception of FWGLL9mw-001c-1382-GW, FWGLL9mw-006c-1387-GW, FWGLL10mw-001c-1389-GW, FWGEQUIPRinse2-1424-GW and FWGLL9mw-002c-1383-GW. The associated results were qualified as estimated, "UJ".	LCG Table 4 >150%=J; 10% -50%=J/UJ; <10%=J/R
27. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓			Sample FWGLL8mw-DUP2-1414-GW was the field duplicate for sample FWGLL8mw-005c-1380-GW and FWGLL9mw-DUP3-1415-GW a field duplicate for sample FWGLL9mw-004c-1385-GW.	QAPP Table 3-2 RPD >30=J
28. Were all positive results verified by a second column confirmation? Were the RPDs ≤ 40?	✓			Only detected concentrations above the RL were evaluated. The confirmation analysis for the detected beta-BHC in sample FWGLL9mw-006c-1387-GW was above 40%. The beta-BHC result for FWGLL9mw-006c-1387-GW was qualified as estimated, "J".	LCG Table 4 >40 RPD=J

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 27, 2009

SDG: A9G150104 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
29. Were reported sample concentrations within calibration range?	✓				
30. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
31. Were lab comments included in report? If yes, summarize contents.	✓			See narrative.	

References:

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 4 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-001C-1376-GW

GC Semivolatiles

Lot-Sample #...:	A9G150104-002	**Work Order #...:**	LGG2D1AD	**Matrix.....:**	WG
Date Sampled...:	07/14/09 09:15	**Date Received..:**	07/15/09		
Prep Date.....:	07/15/09	**Analysis Date..:**	07/21/09		
Prep Batch #...:	9196096				
Dilution Factor:	1	**Initial Wgt/Vol:**	1010 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8081A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	106	(50 - 150)
Decachlorobiphenyl	26 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-002C-1377-GW

GC Semivolatiles

Lot-Sample #...: A9G150104-004 **Work Order #...:** LGG2H1AH **Matrix.....:** WG
Date Sampled...: 07/14/09 10:20 **Date Received..:** 07/15/09
Prep Date.....: 07/15/09 **Analysis Date..:** 07/21/09
Prep Batch #...: 9196096
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	93	(50 - 150)
Decachlorobiphenyl	41 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-001C-1382-GW

GC Semivolatiles

Lot-Sample #...:	A9G150104-006	**Work Order #...:**	LGG2K1AD	**Matrix.....:**	WG
Date Sampled...:	07/14/09 12:35	**Date Received..:**	07/15/09		
Prep Date.....:	07/15/09	**Analysis Date..:**	07/22/09		
Prep Batch #...:	9196096				
Dilution Factor:	1	**Initial Wgt/Vol:**	990 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8081A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	90	(50 - 150)
Decachlorobiphenyl	72	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-003C-1384-GW

GC Semivolatiles

Lot-Sample #...: A9G150104-008 **Work Order #...:** LGG2M1AH **Matrix.....:** WG
Date Sampled...: 07/14/09 13:50 **Date Received..:** 07/15/09
Prep Date.....: 07/15/09 **Analysis Date..:** 07/21/09
Prep Batch #...: 9196098
Dilution Factor: 1 **Initial Wgt/Vol:** 1010 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	**0.014 J**	**0.030**	**ug/L**	**0.0084**
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	96	(50 - 150)
Decachlorobiphenyl	38 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-003C-1391-GW

GC Semivolatiles

Lot-Sample #...: A9G150104-010 **Work Order #...:** LGG2P1AD **Matrix.....:** WG
Date Sampled...: 07/14/09 15:55 **Date Received..:** 07/15/09
Prep Date.....: 07/15/09 **Analysis Date..:** 07/22/09
Prep Batch #...: 9196096
Dilution Factor: 1 **Initial Wgt/Vol:** 1010 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	87	(50 - 150)
Decachlorobiphenyl	42 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-002C-1390-GW

GC Semivolatiles

Lot-Sample #...: A9G150104-012 **Work Order #...:** LGG2R1AD **Matrix.....:** WG
Date Sampled...: 07/14/09 17:00 **Date Received..:** 07/15/09
Prep Date.....: 07/15/09 **Analysis Date..:** 07/22/09
Prep Batch #...: 9196096
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	87	(50 - 150)
Decachlorobiphenyl	35 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-006C-1381-GW

GC Semivolatiles

Lot-Sample #...:	A9G150104-015	**Work Order #...:**	LGG2W1AD	**Matrix.....:**	WG
Date Sampled...:	07/14/09 09:15	**Date Received..:**	07/15/09		
Prep Date.....:	07/15/09	**Analysis Date..:**	07/22/09		
Prep Batch #...:	9196096				
Dilution Factor:	1	**Initial Wgt/Vol:**	970 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8081A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	84	(50 - 150)
Decachlorobiphenyl	24 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-005C-1380-GW

GC Semivolatiles

Lot-Sample #...:	A9G150104-017	**Work Order #...:**	LGG201AD	**Matrix.....:**	WG
Date Sampled...:	07/14/09 10:10	**Date Received..:**	07/15/09		
Prep Date.....:	07/15/09	**Analysis Date..:**	07/22/09		
Prep Batch #...:	9196096				
Dilution Factor:	1	**Initial Wgt/Vol:**	960 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8081A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	**0.015 J**	**0.030**	**ug/L**	**0.0084**
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	91	(50 - 150)
Decachlorobiphenyl	28 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-DUP2-1414-GW

GC Semivolatiles

Lot-Sample #...:	A9G150104-019	**Work Order #...:**	LGG231AD	**Matrix.....:**	WG
Date Sampled...:	07/14/09 11:15	**Date Received..:**	07/15/09		
Prep Date.....:	07/15/09	**Analysis Date..:**	07/22/09		
Prep Batch #...:	9196096				
Dilution Factor:	1	**Initial Wgt/Vol:**	1010 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8081A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	90	(50 - 150)
Decachlorobiphenyl	24 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-004C-1385-GW

GC Semivolatiles

Lot-Sample #...: A9G150104-021 **Work Order #...:** LGG261AD **Matrix.....:** WG
Date Sampled...: 07/14/09 12:15 **Date Received..:** 07/15/09
Prep Date.....: 07/15/09 **Analysis Date..:** 07/22/09
Prep Batch #...: 9196096
Dilution Factor: 1 **Initial Wgt/Vol:** 970 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	**0.013 J**	**0.030**	**ug/L**	**0.0084**
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	86	(50 - 150)
Decachlorobiphenyl	46 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-DUP3-1415-GW

GC Semivolatiles

Lot-Sample #...:	A9G150104-023	**Work Order #...:**	LGG281AD	**Matrix.....:**	WG
Date Sampled...:	07/14/09 13:15	**Date Received..:**	07/15/09		
Prep Date.....:	07/15/09	**Analysis Date..:**	07/22/09		
Prep Batch #...:	9196096				
Dilution Factor:	1	**Initial Wgt/Vol:**	1050 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8081A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	**0.015 J**	**0.030**	**ug/L**	**0.0084**
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	86	(50 - 150)
Decachlorobiphenyl	48 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-006C-1387-GW

GC Semivolatiles

Lot-Sample #...:	A9G150104-025	**Work Order #...:**	LGG3A1AD	**Matrix.....:**	WG
Date Sampled...:	07/14/09 14:15	**Date Received..:**	07/15/09		
Prep Date.....:	07/15/09	**Analysis Date..:**	07/22/09		
Prep Batch #...:	9196096				
Dilution Factor:	1	**Initial Wgt/Vol:**	980 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8081A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	**0.15 PG**	**0.030**	**ug/L**	**0.0084**
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	90	(50 - 150)
Decachlorobiphenyl	71	(50 - 150)

NOTE(S):

PG The percent difference between the original and confirmation analyses is greater than 40%.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-001C-1389-GW

GC Semivolatiles

Lot-Sample #...:	A9G150104-027	**Work Order #...:**	LGG3D1AD	**Matrix.....:**	WG
Date Sampled...:	07/14/09 15:30	**Date Received..:**	07/15/09		
Prep Date.....:	07/15/09	**Analysis Date..:**	07/22/09		
Prep Batch #...:	9196096				
Dilution Factor:	1	**Initial Wgt/Vol:**	990 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8081A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	**0.015 J**	**0.030**	**ug/L**	**0.0084**
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	92	(50 - 150)
Decachlorobiphenyl	57	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-003C-1378-GW

GC Semivolatiles

Lot-Sample #...:	A9G150104-030	**Work Order #...:**	LGG3H1AD	**Matrix.....:**	WG
Date Sampled...:	07/14/09 09:10	**Date Received..:**	07/15/09		
Prep Date.....:	07/15/09	**Analysis Date..:**	07/22/09		
Prep Batch #...:	9196096				
Dilution Factor:	1	**Initial Wgt/Vol:**	1020 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8081A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	**0.015 J**	**0.030**	**ug/L**	**0.0084**
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	91	(50 - 150)
Decachlorobiphenyl	29 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-004C-1379-GW

GC Semivolatiles

Lot-Sample #...:	A9G150104-032	**Work Order #...:**	LGG3K1AD	**Matrix.....:**	WG
Date Sampled...:	07/14/09 10:35	**Date Received..:**	07/15/09		
Prep Date.....:	07/15/09	**Analysis Date..:**	07/22/09		
Prep Batch #...:	9196096				
Dilution Factor:	1	**Initial Wgt/Vol:**	1050 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8081A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	**0.0099 J**	**0.030**	**ug/L**	**0.0084**
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	81	(50 - 150)
Decachlorobiphenyl	23 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1424-GW

GC Semivolatiles

Lot-Sample #...: A9G150104-034 **Work Order #...:** LGG3M1AD **Matrix.....:** WQ
Date Sampled...: 07/14/09 11:30 **Date Received..:** 07/15/09
Prep Date.....: 07/15/09 **Analysis Date..:** 07/22/09
Prep Batch #...: 9196096
Dilution Factor: 1 **Initial Wgt/Vol:** 970 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	90	(50 - 150)
Decachlorobiphenyl	86	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-007C-1388-GW

GC Semivolatiles

Lot-Sample #...: A9G150104-035 **Work Order #...:** LGG3N1AD **Matrix.....:** WG
Date Sampled...: 07/14/09 13:05 **Date Received..:** 07/15/09
Prep Date.....: 07/15/09 **Analysis Date..:** 07/22/09
Prep Batch #...: 9196096
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	**0.016 J**	**0.030**	**ug/L**	**0.0084**
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	86	(50 - 150)
Decachlorobiphenyl	46 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-002C-1383-GW

GC Semivolatiles

Lot-Sample #...: A9G150104-037 **Work Order #...:** LGG3Q1AD **Matrix.....:** WG
Date Sampled...: 07/14/09 14:25 **Date Received..:** 07/15/09
Prep Date.....: 07/15/09 **Analysis Date..:** 07/22/09
Prep Batch #...: 9196096
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	83	(50 - 150)
Decachlorobiphenyl	54	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-005C-1386-GW

GC Semivolatiles

Lot-Sample #...:	A9G150104-039	**Work Order #...:**	LGG3V1AD	**Matrix.....:**	WG
Date Sampled...:	07/14/09 15:40	**Date Received..:**	07/15/09		
Prep Date.....:	07/15/09	**Analysis Date..:**	07/22/09		
Prep Batch #...:	9196096				
Dilution Factor:	1	**Initial Wgt/Vol:**	1050 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8081A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	**0.0088 J**	**0.030**	**ug/L**	**0.0084**
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	92	(50 - 150)
Decachlorobiphenyl	48 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A9G150104 **Work Order #...:** LGG9G1AA **Matrix.....:** WATER
MB Lot-Sample #: A9G150000-096

Prep Date.....: 07/15/09 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 07/22/09 **Prep Batch #...:** 9196096
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
alpha-BHC	ND	0.030	ug/L	SW846 8081A
beta-BHC	ND	0.030	ug/L	SW846 8081A
delta-BHC	ND	0.030	ug/L	SW846 8081A
gamma-BHC (Lindane)	ND	0.030	ug/L	SW846 8081A
Heptachlor	ND	0.030	ug/L	SW846 8081A
Aldrin	ND	0.030	ug/L	SW846 8081A
Heptachlor epoxide	ND	0.030	ug/L	SW846 8081A
Endosulfan I	ND	0.025	ug/L	SW846 8081A
Dieldrin	ND	0.030	ug/L	SW846 8081A
4,4'-DDE	ND	0.030	ug/L	SW846 8081A
Endrin	ND	0.030	ug/L	SW846 8081A
Endosulfan II	ND	0.025	ug/L	SW846 8081A
4,4'-DDD	ND	0.030	ug/L	SW846 8081A
Endosulfan sulfate	ND	0.030	ug/L	SW846 8081A
4,4'-DDT	ND	0.030	ug/L	SW846 8081A
Methoxychlor	ND	0.10	ug/L	SW846 8081A
Endrin ketone	ND	0.030	ug/L	SW846 8081A
Endrin aldehyde	ND	0.030	ug/L	SW846 8081A
alpha-Chlordane	ND	0.030	ug/L	SW846 8081A
gamma-Chlordane	ND	0.030	ug/L	SW846 8081A
Toxaphene	ND	2.0	ug/L	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	93	(50 - 150)
Decachlorobiphenyl	83	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A9G150104
MB Lot-Sample #: A9G150000-098

Analysis Date..: 07/21/09
Dilution Factor: 1

Work Order #...: LGG9K1AA

Prep Date.....: 07/15/09
Prep Batch #...: 9196098
Initial Wgt/Vol: 1000 mL

Matrix.....: WATER

Final Wgt/Vol..: 5 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
alpha-BHC	ND	0.030	ug/L	SW846 8081A
beta-BHC	ND	0.030	ug/L	SW846 8081A
delta-BHC	ND	0.030	ug/L	SW846 8081A
gamma-BHC (Lindane)	ND	0.030	ug/L	SW846 8081A
Heptachlor	ND	0.030	ug/L	SW846 8081A
Aldrin	ND	0.030	ug/L	SW846 8081A
Heptachlor epoxide	ND	0.030	ug/L	SW846 8081A
Endosulfan I	ND	0.025	ug/L	SW846 8081A
Dieldrin	ND	0.030	ug/L	SW846 8081A
4,4'-DDE	ND	0.030	ug/L	SW846 8081A
Endrin	ND	0.030	ug/L	SW846 8081A
Endosulfan II	ND	0.025	ug/L	SW846 8081A
4,4'-DDD	ND	0.030	ug/L	SW846 8081A
Endosulfan sulfate	ND	0.030	ug/L	SW846 8081A
4,4'-DDT	ND	0.030	ug/L	SW846 8081A
Methoxychlor	ND	0.10	ug/L	SW846 8081A
Endrin ketone	ND	0.030	ug/L	SW846 8081A
Endrin aldehyde	ND	0.030	ug/L	SW846 8081A
alpha-Chlordane	ND	0.030	ug/L	SW846 8081A
gamma-Chlordane	ND	0.030	ug/L	SW846 8081A
Toxaphene	ND	2.0	ug/L	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	95	(50 - 150)
Decachlorobiphenyl	82	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A9G150104 Work Order #...: LGG9G1AC Matrix.....: WATER
LCS Lot-Sample#: A9G150000-096
Prep Date.....: 07/15/09 Analysis Date..: 07/21/09
Prep Batch #...: 9196096
Dilution Factor: 2 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
alpha-BHC	101	(44 - 137)	SW846 8081A
beta-BHC	99	(50 - 135)	SW846 8081A
delta-BHC	102	(58 - 160)	SW846 8081A
gamma-BHC (Lindane)	98	(58 - 127)	SW846 8081A
Heptachlor	95	(48 - 150)	SW846 8081A
Aldrin	98	(53 - 128)	SW846 8081A
Heptachlor epoxide	96	(50 - 127)	SW846 8081A
Endosulfan I	61	(50 - 160)	SW846 8081A
Dieldrin	91	(50 - 124)	SW846 8081A
4,4'-DDE	99	(50 - 130)	SW846 8081A
Endrin	98	(50 - 137)	SW846 8081A
Endosulfan II	67	(50 - 144)	SW846 8081A
4,4'-DDD	100	(50 - 137)	SW846 8081A
Endosulfan sulfate	94	(50 - 160)	SW846 8081A
4,4'-DDT	95	(50 - 145)	SW846 8081A
Methoxychlor	92	(50 - 160)	SW846 8081A
Endrin ketone	87	(50 - 150)	SW846 8081A
Endrin aldehyde	78	(30 - 160)	SW846 8081A
alpha-Chlordane	96	(50 - 122)	SW846 8081A
gamma-Chlordane	97	(50 - 130)	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	85	(50 - 150)
Decachlorobiphenyl	52	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A9G150104 Work Order #...: LGG9K1AC Matrix.....: WATER
LCS Lot-Sample#: A9G150000-098
Prep Date.....: 07/15/09 Analysis Date..: 07/21/09
Prep Batch #...: 9196098
Dilution Factor: 2 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
alpha-BHC	101	(44 - 137)	SW846 8081A
beta-BHC	93	(50 - 135)	SW846 8081A
delta-BHC	100	(58 - 160)	SW846 8081A
gamma-BHC (Lindane)	97	(58 - 127)	SW846 8081A
Heptachlor	94	(48 - 150)	SW846 8081A
Aldrin	98	(53 - 128)	SW846 8081A
Heptachlor epoxide	96	(50 - 127)	SW846 8081A
Endosulfan I	61	(50 - 160)	SW846 8081A
Dieldrin	92	(50 - 124)	SW846 8081A
4,4'-DDE	99	(50 - 130)	SW846 8081A
Endrin	98	(50 - 137)	SW846 8081A
Endosulfan II	67	(50 - 144)	SW846 8081A
4,4'-DDD	99	(50 - 137)	SW846 8081A
Endosulfan sulfate	94	(50 - 160)	SW846 8081A
4,4'-DDT	93	(50 - 145)	SW846 8081A
Methoxychlor	92	(50 - 160)	SW846 8081A
Endrin ketone	87	(50 - 150)	SW846 8081A
Endrin aldehyde	78	(30 - 160)	SW846 8081A
alpha-Chlordane	96	(50 - 122)	SW846 8081A
gamma-Chlordane	97	(50 - 130)	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	88	(50 - 150)
Decachlorobiphenyl	47 *	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

* Surrogate recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A9G150104 Work Order #...: LGG2H1AJ-MS Matrix.....: WG
MS Lot-Sample #: A9G150104-004 LGG2H1AK-MSD
Date Sampled...: 07/14/09 10:20 Date Received..: 07/15/09
Prep Date.....: 07/15/09 Analysis Date..: 07/21/09
Prep Batch #...: 9196096
Dilution Factor: 2 Initial Wgt/Vol: 515 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
alpha-BHC	115	(50 - 150)			SW846 8081A
	113	(50 - 150)	1.3	(0-50)	SW846 8081A
beta-BHC	107	(50 - 150)			SW846 8081A
	107	(50 - 150)	0.43	(0-50)	SW846 8081A
delta-BHC	115	(50 - 150)			SW846 8081A
	111	(50 - 150)	2.9	(0-50)	SW846 8081A
gamma-BHC (Lindane)	109	(50 - 150)			SW846 8081A
	109	(50 - 150)	0.14	(0-50)	SW846 8081A
Heptachlor	104	(50 - 150)			SW846 8081A
	102	(50 - 150)	2.2	(0-50)	SW846 8081A
Aldrin	111	(50 - 150)			SW846 8081A
	107	(50 - 150)	3.6	(0-50)	SW846 8081A
Heptachlor epoxide	109	(50 - 150)			SW846 8081A
	107	(50 - 150)	2.0	(0-50)	SW846 8081A
Endosulfan I	71	(50 - 150)			SW846 8081A
	69	(50 - 150)	2.7	(0-50)	SW846 8081A
Dieldrin	99	(50 - 150)			SW846 8081A
	95	(50 - 150)	3.6	(0-50)	SW846 8081A
4,4'-DDE	111	(50 - 150)			SW846 8081A
	107	(50 - 150)	4.1	(0-50)	SW846 8081A
Endrin	110	(50 - 150)			SW846 8081A
	108	(50 - 150)	2.3	(0-50)	SW846 8081A
Endosulfan II	75	(50 - 150)			SW846 8081A
	74	(50 - 150)	0.76	(0-50)	SW846 8081A
4,4'-DDD	112	(50 - 150)			SW846 8081A
	109	(50 - 150)	2.0	(0-50)	SW846 8081A
Endosulfan sulfate	104	(50 - 150)			SW846 8081A
	101	(50 - 150)	3.2	(0-50)	SW846 8081A
4,4'-DDT	100	(50 - 150)			SW846 8081A
	97	(50 - 150)	3.6	(0-50)	SW846 8081A
Methoxychlor	98	(50 - 150)			SW846 8081A
	96	(50 - 150)	1.7	(0-50)	SW846 8081A
Endrin ketone	96	(50 - 150)			SW846 8081A
	94	(50 - 150)	2.5	(0-50)	SW846 8081A
Endrin aldehyde	87	(50 - 150)			SW846 8081A
	85	(50 - 150)	1.9	(0-50)	SW846 8081A
alpha-Chlordane	108	(50 - 150)			SW846 8081A
	106	(50 - 150)	1.5	(0-50)	SW846 8081A
gamma-Chlordane	108	(50 - 150)			SW846 8081A
	105	(50 - 150)	2.4	(0-50)	SW846 8081A

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A9G150104 **Work Order #...:** LGG2H1AJ-MS **Matrix.....:** WG
MS Lot-Sample #: A9G150104-004 LGG2H1AK-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	98	(50 - 150)
	96	(50 - 150)
Decachlorobiphenyl	62	(50 - 150)
	59	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A9G150104 Work Order #...: LGG2M1AJ-MS Matrix.....: WG
MS Lot-Sample #: A9G150104-008 LGG2M1AK-MSD
Date Sampled...: 07/14/09 13:50 Date Received..: 07/15/09
Prep Date.....: 07/15/09 Analysis Date..: 07/21/09
Prep Batch #...: 9196098
Dilution Factor: 2 Initial Wgt/Vol: 525 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
alpha-BHC	137	(50 - 150)			SW846 8081A
	126	(50 - 150)	7.9	(0-50)	SW846 8081A
beta-BHC	126	(50 - 150)			SW846 8081A
	118	(50 - 150)	6.0	(0-50)	SW846 8081A
delta-BHC	134	(50 - 150)			SW846 8081A
	126	(50 - 150)	6.7	(0-50)	SW846 8081A
gamma-BHC (Lindane)	128	(50 - 150)			SW846 8081A
	119	(50 - 150)	7.5	(0-50)	SW846 8081A
Heptachlor	122	(50 - 150)			SW846 8081A
	112	(50 - 150)	8.8	(0-50)	SW846 8081A
Aldrin	129	(50 - 150)			SW846 8081A
	122	(50 - 150)	5.8	(0-50)	SW846 8081A
Heptachlor epoxide	128	(50 - 150)			SW846 8081A
	119	(50 - 150)	7.4	(0-50)	SW846 8081A
Endosulfan I	80	(50 - 150)			SW846 8081A
	75	(50 - 150)	7.2	(0-50)	SW846 8081A
Dieldrin	115	(50 - 150)			SW846 8081A
	107	(50 - 150)	7.8	(0-50)	SW846 8081A
4,4'-DDE	130	(50 - 150)			SW846 8081A
	123	(50 - 150)	5.4	(0-50)	SW846 8081A
Endrin	128	(50 - 150)			SW846 8081A
	120	(50 - 150)	6.5	(0-50)	SW846 8081A
Endosulfan II	87	(50 - 150)			SW846 8081A
	81	(50 - 150)	7.0	(0-50)	SW846 8081A
4,4'-DDD	131	(50 - 150)			SW846 8081A
	121	(50 - 150)	7.8	(0-50)	SW846 8081A
Endosulfan sulfate	121	(50 - 150)			SW846 8081A
	112	(50 - 150)	8.2	(0-50)	SW846 8081A
4,4'-DDT	120	(50 - 150)			SW846 8081A
	110	(50 - 150)	8.4	(0-50)	SW846 8081A
Methoxychlor	129	(50 - 150)			SW846 8081A
	117	(50 - 150)	9.3	(0-50)	SW846 8081A
Endrin ketone	114	(50 - 150)			SW846 8081A
	104	(50 - 150)	8.5	(0-50)	SW846 8081A
Endrin aldehyde	102	(50 - 150)			SW846 8081A
	93	(50 - 150)	8.8	(0-50)	SW846 8081A
alpha-Chlordane	126	(50 - 150)			SW846 8081A
	119	(50 - 150)	5.6	(0-50)	SW846 8081A
gamma-Chlordane	124	(50 - 150)			SW846 8081A
	117	(50 - 150)	6.2	(0-50)	SW846 8081A

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A9G150104 **Work Order #...:** LGG2M1AJ-MS **Matrix.....:** WG
MS Lot-Sample #: A9G150104-008 LGG2M1AK-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	112	(50 - 150)
	105	(50 - 150)
Decachlorobiphenyl	101	(50 - 150)
	87	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

POLYCHLORINATED BIPHENYLS DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/August 27, 2009

SDG: A9G150104 R0
Analysis: SW846 8082

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.1- 5.4 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-5
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-5
7. Does the initial calibration curve consist of 5 concentration levels of Aroclors 1016 and 1260?	✓			Instrument A2HP2; ICAL on 7/02/09 Stds = 0.05, 0.1, 0.2, 0.5, 1.0, 2.0	LCG Table 3 R
8. Was the % RSD ≤ 20%? Were the r^2s >0.990?	✓				LCG Table 3 RSD>20% or r<0.99= J/R
9. Was a MDL Level Verification performed once per quarter? Were all target analytes detected?	✓			7/18/09	LCG Table 3 R
10. Was a MRL Level Verification performed at the beginning and end of the sequence or every 12 hours? Were the results 70-130%	✓				LCG Table 3 >130%=J; 65-70%=J/UJ; <65%=J/R
11. Was a second source (ICV) verification performed after the ICAL? Were results 85-115%?	✓			7/2/09 @ 0350	LCG Table 3 >115%=J; 80-85%=J/UJ; <80%=J/R
12. Were single standards of the other five Aroclors run to aid in pattern recognition and to determine a single point calibration factor?	✓				Method 8082 Section 5.6.2
13. Was a CCV run every 12 hours?	✓				LCG Table 3

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/August 27, 2009

SDG: A9G150104 R0
Analysis: SW846 8082

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
14. Was the % D ≤ 15 % for each analyte or the average %D across all analytes ≤15% with a maximum %D for each target analyte ≤30%?	✓				LCG Table 3 D>30% (neg) =J/R D>30% (pos) =J
15. Was a method blank prepared and analyzed with each batch?	✓			Section checked by ADR	LCG Table 5
16. Were target analytes <1/2 the MRL?	✓				LCG Table 5 <5x = B
17. Was an equipment blank collected and analyzed?	✓			FWGEQUIPRinse2-1424-GW	
18. Were target analytes in the field blank analyses (equipment) <1/2 the MRL?	✓			Section checked by ADR	<5x = B
19. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 3
20. Were the LCS recoveries within limits specified in LCG Appendix C?	✓				LCG Appendix C >UL=J; LL-30%=J/UJ; <30%=J/R
21. Was a MS/MSD pair prepared with each batch?	✓				LCG Table 3
22. Was the MS/MSD parent a Ravenna sample?	✓			Sample FWGLL8mw-002c-1377-GW and FWGLL9mw-003c-1384-GW were the parent MS/MSD samples from this SDG.	
23. Were MS/MSD recoveries 50-150% and RPD ≤20%?	✓				QAPP Table 3-2 Pj
24. Was the surrogate spiked into all samples?	✓				
25. Were surrogate recoveries 50-150%?		✓		The surrogate, DCB, recovered below control limits in all samples with the exception of FWGLL9mw-001c-1382-GW, FWGLL9mw-006c-1387-GW, FWGLL10mw-001c-1389-GW, FWGEQUIPRinse2-1424-GW, FWGLL9mw-002c-1383-GW, FWGLL9mw-004c-1385-GW, FWGLL9mw-005c-1386-GW, FWGLL9mw-007c-1388-GW and FWGLL9mw-DUP3-1415-GW. The results associated with surrogate outliers were qualified as estimated, "UJ".	LCG Table 3 >150%=J; 10-50%=J/UJ; <10%=R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/August 27, 2009

SDG: A9G150104 R0
Analysis: SW846 8082

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
26. Was a field duplicate analyzed? Were the RPDs <30%?	✓			Sample FWGLL8mw-DUP2-1414-GW was the field duplicate for sample FWGLL8mw-005c-1380-GW and FWGLL9mw-DUP3-1415-GW a field duplicate for sample FWGLL9mw-004c-1385-GW.	QAPP Table 3-2 RPD >30=J
27. Were all positive results verified by a second dissimilar column confirmation? Was the RPD ≤ 40?	✓				LCG Table 3 RPD>40=J
28. Were reported sample concentrations within calibration range?	✓				
29. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
30. Were lab comments included in report? If yes, summarize contents.	✓			See narrative for surrogate outliers.	

References:

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 3 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments: As the second column is used only for confirmation and there were no detected aroclors in the samples, only the front column was evaluated.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-001C-1376-GW

GC Semivolatiles

Lot-Sample #...:	A9G150104-002	**Work Order #...:**	LGG2D1AF	**Matrix.....:**	WG
Date Sampled...:	07/14/09 09:15	**Date Received..:**	07/15/09		
Prep Date.....:	07/15/09	**Analysis Date..:**	07/20/09		
Prep Batch #...:	9196099				
Dilution Factor:	1	**Initial Wgt/Vol:**	1010 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	73	(50 - 150)
Decachlorobiphenyl	24 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-002C-1377-GW

GC Semivolatiles

Lot-Sample #...:	A9G150104-004	**Work Order #...:**	LGG2H1AP	**Matrix.....:**	WG
Date Sampled...:	07/14/09 10:20	**Date Received..:**	07/15/09		
Prep Date.....:	07/15/09	**Analysis Date..:**	07/20/09		
Prep Batch #...:	9196099				
Dilution Factor:	1	**Initial Wgt/Vol:**	1000 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	96	(50 - 150)
Decachlorobiphenyl	47 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-001C-1382-GW

GC Semivolatiles

Lot-Sample #...:	A9G150104-006	Work Order #...:	LGG2K1AF	Matrix.....:	WG
Date Sampled...:	07/14/09 12:35	Date Received..:	07/15/09		
Prep Date.....:	07/15/09	Analysis Date..:	07/20/09		
Prep Batch #...:	9196099				
Dilution Factor:	1	Initial Wgt/Vol:	990 mL	Final Wgt/Vol..:	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	88	(50 - 150)
Decachlorobiphenyl	85	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-003C-1384-GW

GC Semivolatiles

Lot-Sample #...:	A9G150104-008	**Work Order #...:**	LGG2M1AP	**Matrix.....:**	WG
Date Sampled...:	07/14/09 13:50	**Date Received..:**	07/15/09		
Prep Date.....:	07/15/09	**Analysis Date..:**	07/21/09		
Prep Batch #...:	9196103				
Dilution Factor:	1	**Initial Wgt/Vol:**	1010 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	92	(50 - 150)
Decachlorobiphenyl	45 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-003C-1391-GW

GC Semivolatiles

Lot-Sample #...:	A9G150104-010	**Work Order #...:**	LGG2P1AF	**Matrix.....:**	WG
Date Sampled...:	07/14/09 15:55	**Date Received..:**	07/15/09		
Prep Date.....:	07/15/09	**Analysis Date..:**	07/20/09		
Prep Batch #...:	9196099				
Dilution Factor:	1	**Initial Wgt/Vol:**	1010 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	69	(50 - 150)
Decachlorobiphenyl	48 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-002C-1390-GW

GC Semivolatiles

Lot-Sample #...:	A9G150104-012	**Work Order #...:**	LGG2R1AF	**Matrix.....:**	WG
Date Sampled...:	07/14/09 17:00	**Date Received..:**	07/15/09		
Prep Date.....:	07/15/09	**Analysis Date..:**	07/20/09		
Prep Batch #...:	9196099				
Dilution Factor:	1	**Initial Wgt/Vol:**	1050 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	88	(50 - 150)
Decachlorobiphenyl	43 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-006C-1381-GW

GC Semivolatiles

Lot-Sample #...:	A9G150104-015	**Work Order #...:**	LGG2W1AF	**Matrix.....:**	WG
Date Sampled...:	07/14/09 09:15	**Date Received..:**	07/15/09		
Prep Date.....:	07/15/09	**Analysis Date..:**	07/20/09		
Prep Batch #...:	9196099				
Dilution Factor:	1	**Initial Wgt/Vol:**	970 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	84	(50 - 150)
Decachlorobiphenyl	31 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-005C-1380-GW

GC Semivolatiles

Lot-Sample #...:	A9G150104-017	**Work Order #...:**	LGG201AF	**Matrix.....:**	WG
Date Sampled...:	07/14/09 10:10	**Date Received..:**	07/15/09		
Prep Date.....:	07/15/09	**Analysis Date..:**	07/20/09		
Prep Batch #...:	9196099				
Dilution Factor:	1	**Initial Wgt/Vol:**	960 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	82	(50 - 150)
Decachlorobiphenyl	33 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-DUP2-1414-GW

GC Semivolatiles

Lot-Sample #...:	A9G150104-019	**Work Order #...:**	LGG231AF	**Matrix.....:**	WG
Date Sampled...:	07/14/09 11:15	**Date Received..:**	07/15/09		
Prep Date.....:	07/15/09	**Analysis Date..:**	07/20/09		
Prep Batch #...:	9196099				
Dilution Factor:	1	**Initial Wgt/Vol:**	1010 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	82	(50 - 150)
Decachlorobiphenyl	28 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-004C-1385-GW

GC Semivolatiles

Lot-Sample #...:	A9G150104-021	**Work Order #...:**	LGG261AF	**Matrix.....:**	WG
Date Sampled...:	07/14/09 12:15	**Date Received..:**	07/15/09		
Prep Date.....:	07/15/09	**Analysis Date..:**	07/20/09		
Prep Batch #...:	9196099				
Dilution Factor:	1	**Initial Wgt/Vol:**	970 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	90	(50 - 150)
Decachlorobiphenyl	52	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-DUP3-1415-GW

GC Semivolatiles

Lot-Sample #...:	A9G150104-023	**Work Order #...:**	LGG281AF	**Matrix.....:**	WG
Date Sampled...:	07/14/09 13:15	**Date Received..:**	07/15/09		
Prep Date.....:	07/15/09	**Analysis Date..:**	07/20/09		
Prep Batch #...:	9196099				
Dilution Factor:	1	**Initial Wgt/Vol:**	1050 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	89	(50 - 150)
Decachlorobiphenyl	57	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-006C-1387-GW

GC Semivolatiles

Lot-Sample #...:	A9G150104-025	**Work Order #...:**	LGG3A1AF	**Matrix.....:**	WG
Date Sampled...:	07/14/09 14:15	**Date Received..:**	07/15/09		
Prep Date.....:	07/15/09	**Analysis Date..:**	07/20/09		
Prep Batch #...:	9196099				
Dilution Factor:	1	**Initial Wgt/Vol:**	980 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	74	(50 - 150)
Decachlorobiphenyl	83	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-001C-1389-GW

GC Semivolatiles

Lot-Sample #...:	A9G150104-027	**Work Order #...:**	LGG3D1AF	**Matrix.....:**	WG
Date Sampled...:	07/14/09 15:30	**Date Received..:**	07/15/09		
Prep Date.....:	07/15/09	**Analysis Date..:**	07/20/09		
Prep Batch #...:	9196099				
Dilution Factor:	1	**Initial Wgt/Vol:**	990 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	78	(50 - 150)
Decachlorobiphenyl	67	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-003C-1378-GW

GC Semivolatiles

Lot-Sample #...:	A9G150104-030	**Work Order #...:**	LGG3H1AF	**Matrix.....:**	WG
Date Sampled...:	07/14/09 09:10	**Date Received..:**	07/15/09		
Prep Date.....:	07/15/09	**Analysis Date..:**	07/20/09		
Prep Batch #...:	9196099				
Dilution Factor:	1	**Initial Wgt/Vol:**	1020 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	84	(50 - 150)
Decachlorobiphenyl	34 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-004C-1379-GW

GC Semivolatiles

Lot-Sample #...:	A9G150104-032	**Work Order #...:**	LGG3K1AF	**Matrix.....:**	WG
Date Sampled...:	07/14/09 10:35	**Date Received..:**	07/15/09		
Prep Date.....:	07/15/09	**Analysis Date..:**	07/20/09		
Prep Batch #...:	9196099				
Dilution Factor:	1	**Initial Wgt/Vol:**	1050 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	81	(50 - 150)
Decachlorobiphenyl	30 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1424-GW

GC Semivolatiles

Lot-Sample #...:	A9G150104-034	**Work Order #...:**	LGG3M1AF	**Matrix.....:**	WQ
Date Sampled...:	07/14/09 11:30	**Date Received..:**	07/15/09		
Prep Date.....:	07/15/09	**Analysis Date..:**	07/20/09		
Prep Batch #...:	9196099				
Dilution Factor:	1	**Initial Wgt/Vol:**	970 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	86	(50 - 150)
Decachlorobiphenyl	94	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-007C-1388-GW

GC Semivolatiles

Lot-Sample #...:	A9G150104-035	**Work Order #...:**	LGG3N1AF	**Matrix.....:**	WG
Date Sampled...:	07/14/09 13:05	**Date Received..:**	07/15/09		
Prep Date.....:	07/15/09	**Analysis Date..:**	07/20/09		
Prep Batch #...:	9196099				
Dilution Factor:	1	**Initial Wgt/Vol:**	1050 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	85	(50 - 150)
Decachlorobiphenyl	59	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-002C-1383-GW

GC Semivolatiles

Lot-Sample #...:	A9G150104-037	**Work Order #...:**	LGG3Q1AF	**Matrix.....:**	WG
Date Sampled...:	07/14/09 14:25	**Date Received..:**	07/15/09		
Prep Date.....:	07/15/09	**Analysis Date..:**	07/20/09		
Prep Batch #...:	9196099				
Dilution Factor:	1	**Initial Wgt/Vol:**	1050 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	79	(50 - 150)
Decachlorobiphenyl	63	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-005C-1386-GW

GC Semivolatiles

Lot-Sample #...:	A9G150104-039	**Work Order #...:**	LGG3V1AF	**Matrix.....:**	WG
Date Sampled...:	07/14/09 15:40	**Date Received..:**	07/15/09		
Prep Date.....:	07/15/09	**Analysis Date..:**	07/20/09		
Prep Batch #...:	9196099				
Dilution Factor:	1	**Initial Wgt/Vol:**	1050 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	87	(50 - 150)
Decachlorobiphenyl	57	(50 - 150)

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A9G150104 **Work Order #...:** LGG9N1AA **Matrix.....:** WATER
MB Lot-Sample #: A9G150000-099

Prep Date.....: 07/15/09 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 07/20/09 **Prep Batch #...:** 9196099
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	0.50	ug/L	SW846 8082
Aroclor 1221	ND	0.50	ug/L	SW846 8082
Aroclor 1232	ND	0.50	ug/L	SW846 8082
Aroclor 1242	ND	0.50	ug/L	SW846 8082
Aroclor 1248	ND	0.50	ug/L	SW846 8082
Aroclor 1254	ND	0.50	ug/L	SW846 8082
Aroclor 1260	ND	0.50	ug/L	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	89	(50 - 150)
Decachlorobiphenyl	95	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A9G150104 **Work Order #...:** LGG9V1AA **Matrix.....:** WATER
MB Lot-Sample #: A9G150000-103

Prep Date.....: 07/15/09 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 07/21/09 **Prep Batch #...:** 9196103
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	0.50	ug/L	SW846 8082
Aroclor 1221	ND	0.50	ug/L	SW846 8082
Aroclor 1232	ND	0.50	ug/L	SW846 8082
Aroclor 1242	ND	0.50	ug/L	SW846 8082
Aroclor 1248	ND	0.50	ug/L	SW846 8082
Aroclor 1254	ND	0.50	ug/L	SW846 8082
Aroclor 1260	ND	0.50	ug/L	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	76	(50 - 150)
Decachlorobiphenyl	85	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A9G150104 Work Order #...: LGG9N1AC Matrix.....: WATER
LCS Lot-Sample#: A9G150000-099
Prep Date.....: 07/15/09 Analysis Date..: 07/21/09
Prep Batch #...: 9196099
Dilution Factor: 2 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Aroclor 1016	**77**	**(58 - 141)**	**SW846 8082**
Aroclor 1260	**84**	**(71 - 143)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	73	(50 - 150)
Decachlorobiphenyl	39 *	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

* Surrogate recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A9G150104 **Work Order #...:** LGG9V1AC **Matrix.....:** WATER
LCS Lot-Sample#: A9G150000-103
Prep Date.....: 07/15/09 **Analysis Date..:** 07/21/09
Prep Batch #...: 9196103
Dilution Factor: 2 **Final Wgt/Vol..:** 5 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Aroclor 1016	**78**	**(58 - 141)**	**SW846 8082**
Aroclor 1260	**90**	**(71 - 143)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	70	(50 - 150)
Decachlorobiphenyl	53	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A9G150104 **Work Order #...:** LGG2H1AQ-MS **Matrix.....:** WG
MS Lot-Sample #: A9G150104-004 LGG2H1AR-MSD
Date Sampled...: 07/14/09 10:20 **Date Received..:** 07/15/09
Prep Date.....: 07/15/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9196099
Dilution Factor: 2 **Initial Wgt/Vol:** 510 mL **Final Wgt/Vol..:** 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**82**	**(50 - 150)**			**SW846 8082**
	81	**(50 - 150)**	**0.49**	**(0-50)**	**SW846 8082**
Aroclor 1260	**84**	**(50 - 150)**			**SW846 8082**
	87	**(50 - 150)**	**3.4**	**(0-50)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	88	(50 - 150)
	93	(50 - 150)
Decachlorobiphenyl	64	(50 - 150)
	60	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A9G150104 **Work Order #...:** LGG2M1AQ-MS **Matrix.....:** WG
MS Lot-Sample #: A9G150104-008 LGG2M1AR-MSD
Date Sampled...: 07/14/09 13:50 **Date Received..:** 07/15/09
Prep Date.....: 07/15/09 **Analysis Date..:** 07/21/09
Prep Batch #...: 9196103
Dilution Factor: 2 **Initial Wgt/Vol:** 500 mL **Final Wgt/Vol..:** 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**78**	**(50 - 150)**			**SW846 8082**
	90	**(50 - 150)**	**14**	**(0-50)**	**SW846 8082**
Aroclor 1260	**89**	**(50 - 150)**			**SW846 8082**
	98	**(50 - 150)**	**9.5**	**(0-50)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	85	(50 - 150)
	103	(50 - 150)
Decachlorobiphenyl	91	(50 - 150)
	90	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METALS DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta / August 27, 2009

SDG: A9G150104 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.1- 5.4 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	✓				QAPP Table 3-8
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-8
7. Did the initial calibration curve range include 3 standards and a blank?	✓				LCG Table 7 R
8. Was the ICAL performed daily?	✓				LCG Table 7 R
9. Was the correlation coefficient r≥0.995 for each analyte?	✓				LCG Table 7 R<0.995=J/R
10. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓				LCG Table 7 R
11. Was a MRL Level Verification performed at the beginning of the daily sequence? Were results 70-130%?		✓		The MRL analyzed 7/27/09 @ 1111 had zinc recover above limits at 142%. Detected concentrations of zinc were qualified as estimated, "J".	LCG Table 7 >130%=J; 65-70%=J/UJ; <65%=J/R
12. Was the ICV (second source verification) analyzed after the ICAL?	✓				LCG Table 7
13. Were all analytes within 90-110% in the ICV?	✓				LCG Table 7 J>110%=J; 90-85%=J/UJ; <85%=J/R

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
14. Was the ICB analyzed after the ICV with results <1/2 the MRL?		✓		ICP The ICB analyzed 7/17/09 had detected calcium at 91.2ug/L, selenium at 3.9ug/L and potassium at 152ug/L. No qualifications were made for calcium as there were no detected results <5x ICB contamination. The potassium results for FWGLL10mw-003c-1391-GF, FWGLL8mw-005c-1380-GF, FWGLL8mw-DUP2-1414-GF, FWGLL9mw-004c-1385-GF, FWGEQUIPRinse2-1424-GW and FWGLL9mw-005c-1386-GF were qualified, "U", as the detected concentrations were <5x blank contamination. Selenium results for FWGEQUIPRinse2-1424-GW, FWGLL8mw-001c-1376-GF and FWGLL8mw-DUP2-1414-GF were qualified, "U", as the detected concentrations were <5x blank contamination. No qualifications were made for ICP or ICPMS due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.	LCG Table 7 < 5x = U
15. Were CCVs analyzed every 10 samples and at the end of the analytical sequence?	✓				LCG Table 7
16. Were CCV results within 90 to 110%?	✓				LCG Table 7 >110%=J 90-85%=J/UJ; <85%=J/R
17. Were the CCBs run every 10 samples and at the end of the analytical sequence? Were results <1/2 the MRL?		✓		ICP The CCBs analyzed 7/17/09 had detected selenium at 4.1ug/L, potassium from 143ug/L to 153ug/L and calcium at 44.2ug/L and 44.3ug/L. • The potassium results for FWGLL10mw-003c-1391-GF, FWGLL8mw-005c-1380-GF, FWGLL8mw-DUP2-1414-GF, FWGLL9mw-004c-1385-GF, FWGEQUIPRinse2-1424-GW and FWGLL9mw-005c-1386-GF were qualified, "U", as the detected concentrations were <5x blank contamination. • The selenium result for FWGLL8mw-001c-1376-GF was qualified, "U", as the detected concentration was <5x blank contamination. • No qualifications were made for calcium as there were no detected results <5x ICB contamination. ICPMS The CCBs analyzed 7/27/09 had detected aluminum at 10.4ug/L and 8.6ug/L, antimony from 0.059 to 0.071ug/L, beryllium from 0.045ug/L to 0.055ug/L, cadmium from 0.034ug/L to 0.089ug/L, iron from 16.9ug/L to 24.3 ug/L and thallium from 0.12ug/L to 0.15ug/L. • The aluminum result for sample FWGLL8mw-006c-1381-GF was qualified, "U" as the result was <5x CCB contamination. • The iron result for sample FWGLL8mw-001c-1376-GF was qualified, "U" as the result was <5x CCB contamination. • No other qualifications were made as the all other contaminants were either nondetect or >5x contamination.	LCG Table 7 <5x = U

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta / August 27, 2009

SDG: A9G150104 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
18. Was an Interelement Check Standard run at the beginning of the analytical sequence?	✓				LCG Table 7
19. Was the ICS recovery within 80 to 120% of true value for each element of interest?	✓				LCG Table 7 >120%=J; 50-79%=J/UJ; <50%=Pj/R
21. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 7
22. Were target analytes <1/2 the MRL in the method blank?		✓		ADR checked section; Potassium was detected in the method blank at 147ug/L and zinc at 8.8ug/L. All detected potassium and zinc results <5x contamination were qualified, "B".	LCG Table 7 <5x = B
23. Was a field blank collected and analyzed?	✓			FWGEQUIPRinse2-1424-GW	
24. Were target analytes reported in the field blank analyses >1/2 the MRL?	✓			ADR checked section; FWGEQUIPRinse2-1424-GW had potassium detected at 157ug/L, selenium at 4.6ug/L and zinc at 3.5ug/L. All detected potassium, selenium and zinc results <5x contamination were qualified, "B".	<5x=B
25. Was a LCS prepared and analyzed with each batch?	✓				LCG Table 7
26. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR.	LCG Appendix C >UL=J; 60%-LL= J/UJ; <60%=J/R
27. Was a MS prepared with each batch?	✓				LCG Table 7
28. Was the MS and Lab Duplicate parent a Ravenna sample?	✓			Sample FWGLL8mw-002c-1377-GF and FWGLL9mw-003c-1384-GF were the parent MS/MSD samples from this SDG.	
29. Were the MS recoveries within 75-125%?	✓			Checked by ADR.	LCG Table 7 >125% = J 30% - 75% = J/UJ <30% = J/R
30. Was the lab sample duplicate RPD ≤ 20%?	✓			Only detected results above RL were evaluated.	LCG Table 7 >20% = J
31. Was a Post Digestion Spike analyzed as needed? Were results within 75-125%?			✓		LCG Table 7 >125%=J; 30-75%=J/UJ; <30%=R
32. Was a serial dilution performed as needed?			✓		

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta / August 27, 2009

SDG: A9G150104 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
33. Was the 4 fold dilution within ± 10% of the original result?			✓		LCG Table 7 >10%=J
34. Was a field duplicate analyzed? Were the RPDs ± 30%?	✓			Checked by ADR. Sample FWGLL8mw-DUP2-1414-GF was the field duplicate for sample FWGLL8mw-005c-1380-GF and FWGLL9mw-DUP3-1415-GF a field duplicate for sample FWGLL9mw-004c-1385-GF. Only results above the RL were evaluated.	QAPP Table 3-2 >30% = J
35. Were sample concentrations within calibration range?	✓				
36. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
37. Were lab comments included in report? If yes, summarize contents.	✓			See narrative.	

References:
Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 7 and Attachment A "Data Validation Guidelines:
Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 27, 2009

SDG: A9G150104 R0
Analysis: SW846 7470A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.1- 5.4 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	✓				QAPP Table 3.8
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-8
7. Did the initial calibration curve range include 5 standards and a blank?	✓				LCG Table 9 R
8. Was the correlation coefficient ≥ 0.995 for Hg?	✓				LCG Table 9 R<0.995=J/R
9. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓				LCG Table 9 R
10. Was a MRL Level Verification performed at the beginning of every daily analytical sequence with 70-130%?	✓				LCG Table 9 >130%=J; 70-65%=J/UJ; <65%=J/R
11. Was the ICV analyzed after the ICAL but before samples with recoveries between 80-120%?	✓				LCG Table 9 >120%=J; 80-75%=J/UJ; <75%=J/R
12. Was the ICB analyzed after the ICAL with results <1/2 the MRL?	✓			No qualifications were made due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.	LCG Table 9 <5x = U
13. Were the CCVs analyzed every 10 samples and at the end of the analytical sequence?	✓				LCG Table 9
14. Were CCV results within 80 to 120%?	✓				LCG Table 9 >120%=J; 80-75%=J/UJ; <75%=J/R
15. Were the CCBs analyzed every 10 samples and at the end of the analytical sequence? Were results <1/2 the MRL?	✓			No qualifications were made for due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.	LCG Table 9 <5x = U

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 27, 2009

SDG: A9G150104 R0
Analysis: SW846 7470A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
16. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 9
17. Were target analytes detected in the method blank <1/2 the MRL?	✓				LCG Table 9 <5x = B
18. Was a field blank collected and analyzed?	✓			FWGEQUIPRinse2-1424-GW	
19. Were target analytes reported in the field blank analyses at <1/2 the MRL?	✓				<5x=B
20. Was a LCS prepared and analyzed with each batch?	✓				LCG Table 9
21. Were the LCS recoveries within 80-120%?	✓			Checked by ADR.	LCG Table 9 J>120%=J; 50-79%=J/UJ; <50%=R
22. Was a MS prepared with each batch?	✓				LCG Table 9
23. Was the MS and Lab Duplicate parent sample a Ravenna sample?	✓			Sample FWGLL8mw-002c-1377-GF and FWGLL9mw-003c-1384-GF were the parent MS/MSD samples from this SDG.	
24. Were the MS recoveries within 80-120%?	✓			Checked by ADR.	LCG Table 9 >125% = J 30% - 75% = J/UJ <30% = J/R
25. Was the Matrix Duplicate RPD ± 20%?	✓				LCG Table 9 >20% = J
26. Was a field duplicate analyzed? Were the RPDs ± 30%?	✓			Checked by ADR. Sample FWGLL8mw-DUP2-1414-GF was the field duplicate for sample FWGLL8mw-005c-1380-GF and FWGLL9mw-DUP3-1415-GF a field duplicate for sample FWGLL9mw-004c-1385-GF.	QAPP Table 3-2
27. Were sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
29. Were lab comments included in report? If yes, summarize contents.		✓			

References:
Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 9 and Attachment A "Data Validation Guidelines:
Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-001C-1376-GF

TOTAL Metals

Lot-Sample #...: A9G150104-003 **Matrix.....:** WG
Date Sampled...: 07/14/09 09:15 **Date Received..:** 07/15/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9197018						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2G1AM
		Dilution Factor: 1		Analysis Time..: 14:32	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/16-07/27/09	LGG2G1AA
		Dilution Factor: 1		Analysis Time..: 16:40	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2G1AJ
		Dilution Factor: 1		Analysis Time..: 14:32	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**34.2**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2G1AN**
		Dilution Factor: 1		Analysis Time..: 14:32	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGG2G1AC
		Dilution Factor: 1		Analysis Time..: 16:40	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**93600**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2G1AP**
		Dilution Factor: 1		Analysis Time..: 14:32	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/27/09	LGG2G1AD
		Dilution Factor: 1		Analysis Time..: 16:40	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2G1AQ
		Dilution Factor: 1		Analysis Time..: 14:32	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2G1AR
		Dilution Factor: 1		Analysis Time..: 14:32	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2G1AT
		Dilution Factor: 1		Analysis Time..: 14:32	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-001C-1376-GF

TOTAL Metals

Lot-Sample #...: A9G150104-003 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**82.3**	**50.0**	**ug/L**	**SW846 6020**	**07/16-07/27/09**	**LGG2G1AE**
		Dilution Factor: 1		Analysis Time..: 16:40	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/21/09	LGG2G1A2
		Dilution Factor: 1		Analysis Time..: 15:13	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.12		
Potassium	**1750 J**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2G1AU**
		Dilution Factor: 1		Analysis Time..: 14:32	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**50800**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2G1AV**
		Dilution Factor: 1		Analysis Time..: 14:32	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**192**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2G1AW**
		Dilution Factor: 1		Analysis Time..: 14:32	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**49900**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2G1AX**
		Dilution Factor: 1		Analysis Time..: 14:32	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2G1A0
		Dilution Factor: 1		Analysis Time..: 14:32	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2G1AK
		Dilution Factor: 1		Analysis Time..: 14:32	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/27/09	LGG2G1AF
		Dilution Factor: 1		Analysis Time..: 16:40	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	**4.8 B**	**5.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2G1AL**
		Dilution Factor: 1		Analysis Time..: 14:32	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-001C-1376-GF

TOTAL Metals

Lot-Sample #...: A9G150104-003 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGG2G1AH
		Dilution Factor: 1		Analysis Time..: 16:40	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2G1A1
		Dilution Factor: 1		Analysis Time..: 14:32	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**4.5 B,J**	**10.0**	**ug/L**	**SW846 6020**	**07/16-07/27/09**	**LGG2G1AG**
		Dilution Factor: 1		Analysis Time..: 16:40	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-002C-1377-GF

TOTAL Metals

Lot-Sample #...: A9G150104-005 **Matrix.....:** WG
Date Sampled...: 07/14/09 10:20 **Date Received..:** 07/15/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9197018						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2J1CL
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/16-07/27/09	LGG2J1AL
		Dilution Factor: 1		Analysis Time..: 16:44	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**5.6**	**5.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2J1CA**
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**40.9**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2J1CP**
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGG2J1AP
		Dilution Factor: 1		Analysis Time..: 16:44	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**102000**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2J1CT**
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/27/09	LGG2J1AT
		Dilution Factor: 1		Analysis Time..: 16:44	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2J1CW
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2J1C1
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2J1C4
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-002C-1377-GF

TOTAL Metals

Lot-Sample #...: A9G150104-005 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**3320**	**50.0**	**ug/L**	**SW846 6020**	**07/16-07/27/09**	**LGG2J1AW**
		Dilution Factor: 1		Analysis Time..: 16:44	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/21/09	LGG2J1AH
		Dilution Factor: 1		Analysis Time..: 14:50	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.12		
Potassium	**2420 J,E**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2J1C7**
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**40800**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2J1DA**
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**344**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2J1DE**
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**31100**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2J1DH**
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2J1AA
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2J1CE
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/27/09	LGG2J1A1
		Dilution Factor: 1		Analysis Time..: 16:44	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2J1CH
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-002C-1377-GF

TOTAL Metals

Lot-Sample #...: A9G150104-005 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGG2J1A7
		Dilution Factor: 1		Analysis Time..: 16:44	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2J1AE
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	ND	10.0	ug/L	SW846 6020	07/16-07/27/09	LGG2J1A4
		Dilution Factor: 1		Analysis Time..: 16:44	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

E Matrix interference.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-001C-1382-GF

TOTAL Metals

Lot-Sample #...: A9G150104-007 **Matrix.....:** WG
Date Sampled...: 07/14/09 12:35 **Date Received..:** 07/15/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9197018						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2L1AQ
		Dilution Factor: 1		Analysis Time..: 15:14	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/16-07/27/09	LGG2L1AE
		Dilution Factor: 1		Analysis Time..: 17:14	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2L1AM
		Dilution Factor: 1		Analysis Time..: 15:14	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**11.6**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2L1AR**
		Dilution Factor: 1		Analysis Time..: 15:14	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGG2L1AF
		Dilution Factor: 1		Analysis Time..: 17:14	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**46100**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2L1AT**
		Dilution Factor: 1		Analysis Time..: 15:14	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/27/09	LGG2L1AG
		Dilution Factor: 1		Analysis Time..: 17:14	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2L1AU
		Dilution Factor: 1		Analysis Time..: 15:14	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2L1AV
		Dilution Factor: 1		Analysis Time..: 15:14	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2L1AW
		Dilution Factor: 1		Analysis Time..: 15:14	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-001C-1382-GF

TOTAL Metals

Lot-Sample #...: A9G150104-007 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/16-07/27/09	LGG2L1AH
		Dilution Factor: 1		Analysis Time..: 17:14	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/21/09	LGG2L1AD
		Dilution Factor: 1		Analysis Time..: 15:21	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.12		
Potassium	**963 B,J**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2L1AX**
		Dilution Factor: 1		Analysis Time..: 15:14	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**13100**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2L1A0**
		Dilution Factor: 1		Analysis Time..: 15:14	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**0.68 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2L1A1**
		Dilution Factor: 1		Analysis Time..: 15:14	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**3390**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2L1A2**
		Dilution Factor: 1		Analysis Time..: 15:14	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2L1AA
		Dilution Factor: 1		Analysis Time..: 15:14	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2L1AN
		Dilution Factor: 1		Analysis Time..: 15:14	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/27/09	LGG2L1AJ
		Dilution Factor: 1		Analysis Time..: 17:14	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2L1AP
		Dilution Factor: 1		Analysis Time..: 15:14	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-001C-1382-GF

TOTAL Metals

Lot-Sample #...: A9G150104-007 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGG2L1AL
		Dilution Factor: 1		Analysis Time..: 17:14	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	**1.1 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2L1AC**
		Dilution Factor: 1		Analysis Time..: 15:14	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**2.5 B,J**	**10.0**	**ug/L**	**SW846 6020**	**07/16-07/27/09**	**LGG2L1AK**
		Dilution Factor: 1		Analysis Time..: 17:14	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-003C-1384-GF

TOTAL Metals

Lot-Sample #...: A9G150104-009 Matrix.....: WG
Date Sampled...: 07/14/09 13:50 Date Received..: 07/15/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9197018						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2N1CL
		Dilution Factor: 1		Analysis Time..: 15:18	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/16-07/27/09	LGG2N1AL
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2N1CA
		Dilution Factor: 1		Analysis Time..: 15:18	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**13.9**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2N1CP**
		Dilution Factor: 1		Analysis Time..: 15:18	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGG2N1AP
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**27300**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2N1CT**
		Dilution Factor: 1		Analysis Time..: 15:18	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/27/09	LGG2N1AT
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2N1CW
		Dilution Factor: 1		Analysis Time..: 15:18	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2N1C1
		Dilution Factor: 1		Analysis Time..: 15:18	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2N1C4
		Dilution Factor: 1		Analysis Time..: 15:18	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-003C-1384-GF

TOTAL Metals

Lot-Sample #...: A9G150104-009 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/16-07/27/09	LGG2N1AW
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/21/09	LGG2N1AH
		Dilution Factor: 1		Analysis Time..: 14:42	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.12		
Potassium	2680 J,E	1000	ug/L	SW846 6010B	07/16-07/17/09	LGG2N1C7
		Dilution Factor: 1		Analysis Time..: 15:18	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	6790	1000	ug/L	SW846 6010B	07/16-07/17/09	LGG2N1DA
		Dilution Factor: 1		Analysis Time..: 15:18	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	20.4 E	10.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2N1DE
		Dilution Factor: 1		Analysis Time..: 15:18	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	3770	1000	ug/L	SW846 6010B	07/16-07/17/09	LGG2N1DH
		Dilution Factor: 1		Analysis Time..: 15:18	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2N1AA
		Dilution Factor: 1		Analysis Time..: 15:18	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2N1CE
		Dilution Factor: 1		Analysis Time..: 15:18	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/27/09	LGG2N1A1
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2N1CH
		Dilution Factor: 1		Analysis Time..: 15:18	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-003C-1384-GF

TOTAL Metals

Lot-Sample #...: A9G150104-009 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGG2N1A7
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2N1AE
		Dilution Factor: 1		Analysis Time..: 15:18	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**7.3 B,J**	**10.0**	**ug/L**	**SW846 6020**	**07/16-07/27/09**	**LGG2N1A4**
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

E Matrix interference.

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-003C-1391-GF

TOTAL Metals

Lot-Sample #...: A9G150104-011 Matrix.....: WG
Date Sampled...: 07/14/09 15:55 Date Received..: 07/15/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9197018						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2Q1AQ
		Dilution Factor: 1		Analysis Time..: 15:37	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/16-07/27/09	LGG2Q1AE
		Dilution Factor: 1		Analysis Time..: 17:36	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2Q1AM
		Dilution Factor: 1		Analysis Time..: 15:37	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**2.6 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2Q1AR**
		Dilution Factor: 1		Analysis Time..: 15:37	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGG2Q1AF
		Dilution Factor: 1		Analysis Time..: 17:36	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**53200**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2Q1AT**
		Dilution Factor: 1		Analysis Time..: 15:37	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/27/09	LGG2Q1AG
		Dilution Factor: 1		Analysis Time..: 17:36	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2Q1AU
		Dilution Factor: 1		Analysis Time..: 15:37	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2Q1AV
		Dilution Factor: 1		Analysis Time..: 15:37	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2Q1AW
		Dilution Factor: 1		Analysis Time..: 15:37	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-003C-1391-GF

TOTAL Metals

Lot-Sample #...: A9G150104-011 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/16-07/27/09	LGG2Q1AH
		Dilution Factor: 1		Analysis Time..: 17:36	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/21/09	LGG2Q1AD
		Dilution Factor: 1		Analysis Time..: 15:11	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.12		
Potassium	**676 B,J**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2Q1AX**
		Dilution Factor: 1		Analysis Time..: 15:37	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**15500**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2Q1A0**
		Dilution Factor: 1		Analysis Time..: 15:37	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	ND	10.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2Q1A1
		Dilution Factor: 1		Analysis Time..: 15:37	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**9950**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2Q1A2**
		Dilution Factor: 1		Analysis Time..: 15:37	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2Q1AA
		Dilution Factor: 1		Analysis Time..: 15:37	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2Q1AN
		Dilution Factor: 1		Analysis Time..: 15:37	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/27/09	LGG2Q1AJ
		Dilution Factor: 1		Analysis Time..: 17:36	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2Q1AP
		Dilution Factor: 1		Analysis Time..: 15:37	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-003C-1391-GF

TOTAL Metals

Lot-Sample #...: A9G150104-011 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGG2Q1AL
		Dilution Factor: 1		Analysis Time..: 17:36	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2Q1AC
		Dilution Factor: 1		Analysis Time..: 15:37	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**2.6 B,J**	**10.0**	**ug/L**	**SW846 6020**	**07/16-07/27/09**	**LGG2Q1AK**
		Dilution Factor: 1		Analysis Time..: 17:36	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-002C-1390-GF

TOTAL Metals

Lot-Sample #...: A9G150104-013 **Matrix.....:** WG
Date Sampled...: 07/14/09 17:00 **Date Received..:** 07/15/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9197018						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2T1AQ
		Dilution Factor: 1		Analysis Time..: 15:42	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/16-07/27/09	LGG2T1AE
		Dilution Factor: 1		Analysis Time..: 17:40	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2T1AM
		Dilution Factor: 1		Analysis Time..: 15:42	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**59.9**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2T1AR**
		Dilution Factor: 1		Analysis Time..: 15:42	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGG2T1AF
		Dilution Factor: 1		Analysis Time..: 17:40	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**25000**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2T1AT**
		Dilution Factor: 1		Analysis Time..: 15:42	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/27/09	LGG2T1AG
		Dilution Factor: 1		Analysis Time..: 17:40	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**3.9 B**	**5.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2T1AU**
		Dilution Factor: 1		Analysis Time..: 15:42	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2T1AV
		Dilution Factor: 1		Analysis Time..: 15:42	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2T1AW
		Dilution Factor: 1		Analysis Time..: 15:42	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-002C-1390-GF

TOTAL Metals

Lot-Sample #...: A9G150104-013 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**5800**	**50.0**	**ug/L**	**SW846 6020**	**07/16-07/27/09**	**LGG2T1AH**
		Dilution Factor: 1		Analysis Time..: 17:40	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/21/09	LGG2T1AD
		Dilution Factor: 1		Analysis Time..: 15:24	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.12		
Potassium	**950 B,J**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2T1AX**
		Dilution Factor: 1		Analysis Time..: 15:42	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**8140**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2T1A0**
		Dilution Factor: 1		Analysis Time..: 15:42	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**1620**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2T1A1**
		Dilution Factor: 1		Analysis Time..: 15:42	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**10300**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2T1A2**
		Dilution Factor: 1		Analysis Time..: 15:42	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	**6.5 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2T1AA**
		Dilution Factor: 1		Analysis Time..: 15:42	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2T1AN
		Dilution Factor: 1		Analysis Time..: 15:42	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/27/09	LGG2T1AJ
		Dilution Factor: 1		Analysis Time..: 17:40	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2T1AP
		Dilution Factor: 1		Analysis Time..: 15:42	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-002C-1390-GF

TOTAL Metals

Lot-Sample #...: A9G150104-013 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGG2T1AL
		Dilution Factor: 1		Analysis Time..: 17:40	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2T1AC
		Dilution Factor: 1		Analysis Time..: 15:42	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**8.9 B,J**	**10.0**	**ug/L**	**SW846 6020**	**07/16-07/27/09**	**LGG2T1AK**
		Dilution Factor: 1		Analysis Time..: 17:40	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-006C-1381-GF

TOTAL Metals

Lot-Sample #...: A9G150104-016 **Matrix.....:** WG
Date Sampled...: 07/14/09 09:15 **Date Received..:** 07/15/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9197018						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2X1AQ
		Dilution Factor: 1		Analysis Time..: 15:47	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	**26.8 B**	**50.0**	**ug/L**	**SW846 6020**	**07/16-07/27/09**	**LGG2X1AE**
		Dilution Factor: 1		Analysis Time..: 17:45	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2X1AM
		Dilution Factor: 1		Analysis Time..: 15:47	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**16.2**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2X1AR**
		Dilution Factor: 1		Analysis Time..: 15:47	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGG2X1AF
		Dilution Factor: 1		Analysis Time..: 17:45	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**73600**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2X1AT**
		Dilution Factor: 1		Analysis Time..: 15:47	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/27/09	LGG2X1AG
		Dilution Factor: 1		Analysis Time..: 17:45	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2X1AU
		Dilution Factor: 1		Analysis Time..: 15:47	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2X1AV
		Dilution Factor: 1		Analysis Time..: 15:47	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2X1AW
		Dilution Factor: 1		Analysis Time..: 15:47	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-006C-1381-GF

TOTAL Metals

Lot-Sample #...: A9G150104-016 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/16-07/27/09	LGG2X1AH
		Dilution Factor: 1		Analysis Time..: 17:45	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/21/09	LGG2X1AD
		Dilution Factor: 1		Analysis Time..: 15:17	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.12		
Potassium	**1560 J**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2X1AX**
		Dilution Factor: 1		Analysis Time..: 15:47	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**29800**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2X1A0**
		Dilution Factor: 1		Analysis Time..: 15:47	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**5.2 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2X1A1**
		Dilution Factor: 1		Analysis Time..: 15:47	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**4610**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG2X1A2**
		Dilution Factor: 1		Analysis Time..: 15:47	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2X1AA
		Dilution Factor: 1		Analysis Time..: 15:47	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2X1AN
		Dilution Factor: 1		Analysis Time..: 15:47	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/27/09	LGG2X1AJ
		Dilution Factor: 1		Analysis Time..: 17:45	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2X1AP
		Dilution Factor: 1		Analysis Time..: 15:47	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-006C-1381-GF

TOTAL Metals

Lot-Sample #...: A9G150104-016 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGG2X1AL
		Dilution Factor: 1		Analysis Time..: 17:45	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/17/09	LGG2X1AC
		Dilution Factor: 1		Analysis Time..: 15:47	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**5.6 B,J**	**10.0**	**ug/L**	**SW846 6020**	**07/16-07/27/09**	**LGG2X1AK**
		Dilution Factor: 1		Analysis Time..: 17:45	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-005C-1380-GF

TOTAL Metals

Lot-Sample #...: A9G150104-018 **Matrix.....:** WG
Date Sampled...: 07/14/09 10:10 **Date Received..:** 07/15/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9197018						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG211AQ
		Dilution Factor: 1		Analysis Time..: 15:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/16-07/27/09	LGG211AE
		Dilution Factor: 1		Analysis Time..: 17:49	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG211AM
		Dilution Factor: 1		Analysis Time..: 15:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**11.0**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG211AR**
		Dilution Factor: 1		Analysis Time..: 15:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGG211AF
		Dilution Factor: 1		Analysis Time..: 17:49	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**64400**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG211AT**
		Dilution Factor: 1		Analysis Time..: 15:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/27/09	LGG211AG
		Dilution Factor: 1		Analysis Time..: 17:49	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG211AU
		Dilution Factor: 1		Analysis Time..: 15:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG211AV
		Dilution Factor: 1		Analysis Time..: 15:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG211AW
		Dilution Factor: 1		Analysis Time..: 15:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-005C-1380-GF

TOTAL Metals

Lot-Sample #...: A9G150104-018 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**760**	**50.0**	**ug/L**	**SW846 6020**	**07/16-07/27/09**	**LGG211AH**
		Dilution Factor: 1		Analysis Time..: 17:49	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/21/09	LGG211AD
		Dilution Factor: 1		Analysis Time..: 15:01	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.12		
Potassium	**718 B,J**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG211AX**
		Dilution Factor: 1		Analysis Time..: 15:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**22000**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG211A0**
		Dilution Factor: 1		Analysis Time..: 15:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**2780**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG211A1**
		Dilution Factor: 1		Analysis Time..: 15:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**11300**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG211A2**
		Dilution Factor: 1		Analysis Time..: 15:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/16-07/17/09	LGG211AA
		Dilution Factor: 1		Analysis Time..: 15:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/17/09	LGG211AN
		Dilution Factor: 1		Analysis Time..: 15:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/27/09	LGG211AJ
		Dilution Factor: 1		Analysis Time..: 17:49	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG211AP
		Dilution Factor: 1		Analysis Time..: 15:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-005C-1380-GF

TOTAL Metals

Lot-Sample #...: A9G150104-018 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGG211AL
		Dilution Factor: 1		Analysis Time..: 17:49	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/17/09	LGG211AC
		Dilution Factor: 1		Analysis Time..: 15:51	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	2.9 B,J	10.0	ug/L	SW846 6020	07/16-07/27/09	LGG211AK
		Dilution Factor: 1		Analysis Time..: 17:49	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-DUP2-1414-GF

TOTAL Metals

Lot-Sample #...: A9G150104-020 **Matrix.....:** WG
Date Sampled...: 07/14/09 11:15 **Date Received..:** 07/15/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9197018						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG251AQ
		Dilution Factor: 1		Analysis Time..: 16:01	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/16-07/27/09	LGG251AE
		Dilution Factor: 1		Analysis Time..: 18:03	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG251AM
		Dilution Factor: 1		Analysis Time..: 16:01	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**11.5**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG251AR**
		Dilution Factor: 1		Analysis Time..: 16:01	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGG251AF
		Dilution Factor: 1		Analysis Time..: 18:03	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**66500**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG251AT**
		Dilution Factor: 1		Analysis Time..: 16:01	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/27/09	LGG251AG
		Dilution Factor: 1		Analysis Time..: 18:03	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**2.3 B**	**5.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG251AU**
		Dilution Factor: 1		Analysis Time..: 16:01	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG251AV
		Dilution Factor: 1		Analysis Time..: 16:01	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG251AW
		Dilution Factor: 1		Analysis Time..: 16:01	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-DUP2-1414-GF

TOTAL Metals

Lot-Sample #...: A9G150104-020 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**743**	**50.0**	**ug/L**	**SW846 6020**	**07/16-07/27/09**	**LGG251AH**
		Dilution Factor: 1		Analysis Time..: 18:03	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/21/09	LGG251AD
		Dilution Factor: 1		Analysis Time..: 14:55	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.12		
Potassium	**728 B,J**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG251AX**
		Dilution Factor: 1		Analysis Time..: 16:01	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**22700**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG251A0**
		Dilution Factor: 1		Analysis Time..: 16:01	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**2890**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG251A1**
		Dilution Factor: 1		Analysis Time..: 16:01	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**11600**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG251A2**
		Dilution Factor: 1		Analysis Time..: 16:01	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	**3.9 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG251AA**
		Dilution Factor: 1		Analysis Time..: 16:01	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/17/09	LGG251AN
		Dilution Factor: 1		Analysis Time..: 16:01	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/27/09	LGG251AJ
		Dilution Factor: 1		Analysis Time..: 18:03	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	**4.9 B**	**5.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG251AP**
		Dilution Factor: 1		Analysis Time..: 16:01	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-DUP2-1414-GF

TOTAL Metals

Lot-Sample #...: A9G150104-020 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGG251AL
		Dilution Factor: 1		Analysis Time..: 18:03	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/17/09	LGG251AC
		Dilution Factor: 1		Analysis Time..: 16:01	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**6.3 B,J**	**10.0**	**ug/L**	**SW846 6020**	**07/16-07/27/09**	**LGG251AK**
		Dilution Factor: 1		Analysis Time..: 18:03	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-004C-1385-GF

TOTAL Metals

Lot-Sample #...: A9G150104-022 **Matrix.....:** WG
Date Sampled...: 07/14/09 12:15 **Date Received..:** 07/15/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9197018						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG271AQ
		Dilution Factor: 1		Analysis Time..: 16:17	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/16-07/27/09	LGG271AE
		Dilution Factor: 1		Analysis Time..: 18:07	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG271AM
		Dilution Factor: 1		Analysis Time..: 16:17	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**28.8**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG271AR**
		Dilution Factor: 1		Analysis Time..: 16:17	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGG271AF
		Dilution Factor: 1		Analysis Time..: 18:07	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**12400**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG271AT**
		Dilution Factor: 1		Analysis Time..: 16:17	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/27/09	LGG271AG
		Dilution Factor: 1		Analysis Time..: 18:07	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**5.1**	**5.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG271AU**
		Dilution Factor: 1		Analysis Time..: 16:17	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG271AV
		Dilution Factor: 1		Analysis Time..: 16:17	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG271AW
		Dilution Factor: 1		Analysis Time..: 16:17	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-004C-1385-GF

TOTAL Metals

Lot-Sample #...: A9G150104-022 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**10600**	**50.0**	**ug/L**	**SW846 6020**	**07/16-07/27/09**	**LGG271AH**
		Dilution Factor: 1		Analysis Time..: 18:07	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/21/09	LGG271AD
		Dilution Factor: 1		Analysis Time..: 15:19	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.12		
Potassium	**741 B,J**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG271AX**
		Dilution Factor: 1		Analysis Time..: 16:17	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**10600**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG271A0**
		Dilution Factor: 1		Analysis Time..: 16:17	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**2450**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG271A1**
		Dilution Factor: 1		Analysis Time..: 16:17	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**4130**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG271A2**
		Dilution Factor: 1		Analysis Time..: 16:17	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	**5.7 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG271AA**
		Dilution Factor: 1		Analysis Time..: 16:17	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/17/09	LGG271AN
		Dilution Factor: 1		Analysis Time..: 16:17	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/27/09	LGG271AJ
		Dilution Factor: 1		Analysis Time..: 18:07	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG271AP
		Dilution Factor: 1		Analysis Time..: 16:17	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-004C-1385-GF

TOTAL Metals

Lot-Sample #...: A9G150104-022 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGG271AL
		Dilution Factor: 1		Analysis Time..: 18:07	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/17/09	LGG271AC
		Dilution Factor: 1		Analysis Time..: 16:17	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**15.9 J**	**10.0**	**ug/L**	**SW846 6020**	**07/16-07/27/09**	**LGG271AK**
		Dilution Factor: 1		Analysis Time..: 18:07	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-DUP3-1415-GF

TOTAL Metals

Lot-Sample #...: A9G150104-024 **Matrix.....:** WG
Date Sampled...: 07/14/09 13:15 **Date Received..:** 07/15/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9197018						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG291AQ
		Dilution Factor: 1		Analysis Time..: 16:22	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/16-07/27/09	LGG291AE
		Dilution Factor: 1		Analysis Time..: 18:12	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG291AM
		Dilution Factor: 1		Analysis Time..: 16:22	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**31.8**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG291AR**
		Dilution Factor: 1		Analysis Time..: 16:22	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGG291AF
		Dilution Factor: 1		Analysis Time..: 18:12	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**13500**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG291AT**
		Dilution Factor: 1		Analysis Time..: 16:22	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/27/09	LGG291AG
		Dilution Factor: 1		Analysis Time..: 18:12	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**5.3**	**5.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG291AU**
		Dilution Factor: 1		Analysis Time..: 16:22	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG291AV
		Dilution Factor: 1		Analysis Time..: 16:22	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG291AW
		Dilution Factor: 1		Analysis Time..: 16:22	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-DUP3-1415-GF

TOTAL Metals

Lot-Sample #...: A9G150104-024 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**11600**	**50.0**	**ug/L**	**SW846 6020**	**07/16-07/27/09**	**LGG291AH**
		Dilution Factor: 1		Analysis Time..: 18:12	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/21/09	LGG291AD
		Dilution Factor: 1		Analysis Time..: 15:04	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.12		
Potassium	**829 B,J**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG291AX**
		Dilution Factor: 1		Analysis Time..: 16:22	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**11400**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG291A0**
		Dilution Factor: 1		Analysis Time..: 16:22	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**2640**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG291A1**
		Dilution Factor: 1		Analysis Time..: 16:22	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**5120**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG291A2**
		Dilution Factor: 1		Analysis Time..: 16:22	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	**7.2 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG291AA**
		Dilution Factor: 1		Analysis Time..: 16:22	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/17/09	LGG291AN
		Dilution Factor: 1		Analysis Time..: 16:22	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/27/09	LGG291AJ
		Dilution Factor: 1		Analysis Time..: 18:12	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG291AP
		Dilution Factor: 1		Analysis Time..: 16:22	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-DUP3-1415-GF

TOTAL Metals

Lot-Sample #...: A9G150104-024 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGG291AL
		Dilution Factor: 1		Analysis Time..: 18:12	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/17/09	LGG291AC
		Dilution Factor: 1		Analysis Time..: 16:22	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**15.7 J**	**10.0**	**ug/L**	**SW846 6020**	**07/16-07/27/09**	**LGG291AK**
		Dilution Factor: 1		Analysis Time..: 18:12	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-006C-1387-GF

TOTAL Metals

Lot-Sample #...: A9G150104-026 **Matrix.....:** WG
Date Sampled...: 07/14/09 14:15 **Date Received..:** 07/15/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9197018						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3C1AQ
		Dilution Factor: 1		Analysis Time..: 16:26	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	**24.0 B**	**50.0**	**ug/L**	**SW846 6020**	**07/16-07/27/09**	**LGG3C1AE**
		Dilution Factor: 1		Analysis Time..: 18:16	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3C1AM
		Dilution Factor: 1		Analysis Time..: 16:26	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**55.7**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3C1AR**
		Dilution Factor: 1		Analysis Time..: 16:26	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGG3C1AF
		Dilution Factor: 1		Analysis Time..: 18:16	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**4360**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3C1AT**
		Dilution Factor: 1		Analysis Time..: 16:26	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/27/09	LGG3C1AG
		Dilution Factor: 1		Analysis Time..: 18:16	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**2.2 B**	**5.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3C1AU**
		Dilution Factor: 1		Analysis Time..: 16:26	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3C1AV
		Dilution Factor: 1		Analysis Time..: 16:26	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3C1AW
		Dilution Factor: 1		Analysis Time..: 16:26	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-006C-1387-GF

TOTAL Metals

Lot-Sample #...: A9G150104-026 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**1480**	**50.0**	**ug/L**	**SW846 6020**	**07/16-07/27/09**	**LGG3C1AH**
		Dilution Factor: 1		Analysis Time..: 18:16	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/21/09	LGG3C1AD
		Dilution Factor: 1		Analysis Time..: 14:59	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.12		
Potassium	**1230 J**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3C1AX**
		Dilution Factor: 1		Analysis Time..: 16:26	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**5200**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3C1A0**
		Dilution Factor: 1		Analysis Time..: 16:26	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**371**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3C1A1**
		Dilution Factor: 1		Analysis Time..: 16:26	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**1840**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3C1A2**
		Dilution Factor: 1		Analysis Time..: 16:26	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	**10.1**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3C1AA**
		Dilution Factor: 1		Analysis Time..: 16:26	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3C1AN
		Dilution Factor: 1		Analysis Time..: 16:26	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/27/09	LGG3C1AJ
		Dilution Factor: 1		Analysis Time..: 18:16	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3C1AP
		Dilution Factor: 1		Analysis Time..: 16:26	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-006C-1387-GF

TOTAL Metals

Lot-Sample #...: A9G150104-026 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGG3C1AL
		Dilution Factor: 1		Analysis Time..: 18:16	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3C1AC
		Dilution Factor: 1		Analysis Time..: 16:26	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**12.7 J**	**10.0**	**ug/L**	**SW846 6020**	**07/16-07/27/09**	**LGG3C1AK**
		Dilution Factor: 1		Analysis Time..: 18:16	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-001C-1389-GF

TOTAL Metals

Lot-Sample #...: A9G150104-028 **Matrix.....:** WG
Date Sampled...: 07/14/09 15:30 **Date Received..:** 07/15/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9197018						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3F1AQ
		Dilution Factor: 1		Analysis Time..: 16:31	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/16-07/27/09	LGG3F1AE
		Dilution Factor: 1		Analysis Time..: 18:20	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3F1AM
		Dilution Factor: 1		Analysis Time..: 16:31	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**2.3 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3F1AR**
		Dilution Factor: 1		Analysis Time..: 16:31	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGG3F1AF
		Dilution Factor: 1		Analysis Time..: 18:20	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**74800**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3F1AT**
		Dilution Factor: 1		Analysis Time..: 16:31	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/27/09	LGG3F1AG
		Dilution Factor: 1		Analysis Time..: 18:20	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3F1AU
		Dilution Factor: 1		Analysis Time..: 16:31	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3F1AV
		Dilution Factor: 1		Analysis Time..: 16:31	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3F1AW
		Dilution Factor: 1		Analysis Time..: 16:31	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-001C-1389-GF

TOTAL Metals

Lot-Sample #...: A9G150104-028 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/16-07/27/09	LGG3F1AH
		Dilution Factor: 1		Analysis Time..: 18:20	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/21/09	LGG3F1AD
		Dilution Factor: 1		Analysis Time..: 15:16	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.12		
Potassium	**1030 J**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3F1AX**
		Dilution Factor: 1		Analysis Time..: 16:31	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**27400**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3F1A0**
		Dilution Factor: 1		Analysis Time..: 16:31	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**1.5 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3F1A1**
		Dilution Factor: 1		Analysis Time..: 16:31	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**7860**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3F1A2**
		Dilution Factor: 1		Analysis Time..: 16:31	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3F1AA
		Dilution Factor: 1		Analysis Time..: 16:31	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3F1AN
		Dilution Factor: 1		Analysis Time..: 16:31	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/27/09	LGG3F1AJ
		Dilution Factor: 1		Analysis Time..: 18:20	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3F1AP
		Dilution Factor: 1		Analysis Time..: 16:31	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-001C-1389-GF

TOTAL Metals

Lot-Sample #...: A9G150104-028 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGG3F1AL
		Dilution Factor: 1		Analysis Time..: 18:20	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3F1AC
		Dilution Factor: 1		Analysis Time..: 16:31	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	ND	10.0	ug/L	SW846 6020	07/16-07/27/09	LGG3F1AK
		Dilution Factor: 1		Analysis Time..: 18:20	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-003C-1378-GF

TOTAL Metals

Lot-Sample #...: A9G150104-031 **Matrix.....:** WG
Date Sampled...: 07/14/09 09:10 **Date Received..:** 07/15/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9197018						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3J1AQ
		Dilution Factor: 1		Analysis Time..: 16:35	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	**25.9 B**	**50.0**	**ug/L**	**SW846 6020**	**07/16-07/27/09**	**LGG3J1AE**
		Dilution Factor: 1		Analysis Time..: 18:24	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**3.5 B**	**5.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3J1AM**
		Dilution Factor: 1		Analysis Time..: 16:35	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**24.9**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3J1AR**
		Dilution Factor: 1		Analysis Time..: 16:35	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGG3J1AF
		Dilution Factor: 1		Analysis Time..: 18:24	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**136000**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3J1AT**
		Dilution Factor: 1		Analysis Time..: 16:35	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/27/09	LGG3J1AG
		Dilution Factor: 1		Analysis Time..: 18:24	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3J1AU
		Dilution Factor: 1		Analysis Time..: 16:35	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3J1AV
		Dilution Factor: 1		Analysis Time..: 16:35	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3J1AW
		Dilution Factor: 1		Analysis Time..: 16:35	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-003C-1378-GF

TOTAL Metals

Lot-Sample #...: A9G150104-031 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**422**	**50.0**	**ug/L**	**SW846 6020**	**07/16-07/27/09**	**LGG3J1AH**
		Dilution Factor: 1		Analysis Time..: 18:24	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/21/09	LGG3J1AD
		Dilution Factor: 1		Analysis Time..: 15:03	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.12		
Potassium	**3230 J**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3J1AX**
		Dilution Factor: 1		Analysis Time..: 16:35	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**50300**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3J1A0**
		Dilution Factor: 1		Analysis Time..: 16:35	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**389**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3J1A1**
		Dilution Factor: 1		Analysis Time..: 16:35	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**46500**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3J1A2**
		Dilution Factor: 1		Analysis Time..: 16:35	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3J1AA
		Dilution Factor: 1		Analysis Time..: 16:35	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3J1AN
		Dilution Factor: 1		Analysis Time..: 16:35	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/27/09	LGG3J1AJ
		Dilution Factor: 1		Analysis Time..: 18:24	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3J1AP
		Dilution Factor: 1		Analysis Time..: 16:35	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-003C-1378-GF

TOTAL Metals

Lot-Sample #...: A9G150104-031 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGG3J1AL
		Dilution Factor: 1		Analysis Time..: 18:24	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3J1AC
		Dilution Factor: 1		Analysis Time..: 16:35	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**3.9 B,J**	**10.0**	**ug/L**	**SW846 6020**	**07/16-07/27/09**	**LGG3J1AK**
		Dilution Factor: 1		Analysis Time..: 18:24	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-004C-1379-GF

TOTAL Metals

Lot-Sample #...: A9G150104-033 **Matrix.....:** WG
Date Sampled...: 07/14/09 10:35 **Date Received..:** 07/15/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9197018						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3L1AQ
		Dilution Factor: 1		Analysis Time..: 16:40	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/16-07/27/09	LGG3L1AE
		Dilution Factor: 1		Analysis Time..: 18:28	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3L1AM
		Dilution Factor: 1		Analysis Time..: 16:40	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**12.9**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3L1AR**
		Dilution Factor: 1		Analysis Time..: 16:40	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGG3L1AF
		Dilution Factor: 1		Analysis Time..: 18:28	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**84100**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3L1AT**
		Dilution Factor: 1		Analysis Time..: 16:40	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/27/09	LGG3L1AG
		Dilution Factor: 1		Analysis Time..: 18:28	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3L1AU
		Dilution Factor: 1		Analysis Time..: 16:40	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3L1AV
		Dilution Factor: 1		Analysis Time..: 16:40	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3L1AW
		Dilution Factor: 1		Analysis Time..: 16:40	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-004C-1379-GF

TOTAL Metals

Lot-Sample #...: A9G150104-033 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/16-07/27/09	LGG3L1AH
		Dilution Factor: 1		Analysis Time..: 18:28	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/21/09	LGG3L1AD
		Dilution Factor: 1		Analysis Time..: 15:22	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.12		
Potassium	**1170 J**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3L1AX**
		Dilution Factor: 1		Analysis Time..: 16:40	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**40800**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3L1A0**
		Dilution Factor: 1		Analysis Time..: 16:40	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**45.7**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3L1A1**
		Dilution Factor: 1		Analysis Time..: 16:40	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**24200**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3L1A2**
		Dilution Factor: 1		Analysis Time..: 16:40	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3L1AA
		Dilution Factor: 1		Analysis Time..: 16:40	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3L1AN
		Dilution Factor: 1		Analysis Time..: 16:40	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/27/09	LGG3L1AJ
		Dilution Factor: 1		Analysis Time..: 18:28	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3L1AP
		Dilution Factor: 1		Analysis Time..: 16:40	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-004C-1379-GF

TOTAL Metals

Lot-Sample #...: A9G150104-033 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGG3L1AL
		Dilution Factor: 1		Analysis Time..: 18:28	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3L1AC
		Dilution Factor: 1		Analysis Time..: 16:40	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	5.4 B,J	10.0	ug/L	SW846 6020	07/16-07/27/09	LGG3L1AK
		Dilution Factor: 1		Analysis Time..: 18:28	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1424-GW

TOTAL Metals

Lot-Sample #...: A9G150104-034 **Matrix.....:** WQ
Date Sampled...: 07/14/09 11:30 **Date Received..:** 07/15/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9197018						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3M1AT
		Dilution Factor: 1		Analysis Time..: 16:44	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/16-07/27/09	LGG3M1AG
		Dilution Factor: 1		Analysis Time..: 18:32	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3M1AP
		Dilution Factor: 1		Analysis Time..: 16:44	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	ND	10.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3M1AU
		Dilution Factor: 1		Analysis Time..: 16:44	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGG3M1AH
		Dilution Factor: 1		Analysis Time..: 18:32	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	ND	1000	ug/L	SW846 6010B	07/16-07/17/09	LGG3M1AV
		Dilution Factor: 1		Analysis Time..: 16:44	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/27/09	LGG3M1AJ
		Dilution Factor: 1		Analysis Time..: 18:32	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3M1AW
		Dilution Factor: 1		Analysis Time..: 16:44	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3M1AX
		Dilution Factor: 1		Analysis Time..: 16:44	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3M1A0
		Dilution Factor: 1		Analysis Time..: 16:44	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1424-GW

TOTAL Metals

Lot-Sample #...: A9G150104-034 Matrix.....: WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/16-07/27/09	LGG3M1AK
		Dilution Factor: 1		Analysis Time..: 18:32	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/21/09	LGG3M1A7
		Dilution Factor: 1		Analysis Time..: 15:26	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.12		
Potassium	**157 B,J**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3M1A1**
		Dilution Factor: 1		Analysis Time..: 16:44	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	ND	1000	ug/L	SW846 6010B	07/16-07/17/09	LGG3M1A2
		Dilution Factor: 1		Analysis Time..: 16:44	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	ND	10.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3M1A3
		Dilution Factor: 1		Analysis Time..: 16:44	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	ND	1000	ug/L	SW846 6010B	07/16-07/17/09	LGG3M1A4
		Dilution Factor: 1		Analysis Time..: 16:44	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3M1A5
		Dilution Factor: 1		Analysis Time..: 16:44	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3M1AQ
		Dilution Factor: 1		Analysis Time..: 16:44	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/27/09	LGG3M1AL
		Dilution Factor: 1		Analysis Time..: 18:32	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	**4.6 B**	**5.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3M1AR**
		Dilution Factor: 1		Analysis Time..: 16:44	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1424-GW

TOTAL Metals

Lot-Sample #...: A9G150104-034 **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGG3M1AN
		Dilution Factor: 1		Analysis Time..: 18:32	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3M1A6
		Dilution Factor: 1		Analysis Time..: 16:44	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	3.5 B,J	10.0	ug/L	SW846 6020	07/16-07/27/09	LGG3M1AM
		Dilution Factor: 1		Analysis Time..: 18:32	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-007C-1388-GF

TOTAL Metals

Lot-Sample #...: A9G150104-036 **Matrix.....:** WG
Date Sampled...: 07/14/09 13:05 **Date Received..:** 07/15/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9197018						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3P1AQ
		Dilution Factor: 1		Analysis Time..: 16:49	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/16-07/27/09	LGG3P1AE
		Dilution Factor: 1		Analysis Time..: 18:36	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3P1AM
		Dilution Factor: 1		Analysis Time..: 16:49	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**12.3**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3P1AR**
		Dilution Factor: 1		Analysis Time..: 16:49	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGG3P1AF
		Dilution Factor: 1		Analysis Time..: 18:36	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**10400**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3P1AT**
		Dilution Factor: 1		Analysis Time..: 16:49	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/27/09	LGG3P1AG
		Dilution Factor: 1		Analysis Time..: 18:36	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**6.5**	**5.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3P1AU**
		Dilution Factor: 1		Analysis Time..: 16:49	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3P1AV
		Dilution Factor: 1		Analysis Time..: 16:49	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3P1AW
		Dilution Factor: 1		Analysis Time..: 16:49	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-007C-1388-GF

TOTAL Metals

Lot-Sample #...: A9G150104-036 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**7300**	**50.0**	**ug/L**	**SW846 6020**	**07/16-07/27/09**	**LGG3P1AH**
		Dilution Factor: 1		Analysis Time..: 18:36	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/21/09	LGG3P1AD
		Dilution Factor: 1		Analysis Time..: 15:14	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.12		
Potassium	**1330 J**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3P1AX**
		Dilution Factor: 1		Analysis Time..: 16:49	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**6470**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3P1A0**
		Dilution Factor: 1		Analysis Time..: 16:49	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**800**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3P1A1**
		Dilution Factor: 1		Analysis Time..: 16:49	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**2730**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3P1A2**
		Dilution Factor: 1		Analysis Time..: 16:49	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	**15.6**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3P1AA**
		Dilution Factor: 1		Analysis Time..: 16:49	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3P1AN
		Dilution Factor: 1		Analysis Time..: 16:49	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/27/09	LGG3P1AJ
		Dilution Factor: 1		Analysis Time..: 18:36	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3P1AP
		Dilution Factor: 1		Analysis Time..: 16:49	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-007C-1388-GF

TOTAL Metals

Lot-Sample #...: A9G150104-036 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGG3P1AL
		Dilution Factor: 1		Analysis Time..: 18:36	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3P1AC
		Dilution Factor: 1		Analysis Time..: 16:49	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**28.6 J**	**10.0**	**ug/L**	**SW846 6020**	**07/16-07/27/09**	**LGG3P1AK**
		Dilution Factor: 1		Analysis Time..: 18:36	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-002C-1383-GF

TOTAL Metals

Lot-Sample #...: A9G150104-038 **Matrix.....:** WG
Date Sampled...: 07/14/09 14:25 **Date Received..:** 07/15/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9197018						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3T1AQ
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	**103**	**50.0**	**ug/L**	**SW846 6020**	**07/16-07/27/09**	**LGG3T1AE**
		Dilution Factor: 1		Analysis Time..: 18:40	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3T1AM
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**4.2 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3T1AR**
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGG3T1AF
		Dilution Factor: 1		Analysis Time..: 18:40	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**17300**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3T1AT**
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/27/09	LGG3T1AG
		Dilution Factor: 1		Analysis Time..: 18:40	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3T1AU
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3T1AV
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3T1AW
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-002C-1383-GF

TOTAL Metals

Lot-Sample #...: A9G150104-038 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/16-07/27/09	LGG3T1AH
		Dilution Factor: 1		Analysis Time..: 18:40	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/21/09	LGG3T1AD
		Dilution Factor: 1		Analysis Time..: 15:06	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.12		
Potassium	**1330 J**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3T1AX**
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**7030**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3T1A0**
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**52.6**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3T1A1**
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**2050**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3T1A2**
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	**13.1**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3T1AA**
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3T1AN
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/27/09	LGG3T1AJ
		Dilution Factor: 1		Analysis Time..: 18:40	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3T1AP
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-002C-1383-GF

TOTAL Metals

Lot-Sample #...: A9G150104-038 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGG3T1AL
		Dilution Factor: 1		Analysis Time..: 18:40	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3T1AC
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**5.5 B,J**	**10.0**	**ug/L**	**SW846 6020**	**07/16-07/27/09**	**LGG3T1AK**
		Dilution Factor: 1		Analysis Time..: 18:40	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-005C-1386-GF

TOTAL Metals

Lot-Sample #...: A9G150104-040 **Matrix.....:** WG
Date Sampled...: 07/14/09 15:40 **Date Received..:** 07/15/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9197018						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3W1AQ
		Dilution Factor: 1		Analysis Time..: 16:58	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/16-07/27/09	LGG3W1AE
		Dilution Factor: 1		Analysis Time..: 18:55	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3W1AM
		Dilution Factor: 1		Analysis Time..: 16:58	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**2.8 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3W1AR**
		Dilution Factor: 1		Analysis Time..: 16:58	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGG3W1AF
		Dilution Factor: 1		Analysis Time..: 18:55	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**11200**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3W1AT**
		Dilution Factor: 1		Analysis Time..: 16:58	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/27/09	LGG3W1AG
		Dilution Factor: 1		Analysis Time..: 18:55	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3W1AU
		Dilution Factor: 1		Analysis Time..: 16:58	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3W1AV
		Dilution Factor: 1		Analysis Time..: 16:58	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3W1AW
		Dilution Factor: 1		Analysis Time..: 16:58	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-005C-1386-GF

TOTAL Metals

Lot-Sample #...: A9G150104-040 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/16-07/27/09	LGG3W1AH
		Dilution Factor: 1		Analysis Time..: 18:55	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/21/09	LGG3W1AD
		Dilution Factor: 1		Analysis Time..: 14:57	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.12		
Potassium	**717 B,J**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3W1AX**
		Dilution Factor: 1		Analysis Time..: 16:58	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**4910**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3W1A0**
		Dilution Factor: 1		Analysis Time..: 16:58	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**1.8 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3W1A1**
		Dilution Factor: 1		Analysis Time..: 16:58	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**3430**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGG3W1A2**
		Dilution Factor: 1		Analysis Time..: 16:58	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3W1AA
		Dilution Factor: 1		Analysis Time..: 16:58	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3W1AN
		Dilution Factor: 1		Analysis Time..: 16:58	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/27/09	LGG3W1AJ
		Dilution Factor: 1		Analysis Time..: 18:55	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3W1AP
		Dilution Factor: 1		Analysis Time..: 16:58	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-005C-1386-GF

TOTAL Metals

Lot-Sample #...: A9G150104-040 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGG3W1AL
		Dilution Factor: 1		Analysis Time..: 18:55	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/17/09	LGG3W1AC
		Dilution Factor: 1		Analysis Time..: 16:58	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	31.0 J	10.0	ug/L	SW846 6020	07/16-07/27/09	LGG3W1AK
		Dilution Factor: 1		Analysis Time..: 18:55	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A9G150104 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A9G160000-018 **Prep Batch #...:** 9197018						
Aluminum	ND	50.0	ug/L	SW846 6020	07/16-07/27/09	LGJ661AE
		Dilution Factor: 1				
		Analysis Time..: 16:30		Analyst ID.....: 001637	Instrument ID..: I8	
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/27/09	LGJ661AJ
		Dilution Factor: 1				
		Analysis Time..: 16:30		Analyst ID.....: 001637	Instrument ID..: I8	
Arsenic	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGJ661AM
		Dilution Factor: 1				
		Analysis Time..: 14:22		Analyst ID.....: 000079	Instrument ID..: I5	
Barium	ND	10.0	ug/L	SW846 6010B	07/16-07/17/09	LGJ661AR
		Dilution Factor: 1				
		Analysis Time..: 14:22		Analyst ID.....: 000079	Instrument ID..: I5	
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGJ661AF
		Dilution Factor: 1				
		Analysis Time..: 16:30		Analyst ID.....: 001637	Instrument ID..: I8	
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/27/09	LGJ661AG
		Dilution Factor: 1				
		Analysis Time..: 16:30		Analyst ID.....: 001637	Instrument ID..: I8	
Calcium	ND	1000	ug/L	SW846 6010B	07/16-07/17/09	LGJ661AT
		Dilution Factor: 1				
		Analysis Time..: 14:22		Analyst ID.....: 000079	Instrument ID..: I5	
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGJ661AV
		Dilution Factor: 1				
		Analysis Time..: 14:22		Analyst ID.....: 000079	Instrument ID..: I5	
Cobalt	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGJ661AU
		Dilution Factor: 1				
		Analysis Time..: 14:22		Analyst ID.....: 000079	Instrument ID..: I5	
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGJ661AW
		Dilution Factor: 1				
		Analysis Time..: 14:22		Analyst ID.....: 000079	Instrument ID..: I5	
Iron	ND	50.0	ug/L	SW846 6020	07/16-07/27/09	LGJ661AH
		Dilution Factor: 1				
		Analysis Time..: 16:30		Analyst ID.....: 001637	Instrument ID..: I8	

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A9G150104 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/17/09	LGJ661AN
		Dilution Factor: 1				
		Analysis Time..: 14:22		Analyst ID.....: 000079	Instrument ID..: I5	
Magnesium	ND	1000	ug/L	SW846 6010B	07/16-07/17/09	LGJ661A0
		Dilution Factor: 1				
		Analysis Time..: 14:22		Analyst ID.....: 000079	Instrument ID..: I5	
Manganese	ND	10.0	ug/L	SW846 6010B	07/16-07/17/09	LGJ661A1
		Dilution Factor: 1				
		Analysis Time..: 14:22		Analyst ID.....: 000079	Instrument ID..: I5	
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/21/09	LGJ661AD
		Dilution Factor: 1				
		Analysis Time..: 14:39		Analyst ID.....: 001576	Instrument ID..: H4	
Nickel	ND	10.0	ug/L	SW846 6010B	07/16-07/17/09	LGJ661AA
		Dilution Factor: 1				
		Analysis Time..: 14:22		Analyst ID.....: 000079	Instrument ID..: I5	
Potassium	**147 B**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/17/09**	**LGJ661AX**
		Dilution Factor: 1				
		Analysis Time..: 14:22		Analyst ID.....: 000079	Instrument ID..: I5	
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGJ661AP
		Dilution Factor: 1				
		Analysis Time..: 14:22		Analyst ID.....: 000079	Instrument ID..: I5	
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/17/09	LGJ661AQ
		Dilution Factor: 1				
		Analysis Time..: 14:22		Analyst ID.....: 000079	Instrument ID..: I5	
Sodium	ND	1000	ug/L	SW846 6010B	07/16-07/17/09	LGJ661A2
		Dilution Factor: 1				
		Analysis Time..: 14:22		Analyst ID.....: 000079	Instrument ID..: I5	
Thallium	ND	1.0	ug/L	SW846 6020	07/16-07/27/09	LGJ661AL
		Dilution Factor: 1				
		Analysis Time..: 16:30		Analyst ID.....: 001637	Instrument ID..: I8	
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/17/09	LGJ661AC
		Dilution Factor: 1				
		Analysis Time..: 14:22		Analyst ID.....: 000079	Instrument ID..: I5	
Zinc	**8.8 B**	**10.0**	**ug/L**	**SW846 6020**	**07/16-07/27/09**	**LGJ661AK**
		Dilution Factor: 1				
		Analysis Time..: 16:30		Analyst ID.....: 001637	Instrument ID..: I8	

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A9G150104 Matrix.....: WATER

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A9G150104 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A9G160000-018 **Prep Batch #...:** 9197018					
Nickel	104	(80 - 120)	SW846 6010B	07/16-07/17/09	LGJ661A3
		Dilution Factor: 1	Analysis Time..: 14:26	Analyst ID.....: 000079	
		Instrument ID..: I5			
Vanadium	98	(80 - 120)	SW846 6010B	07/16-07/17/09	LGJ661A4
		Dilution Factor: 1	Analysis Time..: 14:26	Analyst ID.....: 000079	
		Instrument ID..: I5			
Mercury	100	(80 - 120)	SW846 7470A	07/16-07/21/09	LGJ661A5
		Dilution Factor: 1	Analysis Time..: 14:40	Analyst ID.....: 001576	
		Instrument ID..: H4			
Aluminum	109	(80 - 120)	SW846 6020	07/16-07/27/09	LGJ661A6
		Dilution Factor: 1	Analysis Time..: 16:34	Analyst ID.....: 001637	
		Instrument ID..: I8			
Beryllium	104	(80 - 120)	SW846 6020	07/16-07/27/09	LGJ661A7
		Dilution Factor: 1	Analysis Time..: 16:34	Analyst ID.....: 001637	
		Instrument ID..: I8			
Cadmium	108	(80 - 120)	SW846 6020	07/16-07/27/09	LGJ661A8
		Dilution Factor: 1	Analysis Time..: 16:34	Analyst ID.....: 001637	
		Instrument ID..: I8			
Iron	109	(80 - 120)	SW846 6020	07/16-07/27/09	LGJ661A9
		Dilution Factor: 1	Analysis Time..: 16:34	Analyst ID.....: 001637	
		Instrument ID..: I8			
Antimony	104	(80 - 120)	SW846 6020	07/16-07/27/09	LGJ661CA
		Dilution Factor: 1	Analysis Time..: 16:34	Analyst ID.....: 001637	
		Instrument ID..: I8			
Zinc	112	(80 - 120)	SW846 6020	07/16-07/27/09	LGJ661CC
		Dilution Factor: 1	Analysis Time..: 16:34	Analyst ID.....: 001637	
		Instrument ID..: I8			
Thallium	96	(80 - 120)	SW846 6020	07/16-07/27/09	LGJ661CD
		Dilution Factor: 1	Analysis Time..: 16:34	Analyst ID.....: 001637	
		Instrument ID..: I8			

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A9G150104 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Arsenic	104	(80 - 120)	SW846 6010B	07/16-07/17/09	LGJ661CE
		Dilution Factor: 1	Analysis Time..: 14:26	Analyst ID.....: 000079	
		Instrument ID..: I5			
Lead	98	(80 - 120)	SW846 6010B	07/16-07/17/09	LGJ661CF
		Dilution Factor: 1	Analysis Time..: 14:26	Analyst ID.....: 000079	
		Instrument ID..: I5			
Selenium	101	(80 - 120)	SW846 6010B	07/16-07/17/09	LGJ661CG
		Dilution Factor: 1	Analysis Time..: 14:26	Analyst ID.....: 000079	
		Instrument ID..: I5			
Silver	115	(80 - 120)	SW846 6010B	07/16-07/17/09	LGJ661CH
		Dilution Factor: 1	Analysis Time..: 14:26	Analyst ID.....: 000079	
		Instrument ID..: I5			
Barium	102	(80 - 120)	SW846 6010B	07/16-07/17/09	LGJ661CJ
		Dilution Factor: 1	Analysis Time..: 14:26	Analyst ID.....: 000079	
		Instrument ID..: I5			
Calcium	104	(80 - 120)	SW846 6010B	07/16-07/17/09	LGJ661CK
		Dilution Factor: 1	Analysis Time..: 14:26	Analyst ID.....: 000079	
		Instrument ID..: I5			
Cobalt	101	(80 - 120)	SW846 6010B	07/16-07/17/09	LGJ661CL
		Dilution Factor: 1	Analysis Time..: 14:26	Analyst ID.....: 000079	
		Instrument ID..: I5			
Chromium	102	(80 - 120)	SW846 6010B	07/16-07/17/09	LGJ661CM
		Dilution Factor: 1	Analysis Time..: 14:26	Analyst ID.....: 000079	
		Instrument ID..: I5			
Copper	102	(80 - 120)	SW846 6010B	07/16-07/17/09	LGJ661CN
		Dilution Factor: 1	Analysis Time..: 14:26	Analyst ID.....: 000079	
		Instrument ID..: I5			
Potassium	102	(80 - 120)	SW846 6010B	07/16-07/17/09	LGJ661CP
		Dilution Factor: 1	Analysis Time..: 14:26	Analyst ID.....: 000079	
		Instrument ID..: I5			
Magnesium	106	(80 - 120)	SW846 6010B	07/16-07/17/09	LGJ661CQ
		Dilution Factor: 1	Analysis Time..: 14:26	Analyst ID.....: 000079	
		Instrument ID..: I5			

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A9G150104 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Manganese	106	(80 - 120)	SW846 6010B	07/16-07/17/09	LGJ661CR
		Dilution Factor: 1	Analysis Time..: 14:26	Analyst ID.....: 000079	
		Instrument ID..: I5			
Sodium	106	(80 - 120)	SW846 6010B	07/16-07/17/09	LGJ661CT
		Dilution Factor: 1	Analysis Time..: 14:26	Analyst ID.....: 000079	
		Instrument ID..: I5			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A9G150104 **Matrix.....:** WG
Date Sampled...: 07/14/09 10:20 **Date Received..:** 07/15/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A9G150104-005 **Prep Batch #...:** 9197018					
Aluminum	106	(75 - 125)	SW846 6020	07/16-07/27/09	LGG2J1AM
		Dilution Factor: 1	Analysis Time..: 16:44	Instrument ID..: I8	
		Analyst ID.....: 001637			
Antimony	103	(75 - 125)	SW846 6020	07/16-07/27/09	LGG2J1A2
		Dilution Factor: 1	Analysis Time..: 16:44	Instrument ID..: I8	
		Analyst ID.....: 001637			
Arsenic	103	(75 - 125)	SW846 6010B	07/16-07/17/09	LGG2J1CC
		Dilution Factor: 1	Analysis Time..: 14:36	Instrument ID..: I5	
		Analyst ID.....: 000079			
Barium	100	(75 - 125)	SW846 6010B	07/16-07/17/09	LGG2J1CQ
		Dilution Factor: 1	Analysis Time..: 14:36	Instrument ID..: I5	
		Analyst ID.....: 000079			
Beryllium	98	(75 - 125)	SW846 6020	07/16-07/27/09	LGG2J1AQ
		Dilution Factor: 1	Analysis Time..: 16:44	Instrument ID..: I8	
		Analyst ID.....: 001637			
Cadmium	104	(75 - 125)	SW846 6020	07/16-07/27/09	LGG2J1AU
		Dilution Factor: 1	Analysis Time..: 16:44	Instrument ID..: I8	
		Analyst ID.....: 001637			
Calcium	90	(75 - 125)	SW846 6010B	07/16-07/17/09	LGG2J1CU
		Dilution Factor: 1	Analysis Time..: 14:36	Instrument ID..: I5	
		Analyst ID.....: 000079			
Chromium	99	(75 - 125)	SW846 6010B	07/16-07/17/09	LGG2J1C2
		Dilution Factor: 1	Analysis Time..: 14:36	Instrument ID..: I5	
		Analyst ID.....: 000079			
Cobalt	99	(75 - 125)	SW846 6010B	07/16-07/17/09	LGG2J1CX
		Dilution Factor: 1	Analysis Time..: 14:36	Instrument ID..: I5	
		Analyst ID.....: 000079			
Copper	100	(75 - 125)	SW846 6010B	07/16-07/17/09	LGG2J1C5
		Dilution Factor: 1	Analysis Time..: 14:36	Instrument ID..: I5	
		Analyst ID.....: 000079			

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A9G150104 **Matrix.....:** WG
Date Sampled...: 07/14/09 10:20 **Date Received..:** 07/15/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	113	(75 - 125)	SW846 6020	07/16-07/27/09	LGG2J1AX
		Dilution Factor: 1	Analysis Time..: 16:44		Instrument ID..: I8
		Analyst ID.....: 001637			
Lead	96	(75 - 125)	SW846 6010B	07/16-07/17/09	LGG2J1CF
		Dilution Factor: 1	Analysis Time..: 14:36		Instrument ID..: I5
		Analyst ID.....: 000079			
Magnesium	101	(75 - 125)	SW846 6010B	07/16-07/17/09	LGG2J1DC
		Dilution Factor: 1	Analysis Time..: 14:36		Instrument ID..: I5
		Analyst ID.....: 000079			
Manganese	99	(75 - 125)	SW846 6010B	07/16-07/17/09	LGG2J1DF
		Dilution Factor: 1	Analysis Time..: 14:36		Instrument ID..: I5
		Analyst ID.....: 000079			
Mercury	98	(80 - 120)	SW846 7470A	07/16-07/21/09	LGG2J1AJ
		Dilution Factor: 1	Analysis Time..: 14:50		Instrument ID..: H4
		Analyst ID.....: 001576			
Nickel	101	(75 - 125)	SW846 6010B	07/16-07/17/09	LGG2J1AC
		Dilution Factor: 1	Analysis Time..: 14:36		Instrument ID..: I5
		Analyst ID.....: 000079			
Potassium	102	(75 - 125)	SW846 6010B	07/16-07/17/09	LGG2J1C8
		Dilution Factor: 1	Analysis Time..: 14:36		Instrument ID..: I5
		Analyst ID.....: 000079			
Selenium	100	(75 - 125)	SW846 6010B	07/16-07/17/09	LGG2J1CJ
		Dilution Factor: 1	Analysis Time..: 14:36		Instrument ID..: I5
		Analyst ID.....: 000079			
Silver	115	(75 - 125)	SW846 6010B	07/16-07/17/09	LGG2J1CM
		Dilution Factor: 1	Analysis Time..: 14:36		Instrument ID..: I5
		Analyst ID.....: 000079			
Sodium	99	(75 - 125)	SW846 6010B	07/16-07/17/09	LGG2J1DJ
		Dilution Factor: 1	Analysis Time..: 14:36		Instrument ID..: I5
		Analyst ID.....: 000079			
Thallium	97	(75 - 125)	SW846 6020	07/16-07/27/09	LGG2J1A8
		Dilution Factor: 1	Analysis Time..: 16:44		Instrument ID..: I8
		Analyst ID.....: 001637			

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A9G150104 **Matrix.....:** WG
Date Sampled...: 07/14/09 10:20 **Date Received..:** 07/15/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	95	(75 - 125)	SW846 6010B	07/16-07/17/09	LGG2J1AF
		Dilution Factor: 1	Analysis Time..: 14:36	Instrument ID..: I5	
		Analyst ID.....: 000079			
Zinc	107	(75 - 125)	SW846 6020	07/16-07/27/09	LGG2J1A5
		Dilution Factor: 1	Analysis Time..: 16:44	Instrument ID..: I8	
		Analyst ID.....: 001637			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A9G150104 **Matrix.....:** WG
Date Sampled...: 07/14/09 13:50 **Date Received..:** 07/15/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A9G150104-009 **Prep Batch #...:** 9197018					
Aluminum	108	(75 - 125)	SW846 6020	07/16-07/27/09	LGG2N1AM
		Dilution Factor: 1	Analysis Time..: 17:18	Instrument ID..: I8	
		Analyst ID.....: 001637			
Antimony	102	(75 - 125)	SW846 6020	07/16-07/27/09	LGG2N1A2
		Dilution Factor: 1	Analysis Time..: 17:18	Instrument ID..: I8	
		Analyst ID.....: 001637			
Arsenic	107	(75 - 125)	SW846 6010B	07/16-07/17/09	LGG2N1CC
		Dilution Factor: 1	Analysis Time..: 15:18	Instrument ID..: I5	
		Analyst ID.....: 000079			
Barium	104	(75 - 125)	SW846 6010B	07/16-07/17/09	LGG2N1CQ
		Dilution Factor: 1	Analysis Time..: 15:18	Instrument ID..: I5	
		Analyst ID.....: 000079			
Beryllium	102	(75 - 125)	SW846 6020	07/16-07/27/09	LGG2N1AQ
		Dilution Factor: 1	Analysis Time..: 17:18	Instrument ID..: I8	
		Analyst ID.....: 001637			
Cadmium	106	(75 - 125)	SW846 6020	07/16-07/27/09	LGG2N1AU
		Dilution Factor: 1	Analysis Time..: 17:18	Instrument ID..: I8	
		Analyst ID.....: 001637			
Calcium	109	(75 - 125)	SW846 6010B	07/16-07/17/09	LGG2N1CU
		Dilution Factor: 1	Analysis Time..: 15:18	Instrument ID..: I5	
		Analyst ID.....: 000079			
Chromium	103	(75 - 125)	SW846 6010B	07/16-07/17/09	LGG2N1C2
		Dilution Factor: 1	Analysis Time..: 15:18	Instrument ID..: I5	
		Analyst ID.....: 000079			
Cobalt	103	(75 - 125)	SW846 6010B	07/16-07/17/09	LGG2N1CX
		Dilution Factor: 1	Analysis Time..: 15:18	Instrument ID..: I5	
		Analyst ID.....: 000079			
Copper	104	(75 - 125)	SW846 6010B	07/16-07/17/09	LGG2N1C5
		Dilution Factor: 1	Analysis Time..: 15:18	Instrument ID..: I5	
		Analyst ID.....: 000079			

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A9G150104 **Matrix.....:** WG
Date Sampled...: 07/14/09 13:50 **Date Received..:** 07/15/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	107	(75 - 125)	SW846 6020	07/16-07/27/09	LGG2N1AX
		Dilution Factor: 1	Analysis Time..: 17:18		Instrument ID..: I8
		Analyst ID.....: 001637			
Lead	100	(75 - 125)	SW846 6010B	07/16-07/17/09	LGG2N1CF
		Dilution Factor: 1	Analysis Time..: 15:18		Instrument ID..: I5
		Analyst ID.....: 000079			
Magnesium	109	(75 - 125)	SW846 6010B	07/16-07/17/09	LGG2N1DC
		Dilution Factor: 1	Analysis Time..: 15:18		Instrument ID..: I5
		Analyst ID.....: 000079			
Manganese	108	(75 - 125)	SW846 6010B	07/16-07/17/09	LGG2N1DF
		Dilution Factor: 1	Analysis Time..: 15:18		Instrument ID..: I5
		Analyst ID.....: 000079			
Mercury	92	(80 - 120)	SW846 7470A	07/16-07/21/09	LGG2N1AJ
		Dilution Factor: 1	Analysis Time..: 14:42		Instrument ID..: H4
		Analyst ID.....: 001576			
Nickel	103	(75 - 125)	SW846 6010B	07/16-07/17/09	LGG2N1AC
		Dilution Factor: 1	Analysis Time..: 15:18		Instrument ID..: I5
		Analyst ID.....: 000079			
Potassium	104	(75 - 125)	SW846 6010B	07/16-07/17/09	LGG2N1C8
		Dilution Factor: 1	Analysis Time..: 15:18		Instrument ID..: I5
		Analyst ID.....: 000079			
Selenium	103	(75 - 125)	SW846 6010B	07/16-07/17/09	LGG2N1CJ
		Dilution Factor: 1	Analysis Time..: 15:18		Instrument ID..: I5
		Analyst ID.....: 000079			
Silver	117	(75 - 125)	SW846 6010B	07/16-07/17/09	LGG2N1CM
		Dilution Factor: 1	Analysis Time..: 15:18		Instrument ID..: I5
		Analyst ID.....: 000079			
Sodium	106	(75 - 125)	SW846 6010B	07/16-07/17/09	LGG2N1DJ
		Dilution Factor: 1	Analysis Time..: 15:18		Instrument ID..: I5
		Analyst ID.....: 000079			
Thallium	97	(75 - 125)	SW846 6020	07/16-07/27/09	LGG2N1A8
		Dilution Factor: 1	Analysis Time..: 17:18		Instrument ID..: I8
		Analyst ID.....: 001637			

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A9G150104 **Matrix.....:** WG
Date Sampled...: 07/14/09 13:50 **Date Received..:** 07/15/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	99	(75 - 125)	SW846 6010B	07/16-07/17/09	LGG2N1AF
		Dilution Factor: 1	Analysis Time..: 15:18	Instrument ID..: I5	
		Analyst ID.....: 000079			
Zinc	104	(75 - 125)	SW846 6020	07/16-07/27/09	LGG2N1A5
		Dilution Factor: 1	Analysis Time..: 17:18	Instrument ID..: I8	
		Analyst ID.....: 001637			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Client Lot #...: A9G150104 **Work Order #...:** LGG2J-SMP LGG2J-DUP **Matrix.....:** WG

Date Sampled...: 07/14/09 10:20 **Date Received..:** 07/15/09

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Silver						SD Lot-Sample #:	A9G150104-005	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/16-07/17/09	9197018
		Dilution Factor: 1				Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I5						
Aluminum						SD Lot-Sample #:	A9G150104-005	
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/16-07/27/09	9197018
		Dilution Factor: 1				Analysis Time..: 16:44	Analyst ID.....: 001637	
		Instrument ID..: I8						
Arsenic						SD Lot-Sample #:	A9G150104-005	
	5.6	4.7 B	ug/L	18	(0-20)	SW846 6010B	07/16-07/17/09	9197018
		Dilution Factor: 1				Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I5						
Barium						SD Lot-Sample #:	A9G150104-005	
	40.9	39.3	ug/L	4.1	(0-20)	SW846 6010B	07/16-07/17/09	9197018
		Dilution Factor: 1				Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I5						
Beryllium						SD Lot-Sample #:	A9G150104-005	
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/16-07/27/09	9197018
		Dilution Factor: 1				Analysis Time..: 16:44	Analyst ID.....: 001637	
		Instrument ID..: I8						
Calcium						SD Lot-Sample #:	A9G150104-005	
	102000	98400	ug/L	3.4	(0-20)	SW846 6010B	07/16-07/17/09	9197018
		Dilution Factor: 1				Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I5						
Cadmium						SD Lot-Sample #:	A9G150104-005	
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/16-07/27/09	9197018
		Dilution Factor: 1				Analysis Time..: 16:44	Analyst ID.....: 001637	
		Instrument ID..: I8						
Cobalt						SD Lot-Sample #:	A9G150104-005	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/16-07/17/09	9197018
		Dilution Factor: 1				Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I5						
Chromium						SD Lot-Sample #:	A9G150104-005	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/16-07/17/09	9197018
		Dilution Factor: 1				Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I5						

(Continued on next page)

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A9G150104-000 **Work Order #...:** LGG2J-SMP LGG2J-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Copper						SD Lot-Sample #:	A9G150104-005	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/16-07/17/09	9197018
			Dilution Factor: 1			Analysis Time..: 14:36	Analyst ID.....: 000079	
			Instrument ID..: I5					
Iron						SD Lot-Sample #:	A9G150104-005	
	3320	3870	ug/L	15	(0-20)	SW846 6020	07/16-07/27/09	9197018
			Dilution Factor: 1			Analysis Time..: 16:44	Analyst ID.....: 001637	
			Instrument ID..: I8					
Mercury						SD Lot-Sample #:	A9G150104-005	
	ND	ND	ug/L	0	(0-20)	SW846 7470A	07/16-07/21/09	9197018
			Dilution Factor: 1			Analysis Time..: 14:50	Analyst ID.....: 001576	
			Instrument ID..: H4					
Potassium						SD Lot-Sample #:	A9G150104-005	
	2420 J,E	2330	ug/L	3.8	(0-20)	SW846 6010B	07/16-07/17/09	9197018
			Dilution Factor: 1			Analysis Time..: 14:36	Analyst ID.....: 000079	
			Instrument ID..: I5					
Magnesium						SD Lot-Sample #:	A9G150104-005	
	40800	39300	ug/L	3.6	(0-20)	SW846 6010B	07/16-07/17/09	9197018
			Dilution Factor: 1			Analysis Time..: 14:36	Analyst ID.....: 000079	
			Instrument ID..: I5					
Manganese						SD Lot-Sample #:	A9G150104-005	
	344	332	ug/L	3.4	(0-20)	SW846 6010B	07/16-07/17/09	9197018
			Dilution Factor: 1			Analysis Time..: 14:36	Analyst ID.....: 000079	
			Instrument ID..: I5					
Sodium						SD Lot-Sample #:	A9G150104-005	
	31100	30100	ug/L	3.5	(0-20)	SW846 6010B	07/16-07/17/09	9197018
			Dilution Factor: 1			Analysis Time..: 14:36	Analyst ID.....: 000079	
			Instrument ID..: I5					
Nickel						SD Lot-Sample #:	A9G150104-005	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/16-07/17/09	9197018
			Dilution Factor: 1			Analysis Time..: 14:36	Analyst ID.....: 000079	
			Instrument ID..: I5					
Lead						SD Lot-Sample #:	A9G150104-005	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/16-07/17/09	9197018
			Dilution Factor: 1			Analysis Time..: 14:36	Analyst ID.....: 000079	
			Instrument ID..: I5					

(Continued on next page)

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A9G150104-000 **Work Order #...:** LGG2J-SMP LGG2J-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Antimony						SD Lot-Sample #:	A9G150104-005	
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/16-07/27/09	9197018
		Dilution Factor: 1				Analysis Time..: 16:44	Analyst ID.....: 001637	
		Instrument ID..: I8						
Selenium						SD Lot-Sample #:	A9G150104-005	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/16-07/17/09	9197018
		Dilution Factor: 1				Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I5						
Thallium						SD Lot-Sample #:	A9G150104-005	
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/16-07/27/09	9197018
		Dilution Factor: 1				Analysis Time..: 16:44	Analyst ID.....: 001637	
		Instrument ID..: I8						
Vanadium						SD Lot-Sample #:	A9G150104-005	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/16-07/17/09	9197018
		Dilution Factor: 1				Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I5						
Zinc						SD Lot-Sample #:	A9G150104-005	
	ND	3.2 B	ug/L	200	(0-20)	SW846 6020	07/16-07/27/09	9197018
		Dilution Factor: 1				Analysis Time..: 16:44	Analyst ID.....: 001637	
		Instrument ID..: I8						

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

E Matrix interference.

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Client Lot #...: A9G150104 **Work Order #...:** LGG2N-SMP LGG2N-DUP **Matrix.....:** WG

Date Sampled...: 07/14/09 13:50 **Date Received..:** 07/15/09

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Silver						SD Lot-Sample #:	A9G150104-009	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/16-07/17/09	9197018
			Dilution Factor: 1			Analysis Time..: 15:18	Analyst ID.....: 000079	
			Instrument ID..: I5					
Aluminum						SD Lot-Sample #:	A9G150104-009	
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/16-07/27/09	9197018
			Dilution Factor: 1			Analysis Time..: 17:18	Analyst ID.....: 001637	
			Instrument ID..: I8					
Arsenic						SD Lot-Sample #:	A9G150104-009	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/16-07/17/09	9197018
			Dilution Factor: 1			Analysis Time..: 15:18	Analyst ID.....: 000079	
			Instrument ID..: I5					
Barium						SD Lot-Sample #:	A9G150104-009	
	13.9	13.8	ug/L	0.72	(0-20)	SW846 6010B	07/16-07/17/09	9197018
			Dilution Factor: 1			Analysis Time..: 15:18	Analyst ID.....: 000079	
			Instrument ID..: I5					
Beryllium						SD Lot-Sample #:	A9G150104-009	
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/16-07/27/09	9197018
			Dilution Factor: 1			Analysis Time..: 17:18	Analyst ID.....: 001637	
			Instrument ID..: I8					
Calcium						SD Lot-Sample #:	A9G150104-009	
	27300	27200	ug/L	0.40	(0-20)	SW846 6010B	07/16-07/17/09	9197018
			Dilution Factor: 1			Analysis Time..: 15:18	Analyst ID.....: 000079	
			Instrument ID..: I5					
Cadmium						SD Lot-Sample #:	A9G150104-009	
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/16-07/27/09	9197018
			Dilution Factor: 1			Analysis Time..: 17:18	Analyst ID.....: 001637	
			Instrument ID..: I8					
Cobalt						SD Lot-Sample #:	A9G150104-009	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/16-07/17/09	9197018
			Dilution Factor: 1			Analysis Time..: 15:18	Analyst ID.....: 000079	
			Instrument ID..: I5					
Chromium						SD Lot-Sample #:	A9G150104-009	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/16-07/17/09	9197018
			Dilution Factor: 1			Analysis Time..: 15:18	Analyst ID.....: 000079	
			Instrument ID..: I5					

(Continued on next page)

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A9G150104-000 **Work Order #...:** LGG2N-SMP LGG2N-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Copper						SD Lot-Sample #:	A9G150104-009	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/16-07/17/09	9197018
			Dilution Factor: 1			Analysis Time..: 15:18	Analyst ID.....: 000079	
			Instrument ID..: I5					
Iron						SD Lot-Sample #:	A9G150104-009	
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/16-07/27/09	9197018
			Dilution Factor: 1			Analysis Time..: 17:18	Analyst ID.....: 001637	
			Instrument ID..: I8					
Mercury						SD Lot-Sample #:	A9G150104-009	
	ND	ND	ug/L	0	(0-20)	SW846 7470A	07/16-07/21/09	9197018
			Dilution Factor: 1			Analysis Time..: 14:42	Analyst ID.....: 001576	
			Instrument ID..: H4					
Potassium						SD Lot-Sample #:	A9G150104-009	
	2680 J,E	2640	ug/L	1.3	(0-20)	SW846 6010B	07/16-07/17/09	9197018
			Dilution Factor: 1			Analysis Time..: 15:18	Analyst ID.....: 000079	
			Instrument ID..: I5					
Magnesium						SD Lot-Sample #:	A9G150104-009	
	6790	6760	ug/L	0.54	(0-20)	SW846 6010B	07/16-07/17/09	9197018
			Dilution Factor: 1			Analysis Time..: 15:18	Analyst ID.....: 000079	
			Instrument ID..: I5					
Manganese						SD Lot-Sample #:	A9G150104-009	
	20.4 E	20.3	ug/L	0.28	(0-20)	SW846 6010B	07/16-07/17/09	9197018
			Dilution Factor: 1			Analysis Time..: 15:18	Analyst ID.....: 000079	
			Instrument ID..: I5					
Sodium						SD Lot-Sample #:	A9G150104-009	
	3770	3730	ug/L	1.1	(0-20)	SW846 6010B	07/16-07/17/09	9197018
			Dilution Factor: 1			Analysis Time..: 15:18	Analyst ID.....: 000079	
			Instrument ID..: I5					
Nickel						SD Lot-Sample #:	A9G150104-009	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/16-07/17/09	9197018
			Dilution Factor: 1			Analysis Time..: 15:18	Analyst ID.....: 000079	
			Instrument ID..: I5					
Lead						SD Lot-Sample #:	A9G150104-009	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/16-07/17/09	9197018
			Dilution Factor: 1			Analysis Time..: 15:18	Analyst ID.....: 000079	
			Instrument ID..: I5					

(Continued on next page)

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A9G150104-000 **Work Order #...:** LGG2N-SMP LGG2N-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Antimony						SD Lot-Sample #:	A9G150104-009	
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/16-07/27/09	9197018
			Dilution Factor: 1			Analysis Time..: 17:18	Analyst ID.....: 001637	
			Instrument ID..: I8					
Selenium						SD Lot-Sample #:	A9G150104-009	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/16-07/17/09	9197018
			Dilution Factor: 1			Analysis Time..: 15:18	Analyst ID.....: 000079	
			Instrument ID..: I5					
Thallium						SD Lot-Sample #:	A9G150104-009	
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/16-07/27/09	9197018
			Dilution Factor: 1			Analysis Time..: 17:18	Analyst ID.....: 001637	
			Instrument ID..: I8					
Vanadium						SD Lot-Sample #:	A9G150104-009	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/16-07/17/09	9197018
			Dilution Factor: 1			Analysis Time..: 15:18	Analyst ID.....: 000079	
			Instrument ID..: I5					
Zinc						SD Lot-Sample #:	A9G150104-009	
	7.3 B,J	8.8 B	ug/L	17	(0-20)	SW846 6020	07/16-07/27/09	9197018
			Dilution Factor: 1			Analysis Time..: 17:18	Analyst ID.....: 001637	
			Instrument ID..: I8					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

E Matrix interference.

B Estimated result. Result is less than RL.

TestAmerica North Canton

Metals Data Reporting Form

Contract Required Detection Limit Standard

Instrument: ICPMS **Units:** ug/L

Chart Number: I80727B.csv **Acceptable Range:** 70% - 130%

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	True Conc	CRI 7/27/2009 11:11 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Aluminum	27	50.0	64.48	**129.0**								
Antimony	121	2.0	2.10	**104.9**								
Beryllium	9	1.0	1.02	**101.5**								
Cadmium	111	0.5	0.51	**102.2**								
Iron	56	50.0	50.16	**100.3**								
Thallium	205	1.0	0.92	**92.3**								
Zinc	66	10.0	14.18	**141.8**								

TestAmerica North Canton

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: I50717A.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 7/17/2009 10:03 AM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	189.042	5	2.9	U								
Barium	493.409	10	0.2	U								
Calcium	317.933	1000	~~91.2~~	~~B~~								
Chromium	267.716	5	1.1	U								
Cobalt	228.616	5	0.5	U								
Copper	324.753	5	1.0	U								
Lead	220.353	3	1.1	U								
Magnesium	279.078	1000	3.9	U								
Manganese	257.61	10	0.1	U								
Nickel	231.604	10	1.2	U								
Potassium	766.491	1000	~~152.0~~	~~B~~								
Selenium	196.026	5	~~3.9~~	~~B~~								
Silver	328.068	5	1.1	U								
Sodium	330.232	1000	**-550.0**	**B**								
Vanadium	292.402	10	0.8	U								

U Results

Ca < 456

K < 760

Se < 19.5

5.21.0

U Result is less than the IDL

B Result is between IDL and RL

Form 3 Equivalent

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: I50717A.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 7/17/2009 11:06 AM Found	Q	CCB 7/17/2009 2:02 PM Found	Q	CCB 7/17/2009 3:01 PM Found	Q	CCB 7/17/2009 4:12 PM Found	Q	CCB 7/17/2009 5:10 PM Found	Q
Arsenic	189.042	5	2.9	U	2.9	U	2.9	U	2.9	U	2.9	U
Barium	493.409	10	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Calcium	317.933	1000	40.9	U	40.9	U	40.9	U	~~44.2~~	~~B~~	~~44.3~~	~~B~~
Chromium	267.716	5	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U
Cobalt	228.616	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Copper	324.753	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Lead	220.353	3	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U
Magnesium	279.078	1000	3.9	U	3.9	U	3.9	U	3.9	U	3.9	U
Manganese	257.61	10	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Nickel	231.604	10	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U
Potassium	766.491	1000	~~149.0~~	~~B~~	~~143.0~~	~~B~~	~~153.0~~	~~B~~	~~152.0~~	~~B~~	~~150.0~~	~~B~~
Selenium	196.026	5	3.6	U	**4.1**	**B**	3.6	U	3.6	U	3.6	U
Silver	328.068	5	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U
Sodium	330.232	1000	503.0	U	**-640.0**	**B**	503.0	U	503.0	U	**-540.0**	**B**
Vanadium	292.402	10	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U

U Result is less than the IDL

B Result is between IDL and RL

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: I80727B.csv

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 7/27/2009 11:31 AM Found	Q	CCB 5 7/27/2009 4:09 PM Found	Q	CCB 6 7/27/2009 5:03 PM Found	Q	CCB 7 7/27/2009 5:59 PM Found	Q	CCB 8 7/27/2009 6:51 PM Found	Q
Aluminum	27	50	8.2	U	8.2	U	~~10.4~~	~~B~~	8.2	U	8.2	U
Antimony	121	2	0.055	U	~~0.059~~	~~B~~	0.055	U	~~0.069~~	~~B~~	~~0.059~~	~~B~~
Beryllium	9	1	0.037	U	0.037	U	0.037	U	~~0.045~~	~~B~~	~~0.052~~	~~B~~
Cadmium	111	0.5	0.027	U	~~0.042~~	~~B~~	0.027	U	~~0.052~~	~~B~~	~~0.034~~	~~B~~
Iron	56	50	11	U	~~16.9~~	~~B~~	~~18.5~~	~~B~~	~~21.7~~	~~B~~	~~22~~	~~B~~
Thallium	205	1	~~0.12~~	~~B~~	~~0.15~~	~~B~~	~~0.13~~	~~B~~	~~0.14~~	~~B~~	~~0.13~~	~~B~~
Zinc	66	10	0.85	U	0.85	U	0.85	U	0.85	U	0.85	U

Check for U

Al < 52
Sb < 0.355
Cd < 0.445
Be < 0.275
Fe < 121.5
Tl < ~~0.0~~ 0.75

5.04.5

U Result is less than the IDL
B Result is between IDL and RL

Form 3 Equivalent

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: I80727B.csv

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 9 7/27/2009 7:44 PM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Aluminum	27	50	~~8.6~~	~~B~~								
Antimony	121	2	~~0.071~~	~~B~~								
Beryllium	9	1	~~0.055~~	~~B~~								
Cadmium	111	0.5	~~0.089~~	~~B~~								
Iron	56	50	~~24.3~~	~~B~~								
Thallium	205	1	~~0.15~~	~~B~~								
Zinc	66	10	0.85	U								

U Result is less than the IDL

B Result is between IDL and RL

EXECUTIVE SUMMARY - Detection Highlights

A9G150104

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGTEAM1-TRIP 07/14/09 08:00 001				
Acetone	2.4 J	10	ug/L	SW846 8260B
FWGLL8mw-001C-1376-GW 07/14/09 09:15 002				
bis(2-Ethylhexyl) phthalate	2.9 J	10	ug/L	SW846 8270C
FWGLL8mw-001C-1376-GF 07/14/09 09:15 003				
Iron U	82.3	50.0	ug/L	SW846 6020
Zinc	4.5 B,J	10.0	ug/L	SW846 6020
Selenium U	4.8 B	5.0	ug/L	SW846 6010B
Barium	34.2	10.0	ug/L	SW846 6010B
Calcium	93600	1000	ug/L	SW846 6010B
Potassium	1750 J	1000	ug/L	SW846 6010B
Magnesium	50800	1000	ug/L	SW846 6010B
Manganese	192	10.0	ug/L	SW846 6010B
Sodium	49900	1000	ug/L	SW846 6010B
FWGLL8mw-002C-1377-GW 07/14/09 10:20 004				
bis(2-Ethylhexyl) phthalate	1.5 J	10	ug/L	SW846 8270C
FWGLL8mw-002C-1377-GF 07/14/09 10:20 005				
Iron	3320	50.0	ug/L	SW846 6020
Arsenic	5.6	5.0	ug/L	SW846 6010B
Barium	40.9	10.0	ug/L	SW846 6010B
Calcium	102000	1000	ug/L	SW846 6010B
Potassium	2420 J,E	1000	ug/L	SW846 6010B
Magnesium	40800	1000	ug/L	SW846 6010B
Manganese	344	10.0	ug/L	SW846 6010B
Sodium	31100	1000	ug/L	SW846 6010B
FWGLL9mw-001C-1382-GW 07/14/09 12:35 006				
bis(2-Ethylhexyl) phthalate	1.2 J	10	ug/L	SW846 8270C

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A9G150104

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGLL9mw-001C-1382-GF 07/14/09 12:35	**007**			
Zinc	2.5 B,J	10.0	ug/L	SW846 6020
Barium	11.6	10.0	ug/L	SW846 6010B
Calcium	46100	1000	ug/L	SW846 6010B
Potassium	963 B,J	1000	ug/L	SW846 6010B
Magnesium	13100	1000	ug/L	SW846 6010B
Manganese	0.68 B	10.0	ug/L	SW846 6010B
Sodium	3390	1000	ug/L	SW846 6010B
Vanadium	1.1 B	10.0	ug/L	SW846 6010B
FWGLL9mw-003C-1384-GW 07/14/09 13:50	**008**			
beta-BHC	0.014 J	0.030	ug/L	SW846 8081A
bis(2-Ethylhexyl) phthalate	1.8 J,B	10	ug/L	SW846 8270C
FWGLL9mw-003C-1384-GF 07/14/09 13:50	**009**			
Zinc	7.3 B,J	10.0	ug/L	SW846 6020
Barium	13.9	10.0	ug/L	SW846 6010B
Calcium	27300	1000	ug/L	SW846 6010B
Potassium	2680 J,E	1000	ug/L	SW846 6010B
Magnesium	6790	1000	ug/L	SW846 6010B
Manganese	20.4 E	10.0	ug/L	SW846 6010B
Sodium	3770	1000	ug/L	SW846 6010B
FWGLL10mw-003C-1391-GW 07/14/09 15:55	**010**			
bis(2-Ethylhexyl) phthalate	0.83 J	10	ug/L	SW846 8270C
Chloroform	0.29 J	1.0	ug/L	SW846 8260B
Carbon tetrachloride	2.4	1.0	ug/L	SW846 8260B
FWGLL10mw-003C-1391-GF 07/14/09 15:55	**011**			
Zinc	2.6 B,J	10.0	ug/L	SW846 6020
Barium	2.6 B	10.0	ug/L	SW846 6010B
Calcium	53200	1000	ug/L	SW846 6010B
Potassium U	676 B,J	1000	ug/L	SW846 6010B
Magnesium	15500	1000	ug/L	SW846 6010B
Sodium	9950	1000	ug/L	SW846 6010B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A9G150104

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGLL10mw-002C-1390-GW 07/14/09 17:00 012				
bis(2-Ethylhexyl) phthalate	4.0 J	10	ug/L	SW846 8270C
FWGLL10mw-002C-1390-GF 07/14/09 17:00 013				
Iron	5800	50.0	ug/L	SW846 6020
Zinc	8.9 B,J	10.0	ug/L	SW846 6020
Barium	59.9	10.0	ug/L	SW846 6010B
Calcium	25000	1000	ug/L	SW846 6010B
Cobalt	3.9 B	5.0	ug/L	SW846 6010B
Potassium	950 B,J	1000	ug/L	SW846 6010B
Magnesium	8140	1000	ug/L	SW846 6010B
Manganese	1620	10.0	ug/L	SW846 6010B
Sodium	10300	1000	ug/L	SW846 6010B
Nickel	6.5 B	10.0	ug/L	SW846 6010B
FWGTEAM2-TRIP 07/14/09 08:00 014				
Acetone	2.1 J	10	ug/L	SW846 8260B
FWGLL8mw-006C-1381-GW 07/14/09 09:15 015				
bis(2-Ethylhexyl) phthalate	0.83 J	10	ug/L	SW846 8270C
FWGLL8mw-006C-1381-GF 07/14/09 09:15 016				
Aluminum U	26.8 B	50.0	ug/L	SW846 6020
Zinc	5.6 B,J	10.0	ug/L	SW846 6020
Barium	16.2	10.0	ug/L	SW846 6010B
Calcium	73600	1000	ug/L	SW846 6010B
Potassium	1560 J	1000	ug/L	SW846 6010B
Magnesium	29800	1000	ug/L	SW846 6010B
Manganese	5.2 B	10.0	ug/L	SW846 6010B
Sodium	4610	1000	ug/L	SW846 6010B
FWGLL8mw-005C-1380-GW 07/14/09 10:10 017				
beta-BHC	0.015 J	0.030	ug/L	SW846 8081A

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A9G150104

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGLL8mw-005C-1380-GF 07/14/09 10:10	018			
Iron	760	50.0	ug/L	SW846 6020
Zinc	2.9 B,J	10.0	ug/L	SW846 6020
Barium	11.0	10.0	ug/L	SW846 6010B
Calcium	64400	1000	ug/L	SW846 6010B
Potassium U	718 B,J	1000	ug/L	SW846 6010B
Magnesium	22000	1000	ug/L	SW846 6010B
Manganese	2780	10.0	ug/L	SW846 6010B
Sodium	11300	1000	ug/L	SW846 6010B
FWGLL8mw-DUP2-1414-GW 07/14/09 11:15	019			
bis(2-Ethylhexyl) phthalate	2.4 J	10	ug/L	SW846 8270C
FWGLL8mw-DUP2-1414-GF 07/14/09 11:15	020			
Iron	743	50.0	ug/L	SW846 6020
Zinc	6.3 B,J	10.0	ug/L	SW846 6020
Selenium U	4.9 B	5.0	ug/L	SW846 6010B
Barium	11.5	10.0	ug/L	SW846 6010B
Calcium	66500	1000	ug/L	SW846 6010B
Cobalt	2.3 B	5.0	ug/L	SW846 6010B
Potassium U	728 B,J	1000	ug/L	SW846 6010B
Magnesium	22700	1000	ug/L	SW846 6010B
Manganese	2890	10.0	ug/L	SW846 6010B
Sodium	11600	1000	ug/L	SW846 6010B
Nickel	3.9 B	10.0	ug/L	SW846 6010B
FWGLL9mw-004C-1385-GW 07/14/09 12:15	021			
beta-BHC	0.013 J	0.030	ug/L	SW846 8081A
bis(2-Ethylhexyl) phthalate	0.94 J	10	ug/L	SW846 8270C
FWGLL9mw-004C-1385-GF 07/14/09 12:15	022			
Iron	10600	50.0	ug/L	SW846 6020
Zinc	15.9 J	10.0	ug/L	SW846 6020
Barium	28.8	10.0	ug/L	SW846 6010B
Calcium	12400	1000	ug/L	SW846 6010B
Cobalt	5.1	5.0	ug/L	SW846 6010B
Potassium U	741 B,J	1000	ug/L	SW846 6010B
Magnesium	10600	1000	ug/L	SW846 6010B

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EXECUTIVE SUMMARY - Detection Highlights

A9G150104

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGLL9mw-004C-1385-GF 07/14/09 12:15	**022**			
Manganese	2450	10.0	ug/L	SW846 6010B
Sodium	4130	1000	ug/L	SW846 6010B
Nickel	5.7 B	10.0	ug/L	SW846 6010B
FWGLL9mw-DUP3-1415-GW 07/14/09 13:15	**023**			
beta-BHC	0.015 J	0.030	ug/L	SW846 8081A
bis(2-Ethylhexyl) phthalate	1.5 J,B	10	ug/L	SW846 8270C
FWGLL9mw-DUP3-1415-GF 07/14/09 13:15	**024**			
Iron	11600	50.0	ug/L	SW846 6020
Zinc	15.7 J	10.0	ug/L	SW846 6020
Barium	31.8	10.0	ug/L	SW846 6010B
Calcium	13500	1000	ug/L	SW846 6010B
Cobalt	5.3	5.0	ug/L	SW846 6010B
Potassium	829 B,J	1000	ug/L	SW846 6010B
Magnesium	11400	1000	ug/L	SW846 6010B
Manganese	2640	10.0	ug/L	SW846 6010B
Sodium	5120	1000	ug/L	SW846 6010B
Nickel	7.2 B	10.0	ug/L	SW846 6010B
FWGLL9mw-006C-1387-GW 07/14/09 14:15	**025**			
beta-BHC	0.15 PG	0.030	ug/L	SW846 8081A
bis(2-Ethylhexyl) phthalate	0.95 J,B	10	ug/L	SW846 8270C
FWGLL9mw-006C-1387-GF 07/14/09 14:15	**026**			
Aluminum	24.0 B	50.0	ug/L	SW846 6020
Iron	1480	50.0	ug/L	SW846 6020
Zinc	12.7 J	10.0	ug/L	SW846 6020
Barium	55.7	10.0	ug/L	SW846 6010B
Calcium	4360	1000	ug/L	SW846 6010B
Cobalt	2.2 B	5.0	ug/L	SW846 6010B
Potassium	1230 J	1000	ug/L	SW846 6010B
Magnesium	5200	1000	ug/L	SW846 6010B
Manganese	371	10.0	ug/L	SW846 6010B
Sodium	1840	1000	ug/L	SW846 6010B
Nickel	10.1	10.0	ug/L	SW846 6010B

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EXECUTIVE SUMMARY - Detection Highlights

A9G150104

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGLL10mw-001C-1389-GW 07/14/09 15:30 027				
beta-BHC	0.015 J	0.030	ug/L	SW846 8081A
bis(2-Ethylhexyl) phthalate	1.8 J,B	10	ug/L	SW846 8270C
Chloroform	0.22 J	1.0	ug/L	SW846 8260B
Carbon tetrachloride	1.3	1.0	ug/L	SW846 8260B
FWGLL10mw-001C-1389-GF 07/14/09 15:30 028				
Barium	2.3 B	10.0	ug/L	SW846 6010B
Calcium	74800	1000	ug/L	SW846 6010B
Potassium	1030 J	1000	ug/L	SW846 6010B
Magnesium	27400	1000	ug/L	SW846 6010B
Manganese	1.5 B	10.0	ug/L	SW846 6010B
Sodium	7860	1000	ug/L	SW846 6010B
FWGTEAM3-TRIP 07/14/09 08:00 029				
Acetone	2.4 J	10	ug/L	SW846 8260B
FWGLL8mw-003C-1378-GW 07/14/09 09:10 030				
beta-BHC	0.015 J	0.030	ug/L	SW846 8081A
bis(2-Ethylhexyl) phthalate	4.3 J,B	10	ug/L	SW846 8270C
FWGLL8mw-003C-1378-GF 07/14/09 09:10 031				
Aluminum	25.9 B	50.0	ug/L	SW846 6020
Iron	422	50.0	ug/L	SW846 6020
Zinc	3.9 B,J	10.0	ug/L	SW846 6020
Arsenic	3.5 B	5.0	ug/L	SW846 6010B
Barium	24.9	10.0	ug/L	SW846 6010B
Calcium	136000	1000	ug/L	SW846 6010B
Potassium	3230 J	1000	ug/L	SW846 6010B
Magnesium	50300	1000	ug/L	SW846 6010B
Manganese	389	10.0	ug/L	SW846 6010B
Sodium	46500	1000	ug/L	SW846 6010B
FWGLL8mw-004C-1379-GW 07/14/09 10:35 032				
beta-BHC	0.0099 J	0.030	ug/L	SW846 8081A
bis(2-Ethylhexyl) phthalate	2.9 J,B	10	ug/L	SW846 8270C

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EXECUTIVE SUMMARY - Detection Highlights

A9G150104

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGLL8mw-004C-1379-GF 07/14/09 10:35	**033**			
Zinc	5.4 B,J	10.0	ug/L	SW846 6020
Barium	12.9	10.0	ug/L	SW846 6010B
Calcium	84100	1000	ug/L	SW846 6010B
Potassium	1170 J	1000	ug/L	SW846 6010B
Magnesium	40800	1000	ug/L	SW846 6010B
Manganese	45.7	10.0	ug/L	SW846 6010B
Sodium	24200	1000	ug/L	SW846 6010B
FWGEQUIPRINSE2-1424-GW 07/14/09 11:30	**034**			
Zinc	3.5 B,J	10.0	ug/L	SW846 6020
Selenium U	4.6 B	5.0	ug/L	SW846 6010B
Potassium U	157 B,J	1000	ug/L	SW846 6010B
bis(2-Ethylhexyl) phthalate	2.3 J,B	10	ug/L	SW846 8270C
Methylene chloride	2.6	2.0	ug/L	SW846 8260B
Acetone	5.5 J	10	ug/L	SW846 8260B
FWGLL9mw-007C-1388-GW 07/14/09 13:05	**035**			
beta-BHC	0.016 J	0.030	ug/L	SW846 8081A
bis(2-Ethylhexyl) phthalate	4.1 J,B	10	ug/L	SW846 8270C
FWGLL9mw-007C-1388-GF 07/14/09 13:05	**036**			
Iron	7300	50.0	ug/L	SW846 6020
Zinc	28.6 J	10.0	ug/L	SW846 6020
Barium	12.3	10.0	ug/L	SW846 6010B
Calcium	10400	1000	ug/L	SW846 6010B
Cobalt	6.5	5.0	ug/L	SW846 6010B
Potassium	1330 J	1000	ug/L	SW846 6010B
Magnesium	6470	1000	ug/L	SW846 6010B
Manganese	800	10.0	ug/L	SW846 6010B
Sodium	2730	1000	ug/L	SW846 6010B
Nickel	15.6	10.0	ug/L	SW846 6010B
FWGLL9mw-002C-1383-GW 07/14/09 14:25	**037**			
bis(2-Ethylhexyl) phthalate	1.0 J,B	10	ug/L	SW846 8270C

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EXECUTIVE SUMMARY - Detection Highlights

A9G150104

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGLL9mw-002C-1383-GF 07/14/09 14:25	**038**			
Aluminum	103	50.0	ug/L	SW846 6020
Zinc	5.5 B,J	10.0	ug/L	SW846 6020
Barium	4.2 B	10.0	ug/L	SW846 6010B
Calcium	17300	1000	ug/L	SW846 6010B
Potassium	1330 J	1000	ug/L	SW846 6010B
Magnesium	7030	1000	ug/L	SW846 6010B
Manganese	52.6	10.0	ug/L	SW846 6010B
Sodium	2050	1000	ug/L	SW846 6010B
Nickel	13.1	10.0	ug/L	SW846 6010B
FWGLL9mw-005C-1386-GW 07/14/09 15:40	**039**			
beta-BHC	0.0088 J	0.030	ug/L	SW846 8081A
bis(2-Ethylhexyl) phthalate	1.2 J,B	10	ug/L	SW846 8270C
FWGLL9mw-005C-1386-GF 07/14/09 15:40	**040**			
Zinc	31.0 J	10.0	ug/L	SW846 6020
Barium	2.8 B	10.0	ug/L	SW846 6010B
Calcium	11200	1000	ug/L	SW846 6010B
Potassium	717 B,J	1000	ug/L	SW846 6010B
Magnesium	4910	1000	ug/L	SW846 6010B
Manganese	1.8 B	10.0	ug/L	SW846 6010B
Sodium	3430	1000	ug/L	SW846 6010B

GENERAL CHEMISTRY DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 27, 2009

SDG: A9G150104 R0
Analysis: SW846 9012

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.1- 5.4 °C.	QAPP Table 4-2
3. Were holding times met?		✓			QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-9
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-9
7. Does the initial calibration curve consist of at least 6 standards and one blank?	✓				LCG Table 10 R
8. Was the correlation coefficient R ≥ 0.995?	✓				LCG Table 10 R<0.995=-J/R
9. Were % RSDs ≤ 10% in all standards and ICV/CCVs?	✓				LCG Table 10 RSD%>10=J
10. Were a high and low standard distilled and compared to the undistilled standard? Were the results within ± 10%?			✓		LCG Table 10 R
11. Was an MDL Level Verification performed at least once per quarter with all target analytes detected?	✓				LCG Table 10 R
12. Was a MRL Level Verification performed at the beginning of every daily sequence? Were results within 70-130%?	✓				LCG Table 10 >130%=J; 65-70%=J/UJ; <65%=J/R
13. Was a second source verification (ICV) analyzed after the ICAL and all analytes 85-115%?	✓				LCG Table 10 >115%=J; 80-85%=J/UJ; <80%=J/R
14. Was the ICB analyzed after the ICV with results <1/2 the MRL?	✓				LCG Table 7 < 5x = U
15. Was a CCV run at the beginning and end of the analytical sequence?	✓				LCG Table 10

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 27, 2009

SDG: A9G150104 R0
Analysis: SW846 9012

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
16. Were the CCV results 80-120%?	✓				LCG Table 10 >120%=J; 75-80%=J/UJ; <75%=J/R
17. Was a method blank prepared and analyzed with each batch?	✓				
18. Were target analytes detected in the method blank >1/2 the MRL?	✓			Checked by ADR.	LCG Table 10 <5x=B
19. Was a field blank collected and analyzed?	✓			FWGEQUIPRinse2-1424-GW	
20. Were target analytes in the field blank analyses <1/2 the MRL?	✓				<5x=B
21. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓			Checked by ADR. Sample FWGLL8mw-DUP2-1414-GW was the field duplicate for sample FWGLL8mw-005c-1380-GW and FWGLL9mw-DUP3-1415-GW a field duplicate for sample FWGLL9mw-004c-1385-GW.	QAPP Table 3-2 >30% = J
22. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 10
23. Were the LCS recoveries 80-120%?	✓			Checked by ADR.	LCG Table 10 >120%=J; 50-79%=J/UJ; <50%=R
24. Was a MS prepared once per every 10 samples?	✓				LCG Table 10
25. Was the MS parent a Ravenna sample?	✓			Sample FWGLL8mw-002c-1377-GW and FWGLL9mw-003c-1384-GW were the parent MS/MSD samples from this SDG.	
26. Were MS recoveries 80-120%?		✓		Checked by ADR. The matrix spike duplicate analyzed on sample FWGLL8mw-002c-1377-GW was above control limits at 128%. No qualifications were made as there were no detected cyanide concentrations.	QAPP Table 3-2 >120%=J; 30-79%=J/UJ; <30%=J/R
27. Were reported sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 27, 2009

SDG: A9G150104 R0
Analysis: SW846 9012

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
29. Were lab comments included in report? If yes, summarize contents.		✓			

References: Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 10 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-001C-1376-GW

General Chemistry

Lot-Sample #...: A9G150104-002 **Work Order #...:** LGG2D **Matrix.....:** WG
Date Sampled...: 07/14/09 09:15 **Date Received..:** 07/15/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/16/09	9197481

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-002C-1377-GW

General Chemistry

Lot-Sample #...: A9G150104-004 **Work Order #...:** LGG2H **Matrix.....:** WG
Date Sampled...: 07/14/09 10:20 **Date Received..:** 07/15/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/16/09	9197481

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-001C-1382-GW

General Chemistry

Lot-Sample #...: A9G150104-006 **Work Order #...:** LGG2K **Matrix.....:** WG
Date Sampled...: 07/14/09 12:35 **Date Received..:** 07/15/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/16/09	9197481

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-003C-1384-GW

General Chemistry

Lot-Sample #...: A9G150104-008 **Work Order #...:** LGG2M **Matrix.....:** WG
Date Sampled...: 07/14/09 13:50 **Date Received..:** 07/15/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/16/09	9197480
		Dilution Factor: 1		MDL.....: 0.0050		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-003C-1391-GW

General Chemistry

Lot-Sample #...: A9G150104-010 Work Order #...: LGG2P Matrix.....: WG
Date Sampled...: 07/14/09 15:55 Date Received..: 07/15/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/16/09	9197481
		Dilution Factor: 1		MDL.....: 0.0050		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-002C-1390-GW

General Chemistry

Lot-Sample #...: A9G150104-012 **Work Order #...:** LGG2R **Matrix.....:** WG
Date Sampled...: 07/14/09 17:00 **Date Received..:** 07/15/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/16/09	9197481

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-006C-1381-GW

General Chemistry

Lot-Sample #...: A9G150104-015 **Work Order #...:** LGG2W **Matrix.....:** WG
Date Sampled...: 07/14/09 09:15 **Date Received..:** 07/15/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/16/09	9197481

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-005C-1380-GW

General Chemistry

Lot-Sample #...: A9G150104-017 **Work Order #...:** LGG20 **Matrix.....:** WG
Date Sampled...: 07/14/09 10:10 **Date Received..:** 07/15/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/16/09	9197480

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-DUP2-1414-GW

General Chemistry

Lot-Sample #...: A9G150104-019 **Work Order #...:** LGG23 **Matrix.....:** WG
Date Sampled...: 07/14/09 11:15 **Date Received..:** 07/15/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/16/09	9197480

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-004C-1385-GW

General Chemistry

Lot-Sample #...: A9G150104-021 **Work Order #...:** LGG26 **Matrix.....:** WG
Date Sampled...: 07/14/09 12:15 **Date Received..:** 07/15/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/16/09	9197480

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-DUP3-1415-GW

General Chemistry

Lot-Sample #...: A9G150104-023 **Work Order #...:** LGG28 **Matrix.....:** WG
Date Sampled...: 07/14/09 13:15 **Date Received..:** 07/15/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/16/09	9197480

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-006C-1387-GW

General Chemistry

Lot-Sample #...: A9G150104-025 **Work Order #...:** LGG3A **Matrix.....:** WG
Date Sampled...: 07/14/09 14:15 **Date Received..:** 07/15/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/16/09	9197480

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-001C-1389-GW

General Chemistry

Lot-Sample #...: A9G150104-027 **Work Order #...:** LGG3D **Matrix.....:** WG
Date Sampled...: 07/14/09 15:30 **Date Received..:** 07/15/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/16/09	9197480

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-003C-1378-GW

General Chemistry

Lot-Sample #...: A9G150104-030 Work Order #...: LGG3H Matrix.....: WG
Date Sampled...: 07/14/09 09:10 Date Received..: 07/15/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/16/09	9197480

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-004C-1379-GW

General Chemistry

Lot-Sample #...: A9G150104-032 **Work Order #...:** LGG3K **Matrix.....:** WG
Date Sampled...: 07/14/09 10:35 **Date Received..:** 07/15/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/16/09	9197480

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1424-GW

General Chemistry

Lot-Sample #...: A9G150104-034 **Work Order #...:** LGG3M **Matrix.....:** WQ
Date Sampled...: 07/14/09 11:30 **Date Received..:** 07/15/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/16/09	9197480

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-007C-1388-GW

General Chemistry

Lot-Sample #...: A9G150104-035 **Work Order #...:** LGG3N **Matrix.....:** WG
Date Sampled...: 07/14/09 13:05 **Date Received..:** 07/15/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/16/09	9197480

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-002C-1383-GW

General Chemistry

Lot-Sample #...: A9G150104-037 **Work Order #...:** LGG3Q **Matrix.....:** WG
Date Sampled...: 07/14/09 14:25 **Date Received..:** 07/15/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/16/09	9197480

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-005C-1386-GW

General Chemistry

Lot-Sample #...: A9G150104-039 **Work Order #...:** LGG3V **Matrix.....:** WG
Date Sampled...: 07/14/09 15:40 **Date Received..:** 07/15/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/16/09	9197480

Dilution Factor: 1 MDL.....: 0.0050

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A9G150104 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: LGL0D1AA		MB Lot-Sample #:	A9G160000-480	
	ND	0.010	mg/L	SW846 9012A	07/16/09	9197480
		Dilution Factor: 1				
Cyanide, Total		Work Order #: LGLX71AA		MB Lot-Sample #:	A9G160000-481	
	ND	0.010	mg/L	SW846 9012A	07/16/09	9197481
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A9G150104 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: LGL0D1AC	LCS Lot-Sample#: A9G160000-480		
	102	(80 - 120)	SW846 9012A	07/16/09	9197480
		Dilution Factor: 1			
Cyanide, Total		Work Order #: LGLX71AC	LCS Lot-Sample#: A9G160000-481		
	106	(80 - 120)	SW846 9012A	07/16/09	9197481
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A9G150104 **Matrix.....:** WATER
Date Sampled...: 07/13/09 12:05 **Date Received..:** 07/14/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#: LGE9E1AM-MS/LGE9E1AN-MSD				MS Lot-Sample #: A9G140103-002	
	99	(80 - 120)			SW846 9012A	07/16/09	9197481
	97	(80 - 120)	2.0	(0-20)	SW846 9012A	07/16/09	9197481
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A9G150104 **Matrix.....:** WG
Date Sampled...: 07/14/09 13:50 **Date Received..:** 07/15/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total			WO#: LGG2H1AM-MS/LGG2H1AN-MSD			MS Lot-Sample #: A9G150104-004	
	99	(80 - 120)			SW846 9012A	07/16/09	9197481
	128 N,*	(80 - 120)	25	(0-20)	SW846 9012A	07/16/09	9197481
		Dilution Factor: 1					
Cyanide, Total			WO#: LGG2M1AM-MS/LGG2M1AN-MSD			MS Lot-Sample #: A9G150104-008	
	100	(80 - 120)			SW846 9012A	07/16/09	9197480
	95	(80 - 120)	5.2	(0-20)	SW846 9012A	07/16/09	9197480
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

* Relative percent difference (RPD) is outside stated control limits.

Appendix I

Reason Code Library: Example 1

Category	Code
Low Bias Indicator	-
High Bias Indicator	+
Temperature	A
Holding Times	
Sampling to Analysis	C
Sampling to Extraction	D
Extaction to Analysis	E
Method Blanks	F
Surrogate Recovery	G
MS/MSD	
MS/MSD Recovery	H
MS/MSD RPD	I
LCS	
LCS Recovery	J
LCS RPD	K
Reporting Limits	L
Field QC	
Field Blank	M
Equipment Blank	N
Trip Blank	O
Field Duplicate	P

Category	Code
Initial Calibration	
Initial Calibration RRF	Q
Initial Calibration RSD	R
Initial Calibration Cor. Coef	S
Initial Calibration Verification	
Initial Calibration Verificaton RRF	T
Initial CalibrationVerification %D	U
Continuing Calibration	
Continuing Calibraiton RRF	V
Continuing Calibration %D	W
GC/MS Tune	
GC/MS Tune for Initial Calibration	X
GC/MS Tune for Continuing Calibration	Y
Laboratory Duplicate	Z
Categories not Assessed by Automated Data Review*	
Internal Standards	Is
Calibration Blanks	Cb
Resolution Check Mixture	Rm
Performance Evaluation Mixture	Pm
Professional Judgement	Pj

* Qualifiers for data-review categories not assessed by automated data review are manually entered by the user. The application automatically adds reason codes listed here when the user manually adds qualifiers for these categories if the option for applying reason codes was selected during automated data review.

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G150104										
6010B	FWGEQUIPRINSE2-1424-GW	AQ	EB							
				Potassium	1000	157B J		UJB	ug/L	Cb,F,L
				Selenium	5.0	4.6B		UJ	ug/L	Cb,L
6010B	FWGLL10mw-001C-1389-GF	AQ	N							
				Barium	10.0	2.3B		J	ug/L	L
				Manganese	10.0	1.5B		J	ug/L	L
6010B	FWGLL10mw-002C-1390-GF	AQ	N							
				Cobalt	5.0	3.9B		J	ug/L	L
				Nickel	10.0	6.5B		J	ug/L	L
				Potassium	1000	950B J		J	ug/L	L
6010B	FWGLL10mw-003C-1391-GF	AQ	N							
				Barium	10.0	2.6B		J	ug/L	L
				Potassium	1000	676B J		UJB	ug/L	Cb,N,F,L
6010B	FWGLL8mw-001C-1376-GF	AQ	N							
				Selenium	5.0	4.8B		UJB	ug/L	Cb,N,L
6010B	FWGLL8mw-003C-1378-GF	AQ	N							
				Arsenic	5.0	3.5B		J	ug/L	L
6010B	FWGLL8mw-005C-1380-GF	AQ	N							
				Potassium	1000	718B J		UJB	ug/L	Cb,N,F,L
6010B	FWGLL8mw-006C-1381-GF	AQ	N							
				Manganese	10.0	5.2B		J	ug/L	L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G150104										
6010B	FWGLL8mw-DUP2-1414-GF	AQ	FD							
				Cobalt	5.0	2.3B		J	ug/L	L
				Nickel	10.0	3.9B		J	ug/L	L
				Potassium	1000	728B J		JB	ug/L	L,N,F
				Selenium	5.0	4.9B		UJB	ug/L	Cb,N,L
6010B	FWGLL9mw-001C-1382-GF	AQ	N							
				Manganese	10.0	0.68B		J	ug/L	L
				Potassium	1000	963B J		J	ug/L	L
				Vanadium	10.0	1.1B		J	ug/L	L
6010B	FWGLL9mw-002C-1383-GF	AQ	N							
				Barium	10.0	4.2B		J	ug/L	L
6010B	FWGLL9mw-004C-1385-GF	AQ	N							
				Nickel	10.0	5.7B		J	ug/L	L
				Potassium	1000	741B J		UJB	ug/L	Cb,N,L
6010B	FWGLL9mw-005C-1386-GF	AQ	N							
				Barium	10.0	2.8B		J	ug/L	L
				Manganese	10.0	1.8B		J	ug/L	L
				Potassium	1000	717B J		UJB	ug/L	Cb,N,F,L
6010B	FWGLL9mw-006C-1387-GF	AQ	N							
				Cobalt	5.0	2.2B		J	ug/L	L
6010B	FWGLL9mw-DUP3-1415-GF	AQ	FD							
				Nickel	10.0	7.2B		J	ug/L	L
				Potassium	1000	829B J		J	ug/L	L
6020	FWGEQUIPRINSE2-1424-GW	AQ	EB							
				Zinc	10.0	3.5B J		JB	ug/L	Pj,F,L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G150104										
6020	FWGLL10mw-002C-1390-GF	AQ	N							
				Zinc	10.0	8.9B J		UJ	ug/L	Pj,N,F,L
6020	FWGLL10mw-003C-1391-GF	AQ	N							
				Zinc	10.0	2.6B J		JB	ug/L	Pj,N,F,L
6020	FWGLL8mw-001C-1376-GF	AQ	N							
				Iron	50.0	82.3		U	ug/L	Cb
				Zinc	10.0	4.5B J		JB	ug/L	Pj,N,F,L
6020	FWGLL8mw-003C-1378-GF	AQ	N							
				Aluminum	50.0	25.9B		J	ug/L	L
				Zinc	10.0	3.9B J		JB	ug/L	Pj,N,F,L
6020	FWGLL8mw-004C-1379-GF	AQ	N							
				Zinc	10.0	5.4B J		JB	ug/L	Pj,N,F,L
6020	FWGLL8mw-005C-1380-GF	AQ	N							
				Zinc	10.0	2.9B J		JB	ug/L	Pj,N,P,F,L
6020	FWGLL8mw-006C-1381-GF	AQ	N							
				Aluminum	50.0	26.8B		UJ	ug/L	Cb,L
				Zinc	10.0	5.6B J		JB	ug/L	Pj,N,F,L
6020	FWGLL8mw-DUP2-1414-GF	AQ	FD							
				Zinc	10.0	6.3B J		JB	ug/L	Pj,N,F,L
6020	FWGLL9mw-001C-1382-GF	AQ	N							
				Zinc	10.0	2.5B J		JB	ug/L	Pj,N,F,L
6020	FWGLL9mw-002C-1383-GF	AQ	N							
				Zinc	10.0	5.5B J		JB	ug/L	Pj,N,F,L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G150104										
6020	FWGLL9mw-003C-1384-GF	AQ	N							
				Zinc	10.0	7.3B J		JB	ug/L	Pj,N,F,L
6020	FWGLL9mw-004C-1385-GF	AQ	N							
				Zinc	10.0	15.9J		JB	ug/L	Pj,N,F
6020	FWGLL9mw-005C-1386-GF	AQ	N							
				Zinc	10.0	31.0J		JB	ug/L	Pj,F
6020	FWGLL9mw-006C-1387-GF	AQ	N							
				Aluminum	50.0	24.0B		J	ug/L	L
				Zinc	10.0	12.7J		JB	ug/L	Pj,N,F
6020	FWGLL9mw-007C-1388-GF	AQ	N							
				Zinc	10.0	28.6J		JB	ug/L	Pj,F
6020	FWGLL9mw-DUP3-1415-GF	AQ	FD							
				Zinc	10.0	15.7J		JB	ug/L	Pj,N,F
8081A	FWGLL10mw-001C-1389-GW	AQ	N							
				beta-BHC	0.030	0.015J		J	ug/L	L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G150104										
8081A	FWGLL10mw-002C-1390-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G150104										
8081A	FWGLL10mw-003C-1391-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G150104										
8081A	FWGLL8mw-001C-1376-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G150104										
8081A	FWGLL8mw-002C-1377-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G150104										
8081A	FWGLL8mw-003C-1378-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.015J		J	ug/L	G,L
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G150104										
8081A	FWGLL8mw-004C-1379-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.0099J		J	ug/L	G,L
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G150104										
8081A	FWGLL8mw-005C-1380-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.015J		J	ug/L	G,L
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G150104										
8081A	FWGLL8mw-006C-1381-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G150104										
8081A	FWGLL8mw-DUP2-1414-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G150104										
8081A	FWGLL9mw-003C-1384-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.014J		J	ug/L	G,L
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G150104										
8081A	FWGLL9mw-004C-1385-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.013J		J	ug/L	G,L
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G150104										
8081A	FWGLL9mw-005C-1386-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.0088J		J	ug/L	G,L
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G
8081A	FWGLL9mw-006C-1387-GW	AQ	N							
				beta-BHC	0.030	0.15PG		J	ug/L	Pj

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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G150104										
8081A	FWGLL9mw-007C-1388-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.016J		J	ug/L	G,L
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G150104										
8081A	FWGLL9mw-DUP3-1415-GW	AQ	FD							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.015J		J	ug/L	G,L
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G
8082	FWGLL10mw-002C-1390-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G

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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G150104										
8082	FWGLL10mw-003C-1391-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G
8082	FWGLL8mw-001C-1376-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G
8082	FWGLL8mw-002C-1377-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G

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FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G150104										
8082	FWGLL8mw-003C-1378-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G
8082	FWGLL8mw-004C-1379-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G
8082	FWGLL8mw-005C-1380-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G150104										
8082	FWGLL8mw-006C-1381-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G
8082	FWGLL8mw-DUP2-1414-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G
8082	FWGLL9mw-003C-1384-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G150104										
8260B	FWGEQUIPRINSE2-1424-GW	AQ	EB							
				2-Hexanone	10	10U		UJ	ug/L	Pj ~~[illegible]~~ 9/14/09
				Acetone	10	5.5J		JB	ug/L	~~P~~j,L,O
				Carbon disulfide	1.0	1.0U		UJ	ug/L	Pj
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	J,U
				Methylene chloride	2.0	2.6		J	ug/L	Pj
8260B	FWGLL10mw-001C-1389-GW	AQ	N							
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloroform	1.0	0.22J		J	ug/L	L
				Chloromethane	1.0	1.0U		UJ	ug/L	J,U
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGLL10mw-002C-1390-GW	AQ	N							
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	J,U
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGLL10mw-003C-1391-GW	AQ	N							
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloroform	1.0	0.29J		J	ug/L	L
				Chloromethane	1.0	1.0U		UJ	ug/L	J,U
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGLL8mw-001C-1376-GW	AQ	N							
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	J,U
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G150104										
8260B	FWGLL8mw-002C-1377-GW	AQ	N							
				Chloroethane	1.0	1.0U		UJ	ug/L	H,J
				Chloromethane	1.0	1.0U		UJ	ug/L	H,U,J
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGLL8mw-003C-1378-GW	AQ	N							
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	J,U
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGLL8mw-004C-1379-GW	AQ	N							
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	J,U
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGLL8mw-005C-1380-GW	AQ	N							
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	J,U
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGLL8mw-006C-1381-GW	AQ	N							
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	J,U
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGLL8mw-DUP2-1414-GW	AQ	N							
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	J,U
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G150104										
8260B	FWGLL9mw-001C-1382-GW	AQ	N							
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	J,U
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGLL9mw-002C-1383-GW	AQ	N							
				Acetone	10	10U		UJ	ug/L	Pj
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	U
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGLL9mw-003C-1384-GW	AQ	N							
				Chloroethane	1.0	1.0U		UJ	ug/L	H,J
				Chloromethane	1.0	1.0U		UJ	ug/L	H,U,J
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGLL9mw-004C-1385-GW	AQ	N							
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	J,U
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGLL9mw-005C-1386-GW	AQ	N							
				Acetone	10	10U		UJ	ug/L	Pj
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	U
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGLL9mw-006C-1387-GW	AQ	N							
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	J,U
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G150104										
8260B	FWGLL9mw-007C-1388-GW	AQ	N							
				Acetone	10	10U		UJ	ug/L	Pj
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	U
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGLL9mw-DUP3-1415-GW	AQ	FD							
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	J,U
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGTEAM1-TRIP	AQ	TB							
				Acetone	10	2.4J		J	ug/L	L
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	J,U
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGTEAM2-TRIP	AQ	TB							
				Acetone	10	2.1J		J	ug/L	L
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	J,U
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGTEAM3-TRIP	AQ	TB							
				Acetone	10	2.4J		J	ug/L	L
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	J,U
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8270C	FWGEQUIPRINSE2-1424-GW	AQ	EB							
				bis(2-Ethylhexyl) phthalate	10	2.3J B		JB	ug/L	L,F
8270C	FWGLL10mw-001C-1389-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	1.8J B		JB	ug/L	L,N,F

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G150104										
8270C	FWGLL10mw-002C-1390-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	4.0J		JB	ug/L	L,N
8270C	FWGLL10mw-003C-1391-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	0.83J		JB	ug/L	L,N
8270C	FWGLL8mw-001C-1376-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	2.9J		JB	ug/L	L,N
8270C	FWGLL8mw-002C-1377-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	1.5J		JB	ug/L	L,N
8270C	FWGLL8mw-003C-1378-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	4.3J B		JB	ug/L	L,N,F
8270C	FWGLL8mw-004C-1379-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	2.9J B		JB	ug/L	L,N,F
8270C	FWGLL8mw-006C-1381-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	0.83J		JB	ug/L	L,N
8270C	FWGLL8mw-DUP2-1414-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	2.4J		JB	ug/L	L,N
8270C	FWGLL9mw-001C-1382-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	1.2J		JB	ug/L	L,N
8270C	FWGLL9mw-002C-1383-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	1.0J B		JB	ug/L	L,N,F
8270C	FWGLL9mw-003C-1384-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	1.8J B		JB	ug/L	L,N,F

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G150104										
8270C	FWGLL9mw-004C-1385-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	0.94J		JB	ug/L	L,N,P
8270C	FWGLL9mw-005C-1386-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	1.2J B		JB	ug/L	L,N,F
8270C	FWGLL9mw-006C-1387-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	0.95J B		JB	ug/L	L,N,F
8270C	FWGLL9mw-007C-1388-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	4.1J B		JB	ug/L	L,N,F
8270C	FWGLL9mw-DUP3-1415-GW	AQ	FD							
				bis(2-Ethylhexyl) phthalate	10	1.5J B		JB	ug/L	L,N,F

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGEQUIPRINSE2-1424-GW **Lab Report Batch :** A9G150104 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G150104034

Reviewed By / Date : Angye Dragotta 8/27/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
2-Hexanone	10		ug/L	U	YES	**UJ**															Pj
Acetone	5.5		ug/L	J	YES	~~**UJ**~~	JB							J		~~U~~ B				~~LBO~~ 9/14/09	~~Pj~~,L,O
Carbon disulfide	1.0		ug/L	U	YES	**UJ**															Pj
Chloroethane	1.0		ug/L	U	YES	**UJ**				UJ											J
Chloromethane	1.0		ug/L	U	YES	**UJ**				UJ									UJ		J,U
Methylene chloride	2.6		ug/L		YES	**J**															Pj
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	2.3		ug/L	J B	YES	~~**UJ**~~	JB		~~U~~ B					J							L,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGEQUIPRINSE2-1424-GW **Lab Report Batch :** A9G150104 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G150104034

Reviewed By / Date : Angye Dragotta 8/27/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Potassium	157		ug/L	B J	YES	UJ B			~~U~~ B					J							Cb,F,L
Selenium	4.6		ug/L	B	YES	UJ								J							Cb,L
Analysis Method : 6020						**Dilution: 1**															
Zinc	3.5		ug/L	B J	YES	~~UJ~~ JB			~~U~~ B					J							Pj,F,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL10mw-001C-1389-GF
Lab Report Batch : A9G150104
Lab ID : TALCAN
Sample Date : 07/14/2009
Analysis Type: RES/TOT
Sample Matrix : AQ
Lab Sample ID: A9G150104028

Reviewed By / Date : Angye Dragotta 8/27/2009
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Barium	2.3		ug/L	B	YES	J								J							L
Manganese	1.5		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Zinc	10.0		ug/L	U	YES	~~None~~	U														Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL10mw-001C-1389-GW **Lab Report Batch :** A9G150104 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G150104027

Reviewed By / Date : Angye Dragotta 8/27/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
beta-BHC	0.015		ug/L	J	YES	J								J							L
Analysis Method : 8260B						**Dilution: 1**															
Chloroethane	1.0		ug/L	U	YES	UJ				UJ											J
Chloroform	0.22		ug/L	J	YES	J								J							L
Chloromethane	1.0		ug/L	U	YES	UJ				UJ									UJ		J,U
Vinyl chloride	1.0		ug/L	U	YES	UJ				UJ											J
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	1.8		ug/L	J B	YES	~~UJ~~ JB			~~U~~ B					J		~~U~~ B					L,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL10mw-002C-1390-GF **Lab Report Batch :** A9G150104 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G150104013

Reviewed By / Date : Angye Dragotta 8/27/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Cobalt	3.9		ug/L	B	YES	J								J							L
Nickel	6.5		ug/L	B	YES	J								J							L
Potassium	950		ug/L	B J	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Zinc	8.9		ug/L	B J	YES	~~UJ~~ JB			~~U~~ B					J		~~U~~ B					Pj,N,F,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL10mw-002C-1390-GW **Lab Report Batch :** A9G150104 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G150104012

Reviewed By / Date : Angye Dragotta 8/27/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	**UJ**							UJ								G
Aldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	**UJ**							UJ								G
beta-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
delta-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
Dieldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endosulfan I	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan II	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin ketone	0.030		ug/L	U	YES	**UJ**							UJ								G
gamma-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	**UJ**							UJ								G
Heptachlor	0.030		ug/L	U	YES	**UJ**							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	**UJ**							UJ								G
Methoxychlor	0.10		ug/L	U	YES	**UJ**							UJ								G
Toxaphene	2.0		ug/L	U	YES	**UJ**							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1260	0.50		ug/L	U	YES	**UJ**							UJ								G
Analysis Method : 8260B						**Dilution: 1**															
Chloroethane	1.0		ug/L	U	YES	**UJ**				UJ											J
Chloromethane	1.0		ug/L	U	YES	**UJ**				UJ									UJ		J,U

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL10mw-002C-1390-GW **Lab Report Batch :** A9G150104 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G150104012

Reviewed By / Date : Angye Dragotta 8/27/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Vinyl chloride	1.0		ug/L	U	YES	UJ				UJ											J
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	4.0		ug/L	J	YES	~~UJ~~ JB								J		~~UJ~~ JB					L,N

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL10mw-003C-1391-GF
Sample Date : 07/14/2009
Lab Sample ID: A9G150104011

Lab Report Batch : A9G150104
Analysis Type: RES/TOT

Lab ID : TALCAN
Sample Matrix : AQ

Reviewed By / Date : Angye Dragotta 8/27/2009

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Barium	2.6		ug/L	B	YES	J								J							L
Potassium	676		ug/L	B J	YES	UJB			~~U~~B					J		~~U~~B					Cb,N,F,L
Analysis Method : 6020						**Dilution: 1**															
Zinc	2.6		ug/L	B J	YES	~~UJ~~ JB			~~U~~B					J		~~U~~ JB					Pj,N,F,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL10mw-003C-1391-GW **Lab Report Batch :** A9G150104 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G150104010

Reviewed By / Date : Angye Dragotta 8/27/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	**UJ**							UJ								G
Aldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	**UJ**							UJ								G
beta-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
delta-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
Dieldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endosulfan I	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan II	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin ketone	0.030		ug/L	U	YES	**UJ**							UJ								G
gamma-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	**UJ**							UJ								G
Heptachlor	0.030		ug/L	U	YES	**UJ**							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	**UJ**							UJ								G
Methoxychlor	0.10		ug/L	U	YES	**UJ**							UJ								G
Toxaphene	2.0		ug/L	U	YES	**UJ**							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1260	0.50		ug/L	U	YES	**UJ**							UJ								G
Analysis Method : 8260B						**Dilution: 1**															
Chloroethane	1.0		ug/L	U	YES	**UJ**				UJ											J
Chloroform	0.29		ug/L	J	YES	**J**								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL10mw-003C-1391-GW **Lab Report Batch :** A9G150104 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G150104010

Reviewed By / Date : Angye Dragotta 8/27/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Chloromethane	1.0		ug/L	U	YES	UJ				UJ									UJ		J,U
Vinyl chloride	1.0		ug/L	U	YES	UJ				UJ											J
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	0.83		ug/L	J	YES	~~UJ~~ ~~J~~B								J		~~J~~B					L,N

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL8mw-001C-1376-GF
Sample Date : 07/14/2009
Lab Sample ID: A9G150104003

Lab Report Batch : A9G150104
Analysis Type: RES/TOT

Lab ID : TALCAN
Sample Matrix : AQ

Reviewed By / Date : Angye Dragotta 8/27/2009

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Selenium	4.8		ug/L	B	YES	UJ B								J		U B					Cb,N,L
Analysis Method : 6020						**Dilution: 1**															
Iron	82.3		ug/L		YES	U															Cb
Zinc	4.5		ug/L	B J	YES	UJ JB			U B					J		U B					Pj,N,F,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL8mw-001C-1376-GW **Lab Report Batch :** A9G150104 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G150104002

Reviewed By / Date : Angye Dragotta 8/27/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	**UJ**							UJ								G
Aldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	**UJ**							UJ								G
beta-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
delta-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
Dieldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endosulfan I	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan II	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin ketone	0.030		ug/L	U	YES	**UJ**							UJ								G
gamma-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	**UJ**							UJ								G
Heptachlor	0.030		ug/L	U	YES	**UJ**							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	**UJ**							UJ								G
Methoxychlor	0.10		ug/L	U	YES	**UJ**							UJ								G
Toxaphene	2.0		ug/L	U	YES	**UJ**							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1260	0.50		ug/L	U	YES	**UJ**							UJ								G
Analysis Method : 8260B						**Dilution: 1**															
Chloroethane	1.0		ug/L	U	YES	**UJ**				UJ											J
Chloromethane	1.0		ug/L	U	YES	**UJ**				UJ									UJ		J,U

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL8mw-001C-1376-GW **Lab Report Batch :** A9G150104 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G150104002

Reviewed By / Date : Angye Dragotta 8/27/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Vinyl chloride	1.0		ug/L	U	YES	UJ				UJ											J
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	2.9		ug/L	J	YES	~~UJ~~ JB								J		~~U~~ B					L,N

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL8mw-002C-1377-GF **Lab Report Batch :** A9G150104 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G150104005

Reviewed By / Date : Angye Dragotta 8/27/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6020						**Dilution: 1**															
Zinc	10.0		ug/L	U	YES	~~None~~ U															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL8mw-002C-1377-GW **Lab Report Batch :** A9G150104 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G150104004

Reviewed By / Date : Angye Dragotta 8/27/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	**UJ**							UJ								G
Aldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	**UJ**							UJ								G
beta-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
delta-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
Dieldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endosulfan I	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan II	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin ketone	0.030		ug/L	U	YES	**UJ**							UJ								G
gamma-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	**UJ**							UJ								G
Heptachlor	0.030		ug/L	U	YES	**UJ**							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	**UJ**							UJ								G
Methoxychlor	0.10		ug/L	U	YES	**UJ**							UJ								G
Toxaphene	2.0		ug/L	U	YES	**UJ**							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1260	0.50		ug/L	U	YES	**UJ**							UJ								G
Analysis Method : 8260B						**Dilution: 1**															
Chloroethane	1.0		ug/L	U	YES	**UJ**				UJ	UJ										H,J
Chloromethane	1.0		ug/L	U	YES	**UJ**				UJ	UJ								UJ		H,U,J

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL8mw-002C-1377-GW **Lab Report Batch :** A9G150104 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G150104004

Reviewed By / Date : Angye Dragotta 8/27/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Vinyl chloride	1.0		ug/L	U	YES	UJ				UJ											J-
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	1.5		ug/L	J	YES	~~UJ~~ JB								J		~~UJ~~ JB					L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL8mw-003C-1378-GF
Sample Date : 07/14/2009
Lab Sample ID: A9G150104031

Lab Report Batch : A9G150104
Analysis Type: RES/TOT

Lab ID : TALCAN
Sample Matrix : AQ

Reviewed By / Date : Angye Dragotta 8/27/2009

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Arsenic	3.5		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Aluminum	25.9		ug/L	B	YES	J								J							L
Zinc	3.9		ug/L	B J	YES	~~UJ~~ JB			~~U~~ B					J		~~U~~ B					Pj,N,F,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL8mw-003C-1378-GW **Lab Report Batch :** A9G150104 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G150104030

Reviewed By / Date : Angye Dragotta 8/27/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	**UJ**							UJ								G
Aldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	**UJ**							UJ								G
beta-BHC	0.015		ug/L	J	YES	**J**							J	J							G,L
delta-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
Dieldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endosulfan I	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan II	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin ketone	0.030		ug/L	U	YES	**UJ**							UJ								G
gamma-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	**UJ**							UJ								G
Heptachlor	0.030		ug/L	U	YES	**UJ**							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	**UJ**							UJ								G
Methoxychlor	0.10		ug/L	U	YES	**UJ**							UJ								G
Toxaphene	2.0		ug/L	U	YES	**UJ**							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1260	0.50		ug/L	U	YES	**UJ**							UJ								G
Analysis Method : 8260B						**Dilution: 1**															
Chloroethane	1.0		ug/L	U	YES	**UJ**				UJ											J
Chloromethane	1.0		ug/L	U	YES	**UJ**				UJ									UJ		J,U

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL8mw-003C-1378-GW
Sample Date : 07/14/2009
Lab Sample ID: A9G150104030

Lab Report Batch : A9G150104
Analysis Type: RES

Lab ID : TALCAN
Sample Matrix : AQ

Reviewed By / Date : Angye Dragotta 8/27/2009

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Vinyl chloride	1.0		ug/L	U	YES	UJ				UJ											J
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	4.3		ug/L	J B	YES	~~U~~ JB			~~J~~B					J		~~J~~B					L,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL8mw-004C-1379-GF
Sample Date : 07/14/2009
Lab Sample ID: A9G150104033

Lab Report Batch : A9G150104
Analysis Type: RES/TOT

Lab ID : TALCAN
Sample Matrix : AQ

Reviewed By / Date : Angye Dragotta 8/27/2009

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6020						**Dilution: 1**															
Zinc	5.4		ug/L	B J	YES	~~W~~ JB			JB					J		JB					Pj,N,F,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL8mw-004C-1379-GW **Lab Report Batch :** A9G150104 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G150104032

Reviewed By / Date : Angye Dragotta 8/27/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	UJ							UJ								G
Aldrin	0.030		ug/L	U	YES	UJ							UJ								G
alpha-BHC	0.030		ug/L	U	YES	UJ							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	UJ							UJ								G
beta-BHC	0.0099		ug/L	J	YES	J							J	J							G,L
delta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
Dieldrin	0.030		ug/L	U	YES	UJ							UJ								G
Endosulfan I	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	UJ							UJ								G
Endrin	0.030		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.030		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	UJ							UJ								G
Methoxychlor	0.10		ug/L	U	YES	UJ							UJ								G
Toxaphene	2.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1260	0.50		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8260B						**Dilution: 1**															
Chloroethane	1.0		ug/L	U	YES	UJ				UJ											J
Chloromethane	1.0		ug/L	U	YES	UJ				UJ									UJ		J,U

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL8mw-004C-1379-GW **Lab Report Batch :** A9G150104 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G150104032

Reviewed By / Date : Angye Dragotta 8/27/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Vinyl chloride	1.0		ug/L	U	YES	UJ				UJ											J
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	2.9		ug/L	J B	YES	~~UJ~~ JB			~~U~~ B					J		~~U~~ JB					L,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL8mw-005C-1380-GF **Lab Report Batch :** A9G150104 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G150104018

Reviewed By / Date : Angye Dragotta 8/27/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Potassium	718		ug/L	B J	YES	~~U~~ JB			~~U~~ B					J		~~U~~ B					Cb,N,F,L
Analysis Method : 6020						**Dilution: 1**															
Zinc	2.9		ug/L	B J	YES	~~U~~ JB			~~U~~ B					J		~~U~~ B					Pj,N,P,F,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL8mw-005C-1380-GW **Lab Report Batch :** A9G150104 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G150104017

Reviewed By / Date : Angye Dragotta 8/27/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	**UJ**							UJ								G
Aldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	**UJ**							UJ								G
beta-BHC	0.015		ug/L	J	YES	**J**							J	J							G,L
delta-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
Dieldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endosulfan I	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan II	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin ketone	0.030		ug/L	U	YES	**UJ**							UJ								G
gamma-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	**UJ**							UJ								G
Heptachlor	0.030		ug/L	U	YES	**UJ**							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	**UJ**							UJ								G
Methoxychlor	0.10		ug/L	U	YES	**UJ**							UJ								G
Toxaphene	2.0		ug/L	U	YES	**UJ**							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1260	0.50		ug/L	U	YES	**UJ**							UJ								G
Analysis Method : 8260B						**Dilution: 1**															
Chloroethane	1.0		ug/L	U	YES	**UJ**				UJ											J
Chloromethane	1.0		ug/L	U	YES	**UJ**				UJ									UJ		J,U

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL8mw-005C-1380-GW **Lab Report Batch :** A9G150104 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G150104017

Reviewed By / Date : Angye Dragotta 8/27/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Vinyl chloride	1.0		ug/L	U	YES	**UJ**				UJ											J

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL8mw-006C-1381-GF
Sample Date : 07/14/2009
Lab Sample ID: A9G150104016

Lab Report Batch : A9G150104
Analysis Type: RES/TOT

Lab ID : TALCAN
Sample Matrix : AQ

Reviewed By / Date : Angye Dragotta 8/27/2009

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Manganese	5.2		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Aluminum	26.8		ug/L	B	YES	UJ								J							Cb,L
Zinc	5.6		ug/L	B J	YES	~~UJ~~ B			U B					J		~~U~~ B					Pj,N,F,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL8mw-006C-1381-GW **Lab Report Batch :** A9G150104 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G150104015

Reviewed By / Date : Angye Dragotta 8/27/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	UJ							UJ								G
Aldrin	0.030		ug/L	U	YES	UJ							UJ								G
alpha-BHC	0.030		ug/L	U	YES	UJ							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	UJ							UJ								G
beta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
delta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
Dieldrin	0.030		ug/L	U	YES	UJ							UJ								G
Endosulfan I	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	UJ							UJ								G
Endrin	0.030		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.030		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	UJ							UJ								G
Methoxychlor	0.10		ug/L	U	YES	UJ							UJ								G
Toxaphene	2.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1260	0.50		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8260B						**Dilution: 1**															
Chloroethane	1.0		ug/L	U	YES	UJ				UJ											J
Chloromethane	1.0		ug/L	U	YES	UJ				UJ									UJ		J,U

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL8mw-006C-1381-GW **Lab Report Batch :** A9G150104 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G150104015

Reviewed By / Date : Angye Dragotta 8/27/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Vinyl chloride	1.0		ug/L	U	YES	UJ				UJ											J
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	0.83		ug/L	J	YES	~~UJ~~ JB								J		~~U~~ B					L,N

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL8mw-DUP2-1414-GF **Lab Report Batch :** A9G150104 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G150104020

Reviewed By / Date : Angye Dragotta 8/27/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Cobalt	2.3		ug/L	B	YES	J								J							L
Nickel	3.9		ug/L	B	YES	J								J							L
Potassium	728		ug/L	B J	YES	~~UJ~~ JB			UB					J		UB					L,N,F
Selenium	4.9		ug/L	B	YES	UJ B								J		UB					Cb,N,L
Analysis Method : 6020						**Dilution: 1**															
Zinc	6.3		ug/L	B J	YES	~~UJ~~ JB			UB					J		UB					Pj,N,F,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL8mw-DUP2-1414-GW **Lab Report Batch :** A9G150104 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G150104019

Reviewed By / Date : Angye Dragotta 8/27/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	**UJ**							UJ								G
Aldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	**UJ**							UJ								G
beta-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
delta-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
Dieldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endosulfan I	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan II	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin ketone	0.030		ug/L	U	YES	**UJ**							UJ								G
gamma-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	**UJ**							UJ								G
Heptachlor	0.030		ug/L	U	YES	**UJ**							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	**UJ**							UJ								G
Methoxychlor	0.10		ug/L	U	YES	**UJ**							UJ								G
Toxaphene	2.0		ug/L	U	YES	**UJ**							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1260	0.50		ug/L	U	YES	**UJ**							UJ								G
Analysis Method : 8260B						**Dilution: 1**															
Chloroethane	1.0		ug/L	U	YES	**UJ**				UJ											J
Chloromethane	1.0		ug/L	U	YES	**UJ**				UJ									UJ		J,U

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL8mw-DUP2-1414-GW **Lab Report Batch :** A9G150104 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G150104019

Reviewed By / Date : Angye Dragotta 8/27/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Vinyl chloride	1.0		ug/L	U	YES	**UJ**				UJ											J
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	2.4		ug/L	J	YES	~~UJ~~ JB								J		~~J~~ B					L,N

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL9mw-001C-1382-GF **Lab Report Batch :** A9G150104 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G150104007

Reviewed By / Date : Angye Dragotta 8/27/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Manganese	0.68		ug/L	B	YES	J								J							L
Potassium	963		ug/L	B J	YES	J								J							L
Vanadium	1.1		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Zinc	2.5		ug/L	B J	YES	~~U~~ JB			~~U~~ B					J		~~U~~ B					Pj,N,F,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL9mw-001C-1382-GW **Lab Report Batch :** A9G150104 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G150104006

Reviewed By / Date : Angye Dragotta 8/27/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Chloroethane	1.0		ug/L	U	YES	UJ				UJ											J
Chloromethane	1.0		ug/L	U	YES	UJ				UJ									UJ		J,U
Vinyl chloride	1.0		ug/L	U	YES	UJ				UJ											J
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	1.2		ug/L	J	YES	~~UJ~~ JB								J		JB					L,N

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL9mw-002C-1383-GF
Lab Report Batch : A9G150104
Lab ID : TALCAN
Sample Date : 07/14/2009
Analysis Type: RES/TOT
Sample Matrix : AQ
Lab Sample ID: A9G150104038

Reviewed By / Date : Angye Dragotta 8/27/2009
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Barium	4.2		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Zinc	5.5		ug/L	B J	YES	~~J~~ JB			~~J~~B					J		~~J~~B					Pj,N,F,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL9mw-002C-1383-GW **Lab Report Batch :** A9G150104 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G150104037

Reviewed By / Date : Angye Dragotta 8/27/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Acetone	10		ug/L	U	YES	**UJ**															Pj
Chloroethane	1.0		ug/L	U	YES	**UJ**				UJ											J
Chloromethane	1.0		ug/L	U	YES	**UJ**													UJ		U
Vinyl chloride	1.0		ug/L	U	YES	**UJ**				UJ											J
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	1.0		ug/L	J B	YES	~~UJ~~ JB			~~U~~ JB					J		~~U~~ JB					L,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL9mw-003C-1384-GF
Sample Date : 07/14/2009
Lab Sample ID: A9G150104009

Lab Report Batch : A9G150104
Analysis Type: RES/TOT

Lab ID : TALCAN
Sample Matrix : AQ

Reviewed By / Date : Angye Dragotta 8/27/2009

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6020						**Dilution: 1**															
Zinc	7.3		ug/L	B J	YES	~~U~~ JB			~~U~~ B					J		~~U~~ B					Pj,N,F,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL9mw-003C-1384-GW **Lab Report Batch :** A9G150104 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G150104008

Reviewed By / Date : Angye Dragotta 8/27/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	**UJ**							UJ								G
Aldrin	0.030		ug/L	U	YES	UJ							UJ								G
alpha-BHC	0.030		ug/L	U	YES	UJ							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	**UJ**							UJ								G
beta-BHC	0.014		ug/L	J	YES	**J**							J	J							G,L
delta-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
Dieldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endosulfan I	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	UJ							UJ								G
Endrin	0.030		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.030		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.030		ug/L	U	YES	**UJ**							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	**UJ**							UJ								G
Methoxychlor	0.10		ug/L	U	YES	**UJ**							UJ								G
Toxaphene	2.0		ug/L	U	YES	**UJ**							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1260	0.50		ug/L	U	YES	**UJ**							UJ								G
Analysis Method : 8260B						**Dilution: 1**															
Chloroethane	1.0		ug/L	U	YES	**UJ**				UJ	UJ										H,J
Chloromethane	1.0		ug/L	U	YES	**UJ**				UJ	UJ								UJ		H,U,J

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL9mw-003C-1384-GW
Sample Date : 07/14/2009
Lab Sample ID: A9G150104008

Lab Report Batch : A9G150104
Analysis Type: RES

Lab ID : TALCAN
Sample Matrix : AQ

Reviewed By / Date : Angye Dragotta 8/27/2009

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Vinyl chloride	1.0		ug/L	U	YES	UJ				UJ											J
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	1.8		ug/L	J B	YES	~~UJ~~ JB			~~U~~ JB					J		~~U~~ JB					L,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL9mw-004C-1385-GF
Sample Date : 07/14/2009
Lab Sample ID: A9G150104022

Lab Report Batch : A9G150104
Analysis Type: RES/TOT

Lab ID : TALCAN
Sample Matrix : AQ

Reviewed By / Date : Angye Dragotta 8/27/2009

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Nickel	5.7		ug/L	B	YES	J								J							L
Potassium	741		ug/L	B J	YES	UJ B								J		~~J~~B					Cb,N,L
Analysis Method : 6020						**Dilution: 1**															
Zinc	15.9		ug/L	J	YES	~~U~~ JB			~~U~~B							~~U~~B					Pj,N,F

Project Number and Name: 30240.0006 - RVAAP (OH)
ADR 8.1

Library Used: Ravenna GW
Report Date: 8/27/2009 11:32

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL9mw-004C-1385-GW
Sample Date : 07/14/2009
Lab Sample ID: A9G150104021

Lab Report Batch : A9G150104
Analysis Type: RES

Lab ID : TALCAN
Sample Matrix : AQ

Reviewed By / Date : Angye Dragotta 8/27/2009

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	**UJ**							UJ								G
Aldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	**UJ**							UJ								G
beta-BHC	0.013		ug/L	J	YES	**J**							J	J							G,L
delta-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
Dieldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endosulfan I	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan II	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin ketone	0.030		ug/L	U	YES	**UJ**							UJ								G
gamma-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	**UJ**							UJ								G
Heptachlor	0.030		ug/L	U	YES	**UJ**							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	**UJ**							UJ								G
Methoxychlor	0.10		ug/L	U	YES	**UJ**							UJ								G
Toxaphene	2.0		ug/L	U	YES	**UJ**							UJ								G
Analysis Method : 8260B						**Dilution: 1**															
Chloroethane	1.0		ug/L	U	YES	**UJ**				UJ											J
Chloromethane	1.0		ug/L	U	YES	**UJ**				UJ									UJ		J,U
Vinyl chloride	1.0		ug/L	U	YES	**UJ**				UJ											J
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	0.94		ug/L	J	YES	~~UJ~~ JB								J		~~U~~ B					L,N,P

Project Number and Name: 30240.0006 - RVAAP (OH)
Library Used: Ravenna GW

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL9mw-005C-1386-GF
Sample Date : 07/14/2009
Lab Sample ID: A9G150104040

Lab Report Batch : A9G150104
Analysis Type: RES/TOT

Lab ID : TALCAN
Sample Matrix : AQ

Reviewed By / Date : Angye Dragotta 8/27/2009

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Barium	2.8		ug/L	B	YES	J								J							L
Manganese	1.8		ug/L	B	YES	J								J							L
Potassium	717		ug/L	B J	YES	UJ B			~~J~~B					J		~~J~~B					Cb,N,F,L
Analysis Method : 6020						**Dilution: 1**															
Zinc	31.0		ug/L	J	YES	~~U~~ JB			~~U~~												Pj,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL9mw-005C-1386-GW **Lab Report Batch :** A9G150104 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G150104039

Reviewed By / Date : Angye Dragotta 8/27/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	**UJ**							UJ								G
Aldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	**UJ**							UJ								G
beta-BHC	0.0088		ug/L	J	YES	**J**							J	J							G,L
delta-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
Dieldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endosulfan I	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan II	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin ketone	0.030		ug/L	U	YES	**UJ**							UJ								G
gamma-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	**UJ**							UJ								G
Heptachlor	0.030		ug/L	U	YES	**UJ**							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	**UJ**							UJ								G
Methoxychlor	0.10		ug/L	U	YES	**UJ**							UJ								G
Toxaphene	2.0		ug/L	U	YES	**UJ**							UJ								G
Analysis Method : 8260B						**Dilution: 1**															
Acetone	10		ug/L	U	YES	UJ															Pj
Chloroethane	1.0		ug/L	U	YES	UJ				UJ											J
Chloromethane	1.0		ug/L	U	YES	UJ													UJ		U
Vinyl chloride	1.0		ug/L	U	YES	UJ				UJ											J
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	1.2		ug/L	J B	YES	~~UJ~~ JB			UB					J		UB					L,N,F

Project Number and Name: 30240.0006 - RVAAP (OH) **Library Used:** Ravenna GW

ADR 8.1 Report Date: 8/27/2009 11:32

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL9mw-006C-1387-GF
Sample Date : 07/14/2009
Lab Sample ID: A9G150104026

Lab Report Batch : A9G150104
Analysis Type: RES/TOT

Lab ID : TALCAN
Sample Matrix : AQ

Reviewed By / Date : Angye Dragotta 8/27/2009

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Cobalt	2.2		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Aluminum	24.0		ug/L	B	YES	J								J							L
Zinc	12.7		ug/L	J	YES	~~U~~ J B			~~U~~ B							~~U~~ B					Pj,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL9mw-006C-1387-GW
Lab Report Batch : A9G150104
Lab ID : TALCAN
Sample Date : 07/14/2009
Analysis Type: RES
Sample Matrix : AQ
Lab Sample ID: A9G150104025

Reviewed By / Date : Angye Dragotta 8/27/2009
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
beta-BHC	0.15		ug/L	PG	YES	J															Pj
Analysis Method : 8260B						**Dilution: 1**															
Chloroethane	1.0		ug/L	U	YES	UJ				UJ											J
Chloromethane	1.0		ug/L	U	YES	UJ				UJ									UJ		J,U
Vinyl chloride	1.0		ug/L	U	YES	UJ				UJ											J
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	0.95		ug/L	J B	YES	~~UJ~~ JB			JB					J		JB					L,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL9mw-007C-1388-GF
Sample Date : 07/14/2009
Lab Sample ID: A9G150104036

Lab Report Batch : A9G150104
Analysis Type: RES/TOT

Lab ID : TALCAN
Sample Matrix : AQ

Reviewed By / Date : Angye Dragotta 8/27/2009

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6020						**Dilution: 1**															
Zinc	28.6		ug/L	J	YES	~~UJ~~ JB			~~UB~~												Pj,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL9mw-007C-1388-GW
Sample Date : 07/14/2009
Lab Sample ID: A9G150104035

Lab Report Batch : A9G150104
Analysis Type: RES

Lab ID : TALCAN
Sample Matrix : AQ

Reviewed By / Date : Angye Dragotta 8/27/2009

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	UJ							UJ								G
Aldrin	0.030		ug/L	U	YES	UJ							UJ								G
alpha-BHC	0.030		ug/L	U	YES	UJ							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	UJ							UJ								G
beta-BHC	0.016		ug/L	J	YES	J							J	J							G,L
delta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
Dieldrin	0.030		ug/L	U	YES	UJ							UJ								G
Endosulfan I	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	UJ							UJ								G
Endrin	0.030		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.030		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	UJ							UJ								G
Methoxychlor	0.10		ug/L	U	YES	UJ							UJ								G
Toxaphene	2.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8260B						**Dilution: 1**															
Acetone	10		ug/L	U	YES	UJ															Pj
Chloroethane	1.0		ug/L	U	YES	UJ				UJ											J
Chloromethane	1.0		ug/L	U	YES	UJ													UJ		U
Vinyl chloride	1.0		ug/L	U	YES	UJ				UJ											J
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	4.1		ug/L	J B	YES	~~UJ~~ JB			~~UJ~~ B					J		~~UJ~~ B					L,N,F

Project Number and Name: 30240.0006 - RVAAP (OH)
Library Used: Ravenna GW
ADR 8.1
Report Date: 8/27/2009 11:32

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL9mw-DUP3-1415-GF
Sample Date : 07/14/2009
Lab Sample ID: A9G150104024

Lab Report Batch : A9G150104
Analysis Type: RES/TOT

Lab ID : TALCAN
Sample Matrix : AQ

Reviewed By / Date : Angye Dragotta 8/27/2009

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Nickel	7.2		ug/L	B	YES	J								J							L
Potassium	829		ug/L	B J	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Zinc	15.7		ug/L	J	YES	~~UJ~~ JB			JB							JB					PJ,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL9mw-DUP3-1415-GW **Lab Report Batch :** A9G150104 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G150104023

Reviewed By / Date : Angye Dragotta 8/27/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	UJ							UJ								G
Aldrin	0.030		ug/L	U	YES	UJ							UJ								G
alpha-BHC	0.030		ug/L	U	YES	UJ							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	UJ							UJ								G
beta-BHC	0.015		ug/L	J	YES	J							J	J							G,L
delta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
Dieldrin	0.030		ug/L	U	YES	UJ							UJ								G
Endosulfan I	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	UJ							UJ								G
Endrin	0.030		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.030		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	UJ							UJ								G
Methoxychlor	0.10		ug/L	U	YES	UJ							UJ								G
Toxaphene	2.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8260B						**Dilution: 1**															
Chloroethane	1.0		ug/L	U	YES	UJ				UJ											J
Chloromethane	1.0		ug/L	U	YES	UJ				UJ									UJ		J,U
Vinyl chloride	1.0		ug/L	U	YES	UJ				UJ											J
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	1.5		ug/L	J B	YES	~~UJ~~ JB			~~U~~ B					J		~~U~~ B					L,N,F

Project Number and Name: 30240.0006 - RVAAP (OH) **Library Used:** Ravenna GW

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGTEAM1-TRIP **Lab Report Batch :** A9G150104 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G150104001

Reviewed By / Date : Angye Dragotta 8/27/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Acetone	2.4		ug/L	J	YES	**J**								J							L
Chloroethane	1.0		ug/L	U	YES	**UJ**				UJ											J
Chloromethane	1.0		ug/L	U	YES	**UJ**				UJ									UJ		J,U
Vinyl chloride	1.0		ug/L	U	YES	**UJ**				UJ											J

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGTEAM2-TRIP **Lab Report Batch :** A9G150104 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G150104014

Reviewed By / Date : Angye Dragotta 8/27/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Acetone	2.1		ug/L	J	YES	**J**								J							L
Chloroethane	1.0		ug/L	U	YES	**UJ**				UJ											J
Chloromethane	1.0		ug/L	U	YES	**UJ**				UJ									UJ		J,U
Vinyl chloride	1.0		ug/L	U	YES	**UJ**				UJ											J

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGTEAM3-TRIP **Lab Report Batch :** A9G150104 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G150104029

Reviewed By / Date : Angye Dragotta 8/27/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Acetone	2.4		ug/L	J	YES	**J**								J							L
Chloroethane	1.0		ug/L	U	YES	**UJ**				UJ											J
Chloromethane	1.0		ug/L	U	YES	**UJ**				UJ									UJ		J,U
Vinyl chloride	1.0		ug/L	U	YES	**UJ**				UJ											J

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A9G150104 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGEQUIPRINSE2-1424	A9G150104034	6010B	AQ	Potassium	B J	157	1000	ug/L
				Selenium	B	4.6	5.0	ug/L
		6020		Zinc	B J	3.5	10.0	ug/L
		8260B		Acetone	J	5.5	10	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	2.3	10	ug/L
FWGLL10mw-001C-1389-	A9G150104028	6010B		Barium	B	2.3	10.0	ug/L
				Manganese	B	1.5	10.0	ug/L
FWGLL10mw-001C-1389-	A9G150104027	8081A		beta-BHC	J	0.015	0.030	ug/L
		8260B		Chloroform	J	0.22	1.0	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	1.8	10	ug/L
FWGLL10mw-002C-1390-	A9G150104013	6010B		Cobalt	B	3.9	5.0	ug/L
				Nickel	B	6.5	10.0	ug/L
				Potassium	B J	950	1000	ug/L
		6020		Zinc	B J	8.9	10.0	ug/L
FWGLL10mw-002C-1390-	A9G150104012	8270C		bis(2-Ethylhexyl) phthalate	J	4.0	10	ug/L
FWGLL10mw-003C-1391-	A9G150104011	6010B		Barium	B	2.6	10.0	ug/L
				Potassium	B J	676	1000	ug/L
		6020		Zinc	B J	2.6	10.0	ug/L
FWGLL10mw-003C-1391-	A9G150104010	8260B		Chloroform	J	0.29	1.0	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J	0.83	10	ug/L
FWGLL8mw-001C-1376-G	A9G150104003	6010B		Selenium	B	4.8	5.0	ug/L
		6020		Zinc	B J	4.5	10.0	ug/L
FWGLL8mw-001C-1376-G	A9G150104002	8270C		bis(2-Ethylhexyl) phthalate	J	2.9	10	ug/L
FWGLL8mw-002C-1377-G	A9G150104004			bis(2-Ethylhexyl) phthalate	J	1.5	10	ug/L
FWGLL8mw-003C-1378-G	A9G150104031	6010B		Arsenic	B	3.5	5.0	ug/L
		6020		Aluminum	B	25.9	50.0	ug/L
				Zinc	B J	3.9	10.0	ug/L
FWGLL8mw-003C-1378-G	A9G150104030	8081A		beta-BHC	J	0.015	0.030	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	4.3	10	ug/L
FWGLL8mw-004C-1379-G	A9G150104033	6020		Zinc	B J	5.4	10.0	ug/L
FWGLL8mw-004C-1379-G	A9G150104032	8081A		beta-BHC	J	0.0099	0.030	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	2.9	10	ug/L
FWGLL8mw-005C-1380-G	A9G150104018	6010B		Potassium	B J	718	1000	ug/L
		6020		Zinc	B J	2.9	10.0	ug/L
FWGLL8mw-005C-1380-G	A9G150104017	8081A		beta-BHC	J	0.015	0.030	ug/L
FWGLL8mw-006C-1381-G	A9G150104016	6010B		Manganese	B	5.2	10.0	ug/L

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A9G150104 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGLL8mw-006C-1381-G	A9G150104016	6020	AQ	Aluminum	B	26.8	50.0	ug/L
				Zinc	B J	5.6	10.0	ug/L
FWGLL8mw-006C-1381-G	A9G150104015	8270C		bis(2-Ethylhexyl) phthalate	J	0.83	10	ug/L
FWGLL8mw-DUP2-1414-	A9G150104020	6010B		Cobalt	B	2.3	5.0	ug/L
				Nickel	B	3.9	10.0	ug/L
				Potassium	B J	728	1000	ug/L
				Selenium	B	4.9	5.0	ug/L
		6020		Zinc	B J	6.3	10.0	ug/L
FWGLL8mw-DUP2-1414-	A9G150104019	8270C		bis(2-Ethylhexyl) phthalate	J	2.4	10	ug/L
FWGLL9mw-001C-1382-G	A9G150104007	6010B		Manganese	B	0.68	10.0	ug/L
				Potassium	B J	963	1000	ug/L
				Vanadium	B	1.1	10.0	ug/L
		6020		Zinc	B J	2.5	10.0	ug/L
FWGLL9mw-001C-1382-G	A9G150104006	8270C		bis(2-Ethylhexyl) phthalate	J	1.2	10	ug/L
FWGLL9mw-002C-1383-G	A9G150104038	6010B		Barium	B	4.2	10.0	ug/L
		6020		Zinc	B J	5.5	10.0	ug/L
FWGLL9mw-002C-1383-G	A9G150104037	8270C		bis(2-Ethylhexyl) phthalate	J B	1.0	10	ug/L
FWGLL9mw-003C-1384-G	A9G150104009	6020		Zinc	B J	7.3	10.0	ug/L
FWGLL9mw-003C-1384-G	A9G150104008	8081A		beta-BHC	J	0.014	0.030	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	1.8	10	ug/L
FWGLL9mw-004C-1385-G	A9G150104022	6010B		Nickel	B	5.7	10.0	ug/L
				Potassium	B J	741	1000	ug/L
FWGLL9mw-004C-1385-G	A9G150104021	8081A		beta-BHC	J	0.013	0.030	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J	0.94	10	ug/L
FWGLL9mw-005C-1386-G	A9G150104040	6010B		Barium	B	2.8	10.0	ug/L
				Manganese	B	1.8	10.0	ug/L
				Potassium	B J	717	1000	ug/L
FWGLL9mw-005C-1386-G	A9G150104039	8081A		beta-BHC	J	0.0088	0.030	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	1.2	10	ug/L
FWGLL9mw-006C-1387-G	A9G150104026	6010B		Cobalt	B	2.2	5.0	ug/L
		6020		Aluminum	B	24.0	50.0	ug/L
FWGLL9mw-006C-1387-G	A9G150104025	8270C		bis(2-Ethylhexyl) phthalate	J B	0.95	10	ug/L
FWGLL9mw-007C-1388-G	A9G150104035	8081A		beta-BHC	J	0.016	0.030	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	4.1	10	ug/L
FWGLL9mw-DUP3-1415-	A9G150104024	6010B		Nickel	B	7.2	10.0	ug/L
				Potassium	B J	829	1000	ug/L

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A9G150104 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGLL9mw-DUP3-1415-	A9G150104023	8081A	AQ	beta-BHC	J	0.015	0.030	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	1.5	10	ug/L
FWGTEAM1-TRIP	A9G150104001	8260B		Acetone	J	2.4	10	ug/L
FWGTEAM2-TRIP	A9G150104014			Acetone	J	2.1	10	ug/L
FWGTEAM3-TRIP	A9G150104029			Acetone	J	2.4	10	ug/L

QC Outlier Report: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: A9G150104 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGEQUIPRINSE2-1424	A9G150104034	6010B	AQ	Calcium	U	1000	100.00	ug/L
				Magnesium	U	1000	100.00	ug/L
				Sodium	U	1000	200.00	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: **30240.0006 - RVAAP (OH)**

QC Outlier Report: Trip Blank

Lab Reporting Batch : A9G150104
Method/Preparation Batch : 9201253 / 9201253
Client Sample ID : FWGTEAM1-TRIP
Lab Sample ID : A9G150104001

Lab ID: TALCAN
Analysis Date : 07/20/2009
Preparation Date : 07/20/2009
Preparation Type : 5030B

Analysis Method : 8260B

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	2.4	10	ug/L	J	Common Contaminant

Acetone contamination found in the trip blank did not qualify any samples.

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	2.1	10	ug/L	J	Common Contaminant

Acetone contamination found in the trip blank did not qualify any samples.

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	2.4	10	ug/L	J	Common Contaminant

Acetone was qualified due to trip blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
[illegible]	[illegible]	1	[illegible]	J	ug/L

Laboratory Control Sample / Laboratory Control Sample Duplicate Outlier Report

Method Batch : 9202112 **Analysis Method :** 8260B **Analysis Date :** 07/21/2009

Preparation Batch : 9202112 **Preparation Type :** 5030B **Preparation Date :** 07/21/2009

Lab Reporting Batch : A9G150104 **Lab ID:** TALCAN

			Reported Values		Project Limits (Percent)			
LCS Lab Sample ID	**Matrix**	**Analyte Name**	**Percent Recovery**	**RPD**	**Rejection Point**	**Lower Limit**	**Upper Limit**	**RPD**
A9G210000112C	AQ	Chloroethane	65		30.00	72.00	129.00	30.00
A9G210000112L		Chloroethane	64	1.2	30.00	72.00	129.00	30.00
		Chloromethane	55	21	30.00	58.00	135.00	30.00

Associated Samples

Client Sample ID	**Lab Sample ID**
FWGEQUIPRINSE2-1424-GW	A9G150104034

Scope of Data Qualification: The outlier in the LCS qualifies that analyte in all samples with the same Preparation Batch ID as the LCS

Project Number and Name: 30240.0006 - RVAAP (OH)

Laboratory Control Sample / Laboratory Control Sample Duplicate Outlier Report

Method Batch : 9201253 **Analysis Method :** 8260B **Analysis Date :** 07/20/2009

Preparation Batch : 9201253 **Preparation Type :** 5030B **Preparation Date :** 07/20/2009

Lab Reporting Batch : A9G150104 **Lab ID:** TALCAN

			Reported Values		Project Limits (Percent)			
LCS Lab Sample ID	**Matrix**	**Analyte Name**	**Percent Recovery**	**RPD**	**Rejection Point**	**Lower Limit**	**Upper Limit**	**RPD**
A9G200000253C	AQ	Chloroethane	66		30.00	72.00	129.00	30.00
A9G200000253L		Chloroethane	62	6.4	30.00	72.00	129.00	30.00
		Chloromethane	54	7.9	30.00	58.00	135.00	30.00
		Vinyl chloride	71	3.6	30.00	73.00	134.00	30.00

Associated Samples

Client Sample ID	**Lab Sample ID**
FWGLL10mw-001C-1389-GW	A9G150104027
FWGLL10mw-002C-1390-GW	A9G150104012
FWGLL10mw-003C-1391-GW	A9G150104010
FWGLL8mw-001C-1376-GW	A9G150104002
FWGLL8mw-002C-1377-GW	A9G150104004
FWGLL8mw-003C-1378-GW	A9G150104030
FWGLL8mw-004C-1379-GW	A9G150104032
FWGLL8mw-005C-1380-GW	A9G150104017
FWGLL8mw-006C-1381-GW	A9G150104015
FWGLL8mw-DUP2-1414-GW	A9G150104019
FWGLL9mw-001C-1382-GW	A9G150104006
FWGLL9mw-003C-1384-GW	A9G150104008
FWGLL9mw-004C-1385-GW	A9G150104021
FWGLL9mw-006C-1387-GW	A9G150104025
FWGLL9mw-DUP3-1415-GW	A9G150104023
FWGTEAM1-TRIP	A9G150104001
FWGTEAM2-TRIP	A9G150104014
FWGTEAM3-TRIP	A9G150104029

Scope of Data Qualification: The outlier in the LCS qualifies that analyte in all samples with the same Preparation Batch ID as the LCS

Project Number and Name: 30240.0006 - RVAAP (OH)

Laboratory Control Sample / Laboratory Control Sample Duplicate Outlier Report

Method Batch : 9198160 **Analysis Method :** 8260B **Analysis Date :** 07/17/2009

Preparation Batch : 9198160 **Preparation Type :** 5030B **Preparation Date :** 07/17/2009

Lab Reporting Batch : A9G150104 **Lab ID:** TALCAN

			Reported Values		Project Limits (Percent)			
LCS Lab Sample ID	**Matrix**	**Analyte Name**	**Percent Recovery**	**RPD**	**Rejection Point**	**Lower Limit**	**Upper Limit**	**RPD**
A9G170000160C	AQ	Chloroethane	66		30.00	72.00	129.00	30.00
		Vinyl chloride	71		30.00	73.00	134.00	30.00
A9G170000160L		Chloroethane	70	6.0	30.00	72.00	129.00	30.00

Associated Samples

Client Sample ID	**Lab Sample ID**
FWGLL9mw-002C-1383-GW	A9G150104037
FWGLL9mw-005C-1386-GW	A9G150104039
FWGLL9mw-007C-1388-GW	A9G150104035

Scope of Data Qualification: The outlier in the LCS qualifies that analyte in all samples with the same Preparation Batch ID as the LCS

Project Number and Name: 30240.0006 - RVAAP (OH)

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 9201253 **Analysis Method :** 8260B **Analysis Date :** 07/20/2009

Preparation Batch : 9201253 **Preparation Type :** 5030B **Preparation Date :** 07/20/2009

Lab Reporting Batch : A9G150104 **Lab ID:** TALCAN

				Reported *		Project Limits (Percent)			
Client Sample ID	**Lab Sample ID**	**Matrix**	**Analyte Name**	**Percent Recovery**	**RPD**	**Rejection Point****	**Lower Limit**	**Upper Limit**	**RPD**
FWGLL8mw-002C-1377-	A9G150104004S	AQ	Bromomethane	58		0.00	70.00	130.00	30.00
			Chloroethane	60		0.00	70.00	130.00	30.00
			Chloromethane	53		0.00	70.00	130.00	30.00
FWGLL8mw-002C-1377-	A9G150104004D		Bromomethane	59		0.00	70.00	130.00	30.00
			Chloroethane	62		0.00	70.00	130.00	30.00
			Chloromethane	55		0.00	70.00	130.00	30.00
FWGLL9mw-003C-1384-	A9G150104008S		Bromomethane	61		0.00	70.00	130.00	30.00
			Chloroethane	62		0.00	70.00	130.00	30.00
			Chloromethane	57		0.00	70.00	130.00	30.00
FWGLL9mw-003C-1384-	A9G150104008D		Acetone	66		0.00	70.00	130.00	30.00
			Bromomethane	65		0.00	70.00	130.00	30.00
			Chloroethane	68		0.00	70.00	130.00	30.00
			Chloromethane	60		0.00	70.00	130.00	30.00

Associated Samples: Parent sample only

Client Sample ID	Lab Sample ID
FWGLL8mw-002C-1377-GW	A9G150104004
FWGLL9mw-003C-1384-GW	A9G150104008

* Only those Percent Recovery and/or RPD values outside project limits are listed in this report.
** Metal are also assessed against an upper rejection point of 150 percent for waters and 200 percent for soils and sediments

Project Number and Name: 30240.0006 - RVAAP (OH)

Method Blank Outlier Report

Lab Reporting Batch : A9G150104
Analysis Method : 8270C
Preparation Type : 3520C
Method Blank Lab Sample ID : A9G160000123B

Lab ID: TALCAN
Analysis Date : 07/29/2009
Preparation Date : 07/16/2009
Preparation Batch : 9197123

bis(2-Ethylhexyl) phthalate	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	1.4	10	ug/L	J	Common Contaminant

bis(2-Ethylhexyl) phthalate was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
FWGEQUIPRINSE2-1424-G	A9G150104034	1	2.3	J B	ug/L
FWGLL10mw-001C-1389-G	A9G150104027	1	1.8	J B	ug/L
FWGLL8mw-003C-1378-GW	A9G150104030	1	4.3	J B	ug/L
FWGLL8mw-004C-1379-GW	A9G150104032	1	2.9	J B	ug/L
FWGLL9mw-002C-1383-GW	A9G150104037	1	1.0	J B	ug/L
FWGLL9mw-003C-1384-GW	A9G150104008	1	1.8	J B	ug/L
FWGLL9mw-005C-1386-GW	A9G150104039	1	1.2	J B	ug/L
FWGLL9mw-006C-1387-GW	A9G150104025	1	0.95	J B	ug/L
FWGLL9mw-007C-1388-GW	A9G150104035	1	4.1	J B	ug/L
FWGLL9mw-DUP3-1415-GW	A9G150104023	1	1.5	J B	ug/L

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 9197123 **Analysis Method :** 8270C **Analysis Date :** 07/30/2009

Preparation Batch : 9197123 **Preparation Type :** 3520C **Preparation Date :** 07/16/2009

Lab Reporting Batch : A9G150104 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Matrix	Analyte Name	Reported * Percent Recovery	Reported * RPD	Project Limits (Percent) Rejection Point**	Lower Limit	Upper Limit	RPD
FWGLL9mw-003C-1384-	A9G150104008S	AQ	Hexachloroethane	44		0.00	45.00	135.00	40.00
FWGLL9mw-003C-1384-	A9G150104008D		Hexachlorocyclopentadiene	42		0.00	45.00	135.00	40.00
			Hexachloroethane	43		0.00	45.00	135.00	40.00

Associated Samples: Parent sample only	
Client Sample ID	**Lab Sample ID**
FWGLL9mw-003C-1384-GW	A9G150104008

* Only those Percent Recovery and/or RPD values outside project limits are listed in this report.
** Metal are also assessed against an upper rejection point of 150 percent for waters and 200 percent for soils and sediments

Project Number and Name: 30240.0006 - RVAAP (OH)

Surrogate Recovery Outlier Report

Lab Report Batch: A9G150104 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Dilution	Matrix	Surrogate	Percent Recovery	Criteria (percent) Lower Limit	Upper Limit	Reject Point	Associated Target Analytes
FWGLL10mw-002C-1390-GW	A9G150104012	8081A	1	AQ	Decachlorobiphenyl	35	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	43	50.0	150.0	10.0	All Target
FWGLL10mw-003C-1391-GW	A9G150104010	8081A	1	AQ	Decachlorobiphenyl	42	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	48	50.0	150.0	10.0	All Target
FWGLL8mw-001C-1376-GW	A9G150104002	8081A	1	AQ	Decachlorobiphenyl	26	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	24	50.0	150.0	10.0	All Target
FWGLL8mw-002C-1377-GW	A9G150104004	8081A	1	AQ	Decachlorobiphenyl	41	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	47	50.0	150.0	10.0	All Target
FWGLL8mw-003C-1378-GW	A9G150104030	8081A	1	AQ	Decachlorobiphenyl	29	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	34	50.0	150.0	10.0	All Target
FWGLL8mw-004C-1379-GW	A9G150104032	8081A	1	AQ	Decachlorobiphenyl	23	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	30	50.0	150.0	10.0	All Target
FWGLL8mw-005C-1380-GW	A9G150104017	8081A	1	AQ	Decachlorobiphenyl	28	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	33	50.0	150.0	10.0	All Target
FWGLL8mw-006C-1381-GW	A9G150104015	8081A	1	AQ	Decachlorobiphenyl	24	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	31	50.0	150.0	10.0	All Target
FWGLL8mw-DUP2-1414-GW	A9G150104019	8081A	1	AQ	Decachlorobiphenyl	24	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	28	50.0	150.0	10.0	All Target

Project Number and Name: ***30240.0006 - RVAAP (OH)***

Surrogate Recovery Outlier Report

Lab Report Batch: A9G150104 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Dilution	Matrix	Surrogate	Percent Recovery	Criteria (percent) Lower Limit	Upper Limit	Reject Point	Associated Target Analytes
FWGLL9mw-003C-1384-GW	A9G150104008	8081A	1	AQ	Decachlorobiphenyl	38	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	45	50.0	150.0	10.0	All Target
FWGLL9mw-004C-1385-GW	A9G150104021	8081A	1	AQ	Decachlorobiphenyl	46	50.0	150.0	10.0	All Target
FWGLL9mw-005C-1386-GW	A9G150104039	8081A	1	AQ	Decachlorobiphenyl	48	50.0	150.0	10.0	All Target
FWGLL9mw-007C-1388-GW	A9G150104035	8081A	1	AQ	Decachlorobiphenyl	46	50.0	150.0	10.0	All Target
FWGLL9mw-DUP3-1415-GW	A9G150104023	8081A	1	AQ	Decachlorobiphenyl	48	50.0	150.0	10.0	All Target

Method Blank Outlier Report

Lab Reporting Batch : A9G150104
Analysis Method : 6010B
Preparation Type : 3005A
Method Blank Lab Sample ID : A9G160000018B

Lab ID: TALCAN
Analysis Date : 07/17/2009
Preparation Date : 07/16/2009
Preparation Batch : 9197018

Potassium	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	147	1000	ug/L	B	

Potassium was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
FWGEQUIPRINSE2-1424-G	A9G150104034	1	157	B J	ug/L
FWGLL10mw-003C-1391-GF	A9G150104011	1	676	B J	ug/L
FWGLL8mw-005C-1380-GF	A9G150104018	1	718	B J	ug/L
FWGLL8mw-DUP2-1414-GF	A9G150104020	1	728	B J	ug/L
FWGLL9mw-005C-1386-GF	A9G150104040	1	717	B J	ug/L

Zinc	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	8.8	10.0	ug/L	B	

Zinc was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
FWGEQUIPRINSE2-1424-G	A9G150104034	1	3.5	B J	ug/L
FWGLL10mw-002C-1390-GF	A9G150104013	1	8.9	B J	ug/L
FWGLL10mw-003C-1391-GF	A9G150104011	1	2.6	B J	ug/L
FWGLL8mw-001C-1376-GF	A9G150104003	1	4.5	B J	ug/L
FWGLL8mw-003C-1378-GF	A9G150104031	1	3.9	B J	ug/L
FWGLL8mw-004C-1379-GF	A9G150104033	1	5.4	B J	ug/L
FWGLL8mw-005C-1380-GF	A9G150104018	1	2.9	B J	ug/L
FWGLL8mw-006C-1381-GF	A9G150104016	1	5.6	B J	ug/L
FWGLL8mw-DUP2-1414-GF	A9G150104020	1	6.3	B J	ug/L
FWGLL9mw-001C-1382-GF	A9G150104007	1	2.5	B J	ug/L
FWGLL9mw-002C-1383-GF	A9G150104038	1	5.5	B J	ug/L
FWGLL9mw-003C-1384-GF	A9G150104009	1	7.3	B J	ug/L
FWGLL9mw-004C-1385-GF	A9G150104022	1	15.9	J	ug/L
FWGLL9mw-005C-1386-GF	A9G150104040	1	31.0	J	ug/L
FWGLL9mw-006C-1387-GF	A9G150104026	1	12.7	J	ug/L
FWGLL9mw-007C-1388-GF	A9G150104036	1	28.6	J	ug/L
FWGLL9mw-DUP3-1415-GF	A9G150104024	1	15.7	J	ug/L

QC Outlier Report: Equipment Blank

Lab Reporting Batch : A9G150104
Lab ID: TALCAN
Method/Preparation Batch : 9197018 / 9197018
Analysis Date : 07/17/2009
Client Sample ID : FWGEQUIPRINSE2-1424-GW
Preparation Date : 07/16/2009
Lab Sample ID : A9G150104034
Preparation Type : 3005A

Analysis Method : 6010B

Potassium	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	157	1000	ug/L	B J	

Potassium was qualified due to equipment blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGLL10mw-003C-1391-GF	A9G150104011	1	676	B J	ug/L
FWGLL8mw-005C-1380-GF	A9G150104018	1	718	B J	ug/L
FWGLL8mw-DUP2-1414-GF	A9G150104020	1	728	B J	ug/L
FWGLL9mw-004C-1385-GF	A9G150104022	1	741	B J	ug/L
FWGLL9mw-005C-1386-GF	A9G150104040	1	717	B J	ug/L

Selenium	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	4.6	5.0	ug/L	B	

Selenium was qualified due to equipment blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGLL8mw-001C-1376-GF	A9G150104003	1	4.8	B	ug/L
FWGLL8mw-DUP2-1414-GF	A9G150104020	1	4.9	B	ug/L

Zinc	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	3.5	10.0	ug/L	B J	

QC Outlier Report: Equipment Blank

Lab Reporting Batch : A9G150104
Method/Preparation Batch : 9197018 / 9197018
Client Sample ID : FWGEQUIPRINSE2-1424-GW
Lab Sample ID : A9G150104034

Lab ID: TALCAN
Analysis Date : 07/27/2009
Preparation Date : 07/16/2009
Preparation Type : 3005A

Analysis Method : 6020

Zinc was qualified due to equipment blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGLL10mw-002C-1390-GF	A9G150104013	1	8.9	B J	ug/L
FWGLL10mw-003C-1391-GF	A9G150104011	1	2.6	B J	ug/L
FWGLL8mw-001C-1376-GF	A9G150104003	1	4.5	B J	ug/L
FWGLL8mw-003C-1378-GF	A9G150104031	1	3.9	B J	ug/L
FWGLL8mw-004C-1379-GF	A9G150104033	1	5.4	B J	ug/L
FWGLL8mw-005C-1380-GF	A9G150104018	1	2.9	B J	ug/L
FWGLL8mw-006C-1381-GF	A9G150104016	1	5.6	B J	ug/L
FWGLL8mw-DUP2-1414-GF	A9G150104020	1	6.3	B J	ug/L
FWGLL9mw-001C-1382-GF	A9G150104007	1	2.5	B J	ug/L
FWGLL9mw-002C-1383-GF	A9G150104038	1	5.5	B J	ug/L
FWGLL9mw-003C-1384-GF	A9G150104009	1	7.3	B J	ug/L
FWGLL9mw-004C-1385-GF	A9G150104022	1	15.9	J	ug/L
FWGLL9mw-006C-1387-GF	A9G150104026	1	12.7	J	ug/L
FWGLL9mw-DUP3-1415-GF	A9G150104024	1	15.7	J	ug/L

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	5.5	10	ug/L	J	Common Contaminant

Acetone contamination found in the equipment blank did not qualify any samples.

Methylene chloride	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	2.6	2.0	ug/L		Common Contaminant

Methylene chloride contamination found in the equipment blank did not qualify any samples.

bis(2-Ethylhexyl) phthalate	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	2.3	10	ug/L	J B	Common Contaminant

QC Outlier Report: Equipment Blank

Lab Reporting Batch : A9G150104
Lab ID: TALCAN
Method/Preparation Batch : 9197123 / 9197123
Analysis Date : 07/30/2009
Client Sample ID : FWGEQUIPRINSE2-1424-GW
Preparation Date : 07/16/2009
Lab Sample ID : A9G150104034
Preparation Type : 3520C

Analysis Method : 8270C

bis(2-Ethylhexyl) phthalate was qualified due to equipment blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGLL10mw-001C-1389-G	A9G150104027	1	1.8	J B	ug/L
FWGLL10mw-002C-1390-G	A9G150104012	1	4.0	J	ug/L
FWGLL10mw-003C-1391-G	A9G150104010	1	0.83	J	ug/L
FWGLL8mw-001C-1376-GW	A9G150104002	1	2.9	J	ug/L
FWGLL8mw-002C-1377-GW	A9G150104004	1	1.5	J	ug/L
FWGLL8mw-003C-1378-GW	A9G150104030	1	4.3	J B	ug/L
FWGLL8mw-004C-1379-GW	A9G150104032	1	2.9	J B	ug/L
FWGLL8mw-006C-1381-GW	A9G150104015	1	0.83	J	ug/L
FWGLL8mw-DUP2-1414-GW	A9G150104019	1	2.4	J	ug/L
FWGLL9mw-001C-1382-GW	A9G150104006	1	1.2	J	ug/L
FWGLL9mw-002C-1383-GW	A9G150104037	1	1.0	J B	ug/L
FWGLL9mw-003C-1384-GW	A9G150104008	1	1.8	J B	ug/L
FWGLL9mw-004C-1385-GW	A9G150104021	1	0.94	J	ug/L
FWGLL9mw-005C-1386-GW	A9G150104039	1	1.2	J B	ug/L
FWGLL9mw-006C-1387-GW	A9G150104025	1	0.95	J B	ug/L
FWGLL9mw-007C-1388-GW	A9G150104035	1	4.1	J B	ug/L
FWGLL9mw-DUP3-1415-GW	A9G150104023	1	1.5	J B	ug/L

QC Outlier Report: Field Duplicates (Non-qualified Outliers)

Lab Report Batch: A9G150104 **Lab ID:** TALCAN

			Field Sample				Field Sample Duplicate						
Analysis Method	Matrix	Analyte Name	Client Sample ID	Ana Type	Result	Lab Qualifier	Client Sample Duplicate ID	Ana Type	Result	Lab Qualifier	RPD Dup* (%)	RPD Criteria (%)	Result Units
6010B	AQ	Cobalt	FWGLL8mw-005C	ES/TO	5.0	U	FWGLL8mw-DUP	ES/TO	2.3	B	200.0	30	ug/L
	AQ	Nickel		ES/TO	10.0	U		ES/TO	3.9	B	200.0	30	ug/L
	AQ	Selenium		ES/TO	5.0	U		ES/TO	4.9	B	200.0	30	ug/L
6020	AQ	Zinc		ES/TO	2.9	B J		ES/TO	6.3	B J	73.9	30	ug/L
8270C	AQ	bis(2-Ethylhexyl) phthalate	FWGLL8mw-005C	RES	10	U	FWGLL9mw-DUP	RES	1.5	J B	200.0	30	ug/L
	AQ	bis(2-Ethylhexyl) phthalate		RES	10	U		RES	1.5	J B	200.0	30	ug/L
8270C	AQ	bis(2-Ethylhexyl) phthalate	FWGLL9mw-004C	RES	0.94	J	FWGLL9mw-DUP	RES	1.5	J B	45.9	30	ug/L
	AQ	bis(2-Ethylhexyl) phthalate		RES	0.94	J		RES	1.5	J B	45.9	30	ug/L

**Note: Outlier report also includes analytes detected in one sample but not in the related sample, i.e., analyte was detected in the field sample but not in the field duplicate sample, or vice versa. In this case, RPD value assigned to the field duplicate sample is 200.*

Project Number and Name: ***30240.0006 - RVAAP (OH)***

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 9197481 **Analysis Method :** 9012A **Analysis Date :** 07/16/2009

Preparation Batch : 9197481 **Preparation Type :** Gen Prep **Preparation Date :** 07/16/2009

Lab Reporting Batch : A9G150104 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Matrix	Analyte Name	Reported *		Project Limits (Percent)			
				Percent Recovery	RPD	Rejection Point**	Lower Limit	Upper Limit	RPD
FWGLL8mw-002C-1377-	A9G150104004D	AQ	Cyanide	128	25	40.00	80.00	120.00	20.00

Associated Samples: All samples in Method Batch

Client Sample ID	Lab Sample ID
FWGLL10mw-002C-1390-GW	A9G150104012
FWGLL10mw-003C-1391-GW	A9G150104010
FWGLL8mw-001C-1376-GW	A9G150104002
FWGLL8mw-002C-1377-GW	A9G150104004
FWGLL8mw-006C-1381-GW	A9G150104015
FWGLL9mw-001C-1382-GW	A9G150104006

* Only those Percent Recovery and/or RPD values outside project limits are listed in this report.
** Metal are also assessed against an upper rejection point of 150 percent for waters and 200 percent for soils and sediments

Project Number and Name: 30240.0006 - RVAAP (OH)

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2009
STL Sample Delivery Group: A9G150112

Date: August 31, 2009
Revision: 0

Data Validator: Angye Dragotta/Environmental Quality Management, Inc. (EQM, Inc.)

QA/QC Summary

On July 14, 2009, the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A9G150112.

Field Sample ID	Analytes	Method
FWGLL8mw-001c-1376-GF	Perchlorate	SW846 6860
FWGLL8mw-002c-1377-GF		
FWGLL9mw-001c-1382-GF		
FWGLL9mw-003c-1384-GF		
FWGLL10mw-003c-1391-GF		
FWGLL10mw-002c-1390-GF		
FWGLL8mw-006c-1381-GF		
FWGLL8mw-005c-1380-GF		
FWGLL8mw-DUP2-1414-GF		
FWGLL9mw-004c-1385-GF		
FWGLL9mw-DUP3-1415-GF		
FWGLL9mw-006c-1387-GF		
FWGLL10mw-001c-1389-GF		
FWGLL8mw-003c-1378-GF		
FWGLL8mw-004c-1379-GF		
FWGEQUIPRINSE2-1424-GW		
FWGLL9mw-007c-1388-GF		
FWGLL9mw-002c-1383-GF		
FWGLL9mw-005c-1386-GF		

The data presented in this report were evaluated according to the *Final Quality Assurance Project Plan Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant Ravenna, OH, Portage Environmental, September 2004.* The following documents will be used as needed to supplement the project documentation: *Louisville Chemistry Guidelines, USACE, June 2002 version 5, EPA National Functional Guidelines (NFG) for Organic Data Review, EPA-540/R-99-008, October 1999, NFG for Inorganic Data Review, EPA-540/R-04-004, October 2004*, Analytical Methods, and Laboratory Standard Operating Procedures. These objectives represent accuracy and precision performance goals for each analytical method.

The completeness objective for the project was 90%. The completeness objective was met for this SDG, 100%. Limitations, if any, on the data are indicated with qualifiers detailed below.

All analytical results have been verified against compliance requirements specified in the project QAP, LCG, associated analytical methods and/or SOPs, as appropriate. Checklists used in review of the data have been inserted in the SDGs by parameter. Outliers have been noted below and results requiring qualification, as a result of this verification process, have been summarized in Appendix 1.

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2009
STL Sample Delivery Group: A9G150112

Date: August 31, 2009
Revision: 0

Perchlorate - 6860

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Tuning criteria
- Initial Calibration Criteria
- Internal standard area and retention time criteria
- ICV and CCV criteria
- Limit of Detection Verification criteria
- Interference Check Sample criteria
- MRL verification criteria
- Method blank was free from contamination
- Equipment rinse was free from contamination
- Laboratory Reagent Blanks were free from contamination
- LCS recovery criteria
- MS/MSD recovery and RPD criteria
- Field duplicate RPD

No QC outliers were noted.

Data Reviewer: Angie Drago
Date: 9/15/09

2nd Level Data Review: Erik Corbin
Date: 9/15/09

SAMPLE SUMMARY

A9G150112

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LGG7V	001	FWGLL8mw-001C-1376-GF	07/14/09	09:15
LGG71	002	FWGLL8mw-002C-1377-GF	07/14/09	10:20
LGG75	003	FWGLL9mw-001C-1382-GF	07/14/09	12:35
LGG77	004	FWGLL9mw-003C-1384-GF	07/14/09	13:50
LGG78	005	FWGLL10mw-003C-1391-GF	07/14/09	15:55
LGG79	006	FWGLL10mw-002C-1390-GF	07/14/09	17:00
LGG8C	007	FWGLL8mw-006C-1381-GF	07/14/09	09:15
LGG8D	008	FWGLL8mw-005C-1380-GF	07/14/09	10:10
LGG8E	009	FWGLL8mw-DUP2-1414-GF	07/14/09	11:15
LGG8F	010	FWGLL9mw-004C-1385-GF	07/14/09	12:15
LGG8G	011	FWGLL9mw-DUP3-1415-GF	07/14/09	13:15
LGG8K	012	FWGLL9mw-006C-1387-GF	07/14/09	14:15
LGG8L	013	FWGLL10mw-001C-1389-GF	07/14/09	15:30
LGG8M	014	FWGLL8mw-003C-1378-GF	07/14/09	09:10
LGG8N	015	FWGLL8mw-004C-1379-GF	07/14/09	10:35
LGG8P	016	FWGEQUIPRINSE2-1424-GW	07/14/09	11:30
LGG8Q	017	FWGLL9mw-007C-1388-GF	07/14/09	13:05
LGG8R	018	FWGLL9mw-002C-1383-GF	07/14/09	14:25
LGG8T	019	FWGLL9mw-005C-1386-GF	07/14/09	15:40

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

pg 2 COC # 003181

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 7-14-09	Chain of Custody Number: 003180
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513 825 7500 (fax 7495)	Lab Number: 3304979396	Page 1 of 2
City: Cincinnati; State: OH; Zip Code: 45240	Site Contact: E Corbin	Lab Contact: m Loeb	
Project Name and Location (State): BVAAP (OH) PN: 30240.0004	Carrier/Waybill Number: NA Lab Pickup		
Contract/Purchase Order/Quote No.: PO # 15660			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Cyanide 9012	Propellants 8330	Metals 6010/6020 7470	Perchlorates	Special Instructions/ Conditions of Receipt: Cooler ID
FWG Team1 - Trip	7-14-09	0800		X						2			X								OICU812
FWGLL8mw-001C-1376GW	7-14-09	0915		X			9			3	1		X	X	X	X	X	X	X		C222
FWGLL8mw-001C-1376GF	7-14-09	0915		X			1		1											X X	C222
FWGLL8mw-002C-1377GW	7-14-09	1020		X			27			9	3		X	X	X	X	X	X	X		MSMSD 220,405,8
FWGLL8mw-002C-1377GF	7-14-09	1020		X			3		3											X X	MSMSD 220,405,8
FWGLL9mw-001C-1382GW	7-14-09	1235		X			9			3	1		X	X	X	X	X	X	X		47
FWGLL9mw-001C-1382GF	7-14-09	1235		X			1		1											X X	47
FWGLL9mw-003C-1384GW	7-14-09	1350		X			27			9	3		X	X	X	X	X	X	X		MSMSD OICU812, AD7,54
FWGLL9mw-003C-1384GF	7-14-09	1350		X			3		3											X X	MSMSD OICU812, AD7,54
FWGLL10mw-003C-1391GW	7-14-09	1555		X			9			3	1		X	X	X	X	X	X	X		12
FWGLL10mw-003C-1391GF	7-14-09	1555		X			1		1											X X	12
FWGLL10mw-002C-1390GW	7-14-09	1700		X			9			3	1		X	X	X	X	X	X	X		ASD3

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other per SOW

QC Requirements (Specify): Metals/Perchlorates were field filtered

	Date	Time		Date	Time
1. Relinquished By: Eric Corbin EQ	7/14/09	18:30	1. Received By: RC Robison	7/14/09	1830
2. Relinquished By: E Robison	7/14/09	1950	2. Received By: Chr Lyd	7-15-09	8:00
3. Relinquished By			3. Received By		

Comments: Temps may not meet requirements if sample collection is close to lab pick up time

All VOC in cooler OICU812

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

pg 1 COC # 003180

Client: EQM	Project Manager: John Miller	Date: 7-14-09	Chain of Custody Number: 003181
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513 825 7500 (fax 7495	Lab Number: 3301979396	Page 2 of 2
City: Cincinnati; State: OH; Zip Code: 45240	Site Contact: E Corbin	Lab Contact: M Loeb	
Project Name and Location (State): RVAAP (OH) PN: 30240.0006	Carrier/Waybill Number: NA Lab Pickup		
Contract/Purchase Order/Quote No.: PO# 15660			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Explo 8330	Propellants	Cyanide 9012	Metals 6010/6020 7470	Perchlorates				Special Instructions/ Conditions of Receipt
FWGLL10mw-002C-1390GF	7-14-09	1700		X			1		1											X	X				Cooler ID ASD3

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other per SOW

QC Requirements (Specify): Metals/Perchlorates were field filtered

1. Relinquished By: Eric Corbin EQ	Date: 7/14/09	Time: 18:30	1. Received By: TC Robison	Date: 7/14/09	Time: 1830
2. Relinquished By: TC Robison	Date: 7/14/09	Time: 1950	2. Received By: [illegible]	Date: 7-15-09	Time: 8:00
3. Relinquished By:	Date:	Time:	3. Received By:	Date:	Time:

Comments: Temps may not meet requirements if sample collection is close to lab pickup time

All VOCs in cooler 01CU812

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

[redacted]

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

pg 2 COC# = 003159

Client: EQM	Project Manager: John Miller	Date: 7-14-09	Chain of Custody Number: 003160
Address: 1800 CARILLON BLVD	Telephone Number (Area Code)/Fax Number: 513 825 7500 (fax 7495)	Lab Number: 3304979396	Page 1 of 2
City: Cincinnati; State: OH; Zip Code: 45240	Site Contact: E Corbin; Lab Contact: M Loeb		
Project Name and Location (State): RVAAP Ravenna Oh	Carrier/Waybill Number: Lab pickup		
Contract/Purchase Order/Quote No.: PO#15660 Ph30240 0006			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Exp10 8330	Propellants	Cyanide 9012	Metals 7470 6010 6020	Perchlorates	Special Instructions/ Conditions of Receipt: Cooler ID #
FWG Team 2 Trip	7-14-09	0800		X						2			X									TS2
FWGLL8MW-006C-1381-GW	↓	0915		X			9			3	1		X	X	X	X	X	X	X			TS2
FWGLL8MW-006C-1381-GF	↓	↓		X			1		1											X	X	TS2
FWGLL8MW-005C-1380-GW	↓	1010		X			9			3	1		X	X	X	X	X	X	X			220
FWGLL8MW-005C-1380-GF	↓	1010		X			1		1											X	X	220
FWGLL8MW-DUP2-1414-GW	↓	1115		X			9			3	1		X	X	X	X	X	X	X			PH4
FWGLL8MW-DUP2-1414-GF	↓	1115		X			1		1											X	X	PH4
FWGLL9MW-004C-1385-GW	↓	1215		X			9			3	1		X	X	X	X	X	X	X			B111
FWGLL9MW-004C-1385-GF	↓	↓		X			1		1											X	X	B111
FWGLL9MW-DUP3-1415-GW	↓	1315		X			9			3	1		X	X	X	X	X	X	X			ACDC
FWGLL9MW-DUP3-1415-GF	↓	↓		X			1		1											X	X	ACDC

Cal continued on page 2 COC # 003159

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other Per SOW

QC Requirements (Specify): Metals/Perchlorates were field filtered

	Date	Time		Date	Time
1. Relinquished By: Erik Corbin EQ	7/14/09	18:30	1. Received By: RC Robison	7/14/09	1830
2. Relinquished By: RC Robison	7/14/09	1950	2. Received By: [signature]	7/15/09	0800
3. Relinquished By:			3. Received By:		

Comments: Temps may not meet requirements if sample collection is close to lab pickup time. All VOAs in cooler TS2 For PG1+2 of COC

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

pg1 COC# = 003160

Client	Project Manager	Date	Chain of Custody Number
EQM	John Miller	7-14-09	003159

Address	Telephone Number (Area Code)/Fax Number	Lab Number	Page
1800 CARILLON BLVD	513 825 7500 (fax 7495)	3304979396	2 of 2

City	State	Zip Code	Site Contact	Lab Contact
Cincinnati	OH	45240	E Corbin	M Loeb

Project Name and Location (State)	Carrier/Waybill Number
RVAAP Ravenna Oh	Lab pick up

Contract/Purchase Order/Quote No.: PO#15660 Pn 30240.0006

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Explo 8330	Propellants	Cyanide 9012	Metals 7470 6010 6020	Perchlorates	Special Instructions/ Conditions of Receipt
FWGLL9mw-006C-1387-GW	7-14-09	1415		Y			9			3	1		X	X	X	X	X	X	X			cooler ID#
FWGLL9mw-006C-1387-GF	⊥	⊥		X			1		1											X	X	ID
FWGLL10mw-001C-1389-GW	⊥	1530		X			9			3	1		X	X	X	X	X	X	X			STL-1
FWGLL10mw-001C-1389-GF	⊥	1530		X			1		1											X	X	STL-1

Cal

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other Per SOW

QC Requirements (Specify): Metals/Perchlorates were field filtered

	Date	Time		Date	Time
1. Relinquished By: Eric Corbin EQ	7/14/09	18:30	1. Received By: TC Robison	7/14/09	1830
2. Relinquished By: TC Robison	7/14/09	1950	2. Received By: [signature]	7/15/09	0800
3. Relinquished By			3. Received By		

Comments: Temps may not meet requirements if sample collection is close to lab pick up time. All VOAs in cooler TS2 FOR PG 1+2 OF COC

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client: EQM	Project Manager: JOHN MILLER	Date: 07/14/2009	Chain of Custody Number: 003167
Address: 1800 CARRLLON BLVD	Telephone Number (Area Code)/Fax Number: (513) 825-7500 (FX 7495)	Lab Number: (330) 497-9396	Page 1 of 1
City: CINCINNATI; State: OH; Zip Code: 45240	Site Contact: E. CORBIN	Lab Contact: M. LOEB	
Project Name and Location (State): RVAAP (OH) 030240.0006	Carrier/Waybill Number: N/A - LAB PICKUP		
Contract/Purchase Order/Quote No.: PO 15660			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		VOC 8260	SVOC 8270	PEST 8081	PCB 8082	EXPLO 8330	PERCHLORATES	CYANIDE 9012	METALS 6010/6020 7470	PERCHLORATES				Special Instructions/ Conditions of Receipt
FWG TEAM 3-TRIP	07/14/09	0800		X							2				X												Cooler 0411
FWG LL8 MW-003C-1378-GW	07/14/09	0910		X				9			3	1			X	X	X	X	X	X	X						COOLER 465
FWG LL8 MW-003C-1378-GF	07/14/09	0910		X				1		1												X	X				" 465
FWG LL8 MW-004C-1379-GW	07/14/09	1035		X				9			3	1			X	X	X	X	X	X	X						" B81
FWG LL8 MW-004C-1379-GF	07/14/09	1035		X				1		1												X	X				" B81
FWG EQUIPRINSE2-1424-GW	07/14/09	1130		X				10		1	3	1			X	X	X	X	X	X	X	X	X				" E115
FWG LL9 MW-007C-1388-GW	07/14/09	1305		X				9			3	1			X	X	X	X	X	X	X						" E21
FWG LL9 MW-007C-1388-GF	07/14/09	1305		X				1		1												X	X				" E21
FWG LL9 MW-002C-1383-GW	07/14/09	1425		X				9			3	1			X	X	X	X	X	X	X						" A3D2
FWG LL9 MW-002C-1383-GF	07/14/09	1425		X				1		1												X	X				" A3D2
FWG LL9 MW-005C-1386-GW	07/14/09	1540		X				9			3	1			X	X	X	X	X	X	X						" Ø411
FWG LL9 MW-005C-1386-GF	07/14/09	1540		X				1		1												X	X				" Ø411

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other PQL SOW

QC Requirements (Specify): METALS/PERCHLORATES WERE FIELD FILTERED

1. Relinquished By: Eric Corbin EQ	Date: 7/14/09	Time: 18:30	1. Received By: RC Robison	Date: 7/14/09	Time: 1830
2. Relinquished By: RC Robison	Date: 7/14/09	Time: 1950	2. Received By: [signature]	Date: 7/15/09	Time: 0800
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments: TEMPS MAY NOT MEET REQUIREMENTS IF SAMPLE COLLECTION IS CLOSE TO LAB PICKUP TIME

ALL VOCS IN COOLER Ø411

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

TestAmerica Cooler Receipt Form/Narrative **Lot Number:** A9G150112
North Canton Facility

Client E&M Project RVAAP By: [illegible] (Signature)
Cooler Received on 9/15/09 Opened on 9/15/09
FedEx ☐ UPS ☐ DHL ☐ FAS ☐ Stetson ☐ Client Drop Off ☐ TestAmerica Courier ☒ Other _____
TestAmerica Cooler # _____ Multiple Coolers ☒ Foam Box ☐ Client Cooler ☐ Other _____

1. Were custody seals on the outside of the cooler(s)? Yes ☒ No ☐ Intact? Yes ☒ No ☐ NA ☐
   If YES, Quantity 23 Quantity Unsalvageable _____
   Were custody seals on the outside of cooler(s) signed and dated? Yes ☒ No ☐ NA ☐
   Were custody seals on the bottle(s)? Yes ☐ No ☒
   If YES, are there any exceptions? _____
2. Shippers' packing slip attached to the cooler(s)? Yes ☐ No ☒
3. Did custody papers accompany the sample(s)? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Were the custody papers signed in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☒ Foam ☐ None ☐ Other _____
6. Cooler temperature upon receipt See Attached °C See back of form for multiple coolers/temps ☒
   METHOD: IR ☒ Other ☐ _____
   COOLANT: Wet Ice ☒ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐
7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels be reconciled with the COC? Yes ☒ No ☐
9. Were sample(s) at the correct pH upon receipt? Yes ☒ No ☐ NA ☐
10. Were correct bottle(s) used for the test(s) indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☒ NA ☐
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a trip blank present in the cooler(s)? Yes ☒ No ☐ Were VOAs on the COC? Yes ☒ No ☐

Contacted PM _____ Date _____ by _____ via Verbal ☐ Voice Mail ☐ Other ☐
Concerning _____

14. CHAIN OF CUSTODY

The following discrepancies occurred:

_____

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in Sample Receiving to meet recommended pH level(s). *Nitric Acid Lot# 031909-HNO_3; Sulfuric Acid Lot# 100108-H_2SO_4; Sodium Hydroxide Lot# 073007 -NaOH; Hydrochloric Acid Lot# 092006-HCl; Sodium Hydroxide and Zinc Acetate Lot# 050205-$(CH_3COO)_2ZN/NaOH$.* What time was preservative added to sample(s)? _____

Client ID	pH	Date	Initials
	See Attached		

TestAmerica Multiple Cooler Receipt Form/Narrative Lot Number: A9G150112
North Canton Facility

Client ID	pH	Date	Initials
1376	<2 >12	7/18/09	gm
1377	<2 <2 <2 >12 >12 >12		
1382	<2 >12		
1384	<2 <2 <2 >12 >12 >12		
1391	<2 >12		
1390	<2 >12		
1381	<2 >12		
1380	<2 >12		
1414	<2 >12		
1385	<2 >12		
1415	<2 >12		
1387	<2 >12		
1389	<2 >12		
1378	<2 >12		
1379	<2 >12		
1424	<2 >12		
1388	<2 >12		
1383	<2 >12		
1386	<2 >12		

N:\QAQC\Lab_form\Receiving Forms\TestAmerica N.Canton Multiple Cooler Receipt_Narrative.doc
Revision 1, 06/18/07 JSE

TestAmerica Multiple Cooler Receipt Form/Narrative Lot Number: A9G150112
North Canton Facility

Cooler #	Temp °C	Method	Coolant	Comments
C222	4.8	IR	Ice	
8	3.7			
405	4.2			
220	4.6			
47	3.9			
CICU 812	2.9			
AD7	4.6			
54	3.8			
12	4.8			
ASD3	4.0			
TS2	4.9			
220	3.8			
PH4	4.7			
B111	5.4			
ACDC	3.1			
ID	2.3			
STL-1	3.3			
465	3.8			
B81	3.4			
E115	2.1			
E21	4.9			
ASD2	2.3			
041C	5.3			

TestAmerica Laboratories, Inc.
SAMPLE ANALYSIS REQUISTION

Laboratory **TestAmerica AASG - Denver**
4955 YARROW

ARVADA, CO 80002

4.1 LL
7/16/09
IRI

Lab Request SR113542

Report Package: **Expanded Deliverables**
Need Analytical Report 2009-07-29

Client Code: 14091

Project Manager: MARK LOEB

Sample I.D.	Work Order Number	Client Sample ID	Sampling Date	Analysis Required
A9G150112-1	LGG7V	FWGLL8mw-001C-1376-GF	2009-07-14 9:15	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G150112-2	LGG71	FWGLL8mw-002C-1377-GF	2009-07-14 10:20	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G150112-2 S	LGG71	FWGLL8mw-002C-1377-GF MS/MSD	2009-07-14 10:20	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G150112-2 D	LGG71	FWGLL8mw-002C-1377-GF	2009-07-14 10:20	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G150112-3	LGG75	FWGLL9mw-001C-1382-GF	2009-07-14 12:35	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G150112-4	LGG77	FWGLL9mw-003C-1384-GF	2009-07-14 13:50	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G150112-4 S	LGG77	FWGLL9mw-003C-1384-GF MS/MSD	2009-07-14 13:50	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G150112-4 D	LGG77	FWGLL9mw-003C-1384-GF	2009-07-14 13:50	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G150112-5	LGG78	FWGLL10mw-003C-1391-GF	2009-07-14 15:55	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G150112-6	LGG79	FWGLL10mw-002C-1390-GF	2009-07-14 17:00	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G150112-7	LGG8C	FWGLL8mw-006C-1381-GF	2009-07-14 9:15	WATER, 6860, SW846 6860 Perchlorate, Spe

Please use Client Sample ID for report
Call MARK LOEB with questions at 330-497-9396
at the TAL North Canton Laboratory

Shipping Method: FED EX

Need detection limit and analysis date included in report.

Please send a signed copy of this form with the report at completion of analysis.

Relinquished by: [signature] Date/Time: 7/15/09 1000

Relinquished by: _____ Date/Time: _____

Received for lab by: [signature] Date/Time: 7/16/09 0845

PLEASE RETURN ORIGINAL SAMPLE ANALYSIS REQUISITION

TestAmerica Laboratories, Inc.

SAMPLE ANALYSIS REQUISTION

Lab Request SR113542

Laboratory **TestAmerica AASG - Denver**
4955 YARROW
ARVADA, CO 80002

Report Package: **Expanded Deliverables**

Need Analytical Report 2009-07-29

Client Code: 14091

Project Manager: MARK LOEB

Sample I.D.	Work Order Number	Client Sample ID	Sampling Date	Analysis Required
A9G150112-8	LGG8D	FWGLL8mw-005C-1380-GF	2009-07-14 10:10	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G150112-9	LGG8E	FWGLL8mw-DUP2-1414-GF	2009-07-14 11:15	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G150112-10	LGG8F	FWGLL9mw-004C-1385-GF	2009-07-14 12:15	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G150112-11	LGG8G	FWGLL9mw-DUP3-1415-GF	2009-07-14 13:15	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G150112-12	LGG8K	FWGLL9mw-006C-1387-GF	2009-07-14 14:15	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G150112-13	LGG8L	FWGLL10mw-001C-1389-GF	2009-07-14 15:30	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G150112-14	LGG8M	FWGLL8mw-003C-1378-GF	2009-07-14 9:10	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G150112-15	LGG8N	FWGLL8mw-004C-1379-GF	2009-07-14 10:35	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G150112-16	LGG8P	FWGEQUIPRINSE2-1424-GW	2009-07-14 11:30	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G150112-17	LGG8Q	FWGLL9mw-007C-1388-GF	2009-07-14 13:05	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G150112-18	LGG8R	FWGLL9mw-002C-1383-GF	2009-07-14 14:25	WATER, 6860, SW846 6860 Perchlorate, Spe

Please use Client Sample ID for report

Call MARK LOEB with questions at 330-497-9396

at the TAL North Canton Laboratory

Shipping Method: FED EX

Need detection limit and analysis date included in report.

Please send a signed copy of this form with the report at completion of analysis.

Relinquished by: [signature] Date/Time: 7/15/09 1000

Relinquished by: _____ Date/Time: _____

Received for lab by: [signature] Date/Time: 7/16/09 0845

PLEASE RETURN ORIGINAL SAMPLE ANALYSIS REQUISITION

TestAmerica Laboratories, Inc.

SAMPLE ANALYSIS REQUISTION

Laboratory: TestAmerica AASG - Denver
4955 YARROW
ARVADA, CO 80002

Lab Request: SR113542

Report Package: Expanded Deliverables

Need Analytical Report: 2009-07-29

Client Code: 14091

Project Manager: MARK LOEB

Sample I.D.	Work Order Number	Client Sample ID	Sampling Date	Analysis Required
A9G150112-19	LGG8T	FWGLL9mw-005C-1386-GF	2009-07-14 15:40	WATER, 6860, SW846 6860 Perchlorate, Spe

Please use Client Sample ID for report

Call MARK LOEB with questions at 330-497-9396

at the TAL North Canton Laboratory

Shipping Method: FED EX

Need detection limit and analysis date included in report.

Please send a signed copy of this form with the report at completion of analysis.

Relinquished by: [signature] Date/Time: 2/15/09 1000

Relinquished by: _____ Date/Time: _____

Received for lab by: [signature] Date/Time: 7/16/09 0845

PLEASE RETURN ORIGINAL SAMPLE ANALYSIS REQUISITION

CASE NARRATIVE

A9G150112

The following report contains the analytical results for nineteen water samples submitted to TestAmerica North Canton by Environmental Quality Mgt., Inc. from the RVAAP (OH) Site, project number 30240.0006. The samples were received July 15, 2009, according to documented sample acceptance procedures.

The SW846 6860 Perchlorate analysis was performed at the TestAmerica Denver laboratory.

TestAmerica utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Angye Dragotta, Erik Corbin, and Jackie Doan on August 10, 2009. A summary of QC data for these analyses is included at the back of the report.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Please refer to the Quality Control Elements Narrative following this case narrative for additional quality control information.

If you have any questions, please call the Project Manager, Mark J. Loeb, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT."

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The coolers were received at temperatures ranging from 2.1 to 5.4°C.

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of tbe analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for tbe parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine tbe reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must he below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may he present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

QUALITY CONTROL ELEMENTS NARRATIVE (continued)

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in tbe associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

TestAmerica Certifications and Approvals:

The laboratory is certified for the analytes listed on the documents below. These are available upon request.

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225),
Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Nevada (#OH-000482008A), OhioVAP (#CL0024), Pennsylvania (#008), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit

N:\QAQC\Customer Service\Narrative - Combined RCRA _CWA 032609.doc

6860 PERCHLORATE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.12 **SDG**: A9G150112 R0
Sample Event: July 2009 **Analysis**: SW846 6860
Data Reviewer/Date: Angye Dragotta/August 31, 2009 Perchlorate

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			Coolers were received between 2.1- 5.4 °C.	
3. Were holding times met (28 days)?	✓			Samples collected 7/14/09, extracted 8/5/09, and analyzed on 18/6/09.	UJ/J/R
4. Were sample storage requirements met?	✓				
5. Was the DOD specified PQLs of 0.5ug/L achieved?	✓				
6. Were all QAPP-specified target analytes reported?	✓				
7. Was the LC/MS/MS system mass calibration checked?	✓				R
8. Were the masses within 0.3 amu of ions 99, 101, and 107?	✓				R
9. Was the instrument tuned daily?	✓				
10. Was the tune within criteria? (per laboratory SOP)	✓				R
11. Did the initial calibration curve consist of 5 concentration levels?	✓			LCMS1 8/6/2009 Standards(ng/L): 20, 50, 100, 200, 500, 1000	R
12. Was the correlation coefficient r≥0.995?	✓				R<0.995 =-J/R
13. Was a second source verification (SSCV) analyzed after the ICAL? Were results 90-110%?	✓				LCG Table 1 >120%=J; 60-80%=J/UJ; <60%=J/R
14. Was an ICV analyzed after the ICAL and daily before sample analysis?	✓			8/6/2009 @1747	R
15. Was the %Difference ≤ 15%?	✓				R
16. Was a CCV analyzed after every 10 samples?	✓				
17. Was the %Difference ≤ 15%?	✓				%D > 15% = UJ/J
18. Was a Limit of Detection Verification LODV) analyzed before and after every batch?	✓				

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.12 **SDG**: A9G150112 R0
Sample Event: July 2009 **Analysis**: SW846 6860
Data Reviewer/Date: Angye Dragotta/August 31, 2009 Perchlorate

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
19. Was the LODV recovery within 70-130%?	✓				>130%=J; 70-60%=J/UJ; <60%=J/R
20. Was an Interference Check Sample extracted and analyzed with every batch?	✓				
21.Was the ICS recovery within 70 to 130%?	✓				>120%=J; 50-79%=J/UJ; <50%=Pj/R
22. Was a method blank prepared and analyzed with each batch?	✓				
23. Were target analytes detected in the method blank at >1/2 the MRL?		✓		Checked by ADR.	<5X =B
24. Was a field blank (equipment) collected and analyzed?	✓			FWGEQUIPRINSE2-1424-GW	
25. Were target analytes detected in the field blank analyses >1/2 the MRL?		✓		Checked by ADR.	<5X =B
26. Was a LCS prepared and analyzed with each batch?	✓				
27. Were the LCS recoveries within 85-115%?	✓			Checked by ADR.	>115%=J; 50%-85%=J/UJ; <50%=J/R
28. Was a MS/MSD prepared with each batch?	✓				
29. Was the MS/MSD parent sample a Ravenna sample?	✓			Sample FWGLL8mw-002c-1377-GF and FWGLL9mw-003c-1384-GF were the parents for the MS/MSD evaluation.	
30. Were MS/MSD recoveries 75-125% and RPD values ≤20%?	✓			Checked by ADR.	>125% = J 30% - 75% = J/UJ <30% = J/R
31. Was a Laboratory Reagent Blank (LRB) analyzed prior to calibration and after high concentration samples?	✓				
32. Were target analytes detected in the LRB at >1/2 the MRL?		✓			<5X =B
33. Was a MRL Verification run with every ICAL?	✓				
34. Were the MRL recoveries 70-130%?	✓				R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.12 **SDG**: A9G150112 R0
Sample Event: July 2009 **Analysis**: SW846 6860
Data Reviewer/Date: Angye Dragotta/August 31, 2009 Perchlorate

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
35. Were the internal standards added to every sample?	✓				
36. Were the retention times for all IS compounds within 0.98 and 1.02 seconds from the RT of the mid-point standard in the ICAL?	✓				R
37. Did the IS recover within 50% to150% of the ICAL mid-point standard?	✓				R
38. Was a field duplicate analyzed? Were the RPDs within ±30%?	✓			Sample FWGLL8mw-DUP2-1414-GF was the field duplicate for sample FWGLL8mw-005c-1380-GF and FWGLL9mw-DUP3-1415-GF a field duplicate for sample FWGLL9mw-004c-1385-GF.	RPD >30=J
39. Was the Isotope ratio between 99/101 and 83/85 monitored and fell between 2.3 and 3.08?	✓				J/UJ
40. Were reported sample concentrations within calibration range?	✓				
41. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
42. Were lab comments included in report? If yes, summarize contents.		✓			

References:

DOD Perchlorate Handbook, March 2006; Section G "Selecting Analytical Methods and Services"

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-001C-1376-GF

HPLC

Lot-Sample #...:	A9G150112-001	**Work Order #...:**	LGG7V1AA	**Matrix.....:**	WG
Date Sampled...:	07/14/09 09:15	**Date Received..:**	07/15/09		
Prep Date.....:	08/05/09	**Analysis Date..:**	08/06/09		
Prep Batch #...:	9217395				
Dilution Factor:	1	**Method.....:**	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	**0.019 J**	**0.050**	**ug/L**	**0.0088**

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-002C-1377-GF

HPLC

Lot-Sample #...:	A9G150112-002	**Work Order #...:**	LGG711AA	**Matrix.....:**	WG
Date Sampled...:	07/14/09 10:20	**Date Received..:**	07/15/09		
Prep Date.....:	08/05/09	**Analysis Date..:**	08/06/09		
Prep Batch #...:	9217395				
Dilution Factor:	1	**Method.....:**	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	**0.025 J**	**0.050**	**ug/L**	**0.0088**

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-001C-1382-GF

HPLC

Lot-Sample #...:	A9G150112-003	Work Order #...:	LGG751AA	Matrix.....:	WG
Date Sampled...:	07/14/09 12:35	Date Received..:	07/15/09		
Prep Date.....:	08/05/09	Analysis Date..:	08/06/09		
Prep Batch #...:	9217395				
Dilution Factor:	1	Method.....:	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	0.081	0.050	ug/L	0.0088

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-003C-1384-GF

HPLC

Lot-Sample #...:	A9G150112-004	Work Order #...:	LGG771AA	Matrix.....:	WG
Date Sampled...:	07/14/09 13:50	Date Received..:	07/15/09		
Prep Date.....:	08/05/09	Analysis Date..:	08/07/09		
Prep Batch #...:	9217395				
Dilution Factor:	1	Method.....:	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	0.095	0.050	ug/L	0.0088

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-003C-1391-GF

HPLC

Lot-Sample #...:	A9G150112-005	Work Order #...:	LGG781AA	Matrix.....:	WG
Date Sampled...:	07/14/09 15:55	Date Received..:	07/15/09		
Prep Date.....:	08/05/09	Analysis Date..:	08/07/09		
Prep Batch #...:	9217395				
Dilution Factor:	1	Method.....:	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	0.075	0.050	ug/L	0.0088

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-002C-1390-GF

HPLC

Lot-Sample #...:	A9G150112-006	Work Order #...:	LGG791AA	Matrix.....:	WG
Date Sampled...:	07/14/09 17:00	Date Received..:	07/15/09		
Prep Date.....:	08/05/09	Analysis Date..:	08/07/09		
Prep Batch #...:	9217395				
Dilution Factor:	1	Method.....:	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	0.014 J	0.050	ug/L	0.0088

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-006C-1381-GF

HPLC

Lot-Sample #...:	A9G150112-007	Work Order #...:	LGG8C1AA	Matrix.....:	WG
Date Sampled...:	07/14/09 09:15	Date Received..:	07/15/09		
Prep Date.....:	08/05/09	Analysis Date..:	08/07/09		
Prep Batch #...:	9217395				
Dilution Factor:	1	Method.....:	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	0.050	0.050	ug/L	0.0088

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-005C-1380-GF

HPLC

Lot-Sample #...:	A9G150112-008	**Work Order #...:**	LGG8D1AA	**Matrix.....:**	WG
Date Sampled...:	07/14/09 10:10	**Date Received..:**	07/15/09		
Prep Date.....:	08/05/09	**Analysis Date..:**	08/07/09		
Prep Batch #...:	9217395				
Dilution Factor:	1	**Method.....:**	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	ND	0.050	ug/L	0.0088

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-DUP2-1414-GF

HPLC

Lot-Sample #...:	A9G150112-009	**Work Order #...:**	LGG8E1AA	**Matrix.....:**	WG
Date Sampled...:	07/14/09 11:15	**Date Received..:**	07/15/09		
Prep Date.....:	08/05/09	**Analysis Date..:**	08/07/09		
Prep Batch #...:	9217395				
Dilution Factor:	1	**Method.....:**	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	ND	0.050	ug/L	0.0088

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-004C-1385-GF

HPLC

Lot-Sample #...: A9G150112-010 **Work Order #...:** LGG8F1AA **Matrix.....:** WG
Date Sampled...: 07/14/09 12:15 **Date Received..:** 07/15/09
Prep Date.....: 08/05/09 **Analysis Date..:** 08/07/09
Prep Batch #...: 9217395
Dilution Factor: 1 **Method.....:** SW846 6860

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	ND	0.050	ug/L	0.0088

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-DUP3-1415-GF

HPLC

Lot-Sample #...:	A9G150112-011	**Work Order #...:**	LGG8G1AA	**Matrix.....:**	WG
Date Sampled...:	07/14/09 13:15	**Date Received..:**	07/15/09		
Prep Date.....:	08/05/09	**Analysis Date..:**	08/07/09		
Prep Batch #...:	9217395				
Dilution Factor:	1	**Method.....:**	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	ND	0.050	ug/L	0.0088

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-006C-1387-GF

HPLC

Lot-Sample #...:	A9G150112-012	**Work Order #...:**	LGG8K1AA	**Matrix.....:**	WG
Date Sampled...:	07/14/09 14:15	**Date Received..:**	07/15/09		
Prep Date.....:	08/05/09	**Analysis Date..:**	08/07/09		
Prep Batch #...:	9217395				
Dilution Factor:	1	**Method.....:**	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	0.051	0.050	ug/L	0.0088

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-001C-1389-GF

HPLC

Lot-Sample #...: A9G150112-013 Work Order #...: LGG8L1AA Matrix.....: WG
Date Sampled...: 07/14/09 15:30 Date Received..: 07/15/09
Prep Date.....: 08/05/09 Analysis Date..: 08/07/09
Prep Batch #...: 9217395
Dilution Factor: 1 Method.....: SW846 6860

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	0.069	0.050	ug/L	0.0088

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-003C-1378-GF

HPLC

Lot-Sample #...:	A9G150112-014	**Work Order #...:**	LGG8M1AA	**Matrix.....:**	WG
Date Sampled...:	07/14/09 09:10	**Date Received..:**	07/15/09		
Prep Date.....:	08/05/09	**Analysis Date..:**	08/07/09		
Prep Batch #...:	9217395				
Dilution Factor:	1	**Method.....:**	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	0.019 J	0.050	ug/L	0.0088

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL8mw-004C-1379-GF

HPLC

Lot-Sample #...:	A9G150112-015	Work Order #...:	LGG8N1AA	Matrix.....:	WG
Date Sampled...:	07/14/09 10:35	Date Received..:	07/15/09		
Prep Date.....:	08/05/09	Analysis Date..:	08/07/09		
Prep Batch #...:	9217395				
Dilution Factor:	1	Method.....:	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	0.013 J	0.050	ug/L	0.0088

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1424-GW

HPLC

Lot-Sample #...:	A9G150112-016	**Work Order #...:**	LGG8P1AA	**Matrix.....:**	WQ
Date Sampled...:	07/14/09 11:30	**Date Received..:**	07/15/09		
Prep Date.....:	08/05/09	**Analysis Date..:**	08/07/09		
Prep Batch #...:	9217395				
Dilution Factor:	1	**Method.....:**	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	ND	0.050	ug/L	0.0088

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-007C-1388-GF

HPLC

Lot-Sample #...:	A9G150112-017	Work Order #...:	LGG8Q1AA	Matrix.....:	WG
Date Sampled...:	07/14/09 13:05	Date Received..:	07/15/09		
Prep Date.....:	08/05/09	Analysis Date..:	08/07/09		
Prep Batch #...:	9217395				
Dilution Factor:	1	Method.....:	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	0.025 J	0.050	ug/L	0.0088

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-002C-1383-GF

HPLC

Lot-Sample #...:	A9G150112-018	Work Order #...:	LGG8R1AA	Matrix.....:	WG
Date Sampled...:	07/14/09 14:25	Date Received..:	07/15/09		
Prep Date.....:	08/05/09	Analysis Date..:	08/07/09		
Prep Batch #...:	9217395				
Dilution Factor:	1	Method.....:	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	0.092	0.050	ug/L	0.0088

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL9mw-005C-1386-GF

HPLC

Lot-Sample #...:	A9G150112-019	**Work Order #...:**	LGG8T1AA	**Matrix.....:**	WG
Date Sampled...:	07/14/09 15:40	**Date Received..:**	07/15/09		
Prep Date.....:	08/05/09	**Analysis Date..:**	08/07/09		
Prep Batch #...:	9217395				
Dilution Factor:	1	**Method.....:**	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	**0.044 J**	**0.050**	**ug/L**	**0.0088**

NOTE(S):

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

HPLC

Client Lot #...: A9G150112 **Work Order #...:** LHKFM1AA **Matrix.....:** WATER
MB Lot-Sample #: R9H050000-395

Prep Date.....: 08/05/09
Analysis Date..: 08/06/09 **Prep Batch #...:** 9217395
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Perchlorate	ND	0.050	ug/L	SW846 6860

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A9G150112 **Work Order #...:** LHKFM1AC **Matrix.....:** WATER
LCS Lot-Sample#: R9H050000-395
Prep Date.....: 08/05/09 **Analysis Date..:** 08/06/09
Prep Batch #...: 9217395
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Perchlorate	**104**	**(80 - 120)**	**SW846 6860**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A9G150112 **Work Order #...:** LGG711AC-MS **Matrix.....:** WG
MS Lot-Sample #: A9G150112-002 LGG711AD-MSD
Date Sampled...: 07/14/09 10:20 **Date Received..:** 07/15/09
Prep Date.....: 08/05/09 **Analysis Date..:** 08/06/09
Prep Batch #...: 9217395
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Perchlorate	**95**	**(80 - 120)**			**SW846 6860**
	93	**(80 - 120)**	**1.0**	**(0-15)**	**SW846 6860**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A9G150112 **Work Order #...:** LGG771AC-MS **Matrix.....:** WG
MS Lot-Sample #: A9G150112-004 LGG771AD-MSD
Date Sampled...: 07/14/09 13:50 **Date Received..:** 07/15/09
Prep Date.....: 08/05/09 **Analysis Date..:** 08/07/09
Prep Batch #...: 9217395
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Perchlorate	**98**	**(80 - 120)**			**SW846 6860**
	86	**(80 - 120)**	**4.0**	**(0-15)**	**SW846 6860**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Appendix I

Reason Code Library: Example 1

Category	Code
Low Bias Indicator	-
High Bias Indicator	+
Temperature	A
Holding Times	
Sampling to Analysis	C
Sampling to Extraction	D
Extaction to Analysis	E
Method Blanks	F
Surrogate Recovery	G
MS/MSD	
MS/MSD Recovery	H
MS/MSD RPD	I
LCS	
LCS Recovery	J
LCS RPD	K
Reporting Limits	L
Field QC	
Field Blank	M
Equipment Blank	N
Trip Blank	O
Field Duplicate	P

Category	Code
Initial Calibration	
Initial Calibration RRF	Q
Initial Calibration RSD	R
Initial Calibration Cor. Coef	S
Initial Calibration Verification	
Initial Calibration Verificaton RRF	T
Initial CalibrationVerification %D	U
Continuing Calibration	
Continuing Calibraiton RRF	V
Continuing Calibration %D	W
GC/MS Tune	
GC/MS Tune for Initial Calibration	X
GC/MS Tune for Continuing Calibration	Y
Laboratory Duplicate	Z
Categories not Assessed by Automated Data Review*	
Internal Standards	Is
Calibration Blanks	Cb
Resolution Check Mixture	Rm
Performance Evaluation Mixture	Pm
Professional Judgement	Pj

* Qualifiers for data-review categories not assessed by automated data review are manually entered by the user. The application automaticallly adds reason codes listed here when the user manually adds qualifiers for these categories if the option for applying reason codes was selected during automated data review.

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G150112										
6860	FWGLL10mw-002C-1390-GF	AQ	N							
				Perchlorate	0.050	0.014J		J	ug/L	L
6860	FWGLL8mw-001C-1376-GF	AQ	N							
				Perchlorate	0.050	0.019J		J	ug/L	L
6860	FWGLL8mw-002C-1377-GF	AQ	N							
				Perchlorate	0.050	0.025J		J	ug/L	L
6860	FWGLL8mw-003C-1378-GF	AQ	N							
				Perchlorate	0.050	0.019J		J	ug/L	L
6860	FWGLL8mw-004C-1379-GF	AQ	N							
				Perchlorate	0.050	0.013J		J	ug/L	L
6860	FWGLL9mw-005C-1386-GF	AQ	N							
				Perchlorate	0.050	0.044J		J	ug/L	L
6860	FWGLL9mw-007C-1388-GF	AQ	N							
				Perchlorate	0.050	0.025J		J	ug/L	L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL10mw-002C-1390-GF **Lab Report Batch :** A9G150112 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G150112006

Reviewed By / Date : Angye Dragotta 8/31/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6860						**Dilution: 1**															
Perchlorate	0.014		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL8mw-001C-1376-GF **Lab Report Batch :** A9G150112 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G150112001

Reviewed By / Date : Angye Dragotta 8/31/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6860						**Dilution: 1**															
Perchlorate	0.019		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL8mw-002C-1377-GF **Lab Report Batch :** A9G150112 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G150112002

Reviewed By / Date : Angye Dragotta 8/31/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6860						**Dilution: 1**															
Perchlorate	0.025		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL8mw-003C-1378-GF **Lab Report Batch :** A9G150112 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G150112014

Reviewed By / Date : Angye Dragotta 8/31/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6860						**Dilution: 1**															
Perchlorate	0.019		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL8mw-004C-1379-GF **Lab Report Batch :** A9G150112 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G150112015

Reviewed By / Date : Angye Dragotta 8/31/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6860						**Dilution: 1**															
Perchlorate	0.013		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL9mw-005C-1386-GF **Lab Report Batch :** A9G150112 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G150112019

Reviewed By / Date : Angye Dragotta 8/31/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6860						**Dilution: 1**															
Perchlorate	0.044		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL9mw-007C-1388-GF **Lab Report Batch :** A9G150112 **Lab ID :** TALCAN

Sample Date : 07/14/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G150112017

Reviewed By / Date : Angye Dragotta 8/31/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6860						**Dilution: 1**															
Perchlorate	0.025		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A9G150112 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGLL10mw-002C-1390-	A9G150112006	6860	AQ	Perchlorate	J	0.014	0.050	ug/L
FWGLL8mw-001C-1376-G	A9G150112001			Perchlorate	J	0.019	0.050	ug/L
FWGLL8mw-002C-1377-G	A9G150112002			Perchlorate	J	0.025	0.050	ug/L
FWGLL8mw-003C-1378-G	A9G150112014			Perchlorate	J	0.019	0.050	ug/L
FWGLL8mw-004C-1379-G	A9G150112015			Perchlorate	J	0.013	0.050	ug/L
FWGLL9mw-005C-1386-G	A9G150112019			Perchlorate	J	0.044	0.050	ug/L
FWGLL9mw-007C-1388-G	A9G150112017			Perchlorate	J	0.025	0.050	ug/L

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2009 **Date:** August 28, 2009
STL Sample Delivery Group: A9G160103 **Revision:** 0

Data Validator: Angye Dragotta/Environmental Quality Management, Inc. (EQM, Inc.)

QA/QC Summary

On July 15, 2009 the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A9G160103.

Field Sample ID	Analytes	Method
FWGLL10mw-004c-1392-GW	VOCs	SW846 8260B
FWGLL10mw-005c-1393-GW	SVOCs	SW846 8270C
FWGLL11mw-004c-1397-GW	Pesticides	SW846 8081A
FWGLL11mw-006c-1399-GW	PCBs	SW846 8082
FWGASYmw-003c-1405-GW	Cyanide	SW846 9012A
FWGASYmw-004c-1406-GW		
FWGLL10mw-006c-1394-GW		
FWGLL10mw-DUP4-1416-GW		
FWGLL11mw-010c-1402-GW		
FWGLL11mw-DUP5-1417-GW		
FWGASYmw-001c-1403-GW		
FWGEQUIPRINSE3-1425-GW		
FWGASYmw-002c-1404-GW		
FWGLL11mw-005c-1398-GW		
FWGLL11mw-003c-1396-GW		
FWGLL11mw-009c-1401-GW		
FWGLL11mw-008c-1400-GW		
FWGLL11mw-001c-1395-GW		
FWGASYmw-005c-1407-GW		
FWGLL10mw-004c-1392-GF	TAL23 Metals	SW846 6010B/6020/7470A
FWGLL10mw-005c-1393-GF		
FWGLL11mw-004c-1397-GF		
FWGLL11mw-006c-1399-GF		
FWGASYmw-003c-1405-GF		
FWGASYmw-004c-1406-GF		
FWGLL10mw-006c-1394-GF		
FWGLL10mw-DUP4-1416-GF		
FWGLL11mw-010c-1402-GF		
FWGLL11mw-DUP5-1417-GF		
FWGASYmw-00Ic-1403-GF		
FWGEQUIPRINSE3-1425-GW		
FWGASYmw-002c-1404-GF		
FWGLL11mw-005c-1398-GF		
FWGLL11mw-003c-1396-GF		

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2009 **Date:** August 28, 2009
STL Sample Delivery Group: A9G160103 **Revision:** 0

Field Sample ID	Analytes	Method
FWGLL11mw-009c-1401-GF	TAL23 Metals	SW846 6010B/6020/7470A
FWGLL11mw-008c-1400-GF		
FWGLL11mw-001c-1395-GF		
FWGASYmw-005c-1407-GF		
FWGTEAM1-Trip	VOCs	SW846 8260B
FWGTEAM2-Trip		
FWGTEAM3-Trip		

The data presented in this report were evaluated according to the *Final Quality Assurance Project Plan Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant Ravenna, OH, Portage Environmental, September 2004.* The following documents will be used as needed to supplement the project documentation: *Louisville Chemistry Guidelines, USACE, June 2002 version 5, EPA National Functional Guidelines (NFG) for Organic Data Review, EPA-540/R-99-008, October 1999, NFG for Inorganic Data Review, EPA-540/R-04-004, October 2004*, Analytical Methods, and Laboratory Standard Operating Procedures. These objectives represent accuracy and precision performance goals for each analytical method.

The coolers were received between 0.6 – 4.8 °C. Upon receipt, it was documented by the laboratory, that the samples were not frozen and in good condition. Therefore, no qualifications were made to sample results based on temperatures less than 2°C.

The completeness objective for the project was 90%. The completeness objective was met for this SDG, 99.4%. Limitations, if any, on the data are indicated with qualifiers detailed below.

All analytical results have been verified against compliance requirements specified in the project QAP, LCG, associated analytical methods and/or SOPs, as appropriate. Checklists used in review of the data have been inserted in the SDGs by parameter. Outliers have been noted below and results requiring qualification, as a result of this verification process, have been summarized in Appendix 1.

VOAs - 8260B

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Tuning criteria
- CCV criteria
- Initial Calibration Criteria including SPCC and CCC compounds
- Internal standard area counts and retention times
- MDL verification criteria
- Surrogate recoveries
- Field duplicate RPD criteria

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2009 **Date:** August 28, 2009
STL Sample Delivery Group: A9G160103 **Revision:** 0

QC/MRL
A3UX10

- The opening MRL check analyzed 7/20/09 at 1257 had acetone recover above control limits at 149% and methylene chloride at 132%.
- The closing MRL check analyzed at 2310 had methylene chloride recover above control limits at 151%.

The acetone results for FWGLL11mw-005c-1398-GW and all three trip blanks were qualified as estimated, "J". No qualifications were made methylene chloride as there were no detected methylene chloride concentrations.

A3UX11

- The opening MRL check analyzed 7/21/09 at 1656 had carbon disulfide recover below control limits at 62.2% and 2-hexanone at 64%. Dibromochloromethane recovered above control limits at 146%, trans-1,3-dichloropropene at 132% and bromoform at 183%.
- The closing MRL check analyzed at 1100 had carbon disulfide recover below control limits at 68.4% and methylene chloride at 66%. Dibromochloromethane recovered above control limits at 155%, trans-1,3-dichloropropene at 151% and bromoform at 201%.

The methylene chloride, acetone, carbon disulfide and 2-hexanone results for FWGLL11mw-001c-1395-GW and FWGASYmw-005c-1407-GW were qualified as estimated, "UJ". No qualifications were made for dibromochloromethane, trans-1,3-dichloropropene or bromoform as there were no detected concentrations of these targets. Documentation provided in SDG A9G150104.

ICV
Chloromethane recovered below control limits at 71.5% in the ICV. All chloromethane results were qualified as estimated, "J/UJ".

LCS Recovery

- Batch 9203177- The LCS/LCD percent recovery was below control limits for vinyl chloride at 65% and 68% and for chloroethane at 56% and 59%. Associated vinyl chloride and chloroethane results were qualified as estimated, "UJ".
- Batch 9202112- The LCD percent recovery was below control limits for chloromethane at 55%. The LCS/LCD percent recovery for chloroethane was below control limits at 65% and 64%. Associated chloromethane and chloroethane results were qualified as estimated, "UJ".

Blanks

- The method blank associated with batch 9201377 had detected methylene chloride at 0.38ug/L. The methylene chloride result for FWGEQUIPRinse3-1425-GW was qualified, "B".

- FWGEQUIPRinse3-1425-GW had acetone detected at 6.9ug/L, 2-butanone at 0.79ug/L, benzene at 0.43ug/L, m & p-xylene at 0.76ug/L, methylene chloride at 3.0ug/L, o-xylene at 0.37ug/L, toluene at 1.2ug/L and total xylenes at 1.1ug/L. The acetone result for sample FWGLL11mw-005c-1398-GW was qualified "B". No qualifications were made for the other rinse contaminants as there were no detected concentrations of these contaminants in the associated field samples
- Acetone was detected in all three trip blanks from 3.0ug/L to 3.2ug/L. Sample FWGEQUIPRinse3-1425-GW and FWGLL11mw-005c-1398-GW were qualified, "B".

Matrix Spike Recovery

FWGLL10mw-004c-1392-GW

Chloroethane recovered below control limits in the MS/MSD at 65% and 61%. Carbon disulfide recovered above control limits in the MS/MSD at 140% and 141%. Bromomethane recovered below control limits in the MSD at 65%.

FWGLL11mw-004c-1397-GW

Carbon disulfide recovered above control limits in the MS/MSD at 146% and 152%. Chloroethane recovered below control limits in the MS at 67%.

No qualifications were made for carbon disulfide as the there were no detected carbon disulfide concentrations in FWGLL10mw-004c-1392-GW or FWGLL11mw-004c-1397-GW and the LCS recovered within limits. The chloroethane results for FWGLL10mw-004c-1392-GW and FWGLL11mw-004c-1397-GW were qualified as estimated, "UJ". No qualifications were made for bromomethane as the LCS recovered within limits.

SVOCs- 8270C

The following QC criteria were reviewed with acceptable results:

- Holding time, preservation and sample handling
- Tuning criteria
- Initial Calibration criteria including CCC and SPCC compounds
- ICV/ CCV criteria
- MDL Level Verification
- Internal standard area counts and retention times
- LCS Recovery
- Field Duplicate RPD criteria
- Surrogate recovery criteria
- Equipment blank free from contamination

MRL Recoveries

The MRL check analyzed 8/3/09 at 2038 had 2,4-dinitrophenol recover below control limits at 41% and 4,6-dinitro-2-methylphenol at 41%. The 2,4-dimitrophenol and 4,6-dinitro-2-methylphenol results reported from 8/3/09 were qualified as non usable, "R", as the MDL check analyzed at the end of the run did not have detected concentrations for these targets.

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2009 **Date:** August 28, 2009
STL Sample Delivery Group: A9G160103 **Revision:** 0

Blanks
Bis (2-Ethylhexyl) phthalate was detected in the method blanks at 1.4ug/L and 5.1ug/L. bis (2-Ethylhexyl) phthalate results <10x contamination were qualified, "B".

Matrix Spike Recovery
FWGLL10mw-004c-1392-GW

- Hexachloroethane recovered below control limits in the MSD at 44% and hexachlorocyclopentadiene recovered below control limits at 40%.

FWGLL11mw-004c-1397-GW

- 3,3'-dichlorobenzidine recovered below control limits in the MS/MSD at 30% and 21%. Hexachloroethane recovered below control limits in the MS at 40% and hexachlorocyclopentadiene recovered below control limits at 42%.

No qualifications were made as the associated LCS recovered within limits.

Pesticides- 8081A
The following QC criteria were reviewed with acceptable results:

- Preservation, holding time and sample handling
- Initial Calibration criteria
- DDT and Endrin breakdown criteria
- Retention time criteria
- ICV criteria
- The method blank was free from contamination
- Equipment Rinse was free from contamination
- LCS Recoveries
- Field Duplicate Criteria
- MDL verification criteria
- MRL Verification criteria
- Matrix Spike recovery criteria
- Second Column Confirmation Criteria

CCV Recovery Criteria

- The avg %D for the tox CCV analyzed on 7/20/09 @1442 on the primary column was above limits at 20.8%. No qualifications were made as there were no detected toxaphene concentrations. Documentation provided in SDG A9G140103.
- The avg %D for the tox CCV analyzed on 7/29/09 @1250 on the primary column was above limits at 18.4%. No qualifications were made as there were no detected toxaphene concentrations.

Surrogate Recoveries
The surrogate, DCB, recovered below control limits in samples FWGASYmw-001c-1403-GW, FWGASYmw-002c-1404-GW, FWGASYmw-003c-1405-GW, FWGASYmw-004c-1406-GW, FWGASYmw-005c-1407-GW, FWGLL11mw-001c-1395-GW, FWGLL11mw-003c-1396-GW, FWGLL11mw-008c-1400-GW, FWGLL11mw-010c-1402-GW and FWGLL11mw-DUP5-11417-GW. The associated results were qualified as estimated, "UJ".

PCBs- 8082
The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- Retention time criteria
- MDL verification criteria
- ICV/ CCV criteria
- The method blank was free from contamination
- Equipment Rinse was free from contamination
- LCS/ LCSD percent recoveries and RPD value criteria
- Matrix Spike Recovery and RPD Criteria
- Second Column confirmation criteria
- Field Duplicate RPD criteria
- MRL Verification Criteria

Surrogate Recovery
The surrogate, DCB, recovered below control limits in samples FWGASYmw-001c-1403-GW, FWGASYmw-002c-1404-GW, FWGASYmw-003c-1405-GW, FWGASYmw-004c-1406-GW, FWGASYmw-005c-1407-GW, FWGLL11mw-001c-1395-GW, FWGLL11mw-003c-1396-GW, FWGLL11mw-008c-1400-GW and FWGLL11mw-010c-1402-GW.The associated results were qualified as estimated, "UJ".

Metals - 6010B
The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- ICV criteria
- CCV criteria
- Interference Check Sample (ICSAB) criteria
- LCS recovery criteria
- MS recovery criteria
- MDL Verification criteria
- MRL verification criteria
- Lab Duplicate RPD criteria

Blanks
No qualifications were made for results due to negative blanks, since the LCG doesn't specifically address negative blank values.

- The ICB analyzed 7/20/09 had detected potassium at 147ug/L. The potassium results for FWGLL10mw-004c-1392-GF, FWGLL10mw-005c-1393-GF, FWGLL11mw-006c-1399-GF, FWGEQUIPRinse3-1425-GW, FWGASYmw-002c-1404-GF and FWGLL11mw-005c-1398-GF were qualified, "U", as the detected concentrations were <5x blank contamination.
- The CCBs analyzed 7/20/09 had detected potassium from 143ug/L to 149ug/L. The potassium results for FWGLL10mw-004c-1392-GF, FWGLL10mw-005c-1393-GF, FWGLLI1mw-006c-1399-GF, FWGEQUIPRinse3-1425-GW, FWGASYmw-002c-1404-GF and FWGLL11mw-005c-1398-GF were qualified, "U", as the detected concentrations were <5x blank contamination.
- Potassium was detected in the method blank at 149ug/L. All detected potassium results <5x contamination were qualified, "B".
- FWGEQUIPRinse3-1425-GW had potassium detected at 150ug/L. All detected potassium and zinc results <5x contamination were qualified, "B".

Duplicate RPD Criteria
The manganese duplicate RPD for FWGLL11mw-DUP5-1417-GF and FWGLL11mw-010c-1402-GF was above control limits at 66.9%. The FWGLL11mw-DUP5-1417-GF and FWGLL11mw-010c-1402-GF manganese results were qualified as estimated, "J".

Metals - 6020
The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Internal standard and tune criteria
- Initial Calibration criteria
- ICV/CCV criteria
- MDL Verification Data
- Interference Check Sample (ICSAB) criteria
- LCS Recovery Criteria
- MS recovery criteria

MRL Verification
The MRL analyzed 7/28/09 @ 1034 had zinc recover above limits at 136%. Detected concentrations of zinc were qualified as estimated, "J".

Blanks
No qualifications were made due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.

The CCBs analyzed 7/28/09 had detected antimony at 0.065ug/L, cadmium from 0.033ug/L to 0.065ug/L and iron from 11.2ug/L to 14.5ug/L.

- The iron results for samples FWGLL10mw-DUP4-1416-GF and FWGLL11mw-003c-1396-GF were qualified, "U" as the results were <5x CCB contamination.
- No other qualifications were made as the all other contaminants were either nondetect or >5x contamination.

Zinc was detected in the method blank at 6.8ug/L. All detected zinc results <5x contamination were qualified, "B".

FWGEQUIPRinse3-1425-GW had zinc detected at 2.5ug/L. All detected zinc results <5x contamination were qualified, "B".

Duplicate RPD Criteria

- The lab duplicate RPD analyzed on sample FWGLL11mw-004c-1397-GF was above control limits at 74% for iron. All detected iron results were qualified as estimated, "J".
- The iron field duplicate RPD for FWGLL11mw-DUP5-1417-GF and FWGLL11mw-010c-1402-GF was above control limits at 123%. The FWGLL11mw-DUP5-1417-GF and FWGLL11mw-010c-1402-GF iron results were qualified as estimated, "J".

Mercury - 7470A

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- ICV and CCV criteria
- ICB /CCBs were free from contamination
- The method blank was free from contamination
- The equipment blank was free from contamination
- MRL and MDL verification criteria
- LCS percent recovery criteria
- MS percent recovery
- Matrix Duplicate RPD criteria
- Field duplicate RPD criteria

No QC outliers were noted.

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2009 **Date:** August 28, 2009
STL Sample Delivery Group: A9G160103 **Revision:** 0

Cyanide- 9012

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- ICV and CCV criteria
- MRL Verification Check criteria
- Method and Equipment Blank were free from contamination
- LCS/LCSD percent recoveries and RPD value criteria
- Field Duplicate RPD criteria

Matrix Spike Recovery Criteria

The matrix spike duplicate analyzed on sample FWGLL11mw-004c-1397-GW was below control limits at 62% with an RPD of 36%. The cyanide results associated with batch 9198345 were qualified as estimated, "J/UJ".

Data Validator: [signature]
Date: 9/14/09

2nd Level Data Reviewer: Erik Corbin
Date: 9/14/09

SAMPLE SUMMARY

A9G160103

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LGJ9K	001	FWGTEAM1-TRIP	07/15/09	08:00
LGJ9N	002	FWGLL10mw-004C-1392-GW	07/15/09	08:35
LGJ9P	003	FWGLL10mw-004C-1392-GF	07/15/09	08:35
LGJ9T	004	FWGLL10mw-005C-1393-GW	07/15/09	10:35
LGJ9V	005	FWGLL10mw-005C-1393-GF	07/15/09	10:35
LGJ9W	006	FWGLL11mw-004C-1397-GW	07/15/09	11:55
LGJ9X	007	FWGLL11mw-004C-1397-GF	07/15/09	11:55
LGJ91	008	FWGLL11mw-006C-1399-GW	07/15/09	14:05
LGJ93	009	FWGLL11mw-006C-1399-GF	07/15/09	14:05
LGJ95	010	FWGASYmw-003C-1405-GW	07/15/09	15:30
LGJ97	011	FWGASYmw-003C-1405-GF	07/15/09	15:30
LGJ99	012	FWGASYmw-004C-1406-GW	07/15/09	16:45
LGKAG	013	FWGASYmw-004C-1406-GF	07/15/09	16:45
LGKAL	014	FWGTEAM2-TRIP	07/15/09	08:00
LGKAQ	015	FWGLL10mw-006C-1394-GW	07/15/09	08:50
LGKAR	016	FWGLL10mw-006C-1394-GF	07/15/09	08:50
LGKAT	017	FWGLL10mw-DUP4-1416-GW	07/15/09	10:00
LGKAW	018	FWGLL10mw-DUP4-1416-GF	07/15/09	10:00
LGKAX	019	FWGLL11mw-010C-1402-GW	07/15/09	11:00
LGKA1	020	FWGLL11mw-010C-1402-GF	07/15/09	11:00
LGKA2	021	FWGLL11mw-DUP5-1417-GW	07/15/09	12:00
LGKA5	022	FWGLL11mw-DUP5-1417-GF	07/15/09	12:00
LGKA6	023	FWGASYmw-001C-1403-GW	07/15/09	14:10
LGKA7	024	FWGASYmw-001C-1403-GF	07/15/09	14:10
LGKA8	025	FWGEQUIPRINSE3-1425-GW	07/15/09	14:50
LGKCA	026	FWGASYmw-002C-1404-GW	07/15/09	15:20
LGKCG	027	FWGASYmw-002C-1404-GF	07/15/09	15:20
LGKCH	028	FWGTEAM3-TRIP	07/15/09	07:45
LGKCJ	029	FWGLL11mw-005C-1398-GW	07/15/09	08:45
LGKCM	030	FWGLL11mw-005C-1398-GF	07/15/09	08:45
LGKCN	031	FWGLL11mw-003C-1396-GW	07/15/09	10:25
LGKCP	032	FWGLL11mw-003C-1396-GF	07/15/09	10:25
LGKCQ	033	FWGLL11mw-009C-1401-GW	07/15/09	11:50
LGKCR	034	FWGLL11mw-009C-1401-GF	07/15/09	11:50
LGKCT	035	FWGLL11mw-008C-1400-GW	07/15/09	13:10
LGKCV	036	FWGLL11mw-008C-1400-GF	07/15/09	13:10

(Continued on next page)

SAMPLE SUMMARY

A9G160103

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LGKCW	037	FWGLL11mw-001C-1395-GW	07/15/09	14:30
LGKCX	038	FWGLL11mw-001C-1395-GF	07/15/09	14:30
LGKC0	039	FWGASYmw-005C-1407-GW	07/15/09	16:20
LGKC3	040	FWGASYmw-005C-1407-GF	07/15/09	16:20

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

pg 2 COC
#003183

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 7-15-09	Chain of Custody Number: 003182
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513 825 7500 (fax 7495)	Lab Number: 330497396	Page 1 of 2
City: Cincinnati; State: OH; Zip Code: 45240	Site Contact: E Corbin	Lab Contact: M Loeb	
Project Name and Location (State): RVAAP (OH) PN: 30240.0006	Carrier/Waybill Number: NA Lab Pickup		
Contract/Purchase Order/Quote No.: PO # 15660			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sled.	Soil		Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Explo 8330	Propellants	Cyanide 9012	Metals 6010B/7470	Perchlorate				Special Instructions/ Conditions of Receipt
FWG Team1 Trip	7/15/09	0800		X							2				X												Cooler ID
FWGLL10mw-004C-1392GW	7/15/09	0835		X				27			9	3			X	X	X	X	X	X	X						ECI
FWGLL10mw-004C-1392GF	7/15/09	0835		X				3		3												X	X				MSMSD 185,15,E-120
FWGLL10mw-005C-1393GW	7/15/09	1035		X				9			3	1			X	X	X	X	X	X	X						MSMSD 185,15,E-120
FWGLL10mw-005C-1393GF	7/15/09	1035		X				1		1												X	X				MD88
FWGLL11mw-004C-1397GW	7/15/09	1155		X				27			9	3			X	X	X	X	X	X	X						MD88
FWGLL11mw-004C-1397GF	7/15/09	1155		X				3		3												X	X				msmsD 313,316,114
FWGLL11mw-006C-1399GW	7/15/09	1405		X				9			3	1			X	X	X	X	X	X	X						msmsD 313,316,114
FWGLL11mw-006C-1399GF	7/15/09	1405		X				1		1												X	X				ECI
FWGASYmw-003C-1405GW	7/15/09	1530		X				9			3	1			X	X	X	X	X	X	X						ECI
FWGASYmw-003C-1405GF	7/15/09	1530		X				1		1												X	X				182
FWGASYmw-004C-1406GW	7/15/09			X				9			3	1			X	X	X	X	X	X	X						182
																											C99

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other per SOW

QC Requirements (Specify): metals/Perchlorates were field filtered

1. Relinquished By	Date 7/15/09	Time 1800	1. Received By RC Robison	Date 7/15/09	Time 1800
2. Relinquished By RC Robison	Date 7/15/09	Time 1950	2. Received By Chris Lynch	Date 7-16-09	Time 8:00
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments: Temps may not meet requirements if sample collection is close to lab pickup time

ALL VOCS in cooler ECI

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

pg 1 COC #003182

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 7/15/09	Chain of Custody Number: 003183
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513 825 7500 (fax 7495)	Lab Number: 33049 79396	Page 2 of 2
City: Cincinnati; State: OH; Zip Code: 45240	Site Contact: E Corbin	Lab Contact: M Loeb	
Project Name and Location (State): RVAAP (OH) PN: 30240.0006	Carrier/Waybill Number: NA Lab Pickup		
Contract/Purchase Order/Quote No.: PO # 15d60			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Expl D 8330	Propellants	Cyanide 9012	Metals 6010B 7470	Perchlorates	Special Instructions/ Conditions of Receipt
FWGASYmw-004C-1406GF	7/15/09			X			—		—										X	X		Cooler ID C99

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other per SOW

QC Requirements (Specify): Metals/Perchlorates were field filtered

1. Relinquished By: [signature]	Date: 7/15/09	Time: 1800	1. Received By: RC Robson	Date: 7/15/09	Time: 1800
2. Relinquished By: RC Robson	Date: 7/15/09	Time: 1950	2. Received By:	Date:	Time:
3. Relinquished By:	Date:	Time:	3. Received By: [signature]	Date: 7-16-09	Time: 8:00

Comments: Temps may not meet requirements if sample collection is close to lab pickup time
All VOCs in cooler ECI

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

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Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

pg 2 COC# = 003265

Client	Project Manager	Date	Chain of Custody Number
EQM	John Miller	7-15-09	003161
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 2**
1800 Carillon Blvd	513 825 7500 (fax 7495)	3804979396	
City / State / Zip Code	**Site Contact**	**Lab Contact**	
Cincinnati / OH / 45240	E Corbin	M. Loeb	
Project Name and Location (State)	**Carrier/Waybill Number**		
RVAAP Ravenna Ohio	LAB PICK UP		
Contract/Purchase Order/Quote No.			
PO# 15660 Pn# 30240.0006			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sled.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC 8260	SVOC 8270	PST 8081	PCB 8082	EPH 8330	Propellants	Cyanide 9012	Metals 6010/7470/7196	Perchlorates	Special Instructions/ Conditions of Receipt: Cooler ID #
FWG Trip 2 Trip	7-15-09	0800		X						2			X									
FWGL110mw-006C-1394-GW		0850		X			9			3	1		X	X	X	X	X	X	X			184
FWGL110mw-006C-1394-GF				X			1		1											X	X	184
FWGL110mw-DUP4-1416-GW		1000		X			9			3	1		X	X	X	X	X	X	X			M12
FWGL110mw-DUP4-1416-GF				X			1		1											X	X	M12
FWGL111mw-010C-1402-GW		1100		X			9			3	1		X	X	X	X	X	X	X			~~725~~ 757
FWGL111mw-010C-1402-GF				X			1		1											X	X	757
FWGL111mw-DUP5-1417-GW		1200		X			9			3	1		X	X	X	X	X	X	X			partial vol Cletus
FWGL111mw-DUP5-1417-GF				X			1		1											X	X	partial vol Cletus
FWGASYmw-001C-1403-GW		1410		X			9			3	1		X	X	X	X	X	X	X			PH12
FWGASYmw-001C-1403-GF				X			1		1											X	X	PH12
FWGEQUIPRinse3-1425-GW	7-15-09	1450		X			10		1	3	1		X	X	X	X	X	X	X	X	X	*NOT FILTERED* ASD1

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other Per SOW

QC Requirements (Specify): metals/Perchlorates were field filtered

	Date	Time		Date	Time
1. Relinquished By	7/15/09	1800	1. Received By: RC Robison	7/15/09	1800
2. Relinquished By: RC Robison	7/15/09	1958	2. Received By	7-16-09	8:00
3. Relinquished By			3. Received By		

Comments: Temps may not meet requirements if sample collection is close to lab pick up time. All VOAs in cooler ASD1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

pg1 COC# = 003161

Client: EQM	Project Manager: John Miller	Date: 7-15-09	Chain of Custody Number: 003265
Address: 1800 CARILLON BLVD	Telephone Number (Area Code)/Fax Number: 5138257500 (fax 7495)	Lab Number: 3304979396	Page 2 of 2
City: Cincinnati; State: OH; Zip Code: 45240	Site Contact: E Corbin; Lab Contact: M. Loeb		
Project Name and Location (State): RVAAP Ravenna Ohio	Carrier/Waybill Number: Lab Pickup.		
Contract/Purchase Order/Quote No.: PO# 15660 Pn# 30240.0006			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Matrix: Aqueous	Matrix: Sed.	Matrix: Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Explo 8330	Propellants	Cyanide 9012	Metals 7470 6010 6020	Perchlorates	Special Instructions/ Conditions of Receipt
FWGASYmw-002C-1404-GN	7-15-09	1520		X									X	X	X	X	X	X	X			ASD5
FWGASYmw-002C-1404-GF	1	1		X																X	X	ASD5

Cal

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other Per SOW

QC Requirements (Specify): Metals/Perchlorates were field filtered

	Date	Time		Date	Time
1. Relinquished By: [signature]	7/15/09	1800	1. Received By: RC Robison	7/15/09	1800
2. Relinquished By: RC Robison	7/15/09	1950	2. Received By: [signature]	7-16-09	800
3. Relinquished By:			3. Received By:		

Comments: Temps may not meet requirements if sample collection time is close to lab pick up time. ALL VOAs in cooler ASD4

See pg 1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Canton

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client: EQM	Project Manager: JOHN MILLER	Date: 07/15/2009	Chain of Custody Number: 003187
Address: 1800 CARILLON BLVD	Telephone Number (Area Code)/Fax Number: (513) 825-7500 (FX 7495)	Lab Number: (330) 497-9396	Page 1 of 2
City: CINCINNATI; State: OH; Zip Code: 45240	Site Contact: E. CORBIN	Lab Contact: M. LOEB	
Project Name and Location (State): RVAAP (OH)	Carrier/Waybill Number: N/A - LAB PICKUP		
Contract/Purchase Order/Quote No.: PO 15640			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil		Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		VOC 8240	SVOC 8270	PEST 8081	PCB 8082	EXPLO 8330	PROPELLANTS	CYANIDE 9012	METALS 6010/6020 7470	PERCHLORATES				Special Instructions/ Conditions of Receipt
FWG TEAM 3 - TRIP	07/15/09	0745		X							2				X												COOLER 176
FWG LL11 MW - 005C - 1398 - GW	07/15/09	0845		X				9			3	1			X	X	X	X	X	X	X						COOLER 177
FWG LL11 MW - 005C - 1398 - GF	07/15/09	0845		X				1		1												X	X				" 177
FWG LL11 MW - 003C - 1396 - GW	07/15/09	1025		X				9			3	1			X	X	X	X	X	X	X						" LSASD
FWG LL11 MW - 003C - 1396 - GF	07/15/09	1025		X				1		1												X	X				" LSASD
FWG LL11 MW - 009C - 1401 - GW	07/15/09	1150		X				9			3	1			X	X	X	X	X	X	X						" 311
FWG LL11 MW - 009C - 1401 - GF	07/15/09	1150		X				1		1												X	X				" 311
FWG LL11 MW - 008C - 1400 - GW	07/15/09	1310		X				9			3	1			X	X	X	X	X	X	X						" 13
FWG LL11 MW - 008C - 1400 - GF	07/15/09	1310		X				1		1									PCB 7/15/09			X	X				" 13
FWG LL11 MW - 001C - 1395 - GW	07/15/09	1430		X				9			3	1			X	X	X	X	X	X	X						" 176
FWG LL11 MW - 001C - 1395 - GF	07/15/09	1430		X				1		1												X	X				" 176
CONTINUED ON CHAIN # 003168																											

PCB 07/15/09

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other PER SOW

QC Requirements (Specify): METALS / PERCHLORATES WERE FIELD FILTERED

1. Relinquished By: [signature]	Date: 7/15/09	Time: 1800	1. Received By: RC Robison	Date: 7/15/09	Time: 1800
2. Relinquished By: RC Robison	Date: 7/15/09	Time: 1950	2. Received By: [signature]	Date: 7-16-09	Time: 8:00
3. Relinquished By:	Date:	Time:	3. Received By:	Date:	Time:

Comments: TEMPS MAY NOT MEET REQUIREMENTS IF SAMPLE COLLECTION IS CLOSE TO LAB PICKUP TIME

ALL VOC'S IN COOLER 176

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client: EQM	Project Manager: JOHN MILLER	Date: 07/15/2009	Chain of Custody Number: 003168
Address: 1800 CARILLON BLVD	Telephone Number (Area Code)/Fax Number: (513) 825-7500 (FAX - 7495)	Lab Number: (330) 497-9396	Page 2 of 2
City: CINCINNATI; State: OH; Zip Code: 45240	Site Contact: E. CORBIN	Lab Contact: M. LOEB	
Project Name and Location (State): RVAAP (OH) 030240.0006	Carrier/Waybill Number: N/A - LAB PICKUP		
Contract/Purchase Order/Quote No.: PO 15660			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		Analysis (Attach list if more space is needed): VOC 8240	SVOC 8270	PEST 8081	PCB 8082	EXPLO 8330	PROPELLANTS	CYANIDE 9012	METALS 6010/6020 7470	PERCHLORATES				Special Instructions/ Conditions of Receipt
FWG ASY MW-005C-1407-GW	07/15/09	1620		X				9			3	1			X	X	X	X	X	X	X						COOLER - BUG 69
FWG ASY MW-005C-1407-GF	07/15/09	1620		X				1		1												X	X				" - BUG 69

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other PER SOW

QC Requirements (Specify): METALS/PERCHLORATES WERE FIELD FILTERED

1. Relinquished By: [signature]	Date: 7/15/09	Time: 1800	1. Received By: RC [signature]	Date: 7/15/09	Time: 1808
2. Relinquished By: RC [signature]	Date: 7/15/09	Time: 1950	2. Received By: [signature]	Date: 7-16-09	Time: 8:00
3. Relinquished By:	Date:	Time:	3. Received By:	Date:	Time:

Comments: TEMPS MAY NOT MEET REQUIREMENTS IF SAMPLE COLLECTION IS CLOSE TO LAB PICKUP TIME

ALL VOC'S IN COOLER - #176

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

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TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Lot Number: A9G120103

Client EQM Project RVAAP By: [signature] (Signature)
Cooler Received on 7/16/09 Opened on 7/16/09
FedEx ☐ UPS ☐ DHL ☐ FAS ☐ Stetson ☐ Client Drop Off ☐ TestAmerica Courier ☒ Other
TestAmerica Cooler # Multiple Coolers ☒ Foam Box ☐ Client Cooler ☐ Other

1. Were custody seals on the outside of the cooler(s)? Yes ☒ No ☐ Intact? Yes ☒ No ☐ NA ☐
   If YES, Quantity 23 Quantity Unsalvageable
   Were custody seals on the outside of cooler(s) signed and dated? Yes ☒ No ☐ NA ☐
   Were custody seals on the bottle(s)? Yes ☐ No ☒
   If YES, are there any exceptions?
2. Shippers' packing slip attached to the cooler(s)? ~~Yes~~ ☒ No ☒
3. Did custody papers accompany the sample(s)? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Were the custody papers signed in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☒ Foam ☐ None ☐ Other
6. Cooler temperature upon receipt See Attached °C See back of form for multiple coolers/temps ☒
   METHOD: IR ☒ Other ☐
   COOLANT: Wet Ice ☒ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐
7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels be reconciled with the COC? Yes ☒ No ☐
9. Were sample(s) at the correct pH upon receipt? Yes ☒ No ☐ NA ☐
10. Were correct bottle(s) used for the test(s) indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☒ NA ☐
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a trip blank present in the cooler(s)? Yes ☒ No ☐ Were VOAs on the COC? Yes ☒ No ☐

Contacted PM MJL Date 7/16/09 by JM via Verbal ☒ Voice Mail ☐ Other ☐
Concerning #14

14. CHAIN OF CUSTODY

The following discrepancies occurred:
Sample FWGASYmw-004C-1406-GW & BF does not have a time listed on the COC. Will use time 1645 per bottle labels. Sample FWGLLIDmw-0004-1416-GW the cyanide bottle was received empty. Receiving split 250ml from an unpreserved amber liter for the cyanide.
COC ID= FWGEQUIPRINSE3-1425-GW label ID on all bottles except

15. SAMPLE CONDITION OVER

Sample(s) were received after the recommended holding time had expired.
Sample(s) were received in a broken container.
Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) were further preserved in Sample Receiving to meet recommended pH level(s). *Nitric Acid Lot# 031909-HNO_3; Sulfuric Acid Lot# 100108-H_2SO_4; Sodium Hydroxide Lot# 073007 -NaOH; Hydrochloric Acid Lot# 092006-HCl; Sodium Hydroxide and Zinc Acetate Lot# 050205-$(CH_3COO)_2ZN$/NaOH.* What time was preservative added to sample(s)?

Client ID	pH	Date	Initials
	SEE Attached		

TestAmerica Multiple Cooler Receipt Form/Narrative Lot Number: A9G160103
North Canton Facility

Cooler #	Temp °C	Method	Coolant	Comments
185	3.2	IR	Ice	
15	2.7			
E-1	4.8			
M088	3.6			
313	4.7			
316	4.1			
114	4.0			
EC1	3.8			
182	4.4			
C 99	0.6			
184	0.6			
M12	0.6			
757	1.2			
Clatus	2.7			
PH12	0.7			
ASD1	2.9			
ASD5	1.6			
177	2.4			
L SASD	3.0			
311	1.6			
13	1.0			
176	2.3			
BUG 69	2.4			

TestAmerica Multiple Cooler Receipt Form/Narrative
North Canton Facility

Lot Number: A9G160103

Client ID	pH	Date	Initials
1392	<2 <2 <2 >12 >12 >12	7/16/09	gm
1393	<2 >12		
1397	<2 <2 <2 >12 >12 >12		
1399	<2 >12		
1405	<2 >12		
1406	<2 >12		
1394	<2 >12		
1416	<2 >12		
1402	<2 >12		
1417	<2 >12		
1403	<2 >12		
1425	<2 >12		
1404	<2 >12		
1398	<2 >12		
1396	<2 >12		
1401	<2 >12		
1400	<2 >12		
1395	<2 >12		
1407	<2 >12		

CASE NARRATIVE

A9G160103

The following report contains the analytical results for thirty-seven water samples and three quality control samples submitted to TestAmerica North Canton by Environmental Quality Mgt., Inc. from the RVAAP (OH) Site, project number 30240.0006. The samples were received July 16, 2009, according to documented sample acceptance procedures.

TestAmerica utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Angye Dragotta, Erik Corbin, and Jackie Doan on August 04, 2009. A summary of QC data for these analyses is included at the back of the report.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Please refer to the Quality Control Elements Narrative following this case narrative for additional quality control information.

If you have any questions, please call the Project Manager, Mark J. Loeb, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT."

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The coolers were received at temperatures ranging from 0.6 to 4.8°C.

See TestAmerica's Cooler Receipt Form for additional information.

CASE NARRATIVE (continued)

GC/MS VOLATILES

The sample(s) that contained concentrations of target analyte(s) at a reportable level in the associated Method Blank(s) were flagged with "B". All target analytes in the Method Blank must be below the reporting limit (RL) or the associated sample(s) must be ND with the exception of common laboratory contaminants.

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

The matrix spike/matrix spike duplicate(s) for FWGLL10mw-004C-1392-GW and FWGLL11mw-004C-1397-GW had recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

GC/MS SEMIVOLATILES

The sample(s) that contained concentrations of target analyte(s) at a reportable level in the associated Method Blank(s) were flagged with "B". All target analytes in the Method Blank must be below the reporting limit (RL) or the associated sample(s) must be ND with the exception of common laboratory contaminants.

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

The matrix spike/matrix spike duplicate(s) for FWGLL10mw-004C-1392-GW and FWGLL11mw-004C-1397-GW had recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

The matrix spike/matrix spike duplicate(s) for batch(es) 9197123 had recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

CASE NARRATIVE (continued)

PESTICIDES-8081

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

For sample(s) FWGASYmw-003C-1405-GW, FWGASYmw-004C-1406-GW, FWGLL11mw-010C-1402-GW, FWGLL11mw-DUP5-1417-GW, FWGASYmw-001C-1403-GW, FWGASYmw-002C-1404-GW, FWGLL11mw-003C-1396-GW, FWGLL11mw-008C-1400-GW, FWGLL11mw-001C-1395-GW, FWGASYmw-005C-1407-GW, the Blank and LCS associated with batch(es) 9197128, and the LCS associated with batch(es) 9198024, the recovery for one surrogate compound is outside acceptance criteria. Since the method criterion is that one of two surrogate compounds must meet acceptance criteria, no corrective action was required. (Surrogate was below acceptance limit, but above 10%.)

The opening Toxaphene CCV failed high, but since the associated sample(s) FWGLL10mw-004C-1392-GW was non-detect for Toxaphene, no corrective action was necessary.

The PEM on the rear column failed Endrin breakdown. The PEM on the front column met criteria for Endrin breakdown; therefore, no corrective action was necessary. Data is reported from the front column and the rear column is used for confirmation only.

The opening CCV passed average, but failed Methoxychlor, but since the associated sample(s) FWGLL10mw-004C-1392-GW was non-detect, no corrective action was necessary.

The closing CCV passed average, but failed alpha-BHC, gamma-BHC, delta-BHC, and Heptachlor. Since the associated sample(s) FWGLL10mw-004C-1392-GW was non-detect, no corrective action was necessary.

POLYCHLORINATED BIPHENYLS-8082

For sample(s) FWGASYmw-003C-1405-GW, FWGASYmw-004C-1406-GW, FWGLL11mw-010C-1402-GW, FWGASYmw-001C-1403-GW, FWGASYmw-002C-1404-GW, FWGLL11mw-008C-1400-GW, and FWGLL11mw-001C-1395-GW, the recovery for one surrogate compound is outside acceptance criteria. Since LCG criterion is that one of two surrogate compounds must meet acceptance criteria, no corrective action was required. (Surrogate was below acceptance limit, but above 10%.)

CASE NARRATIVE (continued)

METALS

The sample(s) that contain results between the MDL and the RL were flagged with "B". There is the possibility of false positive or mis-identification at these quantitation levels. The acceptance criteria for the ICB, CCB, and Method Blank are +/- the standard reporting limit (SRL).

Serial dilution of a sample in this lot indicates that physical and chemical interferences were present. Refer to the sample report pages for the affected analytes flagged with "E".

The sample(s) that contained concentrations of target analyte(s) at a reportable level in the associated Method Blank(s) were flagged with "J". Refer to the sample report pages for the affected analyte(s).

The sample duplicate RPD was outside the acceptance limits for some analytes. The result is less than five times the reporting limit; therefore, no corrective action is required. Refer to the sample duplicate report for RPDS that exceed 20%.

GENERAL CHEMISTRY

The matrix spike/matrix spike duplicate(s) for FWGLL11mw-004C-1397-GW had RPD's and recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

MANUAL INTEGRATION SUMMARY

Manual integrations were performed on samples(s) reported herein. A list of samples and analytes for which manual integration was necessary is provided following this Case Narrative.

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica Nortb Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to tbe twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, wbere appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased higb and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must he below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

QUALITY CONTROL ELEMENTS NARRATIVE (continued)

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failnre to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

TestAmerica Certifications and Approvals:

The laboratory is certified for the analytes listed on the documents below. These are available upon request.

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225),
Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Nevada (#OH-000482008A), OhioVAP (#CL0024), Pennsylvania (#008), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit

N:\QAQC\Customer Service\Narrative - Combined RCRA _CWA 032609.doc

MANUAL INTEGRATION SUMMARY

Lot A9G160103

Client ID: FWGLL11mw-006C-1399
Compound Name: Endrin ketone
Instrument ID: a2hp3.i
File Name: 012F1201.D
Inj. Date and Time: 23-JUL-2009 15:35
Manual Integration Reason: Poor Chromatography

Client ID: FWGLL11mw-006C-1399
Compound Name: Decachlorobiphenyl
Instrument ID: a2hp3.i
File Name: 012F1201.D
Inj. Date and Time: 23-JUL-2009 15:35
Manual Integration Reason: Poor Chromatography

Client ID: FWGLL10mw-004C-1392
Compound Name: 4,6-Dinitro-2-methylphenol
Instrument ID: a4hp7.i
File Name: LGJ9N1AG.D
Inj. Date and Time: 30-JUL-2009 16:37
Manual Integration Reason: Peak not found

Client ID: FWGLL11mw-009C-1401
Compound Name: Benzoic Acid
Instrument ID: a4hp7.i
File Name: LGKCQ1AC.D
Inj. Date and Time: 03-AUG-2009 17:19
Manual Integration Reason: Peak not found

Client ID: FWGLL11mw-009C-1401
Compound Name: Methoxychlor
Instrument ID: a2hp3.i
File Name: 024F2401.D
Inj. Date and Time: 23-JUL-2009 21:43
Manual Integration Reason: Poor Chromatography

GCMS VOLATILE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/August 28, 2009

SDG: A9G160103 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.6 – 4.8 °C. Upon receipt, it was documented by the laboratory, that the samples were not frozen and in good condition. Therefore, no qualifications were made to sample results based on temperatures less than 2°C.	QAPP Table 4-2, NELAC
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3.3
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-3
7. Was the GC/MS system tuned with bromofluorobenzene (BFB)?	✓				LCG Table 1
8. Was the criteria met during each 12 hour shift (prior to ICAL and Cal Ver.)?	✓				SW846 8260B 7.3.1
9. Did the initial calibration curve consist of 5 concentration levels?	✓			Instrument A3UX10 –5/5/09 stds – 5, 10, 25, 50, 100, 200 ng on column Instrument A3UX11 – 6/22/09 stds – 5, 10, 25, 50, 100, 200 ng on column	LCG Table 1 R
10. Did the Calibration Check Compounds (CCCs) (see Table 1 below) relative standard deviations (%RSD) ≤ 30%?	✓				LCG Table 1 R
11. Were the minimum response factors (RFs) for the System Performance Check Compounds (SPCCs) (see Table 2 below) met?	✓				LCG Table 1
12. Were all other target analytes ≤ 15% RSD? OR Was the average RSD ≤ 15%? Was a different calibration option used?	✓			5/5/09-Bromomethane, acetone, trans-1,3-dichloropropene, 2-hexanone, styrene and bromoform used weighted linear curves. 6/22/09-Acetone, methylene chloride, cis-1,3-dichloropropene, trans-1,3-dichloropropene, dibromochloromethane and bromoform used weighted linear curves.	LCG Table 1 15% <RSD< 20% = J/UJ
13. If a linear regression curve was used, was the correlation coefficient r≥0.99?	✓			All correlation coefficients were ≥0.99. No qualifications were made since the correlation coefficients were acceptable.	LCG Table 1 R<0.99=-J/R
14. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓			A3UX10 – 5/8/09 @ 1130 A3UX11 – 7/21/09 @1719	LCG Table 1 R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/August 28, 2009

SDG: A9G160103 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
15. Was a MRL Level Verification run at the beginning and end of every daily sequence or every 12 hours?	✓				LCG Table 1
16. Were the QC/MRL recoveries 70-130%?		✓		A3UX10 • The opening MRL check analyzed 7/20/09 at 1257 had acetone recover above control limits at 149% and methylene chloride at 132%. • The closing MRL check analyzed at 2310 had methylene chloride recover above control limits at 151%. The acetone results for FWGLL11mw-005c-1398-GW and all three trip blanks were qualified as estimated, "J". No qualifications were made methylene chloride as there were no detected methylene chloride concentrations. A3UX11 • The opening MRL check analyzed 7/21/09 at 1656 had carbon disulfide recover below control limits at 62.2% and 2-hexanone at 64%. Dibromochloromethane recovered above control limits at 146%, trans-1,3-dichloropropene at 132% and bromoform at 183%. • The closing MRL check analyzed at 1100 had carbon disulfide recover below control limits at 68.4% and methylene chloride at 66%. Dibromochloromethane recovered above control limits at 155%, trans-1,3-dichloropropene at 151% and bromoform at 201%. The methylene chloride, acetone, carbon disulfide and 2-hexanone results for FWGLL11mw-001c-1395-GW and FWGASYmw-005c-1407-GW were qualified as estimated, "UJ". No qualifications were made for dibromochloromethane, trans-1,3-dichloropropene or bromoform as there were no detected concentrations of these targets.	LCG Table 1 >130%=J; 70-60%=J/UJ; <60%=J/R
17. Was a second source verification (ICV) analyzed after the ICAL? Were results 80-120%?	✓			A3UX10 –5/5/09 @1257 A3UX11 –6/22/09 @ 1345 Chloromethane recovered below control limits at 71.5%. All Chloromethane results were qualified as estimated, "J/UJ".	LCG Table 1 >120%=J; 60-80%=J/UJ; <60%=J/R
18. Was a CCV run every 12 hours?	✓				LCG Table 1
19. Did the CCCs have a %Difference < 20%?	✓				LCG Table 1

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/August 28, 2009

SDG: A9G160103 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
20. Were the minimum RFs for the SPCCs within limits?	✓				LCG Table 1
21. Was the average of all target analytes ≤ 20%D with a maximum D for each target analyte ≤30%?	✓				LCG Table 1 Avg D>20% and D>30% =R; Avg %D<20% and D>30% =J D>20% (neg) = J/R D>30% (pos) = J
22. Were the internal standards added to every sample?	✓				LCG Table 1
23. Were the retention times for all IS compounds within ±30 seconds from the RT of the mid-point standard in the ICAL?	✓				LCG Table 1 R
24. Was the EICP area between -50% and +100% of the ICAL mid-point standard?	✓				LCG Table 1 R
25. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 1
26. Were target analytes detected in the method blank >1/2 the MRL?	✓			Checked by ADR. The method blank associated with batch 9201377 had detected methylene chloride at 0.38ug/L. The methylene chloride result for FWGEQUIPRinse3-1425-GW was qualified, "B".	LCG Table 1 <5/10X =B
27. Was a field blank (equipment and/or trip) collected and analyzed?	✓			FWGEQUIPRinse3-1425-GW	
28. Were target analytes detected in the field blank analyses >1/2 the MRL?	✓			FWGEQUIPRinse3-1425-GW had acetone detected at 6.9ug/L, 2-butanone at 0.79ug/L, benzene at 0.43ug/L, m & p-xylene at 0.76ug/L, methylene chloride at 3.0ug/L, o-xylene at 0.37ug/L, toluene at 1.2ug/L and total xylenes at 1.1ug/L. The acetone result for sample FWGLL11mw-005c-1398-GW was qualified "B". No qualifications were made for the other rinse contaminants as there were no detected concentrations of these contaminants in the associated field samples Acetone was detected in all three trip blanks from 3.0ug/L to 3.2ug/L. Sample FWGEQUIPRinse3-1425-GW and FWGLL11mw-005c-1398-GW were qualified, "B".	<5/10X =B
29. Was a field duplicate analyzed?	✓			Sample FWGLL11mw-DUP5-1417-GW was the field duplicate for sample FWGLL11mw-010c-1402-GW and FWGLL10mw-DUP4-1416-GW was the field duplicate for sample FWGLL10mw-006c-1394-GW.	
30. Were the Field duplicates RPDs within ±30%?	✓			ADR checked section; Only targets detected above the RL were evaluated.	QAPP Table 3-2 RPD >30=J

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/August 28, 2009

SDG: A9G160103 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
31. Was a LCS prepared and analyzed with each batch?	✓				LCG Table 1
32. Were the LCS recoveries within limits specified in Appendix C of the LCG?	✓			ADR checked section; Batch 9203177- The LCS/LCD percent recovery was below control limits for vinyl chloride at 65% and 68% and for chloroethane at 56% and 59%. Associated vinyl chloride and chloroethane results were qualified as estimated, "UJ". Batch 9202112- The LCD percent recovery was below control limits for chloromethane at 55%. The LCS/LCD percent recovery for chloroethane was below control limits at 65% and 64%. Associated chloromethane and chloroethane results were qualified as estimated, "UJ".	LCG Appendix C >UL=J; 30%-LL=J/UJ; <30%=J/R
33. Was a MS/MSD prepared with each batch?	✓				LCG Table 1
34. Was the MS/MSD parent a Ravenna sample?	✓			Sample FWGLL10mw-004c-1392-GW and FWGLL11mw-004c-1397-GW were the parent MS/MSD samples from this SDG.	
35. Were MS/MSD recoveries 70-130% and RPD values ≤20%?		✓		ADR checked section. **FWGLL10mw-004c-1392-GW** -Chloroethane recovered below control limits in the MS/MSD at 65% and 61%. Carbon disulfide recovered above control limits in the MS/MSD at 140% and 141%. Bromomethane recovered below control limits in the MSD at 65%. **FWGLL11mw-004c-1397-GW** - Carbon disulfide recovered above control limits in the MS/MSD at 146% and 152%. Chloroethane recovered below control limits in the MS at 67%. No qualifications were made for carbon disulfide as the there were no detected carbon disulfide concentrations in FWGLL10mw-004c-1392-GW or FWGLL11mw-004c-1397-GW and the LCS recovered within limits. The chloroethane results for FWGLL10mw-004c-1392-GW and FWGLL11mw-004c-1397-GW were qualified as estimated, "UJ". No qualifications were made for bromomethane as the LCS recovered within limits.	LCG Table 1 Pj
36. Were surrogate recoveries 50-150%?	✓				LCG Table 1 >150%=J; 10% -50%=J/UJ; <10%=J/R
37. Were reported sample concentrations within calibration range?	✓				

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/August 28, 2009

SDG: A9G160103 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
38. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
39. Were lab comments included in report? If yes, summarize contents.		✓			

References:

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 1 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Table1- CCCs

Analyte
1,1-Dichloroethene
Chloroform
1,2-Dichloropropane
Toluene
Ethylbenzene
Vinyl chloride

Table 2- SPCCs

Analyte	Minimum RF
Chloromethane	0.10
1,1-Dichlorethane	0.10
Bromoform	0.10
Chlorobenzene	0.30
1,1,2,2-Tetrachloroethane	0.30

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM1-TRIP

GC/MS Volatiles

Lot-Sample #...: A9G160103-001 **Work Order #...:** LGJ9K1AA **Matrix.....:** WQ
Date Sampled...: 07/15/09 08:00 **Date Received..:** 07/16/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9201377
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	**3.0 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM1-TRIP

GC/MS Volatiles

Lot-Sample #...: A9G160103-001 **Work Order #...:** LGJ9K1AA **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	99	(50 - 150)
1,2-Dichloroethane-d4	87	(50 - 150)
Toluene-d8	92	(50 - 150)
4-Bromofluorobenzene	93	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-004C-1392-GW

GC/MS Volatiles

Lot-Sample #...: A9G160103-002 **Work Order #...:** LGJ9N1AA **Matrix.....:** WG
Date Sampled...: 07/15/09 08:35 **Date Received..:** 07/16/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9201377
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-004C-1392-GW

GC/MS Volatiles

Lot-Sample #...: A9G160103-002 **Work Order #...:** LGJ9N1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	95	(50 - 150)
1,2-Dichloroethane-d4	83	(50 - 150)
Toluene-d8	93	(50 - 150)
4-Bromofluorobenzene	94	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-005C-1393-GW

GC/MS Volatiles

Lot-Sample #...: A9G160103-004 **Work Order #...:** LGJ9T1AA **Matrix.....:** WG
Date Sampled...: 07/15/09 10:35 **Date Received..:** 07/16/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9201377
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-005C-1393-GW

GC/MS Volatiles

Lot-Sample #...: A9G160103-004 **Work Order #...:** LGJ9T1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
1,2-Dichloroethane-d4	85	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	96	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-004C-1397-GW

GC/MS Volatiles

Lot-Sample #...: A9G160103-006 **Work Order #...:** LGJ9W1AA **Matrix.....:** WG
Date Sampled...: 07/15/09 11:55 **Date Received..:** 07/16/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9201377
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-004C-1397-GW

GC/MS Volatiles

Lot-Sample #...: A9G160103-006 **Work Order #...:** LGJ9W1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	93	(50 - 150)
1,2-Dichloroethane-d4	83	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	94	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-006C-1399-GW

GC/MS Volatiles

Lot-Sample #...: A9G160103-008 **Work Order #...:** LGJ911AA **Matrix.....:** WG
Date Sampled...: 07/15/09 14:05 **Date Received..:** 07/16/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9201377
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-006C-1399-GW

GC/MS Volatiles

Lot-Sample #...: A9G160103-008 **Work Order #...:** LGJ911AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
1,2-Dichloroethane-d4	84	(50 - 150)
Toluene-d8	94	(50 - 150)
4-Bromofluorobenzene	92	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-003C-1405-GW

GC/MS Volatiles

Lot-Sample #...: A9G160103-010 **Work Order #...:** LGJ951AA **Matrix.....:** WG
Date Sampled...: 07/15/09 15:30 **Date Received..:** 07/16/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9201377
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-003C-1405-GW

GC/MS Volatiles

Lot-Sample #...: A9G160103-010 **Work Order #...:** LGJ951AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	100	(50 - 150)
1,2-Dichloroethane-d4	87	(50 - 150)
Toluene-d8	92	(50 - 150)
4-Bromofluorobenzene	91	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-004C-1406-GW

GC/MS Volatiles

Lot-Sample #...: A9G160103-012 **Work Order #...:** LGJ991AA **Matrix.....:** WG
Date Sampled...: 07/15/09 16:45 **Date Received..:** 07/16/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9201377
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-004C-1406-GW

GC/MS Volatiles

Lot-Sample #...: A9G160103-012 **Work Order #...:** LGJ991AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	99	(50 - 150)
1,2-Dichloroethane-d4	90	(50 - 150)
Toluene-d8	93	(50 - 150)
4-Bromofluorobenzene	92	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM2-TRIP

GC/MS Volatiles

Lot-Sample #...: A9G160103-014 **Work Order #...:** LGKAL1AA **Matrix.....:** WQ
Date Sampled...: 07/15/09 08:00 **Date Received..:** 07/16/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9201377
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	**3.2 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM2-TRIP

GC/MS Volatiles

Lot-Sample #...: A9G160103-014 **Work Order #...:** LGKAL1AA **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	100	(50 - 150)
1,2-Dichloroethane-d4	90	(50 - 150)
Toluene-d8	93	(50 - 150)
4-Bromofluorobenzene	92	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-006C-1394-GW

GC/MS Volatiles

Lot-Sample #...: A9G160103-015 **Work Order #...:** LGKAQ1AA **Matrix.....:** WG
Date Sampled...: 07/15/09 08:50 **Date Received..:** 07/16/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9201377
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-006C-1394-GW

GC/MS Volatiles

Lot-Sample #...: A9G160103-015 **Work Order #...:** LGKAQ1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	97	(50 - 150)
1,2-Dichloroethane-d4	90	(50 - 150)
Toluene-d8	91	(50 - 150)
4-Bromofluorobenzene	93	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-DUP4-1416-GW

GC/MS Volatiles

Lot-Sample #...: A9G160103-017 **Work Order #...:** LGKAT1AA **Matrix.....:** WG
Date Sampled...: 07/15/09 10:00 **Date Received..:** 07/16/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9201377
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-DUP4-1416-GW

GC/MS Volatiles

Lot-Sample #...: A9G160103-017 **Work Order #...:** LGKAT1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	99	(50 - 150)
1,2-Dichloroethane-d4	89	(50 - 150)
Toluene-d8	93	(50 - 150)
4-Bromofluorobenzene	90	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-010C-1402-GW

GC/MS Volatiles

Lot-Sample #...: A9G160103-019 **Work Order #...:** LGKAX1AA **Matrix.....:** WG
Date Sampled...: 07/15/09 11:00 **Date Received..:** 07/16/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9201377
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-010C-1402-GW

GC/MS Volatiles

Lot-Sample #...: A9G160103-019 **Work Order #...:** LGKAX1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	100	(50 - 150)
1,2-Dichloroethane-d4	90	(50 - 150)
Toluene-d8	92	(50 - 150)
4-Bromofluorobenzene	91	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-DUP5-1417-GW

GC/MS Volatiles

Lot-Sample #...: A9G160103-021 **Work Order #...:** LGKA21AA **Matrix.....:** WG
Date Sampled...: 07/15/09 12:00 **Date Received..:** 07/16/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9201377
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-DUP5-1417-GW

GC/MS Volatiles

Lot-Sample #...: A9G160103-021 **Work Order #...:** LGKA21AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	99	(50 - 150)
1,2-Dichloroethane-d4	90	(50 - 150)
Toluene-d8	92	(50 - 150)
4-Bromofluorobenzene	91	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-001C-1403-GW

GC/MS Volatiles

Lot-Sample #...: A9G160103-023 **Work Order #...:** LGKA61AA **Matrix.....:** WG
Date Sampled...: 07/15/09 14:10 **Date Received..:** 07/16/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9201377
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-001C-1403-GW

GC/MS Volatiles

Lot-Sample #...: A9G160103-023 **Work Order #...:** LGKA61AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	99	(50 - 150)
1,2-Dichloroethane-d4	90	(50 - 150)
Toluene-d8	91	(50 - 150)
4-Bromofluorobenzene	91	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1425-GW

GC/MS Volatiles

Lot-Sample #...: A9G160103-025 **Work Order #...:** LGKA81AA **Matrix.....:** WQ
Date Sampled...: 07/15/09 14:50 **Date Received..:** 07/16/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9201377
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	**0.37 J**	**1.0**	**ug/L**	**0.14**
m-Xylene & p-Xylene	**0.76 J**	**2.0**	**ug/L**	**0.24**
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	**3.0 B**	**2.0**	**ug/L**	**0.33**
Acetone	**6.9 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	**0.79 J**	**10**	**ug/L**	**0.57**
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	**0.43 J**	**1.0**	**ug/L**	**0.13**
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	**1.2**	**1.0**	**ug/L**	**0.13**
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1425-GW

GC/MS Volatiles

Lot-Sample #...: A9G160103-025 **Work Order #...:** LGKA81AA **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	**1.1 J**	**2.0**	**ug/L**	**0.28**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	101	(50 - 150)
1,2-Dichloroethane-d4	91	(50 - 150)
Toluene-d8	91	(50 - 150)
4-Bromofluorobenzene	93	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-002C-1404-GW

GC/MS Volatiles

Lot-Sample #...: A9G160103-026 **Work Order #...:** LGKCA1AA **Matrix.....:** WG
Date Sampled...: 07/15/09 15:20 **Date Received..:** 07/16/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9201377
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-002C-1404-GW

GC/MS Volatiles

Lot-Sample #...: A9G160103-026 **Work Order #...:** LGKCA1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	97	(50 - 150)
1,2-Dichloroethane-d4	89	(50 - 150)
Toluene-d8	93	(50 - 150)
4-Bromofluorobenzene	91	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM3-TRIP

GC/MS Volatiles

Lot-Sample #...: A9G160103-028 **Work Order #...:** LGKCH1AA **Matrix.....:** WQ
Date Sampled...: 07/15/09 07:45 **Date Received..:** 07/16/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9201377
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	**3.2 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM3-TRIP

GC/MS Volatiles

Lot-Sample #...: A9G160103-028 **Work Order #...:** LGKCH1AA **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	100	(50 - 150)
1,2-Dichloroethane-d4	91	(50 - 150)
Toluene-d8	91	(50 - 150)
4-Bromofluorobenzene	90	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-005C-1398-GW

GC/MS Volatiles

Lot-Sample #...: A9G160103-029 **Work Order #...:** LGKCJ1AA **Matrix.....:** WG
Date Sampled...: 07/15/09 08:45 **Date Received..:** 07/16/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9201377
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	**1.2 J**	**10**	**ug/L**	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-005C-1398-GW

GC/MS Volatiles

Lot-Sample #...: A9G160103-029 **Work Order #...:** LGKCJ1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	97	(50 - 150)
1,2-Dichloroethane-d4	91	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	88	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-003C-1396-GW

GC/MS Volatiles

Lot-Sample #...: A9G160103-031 **Work Order #...:** LGKCN1AA **Matrix.....:** WG
Date Sampled...: 07/15/09 10:25 **Date Received..:** 07/16/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9201377
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-003C-1396-GW

GC/MS Volatiles

Lot-Sample #...: A9G160103-031 **Work Order #...:** LGKCN1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	100	(50 - 150)
1,2-Dichloroethane-d4	93	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	87	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-009C-1401-GW

GC/MS Volatiles

Lot-Sample #...: A9G160103-033 **Work Order #...:** LGKCQ1AA **Matrix.....:** WG
Date Sampled...: 07/15/09 11:50 **Date Received..:** 07/16/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9201377
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	**3.8**	**1.0**	**ug/L**	**0.29**
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-009C-1401-GW

GC/MS Volatiles

Lot-Sample #...: A9G160103-033 **Work Order #...:** LGKCQ1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	99	(50 - 150)
1,2-Dichloroethane-d4	92	(50 - 150)
Toluene-d8	91	(50 - 150)
4-Bromofluorobenzene	87	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-008C-1400-GW

GC/MS Volatiles

Lot-Sample #...: A9G160103-035 **Work Order #...:** LGKCT1AA **Matrix.....:** WG
Date Sampled...: 07/15/09 13:10 **Date Received..:** 07/16/09
Prep Date.....: 07/20/09 **Analysis Date..:** 07/20/09
Prep Batch #...: 9201377
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	**0.69 J**	**1.0**	**ug/L**	**0.30**
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-008C-1400-GW

GC/MS Volatiles

Lot-Sample #...: A9G160103-035 **Work Order #...:** LGKCT1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	100	(50 - 150)
1,2-Dichloroethane-d4	92	(50 - 150)
Toluene-d8	93	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-001C-1395-GW

GC/MS Volatiles

Lot-Sample #...: A9G160103-037 **Work Order #...:** LGKCW1AA **Matrix.....:** WG
Date Sampled...: 07/15/09 14:30 **Date Received..:** 07/16/09
Prep Date.....: 07/21/09 **Analysis Date..:** 07/21/09
Prep Batch #...: 9202112
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-001C-1395-GW

GC/MS Volatiles

Lot-Sample #...: A9G160103-037 **Work Order #...:** LGKCW1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	92	(50 - 150)
1,2-Dichloroethane-d4	92	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	86	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-005C-1407-GW

GC/MS Volatiles

Lot-Sample #...: A9G160103-039 **Work Order #...:** LGKC01AA **Matrix.....:** WG
Date Sampled...: 07/15/09 16:20 **Date Received..:** 07/16/09
Prep Date.....: 07/21/09 **Analysis Date..:** 07/21/09
Prep Batch #...: 9202112
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-005C-1407-GW

GC/MS Volatiles

Lot-Sample #...: A9G160103-039 **Work Order #...:** LGKC01AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	95	(50 - 150)
1,2-Dichloroethane-d4	94	(50 - 150)
Toluene-d8	94	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A9G160103 **Work Order #...:** LGQHP1AA **Matrix.....:** WATER
MB Lot-Sample #: A9G200000-377

Prep Date.....: 07/20/09 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 07/20/09 **Prep Batch #...:** 9201377
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
1,2-Dibromoethane	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
o-Xylene	ND	1.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	ND	2.0	ug/L	SW846 8260B
Chloromethane	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	1.0	ug/L	SW846 8260B
Methylene chloride	**0.38 J**	**2.0**	**ug/L**	**SW846 8260B**
Acetone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	10	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B
2-Hexanone	ND	10	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	2.0	ug/L	SW846 8260B

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A9G160103 **Work Order #...:** LGQHP1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	92	(50 - 150)
1,2-Dichloroethane-d4	83	(50 - 150)
Toluene-d8	92	(50 - 150)
4-Bromofluorobenzene	98	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A9G160103 **Work Order #...:** LGRAC1AA **Matrix.....:** WATER
MB Lot-Sample #: A9G210000-112

Prep Date.....: 07/21/09 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 07/21/09 **Prep Batch #...:** 9202112
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
1,2-Dibromoethane	ND	1.0	ug/L	SW846 8260B
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
o-Xylene	ND	1.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	ND	2.0	ug/L	SW846 8260B
Chloromethane	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	2.0	ug/L	SW846 8260B
Acetone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	10	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B
2-Hexanone	ND	10	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	2.0	ug/L	SW846 8260B

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A9G160103 **Work Order #...:** LGRAC1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	96	(50 - 150)
1,2-Dichloroethane-d4	93	(50 - 150)
Toluene-d8	91	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G160103 Work Order #...: LGQHP1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A9G200000-377 LGQHP1AD-LCSD
Prep Date.....: 07/20/09 Analysis Date..: 07/20/09
Prep Batch #...: 9201377
Dilution Factor: 1 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
cis-1,2-Dichloroethene	100	(73 - 133)			SW846 8260B
	105	(73 - 133)	4.6	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	93	(75 - 134)			SW846 8260B
	97	(75 - 134)	4.1	(0-30)	SW846 8260B
1,2-Dibromoethane	90	(75 - 127)			SW846 8260B
	93	(75 - 127)	3.4	(0-30)	SW846 8260B
Bromochloromethane	98	(75 - 127)			SW846 8260B
	104	(75 - 127)	5.6	(0-30)	SW846 8260B
m-Xylene & p-Xylene	94	(75 - 122)			SW846 8260B
	96	(75 - 122)	2.5	(0-30)	SW846 8260B
o-Xylene	94	(75 - 118)			SW846 8260B
	100	(75 - 118)	6.0	(0-30)	SW846 8260B
Chloromethane	76	(58 - 135)			SW846 8260B
	77	(58 - 135)	1.6	(0-30)	SW846 8260B
Bromomethane	56	(35 - 153)			SW846 8260B
	62	(35 - 153)	10	(0-30)	SW846 8260B
Vinyl chloride	65 a	(73 - 134)			SW846 8260B
	68 a	(73 - 134)	3.8	(0-30)	SW846 8260B
Chloroethane	56 a	(72 - 129)			SW846 8260B
	59 a	(72 - 129)	4.5	(0-30)	SW846 8260B
Methylene chloride	89	(69 - 118)			SW846 8260B
	94	(69 - 118)	4.7	(0-30)	SW846 8260B
Acetone	108	(51 - 157)			SW846 8260B
	111	(51 - 157)	2.8	(0-30)	SW846 8260B
Carbon disulfide	109	(74 - 123)			SW846 8260B
	114	(74 - 123)	4.6	(0-30)	SW846 8260B
1,1-Dichloroethene	90	(75 - 125)			SW846 8260B
	93	(75 - 125)	3.9	(0-30)	SW846 8260B
1,1-Dichloroethane	93	(75 - 133)			SW846 8260B
	95	(75 - 133)	2.2	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	97	(85 - 111)			SW846 8260B
	101	(85 - 111)	4.4	(0-30)	SW846 8260B
Chloroform	93	(74 - 127)			SW846 8260B
	97	(74 - 127)	3.8	(0-30)	SW846 8260B
1,2-Dichloroethane	90	(67 - 132)			SW846 8260B
	93	(67 - 132)	2.8	(0-30)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G160103 Work Order #...: LGQHP1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A9G200000-377 LGQHP1AD-LCSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Butanone	94	(45 - 150)			SW846 8260B
	85	(45 - 150)	9.6	(0-30)	SW846 8260B
1,1,1-Trichloroethane	100	(70 - 127)			SW846 8260B
	103	(70 - 127)	3.0	(0-30)	SW846 8260B
Carbon tetrachloride	98	(71 - 132)			SW846 8260B
	101	(71 - 132)	3.6	(0-30)	SW846 8260B
Bromodichloromethane	93	(70 - 130)			SW846 8260B
	97	(70 - 130)	4.8	(0-30)	SW846 8260B
1,2-Dichloropropane	89	(75 - 127)			SW846 8260B
	92	(75 - 127)	3.0	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	91	(73 - 132)			SW846 8260B
	94	(73 - 132)	3.4	(0-30)	SW846 8260B
Trichloroethene	97	(67 - 128)			SW846 8260B
	101	(67 - 128)	3.4	(0-30)	SW846 8260B
Dibromochloromethane	90	(74 - 145)			SW846 8260B
	95	(74 - 145)	5.3	(0-30)	SW846 8260B
1,1,2-Trichloroethane	86	(75 - 136)			SW846 8260B
	91	(75 - 136)	5.5	(0-30)	SW846 8260B
Benzene	95	(75 - 126)			SW846 8260B
	97	(75 - 126)	2.1	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	81	(74 - 131)			SW846 8260B
	86	(74 - 131)	5.3	(0-30)	SW846 8260B
Bromoform	88	(72 - 136)			SW846 8260B
	91	(72 - 136)	3.9	(0-30)	SW846 8260B
4-Methyl-2-pentanone	92	(59 - 150)			SW846 8260B
	95	(59 - 150)	2.7	(0-30)	SW846 8260B
2-Hexanone	90	(53 - 139)			SW846 8260B
	92	(53 - 139)	2.9	(0-30)	SW846 8260B
Tetrachloroethene	88	(75 - 129)			SW846 8260B
	90	(75 - 129)	2.1	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	84	(68 - 129)			SW846 8260B
	89	(68 - 129)	5.8	(0-30)	SW846 8260B
Toluene	91	(75 - 125)			SW846 8260B
	95	(75 - 125)	4.2	(0-30)	SW846 8260B
Chlorobenzene	92	(75 - 127)			SW846 8260B
	93	(75 - 127)	1.7	(0-30)	SW846 8260B
Ethylbenzene	94	(75 - 120)			SW846 8260B
	97	(75 - 120)	3.6	(0-30)	SW846 8260B
Styrene	90	(75 - 130)			SW846 8260B
	94	(75 - 130)	4.0	(0-30)	SW846 8260B
Xylenes (total)	94	(90 - 114)			SW846 8260B
	97	(90 - 114)	3.7	(0-30)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G160103 **Work Order #...:** LGQHP1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A9G200000-377 LGQHP1AD-LCSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	95	(50 - 150)
	95	(50 - 150)
1,2-Dichloroethane-d4	84	(50 - 150)
	83	(50 - 150)
Toluene-d8	97	(50 - 150)
	96	(50 - 150)
4-Bromofluorobenzene	107	(50 - 150)
	107	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G160103 Work Order #...: LGRAC1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A9G210000-112 LGRAC1AD-LCSD
Prep Date.....: 07/21/09 Analysis Date..: 07/21/09
Prep Batch #...: 9202112
Dilution Factor: 1 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
cis-1,2-Dichloroethene	93	(73 - 133)			SW846 8260B
	90	(73 - 133)	3.3	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	87	(75 - 134)			SW846 8260B
	89	(75 - 134)	2.1	(0-30)	SW846 8260B
1,2-Dibromoethane	90	(75 - 127)			SW846 8260B
	95	(75 - 127)	5.4	(0-30)	SW846 8260B
Bromochloromethane	92	(75 - 127)			SW846 8260B
	92	(75 - 127)	0.24	(0-30)	SW846 8260B
m-Xylene & p-Xylene	97	(75 - 122)			SW846 8260B
	94	(75 - 122)	3.1	(0-30)	SW846 8260B
o-Xylene	95	(75 - 118)			SW846 8260B
	93	(75 - 118)	2.0	(0-30)	SW846 8260B
Chloromethane	68	(58 - 135)			SW846 8260B
	55 a	(58 - 135)	21	(0-30)	SW846 8260B
Bromomethane	66	(35 - 153)			SW846 8260B
	63	(35 - 153)	5.4	(0-30)	SW846 8260B
Vinyl chloride	73	(73 - 134)			SW846 8260B
	73	(73 - 134)	0.0	(0-30)	SW846 8260B
Chloroethane	65 a	(72 - 129)			SW846 8260B
	64 a	(72 - 129)	1.2	(0-30)	SW846 8260B
Methylene chloride	82	(69 - 118)			SW846 8260B
	79	(69 - 118)	4.6	(0-30)	SW846 8260B
Acetone	93	(51 - 157)			SW846 8260B
	97	(51 - 157)	4.2	(0-30)	SW846 8260B
Carbon disulfide	73 a	(74 - 123)			SW846 8260B
	71 a	(74 - 123)	2.0	(0-30)	SW846 8260B
1,1-Dichloroethene	84	(75 - 125)			SW846 8260B
	81	(75 - 125)	3.4	(0-30)	SW846 8260B
1,1-Dichloroethane	88	(75 - 133)			SW846 8260B
	90	(75 - 133)	1.4	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	90	(85 - 111)			SW846 8260B
	90	(85 - 111)	0.67	(0-30)	SW846 8260B
Chloroform	91	(74 - 127)			SW846 8260B
	90	(74 - 127)	0.41	(0-30)	SW846 8260B
1,2-Dichloroethane	94	(67 - 132)			SW846 8260B
	90	(67 - 132)	4.7	(0-30)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G160103 Work Order #...: LGRAC1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A9G210000-112 LGRAC1AD-LCSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Butanone	90	(45 - 150)			SW846 8260B
	88	(45 - 150)	1.8	(0-30)	SW846 8260B
1,1,1-Trichloroethane	95	(70 - 127)			SW846 8260B
	96	(70 - 127)	1.3	(0-30)	SW846 8260B
Carbon tetrachloride	100	(71 - 132)			SW846 8260B
	100	(71 - 132)	0.080	(0-30)	SW846 8260B
Bromodichloromethane	98	(70 - 130)			SW846 8260B
	96	(70 - 130)	2.4	(0-30)	SW846 8260B
1,2-Dichloropropane	90	(75 - 127)			SW846 8260B
	89	(75 - 127)	1.0	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	80	(73 - 132)			SW846 8260B
	80	(73 - 132)	0.54	(0-30)	SW846 8260B
Trichloroethene	91	(67 - 128)			SW846 8260B
	93	(67 - 128)	2.2	(0-30)	SW846 8260B
Dibromochloromethane	97	(74 - 145)			SW846 8260B
	95	(74 - 145)	1.6	(0-30)	SW846 8260B
1,1,2-Trichloroethane	91	(75 - 136)			SW846 8260B
	90	(75 - 136)	1.2	(0-30)	SW846 8260B
Benzene	90	(75 - 126)			SW846 8260B
	90	(75 - 126)	0.33	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	84	(74 - 131)			SW846 8260B
	83	(74 - 131)	0.92	(0-30)	SW846 8260B
Bromoform	109	(72 - 136)			SW846 8260B
	105	(72 - 136)	3.4	(0-30)	SW846 8260B
4-Methyl-2-pentanone	87	(59 - 150)			SW846 8260B
	86	(59 - 150)	1.2	(0-30)	SW846 8260B
2-Hexanone	83	(53 - 139)			SW846 8260B
	82	(53 - 139)	1.1	(0-30)	SW846 8260B
Tetrachloroethene	95	(75 - 129)			SW846 8260B
	94	(75 - 129)	0.45	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	81	(68 - 129)			SW846 8260B
	83	(68 - 129)	2.5	(0-30)	SW846 8260B
Toluene	89	(75 - 125)			SW846 8260B
	88	(75 - 125)	1.4	(0-30)	SW846 8260B
Chlorobenzene	91	(75 - 127)			SW846 8260B
	90	(75 - 127)	1.3	(0-30)	SW846 8260B
Ethylbenzene	90	(75 - 120)			SW846 8260B
	92	(75 - 120)	2.8	(0-30)	SW846 8260B
Styrene	96	(75 - 130)			SW846 8260B
	94	(75 - 130)	1.4	(0-30)	SW846 8260B
Xylenes (total)	96	(90 - 114)			SW846 8260B
	94	(90 - 114)	2.8	(0-30)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G160103 **Work Order #...:** LGRAC1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A9G210000-112 LGRAC1AD-LCSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	93	(50 - 150)
	94	(50 - 150)
1,2-Dichloroethane-d4	90	(50 - 150)
	98	(50 - 150)
Toluene-d8	91	(50 - 150)
	92	(50 - 150)
4-Bromofluorobenzene	100	(50 - 150)
	98	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G160103 Work Order #...: LGJ9N1AC-MS Matrix.....: WG
MS Lot-Sample #: A9G160103-002 LGJ9N1AD-MSD
Date Sampled...: 07/15/09 08:35 Date Received..: 07/16/09
Prep Date.....: 07/20/09 Analysis Date..: 07/20/09
Prep Batch #...: 9201377
Dilution Factor: 1 Initial Wgt/Vol: 5 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
cis-1,2-Dichloroethene	106	(70 - 130)			SW846 8260B
	106	(70 - 130)	0.08	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	104	(70 - 130)			SW846 8260B
	101	(70 - 130)	3.2	(0-30)	SW846 8260B
1,2-Dibromoethane	90	(70 - 130)			SW846 8260B
	88	(70 - 130)	2.4	(0-30)	SW846 8260B
Bromochloromethane	103	(70 - 130)			SW846 8260B
	102	(70 - 130)	1.2	(0-30)	SW846 8260B
m-Xylene & p-Xylene	99	(70 - 130)			SW846 8260B
	101	(70 - 130)	2.4	(0-30)	SW846 8260B
o-Xylene	101	(70 - 130)			SW846 8260B
	103	(70 - 130)	2.3	(0-30)	SW846 8260B
Chloromethane	101	(70 - 130)			SW846 8260B
	98	(70 - 130)	2.4	(0-30)	SW846 8260B
Bromomethane	70	(70 - 130)			SW846 8260B
	65 a	(70 - 130)	6.4	(0-30)	SW846 8260B
Vinyl chloride	86	(70 - 130)			SW846 8260B
	85	(70 - 130)	0.47	(0-30)	SW846 8260B
Chloroethane	65 a	(70 - 130)			SW846 8260B
	61 a	(70 - 130)	6.4	(0-30)	SW846 8260B
Methylene chloride	97	(70 - 130)			SW846 8260B
	96	(70 - 130)	1.2	(0-30)	SW846 8260B
Acetone	101	(70 - 130)			SW846 8260B
	96	(70 - 130)	5.8	(0-30)	SW846 8260B
Carbon disulfide	140 a	(70 - 130)			SW846 8260B
	141 a	(70 - 130)	0.94	(0-30)	SW846 8260B
1,1-Dichloroethene	104	(70 - 130)			SW846 8260B
	102	(70 - 130)	1.9	(0-30)	SW846 8260B
1,1-Dichloroethane	100	(70 - 130)			SW846 8260B
	100	(70 - 130)	0.04	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	105	(70 - 130)			SW846 8260B
	104	(70 - 130)	1.5	(0-30)	SW846 8260B
Chloroform	97	(70 - 130)			SW846 8260B
	97	(70 - 130)	0.12	(0-30)	SW846 8260B
1,2-Dichloroethane	93	(70 - 130)			SW846 8260B
	92	(70 - 130)	1.3	(0-30)	SW846 8260B
2-Butanone	77	(70 - 130)			SW846 8260B
	79	(70 - 130)	2.6	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G160103 Work Order #...: LGJ9N1AC-MS Matrix.....: WG
MS Lot-Sample #: A9G160103-002 LGJ9N1AD-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1,1-Trichloroethane	110	(70 - 130)			SW846 8260B
	109	(70 - 130)	1.5	(0-30)	SW846 8260B
Carbon tetrachloride	110	(70 - 130)			SW846 8260B
	111	(70 - 130)	0.63	(0-30)	SW846 8260B
Bromodichloromethane	93	(70 - 130)			SW846 8260B
	94	(70 - 130)	0.71	(0-30)	SW846 8260B
1,2-Dichloropropane	93	(70 - 130)			SW846 8260B
	93	(70 - 130)	0.61	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	90	(70 - 130)			SW846 8260B
	89	(70 - 130)	2.0	(0-30)	SW846 8260B
Trichloroethene	99	(70 - 130)			SW846 8260B
	102	(70 - 130)	2.8	(0-30)	SW846 8260B
Dibromochloromethane	90	(70 - 130)			SW846 8260B
	89	(70 - 130)	0.60	(0-30)	SW846 8260B
1,1,2-Trichloroethane	86	(70 - 130)			SW846 8260B
	88	(70 - 130)	2.5	(0-30)	SW846 8260B
Benzene	101	(70 - 130)			SW846 8260B
	99	(70 - 130)	2.3	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	82	(70 - 130)			SW846 8260B
	82	(70 - 130)	0.62	(0-30)	SW846 8260B
Bromoform	83	(70 - 130)			SW846 8260B
	84	(70 - 130)	0.90	(0-30)	SW846 8260B
4-Methyl-2-pentanone	83	(70 - 130)			SW846 8260B
	83	(70 - 130)	0.26	(0-30)	SW846 8260B
2-Hexanone	84	(70 - 130)			SW846 8260B
	81	(70 - 130)	3.1	(0-30)	SW846 8260B
Tetrachloroethene	94	(70 - 130)			SW846 8260B
	92	(70 - 130)	2.3	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	84	(70 - 130)			SW846 8260B
	84	(70 - 130)	0.28	(0-30)	SW846 8260B
Toluene	96	(70 - 130)			SW846 8260B
	97	(70 - 130)	0.66	(0-30)	SW846 8260B
Chlorobenzene	96	(70 - 130)			SW846 8260B
	96	(70 - 130)	0.13	(0-30)	SW846 8260B
Ethylbenzene	99	(70 - 130)			SW846 8260B
	99	(70 - 130)	0.13	(0-30)	SW846 8260B
Styrene	93	(70 - 130)			SW846 8260B
	94	(70 - 130)	0.88	(0-30)	SW846 8260B
Xylenes (total)	99	(70 - 130)			SW846 8260B
	102	(70 - 130)	2.4	(0-30)	SW846 8260B

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G160103 **Work Order #...:** LGJ9N1AC-MS **Matrix.....:** WG
MS Lot-Sample #: A9G160103-002 LGJ9N1AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	98	(50 - 150)
	98	(50 - 150)
1,2-Dichloroethane-**d**4	90	(50 - 150)
	85	(50 - 150)
Toluene-d8	98	(50 - 150)
	98	(50 - 150)
4-Bromofluorobenzene	103	(50 - 150)
	102	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G160103 Work Order #...: LGJ9W1AC-MS Matrix.....: WG
MS Lot-Sample #: A9G160103-006 LGJ9W1AD-MSD
Date Sampled...: 07/15/09 11:55 Date Received..: 07/16/09
Prep Date.....: 07/20/09 Analysis Date..: 07/20/09
Prep Batch #...: 9201377
Dilution Factor: 1 Initial Wgt/Vol: 5 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
cis-1,2-Dichloroethene	109	(70 - 130)			SW846 8260B
	119	(70 - 130)	8.2	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	104	(70 - 130)			SW846 8260B
	110	(70 - 130)	5.4	(0-30)	SW846 8260B
1,2-Dibromoethane	88	(70 - 130)			SW846 8260B
	92	(70 - 130)	4.3	(0-30)	SW846 8260B
Bromochloromethane	105	(70 - 130)			SW846 8260B
	112	(70 - 130)	7.1	(0-30)	SW846 8260B
m-Xylene & p-Xylene	102	(70 - 130)			SW846 8260B
	107	(70 - 130)	5.4	(0-30)	SW846 8260B
o-Xylene	103	(70 - 130)			SW846 8260B
	109	(70 - 130)	5.2	(0-30)	SW846 8260B
Chloromethane	106	(70 - 130)			SW846 8260B
	109	(70 - 130)	2.8	(0-30)	SW846 8260B
Bromomethane	76	(70 - 130)			SW846 8260B
	87	(70 - 130)	13	(0-30)	SW846 8260B
Vinyl chloride	91	(70 - 130)			SW846 8260B
	90	(70 - 130)	0.49	(0-30)	SW846 8260B
Chloroethane	67 a	(70 - 130)			SW846 8260B
	72	(70 - 130)	7.7	(0-30)	SW846 8260B
Methylene chloride	100	(70 - 130)			SW846 8260B
	108	(70 - 130)	7.2	(0-30)	SW846 8260B
Acetone	98	(70 - 130)			SW846 8260B
	100	(70 - 130)	2.2	(0-30)	SW846 8260B
Carbon disulfide	146 a	(70 - 130)			SW846 8260B
	152 a	(70 - 130)	4.1	(0-30)	SW846 8260B
1,1-Dichloroethene	106	(70 - 130)			SW846 8260B
	111	(70 - 130)	4.1	(0-30)	SW846 8260B
1,1-Dichloroethane	103	(70 - 130)			SW846 8260B
	109	(70 - 130)	5.7	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	107	(70 - 130)			SW846 8260B
	114	(70 - 130)	6.8	(0-30)	SW846 8260B
Chloroform	100	(70 - 130)			SW846 8260B
	106	(70 - 130)	5.6	(0-30)	SW846 8260B
1,2-Dichloroethane	94	(70 - 130)			SW846 8260B
	99	(70 - 130)	5.7	(0-30)	SW846 8260B
2-Butanone	76	(70 - 130)			SW846 8260B
	79	(70 - 130)	5.1	(0-30)	SW846 8260B

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G160103 Work Order #...: LGJ9W1AC-MS Matrix.....: WG
MS Lot-Sample #: A9G160103-006 LGJ9W1AD-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1,1-Trichloroethane	114	(70 - 130)			SW846 8260B
	119	(70 - 130)	4.3	(0-30)	SW846 8260B
Carbon tetrachloride	116	(70 - 130)			SW846 8260B
	118	(70 - 130)	2.3	(0-30)	SW846 8260B
Bromodichloromethane	96	(70 - 130)			SW846 8260B
	103	(70 - 130)	7.5	(0-30)	SW846 8260B
1,2-Dichloropropane	94	(70 - 130)			SW846 8260B
	97	(70 - 130)	3.0	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	90	(70 - 130)			SW846 8260B
	96	(70 - 130)	7.0	(0-30)	SW846 8260B
Trichloroethene	102	(70 - 130)			SW846 8260B
	108	(70 - 130)	5.6	(0-30)	SW846 8260B
Dibromochloromethane	92	(70 - 130)			SW846 8260B
	96	(70 - 130)	4.5	(0-30)	SW846 8260B
1,1,2-Trichloroethane	87	(70 - 130)			SW846 8260B
	89	(70 - 130)	1.8	(0-30)	SW846 8260B
Benzene	102	(70 - 130)			SW846 8260B
	107	(70 - 130)	4.1	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	82	(70 - 130)			SW846 8260B
	86	(70 - 130)	4.4	(0-30)	SW846 8260B
Bromoform	84	(70 - 130)			SW846 8260B
	84	(70 - 130)	0.03	(0-30)	SW846 8260B
4-Methyl-2-pentanone	84	(70 - 130)			SW846 8260B
	86	(70 - 130)	2.0	(0-30)	SW846 8260B
2-Hexanone	84	(70 - 130)			SW846 8260B
	80	(70 - 130)	4.5	(0-30)	SW846 8260B
Tetrachloroethene	96	(70 - 130)			SW846 8260B
	99	(70 - 130)	2.4	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	84	(70 - 130)			SW846 8260B
	87	(70 - 130)	3.1	(0-30)	SW846 8260B
Toluene	96	(70 - 130)			SW846 8260B
	102	(70 - 130)	5.8	(0-30)	SW846 8260B
Chlorobenzene	96	(70 - 130)			SW846 8260B
	102	(70 - 130)	5.8	(0-30)	SW846 8260B
Ethylbenzene	100	(70 - 130)			SW846 8260B
	103	(70 - 130)	3.0	(0-30)	SW846 8260B
Styrene	94	(70 - 130)			SW846 8260B
	98	(70 - 130)	4.9	(0-30)	SW846 8260B
Xylenes (total)	102	(70 - 130)			SW846 8260B
	108	(70 - 130)	5.3	(0-30)	SW846 8260B

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G160103 **Work Order #...:** LGJ9W1AC-MS **Matrix.....:** WG
MS Lot-Sample #: A9G160103-006 LGJ9W1AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	101	(50 - 150)
	101	(50 - 150)
1,2-Dichloroethane-d4	91	(50 - 150)
	91	(50 - 150)
Toluene-d8	97	(50 - 150)
	97	(50 - 150)
4-Bromofluorobenzene	102	(50 - 150)
	101	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

5A
VOLATILE ORGANIC GC/MS TUNING AND MASS
CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: NORTH CANTON Contract:

Lab Code: TALCAN Case No.: SAS No.: SDG No.: A9G160103

Lab File ID: BFB119 BFB Injection Date: 07/21/09

Instrument ID: A3UX11 BFB Injection Time: 0925

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.9
75	30.0 - 60.0% of mass 95	52.8
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.4
173	Less than 2.0% of mass 174	0.2 (0.2)1
174	50.0 - 100.0% of mass 95	83.5
175	5.0 - 9.0% of mass 174	5.8 (6.9)1
176	Greater than 95.0%, but less than 101.0% of mass 174	80.5 (96.4)1
177	5.0 - 9.0% of mass 176	5.5 (6.8)2

1-Value is % of mass 174 2-Value is % of mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD010	50NG-CC	UXJ3223	07/21/09	0949
02	LGRAC-CHK	LGRAC1AC	UXJ3225	07/21/09	1036
03	LGRAC-BLK	LGRAC1AA	UXJ3227	07/21/09	1123
04	LGRAC-CKDUP	LGRAC1AD	UXJ3228	07/21/09	1147
05	FWGLL11MW-00	LGKCW1AA	UXJ3230	07/21/09	1234
06	FWGASYMW-005	LGKC01AA	UXJ3231	07/21/09	1258
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page 1 of 1

FORM V VOA 1/87 Rev.

5A
VOLATILE ORGANIC GC/MS TUNING AND MASS
CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: NORTH CANTON Contract:

Lab Code: TALCAN Case No.: SAS No.: SDG No.: A9G160103

Lab File ID: BFB3336 BFB Injection Date: 07/20/09

Instrument ID: A3UX10 BFB Injection Time: 1148

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.4
75	30.0 - 60.0% of mass 95	50.1
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.4 (0.4)1
174	50.0 - 100.0% of mass 95	99.9
175	5.0 - 9.0% of mass 174	6.9 (6.9)1
176	Greater than 95.0%, but less than 101.0% of mass 174	95.4 (95.5)1
177	5.0 - 9.0% of mass 176	6.1 (6.4)2

1-Value is % of mass 174 2-Value is % of mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD010	50NG-CC	UXX3592	07/20/09	1214
02	LGQHP-CHK	LGQHP1AC	UXX3595	07/20/09	1319
03	LGQHP-CKDUP	LGQHP1AD	UXX3596	07/20/09	1340
04	LGQHP-BLK	LGQHP1AA	UXX3597	07/20/09	1402
05	FWGLL10MW-00	LGJ9N1AA	UXX3598	07/20/09	1424
06	FWGLL11MW-00	LGJ9W1AA	UXX3599	07/20/09	1445
07	FWGLL10MW-00	LGJ9T1AA	UXX3600	07/20/09	1507
08	FWGLL11MW-00	LGJ911AA	UXX3601	07/20/09	1528
09	FWGLL10MW-00	LGJ9N1AC	UXX3602	07/20/09	1552
10	FWGLL10MW-00	LGJ9N1AD	UXX3603	07/20/09	1617
11	FWGLL11MW-00	LGJ9W1AC	UXX3604	07/20/09	1639
12	FWGLL11MW-00	LGJ9W1AD	UXX3605	07/20/09	1700
13	FWGTEAM1-TRI	LGJ9K1AA	UXX3606	07/20/09	1722
14	FWGASYMW-003	LGJ951AA	UXX3607	07/20/09	1744
15	FWGASYMW-004	LGJ991AA	UXX3608	07/20/09	1805
16	FWGTEAM2-TRI	LGKAL1AA	UXX3609	07/20/09	1827
17	FWGLL10MW-00	LGKAQ1AA	UXX3610	07/20/09	1849
18	FWGLL10MW-DU	LGKAT1AA	UXX3611	07/20/09	1910
19	FWGLL11MW-01	LGKAX1AA	UXX3612	07/20/09	1932
20	FWGLL11MW-DU	LGKA21AA	UXX3613	07/20/09	1953
21	FWGASYMW-001	LGKA61AA	UXX3614	07/20/09	2015
22	FWGEQUIPRINS	LGKA81AA	UXX3615	07/20/09	2036

5A
VOLATILE ORGANIC GC/MS TUNING AND MASS
CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: NORTH CANTON Contract:

Lab Code: TALCAN Case No.: SAS No.: SDG No.: A9G160103

Lab File ID: BFB3336 BFB Injection Date: 07/20/09

Instrument ID: A3UX10 BFB Injection Time: 1148

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.4
75	30.0 - 60.0% of mass 95	50.1
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.4 (0.4)1
174	50.0 - 100.0% of mass 95	99.9
175	5.0 - 9.0% of mass 174	6.9 (6.9)1
176	Greater than 95.0%, but less than 101.0% of mass 174	95.4 (95.5)1
177	5.0 - 9.0% of mass 176	6.1 (6.4)2

1-Value is % of mass 174 2-Value is % of mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	FWGASYMW-002	LGKCA1AA	UXX3616	07/20/09	2057
02	FWGTEAM3-TRI	LGKCH1AA	UXX3617	07/20/09	2119
03	FWGLL11MW-00	LGKCJ1AA	UXX3618	07/20/09	2141
04	FWGLL11MW-00	LGKCN1AA	UXX3619	07/20/09	2203
05	FWGLL11MW-00	LGKCQ1AA	UXX3620	07/20/09	2227
06	FWGLL11MW-00	LGKCT1AA	UXX3621	07/20/09	2249
07					
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18					
19					
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21					
22					

Data File: \\cansvr11\dd\chem\MSV\a3ux10.i\P90720A.b\UXX3622.D
Report Date: 21-Jul-2009 08:44

TestAmerica North Canton

RECOVERY REPORT

7/20/09
@
2310.

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: QCMRL
Level: LOW
Data Type: MS DATA
SpikeList File: MRL.spk
Sublist File: 2-8260.SUB

Client SDG: SDGa00932
Fraction: VOA

Operator: 1904
SampleType: METHSPIKE
Quant Type: ISTD

Method File: \\cansvr11\dd\chem\MSV\a3ux10.i\P90720A.b\8260LLUX10.m
Misc Info: P90720A,8260LLUX10,2-8260.SUB,1904,3

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	17 1,1-Dichloroethene	1.000	1.024	102.45	70-130
	42 Trichloroethene	1.000	0.9791	97.91	70-130
	59 Chlorobenzene	1.000	0.9774	97.74	70-130
	50 Toluene	1.000	0.9975	99.75	70-130
	41 Benzene	1.000	1.102	110.24	70-130
	16 Acetone	2.000	1.794	89.71	70-130
	20 Carbon Disulfide	1.000	1.239	123.94	70-130
	9 Chloromethane	1.000	1.291	129.07	70-130
	11 Bromomethane	1.000	1.044	104.39	70-130
	10 Vinyl Chloride	1.000	0.9370	93.70	70-130
	12 Chloroethane	1.000	0.8242	82.42	70-130
	21 Methylene Chloride	1.000	1.507	150.69*	70-130
	28 1,1-Dichloroethane	1.000	1.013	101.29	70-130
M	31 1,2-Dichloroethene	2.000	2.059	102.97	70-130
	35 Chloroform	1.000	1.040	104.06	70-130
	40 1,2-Dichloroethane	1.000	1.014	101.43	70-130
	30 2-Butanone	2.000	1.735	86.77	70-130
	37 1,1,1-Trichloroeth	1.000	0.9943	99.43	70-130
	39 Carbon Tetrachlori	1.000	0.9461	94.61	70-130
	46 Bromodichlorometha	1.000	0.9123	91.23	70-130
	43 1,2-Dichloropropan	1.000	0.9314	93.14	70-130
	48 cis-1,3-Dichloropr	1.000	0.7736	77.36	70-130
	54 1,3-Dichloropropan	1.000	0.9000	90.00	70-130
	57 Dibromochlorometha	1.000	0.8363	83.63	70-130
	53 1,1,2-Trichloroeth	1.000	0.9798	97.98	70-130
	51 trans-1,3-Dichloro	1.000	0.9593	95.93	70-130
	49 4-Methyl-2-pentano	2.000	1.508	75.42	70-130
	56 2-Hexanone	2.000	2.013	100.65	70-130
	55 Tetrachloroethene	1.000	0.8635	86.35	70-130
	68 1,1,2,2-Tetrachlor	1.000	0.9413	94.13	70-130
	66 Bromoform	1.000	0.9921	99.21	70-130
	61 Ethylbenzene	1.000	0.8614	86.14	70-130
	65 Styrene	1.000	0.9874	98.75	70-130
M	63 Xylenes (total)	3.000	2.243	74.78	70-130
	32 cis-1,2-dichloroet	1.000	1.063	106.31	70-130
	25 trans-1,2-Dichloro	1.000	0.9963	99.63	70-130
	8 Dichlorodifluorome	1.000	0.9868	98.68	70-130
	13 Trichlorofluoromet	1.000	1.480	NJ 148.04*	70-130
	70 1,2,3-Trichloropro	1.000	0.9286	92.86	70-130
	18 Freon-113	1.000	0.9270	92.70	70-130

Data File: \\cansvr11\dd\chem\MSV\a3ux10.i\P90720A.b\UXX3622.D
Report Date: 21-Jul-2009 08:44

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
24 Methyl tert-butyl	1.000	0.8613	86.13	70-130
58 1,2-Dibromoethane	1.000	0.9591	95.91	70-130
67 Isopropylbenzene	1.000	0.9586	95.86	70-130
80 1,3-Dichlorobenzen	1.000	0.8958	89.58	70-130
81 1,4-Dichlorobenzen	1.000	0.9964	99.64	70-130
83 1,2-Dichlorobenzen	1.000	0.9396	93.96	70-130
84 1,2-Dibromo-3-chlo	1.000	0.8275	82.75	70-130
85 1,2,4-Trichloroben	1.000	0.7252	72.52	70-130
98 Cyclohexane	1.000	0.7392	73.92	70-130
143 Methyl Acetate	2.000	1.891	94.56	70-130
144 Methylcyclohexane	1.000	0.6635	NT 66.35*	70-130
71 Bromobenzene	1.000	0.9684	96.84	70-130
34 Bromochloromethane	1.000	1.028	102.82	70-130
82 n-Butylbenzene	1.000	0.5517	NT 55.17*	70-130
78 sec-Butylbenzene	1.000	0.5617	NT 56.17*	70-130
76 tert-Butylbenzene	1.000	0.9502	95.02	70-130
73 2-Chlorotoluene	1.000	0.7909	79.09	70-130
75 4-Chlorotoluene	1.000	0.7968	79.68	70-130
45 Dibromomethane	1.000	0.9854	98.54	70-130
33 2,2-Dichloropropan	1.000	0.8483	84.83	70-130
38 1,1-Dichloropropen	1.000	0.8921	89.21	70-130
86 Hexachlorobutadien	1.000	0.5588	NT 55.88*	70-130
19 Iodomethane	1.000	1.017	101.70	70-130
79 4-Isopropyltoluene	1.000	0.8765	87.65	70-130
87 Naphthalene	1.000	0.8536	85.36	70-130
72 n-Propylbenzene	1.000	0.6851	68.51*	70-130
60 1,1,1,2-Tetrachlor	1.000	0.8497	84.97	70-130
88 1,2,3-Trichloroben	1.000	0.6945	NT 69.45*	70-130
77 1,2,4-Trimethylben	1.000	0.9182	91.82	70-130
74 1,3,5-Trimethylben	1.000	0.9513	95.13	70-130
149 Vinyl Acetate-86	1.000	1.369	NT 136.91*	70-130
62 m + p-Xylene	2.000	1.492	74.61	70-130
64 Xylene-o	1.000	0.7511	75.11	70-130
49 4-Methyl-2-pentano	2.000	1.508	75.42	70-130
27 Vinyl acetate	1.000	1.065	106.48	70-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Dibromofluorometha	10.000	9.823	98.23	73-122
$ 5 1,2-Dichloroethane	10.000	9.167	91.67	61-128
$ 6 Toluene-d8	10.000	9.634	96.34	76-110
$ 7 Bromofluorobenzene	10.000	8.875	88.75	74-116

Data File: \\cansvr11\dd\chem\MSV\a3ux10.i\P90720A.b\UXX3594.D
Report Date: 20-Jul-2009 13:16

TestAmerica North Canton

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: QCMRL
Level: LOW
Data Type: MS DATA
SpikeList File: MRL.spk
Sublist File: 2-8260.SUB
Method File: \\cansvr11\dd\chem\MSV\a3ux10.i\P90720A.b\8260LLUX10.m
Misc Info: P90720A,8260LLUX10,2-8260.SUB,1904,3

Client SDG: SDGa00932
Fraction: VOA

Operator: 1904
SampleType: METHSPIKE
Quant Type: ISTD

7/20/09 @1257

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	17 1,1-Dichloroethene	1.000	1.062	106.23	70-130
	42 Trichloroethene	1.000	1.055	105.50	70-130
	59 Chlorobenzene	1.000	0.9830	98.30	70-130
	50 Toluene	1.000	0.9853	98.53	70-130
	41 Benzene	1.000	1.041	104.13	70-130
	16 Acetone	2.000	2.978	~~148.92*~~	70-130
	20 Carbon Disulfide	1.000	1.264	126.43	70-130
	9 Chloromethane	1.000	1.100	110.03	70-130
	11 Bromomethane	1.000	1.120	111.99	70-130
	10 Vinyl Chloride	1.000	0.9027	90.27	70-130
	12 Chloroethane	1.000	0.8707	87.07	70-130
	21 Methylene Chloride	1.000	1.316	~~131.58*~~	70-130
	28 1,1-Dichloroethane	1.000	0.9746	97.46	70-130
M	31 1,2-Dichloroethene	2.000	2.028	101.38	70-130
	35 Chloroform	1.000	0.9994	99.94	70-130
	40 1,2-Dichloroethane	1.000	0.9735	97.35	70-130
	30 2-Butanone	2.000	2.026	101.32	70-130
	37 1,1,1-Trichloroeth	1.000	1.054	105.43	70-130
	39 Carbon Tetrachlori	1.000	0.9721	97.21	70-130
	46 Bromodichlorometha	1.000	0.8763	87.63	70-130
	43 1,2-Dichloropropan	1.000	0.9268	92.69	70-130
	48 cis-1,3-Dichloropr	1.000	0.8193	81.93	70-130
	54 1,3-Dichloropropan	1.000	0.8947	89.47	70-130
	57 Dibromochlorometha	1.000	0.7901	79.01	70-130
	53 1,1,2-Trichloroeth	1.000	0.9344	93.44	70-130
	51 trans-1,3-Dichloro	1.000	1.010	101.05	70-130
	49 4-Methyl-2-pentano	2.000	1.726	86.32	70-130
	56 2-Hexanone	2.000	2.244	112.21	70-130
	55 Tetrachloroethene	1.000	0.9149	91.49	70-130
	68 1,1,2,2-Tetrachlor	1.000	0.8958	89.58	70-130
	66 Bromoform	1.000	1.073	107.27	70-130
	61 Ethylbenzene	1.000	0.8997	89.97	70-130
	65 Styrene	1.000	1.117	111.70	70-130
M	63 Xylenes (total)	3.000	2.661	88.71	70-130
	32 cis-1,2-dichloroet	1.000	1.043	104.29	70-130
	25 trans-1,2-Dichloro	1.000	0.9846	98.46	70-130
	8 Dichlorodifluorome	1.000	0.9221	92.21	70-130
	13 Trichlorofluoromet	1.000	1.665	NT 166.54*	70-130
	70 1,2,3-Trichloropro	1.000	0.8558	85.58	70-130
	18 Freon-113	1.000	1.106	110.57	70-130

Data File: \\cansvr11\dd\chem\MSV\a3ux10.i\P90720A.b\UXX3594.D
Report Date: 20-Jul-2009 13:16

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
24 Methyl tert-butyl	1.000	0.9441	94.41	70-130
58 1,2-Dibromoethane	1.000	0.9036	90.36	70-130
67 Isopropylbenzene	1.000	1.114	111.41	70-130
80 1,3-Dichlorobenzen	1.000	0.9297	92.97	70-130
81 1,4-Dichlorobenzen	1.000	0.9805	98.05	70-130
83 1,2-Dichlorobenzen	1.000	0.9266	92.66	70-130
84 1,2-Dibromo-3-chlo	1.000	0.9231	92.31	70-130
85 1,2,4-Trichloroben	1.000	0.8605	86.05	70-130
98 Cyclohexane	1.000	0.9192	91.92	70-130
143 Methyl Acetate	2.000	1.677	83.87	70-130
144 Methylcyclohexane	1.000	0.8801	88.01	70-130
71 Bromobenzene	1.000	0.9088	90.88	70-130
34 Bromochloromethane	1.000	1.038	103.75	70-130
82 n-Butylbenzene	1.000	0.6857	NT 68.57*	70-130
78 sec-Butylbenzene	1.000	0.7040	70.40	70-130
76 tert-Butylbenzene	1.000	1.060	106.03	70-130
73 2-Chlorotoluene	1.000	0.8254	82.54	70-130
75 4-Chlorotoluene	1.000	0.8504	85.04	70-130
45 Dibromomethane	1.000	1.029	102.93	70-130
33 2,2-Dichloropropan	1.000	1.023	102.30	70-130
38 1,1-Dichloropropen	1.000	1.020	101.98	70-130
86 Hexachlorobutadien	1.000	0.6630	NT 66.30*	70-130
19 Iodomethane	1.000	1.008	100.80	70-130
79 4-Isopropyltoluene	1.000	1.043	104.31	70-130
87 Naphthalene	1.000	1.122	112.17	70-130
72 n-Propylbenzene	1.000	0.8010	80.10	70-130
60 1,1,1,2-Tetrachlor	1.000	0.8785	87.85	70-130
88 1,2,3-Trichloroben	1.000	0.8646	86.46	70-130
77 1,2,4-Trimethylben	1.000	1.056	105.58	70-130
74 1,3,5-Trimethylben	1.000	1.044	104.43	70-130
149 Vinyl Acetate-86	1.000	1.189	118.90	70-130
62 m + p-Xylene	2.000	1.761	88.07	70-130
64 Xylene-o	1.000	0.8998	89.98	70-130
49 4-Methyl-2-pentano	2.000	1.726	86.32	70-130
27 Vinyl acetate	1.000	1.047	104.68	70-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Dibromofluorometha	10.000	9.571	95.71	73-122
$ 5 1,2-Dichloroethane	10.000	8.514	85.14	61-128
$ 6 Toluene-d8	10.000	9.343	93.43	76-110
$ 7 Bromofluorobenzene	10.000	10.326	103.26	74-116

GCMS SEMIVOLATILE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 28, 2009

SDG: A9G160103 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.6 – 4.8 °C. Upon receipt, it was documented by the laboratory, that the samples were not frozen and in good condition. Therefore, no qualifications were made to sample results based on temperatures less than 2°C.	QAPP Table 4-2
3. Were samples extracted using the correct preparation, clean-up methods?	✓				QAPP Table 4-2
4. Were samples extracted within required holding times (7 days - water)?	✓				QAPP Table 4-2 J/UJ/R
5. Were samples analyzed within required holding times (40 days after extraction)?	✓				QAPP Table 4-2 J/UJ/R
6. Were sample storage requirements met?	✓				QAPP Table 4-2
7. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-4 and 3-6
8. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-4 and 3-6
9. Was the GC/MS system tuned with decafluorotriphenylphosphine (DFTPP)?	✓				LCG Table 2
10. Were the criteria met during each 12 hour shift?	✓				LCG Table 2
11. Did the initial calibration curve consist of 5 concentration levels, with the low standard near but above the MDL?	✓			A4HP7-7/29/09, 8/3/09 stds = 0.05, 0.25, 0.50, 1.0, 2.5, 5.0, 7.5, 10.0, 12.5 ng on column	LCG Table 2 R
12. Did the Calibration Check Compounds (CCCs) (see Table 1 below) relative standard deviation (%RSD) ≤ 30%?	✓				LCG Table 2 R
13. Were the minimum response factors (RFs) for the System Performance Check Compounds (SPCCs) (see Table 2 below) met?	✓				LCG Table 2 R
14. Was each target analyte <15 % RSD, or was the average RSD <15%?	✓				LCG Table 2 15% <RSD< 30% = J/UJ

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 28, 2009

SDG: A9G160103 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
15. If a different calibration option was used, was the correlation coefficient (r^2) or the coefficient of determination ≥0.99?	✓			7/29/09- Benzoic acid, 2,4-dinitrophenol, 4,6-dinitro-2-methylphenol and pentachlorophenol used a quadratic fit. 8/3/09- Benzoic acid, 2,4-dinitrophenol and 4,6-dinitro-2-methylphenol used a quadratic fit. No qualifications were made as coefficients of determination (COD) (r) were≥0.99.	LCG Table 2 r<0.99=-J/R
16. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓			7/7/09	LCG Table 2 R
17. Was a MRL Level Verification run at the beginning and end of the sequence or every 12 hours?	✓				LCG Table 2
18. Were the QC/MRL recoveries 70-130%?		✓		The MRL check analyzed 8/3/09 at 2038 had 2,4-dinitrophenol recover below control limits at 41% and 4,6-dinitro-2-methylphenol at 41%. The 2,4-dinitrophenol and 4,6-dinitro-2-methylphenol results reported from 8/3/09 were qualified as non usable, "R", as the MDL check analyzed at the end of the run did not have detected concentrations for these targets.	LCG Table 2 >130%=J; 50-70%=J/UJ; <50%=J/R
19. Was a second source (ICV) verification analyzed after the ICAL? Were results 70-130%?	✓			7/29/09, 8/3/09	LCG Table 2 >130%=J; 50-70%=J/UJ; <50%=J/R
20. Was a CCV analyzed every 12 hours?			✓		LCG Table 2
21. Was the percent difference (% D) for the CCCs ≤ 20%? (see Table 1) (% drift if regression fit model used)			✓		LCG Table 2
22. Were the minimum RFs for the SPCCs met? (see Table 2)			✓		LCG Table 2
23. Was the %Difference or %Drift ≤20% for all target analytes? OR was the average %D ≤20% with no individual analyte ≥30%D?			✓		LCG Table 2 Avg D>20% and D>30% =R; Avg %D<20% and D>30% =J D>30% (neg) = J/R D>30% (pos) = J

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 28, 2009

SDG: A9G160103 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
24. Were the internal standards added to every sample?	✓				LCG Table 2
25. Were the retention times for all IS compounds within ±30 seconds from the RT of the mid-point ICAL std?	✓				LCG Table 2 R
26. Did the areas of all IS compounds vary by no more than -50% to +100% from the ICAL EICP area?	✓				LCG Table 2 R
27. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 2
28. Were all target analytes in the method blank <1/2 the MRL?		✓		Checked by ADR. Bis (2-Ethylhexyl) phthalate was detected in the method blanks at 1.4ug/L and 5.1ug/L. bis (2-Ethylhexyl) phthalate results <10x contamination were qualified, "B".	LCG Table 2 <5/10x blank = B
29. Was a field blank collected and analyzed?	✓			FWGEQUIPRinse3-1425-GW	
30. Were all target analytes in the field blank analysis <1/2 the MRL?	✓			Checked by ADR.	<5/10x blank = B
31. Was a field duplicate analyzed?	✓			Sample FWGLL11mw-DUP5-1417-GW was the field duplicate for sample FWGLL11mw-010c-1402-GW and FWGLL10mw-DUP4-1416-GW was the field duplicate for sample FWGLL10mw-006c-1394-GW.	
32. Were the field duplicate RPDs ≤30%?	✓			Checked by ADR. Only detected results above the RL were evaluated.	QAPP Table 3-2 RPD >30=J
33. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 2
34. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR.	LCG Appendix C >UL=J; 30%-LL=J/UJ; <30%=J/R
35. Was a MS/MSD pair prepared with each batch?	✓				LCG Table 2
36. Was the MS/MSD parent a Ravenna sample?	✓			Sample FWGLL10mw-004c-1392-GW and FWGLL11mw-004c-1397-GW were the parent MS/MSD samples from this SDG.	

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 28, 2009

SDG: A9G160103 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
37. Were MS/MSD recoveries 45-135% and RPD value ≤40%?		✓		FWGLL10mw-004c-1392-GW • Hexachloroethane recovered below control limits in the MSD at 44% and hexachlorocyclopentadiene recovered below control limits at 40%. FWGLL11mw-004c-1397-GW • 3,3'-dichlorobenzidine recovered below control limits in the MS/MSD at 30% and 21%. Hexachloroethane recovered below control limits in the MS at 40% and hexachlorocyclopentadiene recovered below control limits at 42%. No qualifications were made as the associated LCS recovered within limits.	LCG Table 2 Pj
38. Were surrogate recoveries within 50-150%?	✓				LCG Table 2 >150%=J; 10% -50%=J/UJ; <10%=J/R
39. Were reported sample concentrations within calibration range?	✓				
40. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
41. Were lab comments included in report? If yes, summarize contents.	✓			See narrative regarding MS outliers.	

References:
Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 2 and Attachment A "Data Validation Guidelines:
Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 28, 2009

SDG: A9G160103 R0
Analysis: SW846 8270C (including PAHs)

Table 1: CCCs

Base / Neutral Compunds	Acid Compounds
Acenaphthalene	4-Chloro-3-methylphenol
1,4-Dichlorobenzene	2,4-Dichlorophenol
Hexachlorobutadiene	2-Nitrophenol
N-Nitrosodiphehylamine	Phenol
Di-n-octylphthalate	Pentachlorophenol
Fluoroanthene	2,4,6-Trichlorophenol
Benzo(a)pyrene	

(All analytes if CCCs not included in standard)

Table 2: SPCCs

N-Nitroso-di-n-propylamine	0.050
Hexachlorocyclopentadiene	0.050
2,4-Dinitrophenol	0.050
4-Nitrophenol	0.050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-004C-1392-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-002 **Work Order #...:** LGJ9N1AE **Matrix.....:** WG
Date Sampled...: 07/15/09 08:35 **Date Received..:** 07/16/09
Prep Date.....: 07/16/09 **Analysis Date..:** 07/30/09
Prep Batch #...: 9197122
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**2.2 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-004C-1392-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-002 **Work Order #...:** LGJ9N1AE **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-004C-1392-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-002 **Work Order #...:** LGJ9N1AE **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	72	(50 - 150)
2-Fluorobiphenyl	60	(50 - 150)
Terphenyl-d14	78	(50 - 150)
Phenol-d5	73	(50 - 150)
2-Fluorophenol	70	(50 - 150)
2,4,6-Tribromophenol	75	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-005C-1393-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-004 **Work Order #...:** LGJ9T1AC **Matrix.....:** WG
Date Sampled...: 07/15/09 10:35 **Date Received..:** 07/16/09
Prep Date.....: 07/16/09 **Analysis Date..:** 07/30/09
Prep Batch #...: 9197122
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**3.5 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-005C-1393-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-004 **Work Order #...:** LGJ9T1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-005C-1393-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-004 **Work Order #...:** LGJ9T1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	76	(50 - 150)
2-Fluorobiphenyl	63	(50 - 150)
Terphenyl-d14	83	(50 - 150)
Phenol-d5	71	(50 - 150)
2-Fluorophenol	65	(50 - 150)
2,4,6-Tribromophenol	67	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-004C-1397-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-006 **Work Order #...:** LGJ9W1AE **Matrix.....:** WG
Date Sampled...: 07/15/09 11:55 **Date Received..:** 07/16/09
Prep Date.....: 07/16/09 **Analysis Date..:** 07/30/09
Prep Batch #...: 9197122
Dilution Factor: 1 **Initial Wgt/Vol:** 1040 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.3 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-004C-1397-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-006 **Work Order #...:** LGJ9W1AE **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-004C-1397-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-006 **Work Order #...:** LGJ9W1AE **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	65	(50 - 150)
2-Fluorobiphenyl	54	(50 - 150)
Terphenyl-d14	70	(50 - 150)
Phenol-d5	74	(50 - 150)
2-Fluorophenol	68	(50 - 150)
2,4,6-Tribromophenol	75	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-006C-1399-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-008 **Work Order #...:** LGJ911AC **Matrix.....:** WG
Date Sampled...: 07/15/09 14:05 **Date Received..:** 07/16/09
Prep Date.....: 07/16/09 **Analysis Date..:** 08/03/09
Prep Batch #...: 9197122
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**2.9 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-006C-1399-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-008 Work Order #...: LGJ911AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-006C-1399-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-008 **Work Order #...:** LGJ911AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	72	(50 - 150)
2-Fluorobiphenyl	61	(50 - 150)
Terphenyl-d14	79	(50 - 150)
Phenol-d5	69	(50 - 150)
2-Fluorophenol	69	(50 - 150)
2,4,6-Tribromophenol	73	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-003C-1405-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-010 **Work Order #...:** LGJ951AC **Matrix.....:** WG
Date Sampled...: 07/15/09 15:30 **Date Received..:** 07/16/09
Prep Date.....: 07/16/09 **Analysis Date..:** 07/30/09
Prep Batch #...: 9197122
Dilution Factor: 1 **Initial Wgt/Vol:** 990 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.5 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-003C-1405-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-010 **Work Order #...:** LGJ951AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-003C-1405-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-010 **Work Order #...:** LGJ951AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	73	(50 - 150)
2-Fluorobiphenyl	61	(50 - 150)
Terphenyl-d14	79	(50 - 150)
Phenol-d5	75	(50 - 150)
2-Fluorophenol	66	(50 - 150)
2,4,6-Tribromophenol	77	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-004C-1406-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-012 **Work Order #...:** LGJ991AC **Matrix.....:** WG
Date Sampled...: 07/15/09 16:45 **Date Received..:** 07/16/09
Prep Date.....: 07/16/09 **Analysis Date..:** 07/30/09
Prep Batch #...: 9197122
Dilution Factor: 1 **Initial Wgt/Vol:** 1030 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.4 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-004C-1406-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-012 **Work Order #...:** LGJ991AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-004C-1406-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-012 **Work Order #...:** LGJ991AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	69	(50 - 150)
2-Fluorobiphenyl	58	(50 - 150)
Terphenyl-d14	77	(50 - 150)
Phenol-d5	73	(50 - 150)
2-Fluorophenol	66	(50 - 150)
2,4,6-Tribromophenol	75	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-006C-1394-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-015 **Work Order #...:** LGKAQ1AC **Matrix.....:** WG
Date Sampled...: 07/15/09 08:50 **Date Received..:** 07/16/09
Prep Date.....: 07/16/09 **Analysis Date..:** 07/30/09
Prep Batch #...: 9197122
Dilution Factor: 1 **Initial Wgt/Vol:** 980 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**0.98 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-006C-1394-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-015 Work Order #...: LGKAQ1AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-006C-1394-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-015 **Work Order #...:** LGKAQ1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	66	(50 - 150)
2-Fluorobiphenyl	56	(50 - 150)
Terphenyl-d14	75	(50 - 150)
Phenol-d5	68	(50 - 150)
2-Fluorophenol	64	(50 - 150)
2,4,6-Tribromophenol	66	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-DUP4-1416-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-017 **Work Order #...:** LGKAT1AC **Matrix.....:** WG
Date Sampled...: 07/15/09 10:00 **Date Received..:** 07/16/09
Prep Date.....: 07/16/09 **Analysis Date..:** 07/30/09
Prep Batch #...: 9197122
Dilution Factor: 1 **Initial Wgt/Vol:** 990 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	0.80
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-DUP4-1416-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-017 **Work Order #...:** LGKAT1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-DUP4-1416-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-017 **Work Order #...:** LGKAT1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	69	(50 - 150)
2-Fluorobiphenyl	59	(50 - 150)
Terphenyl-d14	79	(50 - 150)
Phenol-d5	73	(50 - 150)
2-Fluorophenol	70	(50 - 150)
2,4,6-Tribromophenol	70	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-010C-1402-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-019 **Work Order #...:** LGKAX1AC **Matrix.....:** WG
Date Sampled...: 07/15/09 11:00 **Date Received..:** 07/16/09
Prep Date.....: 07/16/09 **Analysis Date..:** 08/03/09
Prep Batch #...: 9197122
Dilution Factor: 1 **Initial Wgt/Vol:** 950 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.1 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-010C-1402-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-019 **Work Order #...:** LGKAX1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-010C-1402-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-019 **Work Order #...:** LGKAX1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	84	(50 - 150)
2-Fluorobiphenyl	75	(50 - 150)
Terphenyl-d14	95	(50 - 150)
Phenol-d5	79	(50 - 150)
2-Fluorophenol	81	(50 - 150)
2,4,6-Tribromophenol	81	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-DUP5-1417-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-021 **Work Order #...:** LGKA21AC **Matrix.....:** WG
Date Sampled...: 07/15/09 12:00 **Date Received..:** 07/16/09
Prep Date.....: 07/16/09 **Analysis Date..:** 08/03/09
Prep Batch #...: 9197122
Dilution Factor: 1 **Initial Wgt/Vol:** 960 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**2.0 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-DUP5-1417-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-021 **Work Order #...:** LGKA21AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-DUP5-1417-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-021 **Work Order #...:** LGKA21AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	75	(50 - 150)
2-Fluorobiphenyl	63	(50 - 150)
Terphenyl-d14	81	(50 - 150)
Phenol-d5	71	(50 - 150)
2-Fluorophenol	72	(50 - 150)
2,4,6-Tribromophenol	67	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-001C-1403-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-023 **Work Order #...:** LGKA61AC **Matrix.....:** WG
Date Sampled...: 07/15/09 14:10 **Date Received..:** 07/16/09
Prep Date.....: 07/16/09 **Analysis Date..:** 08/03/09
Prep Batch #...: 9197122
Dilution Factor: 1 **Initial Wgt/Vol:** 990 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.7 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-001C-1403-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-023 **Work Order #...:** LGKA61AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-001C-1403-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-023 **Work Order #...:** LGKA61AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	76	(50 - 150)
2-Fluorobiphenyl	63	(50 - 150)
Terphenyl-d14	81	(50 - 150)
Phenol-d5	59	(50 - 150)
2-Fluorophenol	55	(50 - 150)
2,4,6-Tribromophenol	69	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1425-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-025 **Work Order #...:** LGKA81AC **Matrix.....:** WQ
Date Sampled...: 07/15/09 14:50 **Date Received..:** 07/16/09
Prep Date.....: 07/16/09 **Analysis Date..:** 08/03/09
Prep Batch #...: 9197122
Dilution Factor: 1 **Initial Wgt/Vol:** 960 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	0.80
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1425-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-025 **Work Order #...:** LGKA81AC **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1425-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-025 **Work Order #...:** LGKA81AC **Matrix.....:** WQ

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	77	(50 - 150)
2-Fluorobiphenyl	63	(50 - 150)
Terphenyl-d14	85	(50 - 150)
Phenol-d5	71	(50 - 150)
2-Fluorophenol	70	(50 - 150)
2,4,6-Tribromophenol	60	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-002C-1404-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-026 **Work Order #...:** LGKCA1AC **Matrix.....:** WG
Date Sampled...: 07/15/09 15:20 **Date Received..:** 07/16/09
Prep Date.....: 07/16/09 **Analysis Date..:** 08/03/09
Prep Batch #...: 9197122
Dilution Factor: 1 **Initial Wgt/Vol:** 1010 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.3 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-002C-1404-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-026 **Work Order #...:** LGKCA1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-002C-1404-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-026 **Work Order #...:** LGKCA1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	72	(50 - 150)
2-Fluorobiphenyl	60	(50 - 150)
Terphenyl-d14	80	(50 - 150)
Phenol-d5	69	(50 - 150)
2-Fluorophenol	67	(50 - 150)
2,4,6-Tribromophenol	68	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-005C-1398-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-029 **Work Order #...:** LGKCJ1AC **Matrix.....:** WG
Date Sampled...: 07/15/09 08:45 **Date Received..:** 07/16/09
Prep Date.....: 07/16/09 **Analysis Date..:** 08/03/09
Prep Batch #...: 9197122
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.0 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-005C-1398-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-029 **Work Order #...:** LGKCJ1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-005C-1398-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-029 **Work Order #...:** LGKCJ1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	69	(50 - 150)
2-Fluorobiphenyl	57	(50 - 150)
Terphenyl-d14	80	(50 - 150)
Phenol-d5	64	(50 - 150)
2-Fluorophenol	64	(50 - 150)
2,4,6-Tribromophenol	71	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-003C-1396-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-031 **Work Order #...:** LGKCN1AC **Matrix.....:** WG
Date Sampled...: 07/15/09 10:25 **Date Received..:** 07/16/09
Prep Date.....: 07/16/09 **Analysis Date..:** 08/03/09
Prep Batch #...: 9197122
Dilution Factor: 1 **Initial Wgt/Vol:** 1010 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.2 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-003C-1396-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-031 **Work Order #...:** LGKCN1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-003C-1396-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-031 **Work Order #...:** LGKCN1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	72	(50 - 150)
2-Fluorobiphenyl	61	(50 - 150)
Terphenyl-d14	83	(50 - 150)
Phenol-d5	68	(50 - 150)
2-Fluorophenol	66	(50 - 150)
2,4,6-Tribromophenol	73	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-009C-1401-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-033 **Work Order #...:** LGKCQ1AC **Matrix.....:** WG
Date Sampled...: 07/15/09 11:50 **Date Received..:** 07/16/09
Prep Date.....: 07/16/09 **Analysis Date..:** 08/03/09
Prep Batch #...: 9197122
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**5.9 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-009C-1401-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-033 **Work Order #...:** LGKCQ1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-009C-1401-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-033 **Work Order #...:** LGKCQ1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	72	(50 - 150)
2-Fluorobiphenyl	61	(50 - 150)
Terphenyl-d14	80	(50 - 150)
Phenol-d5	69	(50 - 150)
2-Fluorophenol	70	(50 - 150)
2,4,6-Tribromophenol	76	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-008C-1400-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-035 **Work Order #...:** LGKCT1AC **Matrix.....:** WG
Date Sampled...: 07/15/09 13:10 **Date Received..:** 07/16/09
Prep Date.....: 07/16/09 **Analysis Date..:** 07/30/09
Prep Batch #...: 9197123
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**3.5 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-008C-1400-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-035 **Work Order #...:** LGKCT1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-008C-1400-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-035 Work Order #...: LGKCT1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	70	(50 - 150)
2-Fluorobiphenyl	61	(50 - 150)
Terphenyl-d14	76	(50 - 150)
Phenol-d5	71	(50 - 150)
2-Fluorophenol	69	(50 - 150)
2,4,6-Tribromophenol	73	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-001C-1395-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-037 **Work Order #...:** LGKCW1AC **Matrix.....:** WG
Date Sampled...: 07/15/09 14:30 **Date Received..:** 07/16/09
Prep Date.....: 07/16/09 **Analysis Date..:** 07/30/09
Prep Batch #...: 9197123
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.1 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-001C-1395-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-037 **Work Order #...:** LGKCW1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-001C-1395-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-037 Work Order #...: LGKCW1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	72	(50 - 150)
2-Fluorobiphenyl	60	(50 - 150)
Terphenyl-d14	71	(50 - 150)
Phenol-d5	73	(50 - 150)
2-Fluorophenol	60	(50 - 150)
2,4,6-Tribromophenol	72	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-005C-1407-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-039 **Work Order #...:** LGKC01AC **Matrix.....:** WG
Date Sampled...: 07/15/09 16:20 **Date Received..:** 07/16/09
Prep Date.....: 07/16/09 **Analysis Date..:** 07/30/09
Prep Batch #...: 9197123
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	**12**	**10**	**ug/L**	**10**
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.9 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-005C-1407-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-039 Work Order #...: LGKC01AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-005C-1407-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160103-039 **Work Order #...:** LGKC01AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	67	(50 - 150)
2-Fluorobiphenyl	53	(50 - 150)
Terphenyl-d14	58	(50 - 150)
Phenol-d5	69	(50 - 150)
2-Fluorophenol	64	(50 - 150)
2,4,6-Tribromophenol	69	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A9G160103 **Work Order #...:** LGKH61AA **Matrix.....:** WATER
MB Lot-Sample #: A9G160000-122

Prep Date.....: 07/16/09 **Final Wgt/Vol..:** 2 mL
Analysis Date..: 07/30/09 **Prep Batch #...:** 9197122
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	0.20	ug/L	SW846 8270C
Acenaphthylene	ND	0.20	ug/L	SW846 8270C
Anthracene	ND	0.20	ug/L	SW846 8270C
Benzo(a)anthracene	ND	0.20	ug/L	SW846 8270C
Benzo(b)fluoranthene	ND	0.20	ug/L	SW846 8270C
Benzo(k)fluoranthene	ND	0.20	ug/L	SW846 8270C
Benzoic acid	ND	10	ug/L	SW846 8270C
Benzo(ghi)perylene	ND	0.20	ug/L	SW846 8270C
Benzo(a)pyrene	ND	0.20	ug/L	SW846 8270C
Benzyl alcohol	ND	5.0	ug/L	SW846 8270C
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	SW846 8270C
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	SW846 8270C
bis(2-Ethylhexyl) phthalate	**5.1 J**	**10**	**ug/L**	**SW846 8270C**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	SW846 8270C
Butyl benzyl phthalate	ND	1.0	ug/L	SW846 8270C
4-Chloroaniline	ND	2.0	ug/L	SW846 8270C
4-Chloro-3-methylphenol	ND	2.0	ug/L	SW846 8270C
2-Chloronaphthalene	ND	1.0	ug/L	SW846 8270C
2-Chlorophenol	ND	1.0	ug/L	SW846 8270C
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	SW846 8270C
Chrysene	ND	0.20	ug/L	SW846 8270C
Dibenz(a,h)anthracene	ND	0.20	ug/L	SW846 8270C
Dibenzofuran	ND	1.0	ug/L	SW846 8270C
Di-n-butyl phthalate	ND	1.0	ug/L	SW846 8270C
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8270C
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8270C
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8270C
3,3'-Dichlorobenzidine	ND	5.0	ug/L	SW846 8270C
2,4-Dichlorophenol	ND	2.0	ug/L	SW846 8270C
Diethyl phthalate	ND	1.0	ug/L	SW846 8270C
2,4-Dimethylphenol	ND	2.0	ug/L	SW846 8270C
Dimethyl phthalate	ND	1.0	ug/L	SW846 8270C
Di-n-octyl phthalate	ND	1.0	ug/L	SW846 8270C
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	SW846 8270C
2,4-Dinitrophenol	ND	5.0	ug/L	SW846 8270C

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A9G160103 **Work Order #...:** LGKH61AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,4-Dinitrotoluene	ND	5.0	ug/L	SW846 8270C
2,6-Dinitrotoluene	ND	5.0	ug/L	SW846 8270C
Fluoranthene	ND	0.20	ug/L	SW846 8270C
Fluorene	ND	0.20	ug/L	SW846 8270C
Hexachlorobenzene	ND	0.20	ug/L	SW846 8270C
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8270C
Hexachlorocyclopenta-diene	ND	10	ug/L	SW846 8270C
Hexachloroethane	ND	1.0	ug/L	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	SW846 8270C
Isophorone	ND	1.0	ug/L	SW846 8270C
2-Methylnaphthalene	ND	0.20	ug/L	SW846 8270C
2-Methylphenol	ND	1.0	ug/L	SW846 8270C
4-Methylphenol	ND	1.0	ug/L	SW846 8270C
Naphthalene	ND	0.20	ug/L	SW846 8270C
2-Nitroaniline	ND	2.0	ug/L	SW846 8270C
3-Nitroaniline	ND	2.0	ug/L	SW846 8270C
4-Nitroaniline	ND	2.0	ug/L	SW846 8270C
Nitrobenzene	ND	1.0	ug/L	SW846 8270C
2-Nitrophenol	ND	2.0	ug/L	SW846 8270C
4-Nitrophenol	ND	5.0	ug/L	SW846 8270C
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	SW846 8270C
N-Nitrosodiphenylamine	ND	1.0	ug/L	SW846 8270C
Pentachlorophenol	ND	5.0	ug/L	SW846 8270C
Phenanthrene	ND	0.20	ug/L	SW846 8270C
Phenol	ND	1.0	ug/L	SW846 8270C
Pyrene	ND	0.20	ug/L	SW846 8270C
1,2,4-Trichloro-benzene	ND	1.0	ug/L	SW846 8270C
2,4,5-Trichloro-phenol	ND	5.0	ug/L	SW846 8270C
2,4,6-Trichloro-phenol	ND	5.0	ug/L	SW846 8270C
Carbazole	ND	1.0	ug/L	SW846 8270C
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	72	(50 - 150)
2-Fluorobiphenyl	62	(50 - 150)
Terphenyl-d14	78	(50 - 150)
Phenol-d5	72	(50 - 150)
2-Fluorophenol	68	(50 - 150)

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A9G160103 **Work Order #...:** LGKH61AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,4,6-Tribromophenol	63	(50 - 150)		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A9G160103 **Work Order #...:** LGKJC1AA **Matrix.....:** WATER
MB Lot-Sample #: A9G160000-123

Prep Date.....: 07/16/09 **Final Wgt/Vol..:** 2 mL
Analysis Date..: 07/29/09 **Prep Batch #...:** 9197123
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2-Chloronaphthalene	ND	1.0	ug/L	SW846 8270C
2-Chlorophenol	ND	1.0	ug/L	SW846 8270C
Fluorene	ND	0.20	ug/L	SW846 8270C
2-Nitrophenol	ND	2.0	ug/L	SW846 8270C
4-Nitrophenol	ND	5.0	ug/L	SW846 8270C
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	SW846 8270C
N-Nitrosodiphenylamine	ND	1.0	ug/L	SW846 8270C
Pentachlorophenol	ND	5.0	ug/L	SW846 8270C
Phenanthrene	ND	0.20	ug/L	SW846 8270C
Acenaphthene	ND	0.20	ug/L	SW846 8270C
Acenaphthylene	ND	0.20	ug/L	SW846 8270C
Anthracene	ND	0.20	ug/L	SW846 8270C
Benzo(a)anthracene	ND	0.20	ug/L	SW846 8270C
Benzo(b)fluoranthene	ND	0.20	ug/L	SW846 8270C
Benzo(k)fluoranthene	ND	0.20	ug/L	SW846 8270C
Benzoic acid	ND	10	ug/L	SW846 8270C
Benzo(ghi)perylene	ND	0.20	ug/L	SW846 8270C
Benzo(a)pyrene	ND	0.20	ug/L	SW846 8270C
Benzyl alcohol	ND	5.0	ug/L	SW846 8270C
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	SW846 8270C
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	SW846 8270C
bis(2-Ethylhexyl) phthalate	**1.4 J**	**10**	**ug/L**	**SW846 8270C**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	SW846 8270C
Butyl benzyl phthalate	ND	1.0	ug/L	SW846 8270C
4-Chloroaniline	ND	2.0	ug/L	SW846 8270C
4-Chloro-3-methylphenol	ND	2.0	ug/L	SW846 8270C
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	SW846 8270C
Chrysene	ND	0.20	ug/L	SW846 8270C
Dibenz(a,h)anthracene	ND	0.20	ug/L	SW846 8270C
Dibenzofuran	ND	1.0	ug/L	SW846 8270C
Di-n-butyl phthalate	ND	1.0	ug/L	SW846 8270C
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8270C
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8270C
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8270C
3,3'-Dichlorobenzidine	ND	5.0	ug/L	SW846 8270C

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A9G160103 **Work Order #...:** LGKJC1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,4-Dichlorophenol	ND	2.0	ug/L	SW846 8270C
Diethyl phthalate	ND	1.0	ug/L	SW846 8270C
2,4-Dimethylphenol	ND	2.0	ug/L	SW846 8270C
Dimethyl phthalate	ND	1.0	ug/L	SW846 8270C
Di-n-octyl phthalate	ND	1.0	ug/L	SW846 8270C
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	SW846 8270C
2,4-Dinitrophenol	ND	5.0	ug/L	SW846 8270C
2,4-Dinitrotoluene	ND	5.0	ug/L	SW846 8270C
2,6-Dinitrotoluene	ND	5.0	ug/L	SW846 8270C
Fluoranthene	ND	0.20	ug/L	SW846 8270C
Hexachlorobenzene	ND	0.20	ug/L	SW846 8270C
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8270C
Hexachlorocyclopentadiene	ND	10	ug/L	SW846 8270C
Hexachloroethane	ND	1.0	ug/L	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	SW846 8270C
Isophorone	ND	1.0	ug/L	SW846 8270C
2-Methylnaphthalene	ND	0.20	ug/L	SW846 8270C
2-Methylphenol	ND	1.0	ug/L	SW846 8270C
4-Methylphenol	ND	1.0	ug/L	SW846 8270C
Naphthalene	ND	0.20	ug/L	SW846 8270C
2-Nitroaniline	ND	2.0	ug/L	SW846 8270C
3-Nitroaniline	ND	2.0	ug/L	SW846 8270C
4-Nitroaniline	ND	2.0	ug/L	SW846 8270C
Nitrobenzene	ND	1.0	ug/L	SW846 8270C
Phenol	ND	1.0	ug/L	SW846 8270C
Pyrene	ND	0.20	ug/L	SW846 8270C
1,2,4-Trichlorobenzene	ND	1.0	ug/L	SW846 8270C
2,4,5-Trichlorophenol	ND	5.0	ug/L	SW846 8270C
2,4,6-Trichlorophenol	ND	5.0	ug/L	SW846 8270C
Carbazole	ND	1.0	ug/L	SW846 8270C
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	69	(50 - 150)
2-Fluorobiphenyl	59	(50 - 150)
Terphenyl-d14	80	(50 - 150)
Phenol-d5	69	(50 - 150)
2-Fluorophenol	68	(50 - 150)

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A9G160103 **Work Order #...:** LGKJC1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,4,6-Tribromophenol	54	(50 - 150)		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G160103 Work Order #...: LGKH61AC Matrix.....: WATER
LCS Lot-Sample#: A9G160000-122
Prep Date.....: 07/16/09 Analysis Date..: 07/30/09
Prep Batch #...: 9197122
Dilution Factor: 1 Final Wgt/Vol..: 2 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Benzyl alcohol	91	(29 - 115)	SW846 8270C
1,2,4-Trichloro-benzene	58	(30 - 120)	SW846 8270C
Acenaphthene	79	(31 - 120)	SW846 8270C
2,4-Dinitrotoluene	91	(34 - 151)	SW846 8270C
Pyrene	79	(35 - 139)	SW846 8270C
N-Nitrosodi-n-propyl-amine	93	(30 - 132)	SW846 8270C
1,4-Dichlorobenzene	61	(30 - 115)	SW846 8270C
Pentachlorophenol	56	(30 - 150)	SW846 8270C
Phenol	83	(30 - 115)	SW846 8270C
2-Chlorophenol	81	(30 - 120)	SW846 8270C
4-Chloro-3-methylphenol	83	(31 - 121)	SW846 8270C
4-Nitrophenol	81	(30 - 138)	SW846 8270C
1,2-Dichlorobenzene	64	(30 - 120)	SW846 8270C
1,3-Dichlorobenzene	55	(30 - 120)	SW846 8270C
2,4,5-Trichloro-phenol	81	(36 - 135)	SW846 8270C
4-Methylphenol	84	(31 - 115)	SW846 8270C
4-Nitroaniline	90	(30 - 140)	SW846 8270C
Acenaphthylene	86	(37 - 115)	SW846 8270C
Anthracene	83	(45 - 118)	SW846 8270C
Benzo(a)anthracene	78	(43 - 138)	SW846 8270C
Benzo(a)pyrene	75	(38 - 144)	SW846 8270C
Benzo(b)fluoranthene	81	(31 - 146)	SW846 8270C
Benzo(ghi)perylene	79	(35 - 129)	SW846 8270C
Benzo(k)fluoranthene	80	(40 - 127)	SW846 8270C
bis(2-Chloroethoxy) methane	84	(30 - 115)	SW846 8270C
bis(2-Chloroethyl)-ether	81	(30 - 115)	SW846 8270C
bis(2-Chloroisopropyl) ether	93	(50 - 150)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G160103 Work Order #...: LGKH61AC Matrix.....: WATER
LCS Lot-Sample#: A9G160000-122

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
bis(2-Ethylhexyl) phthalate	91	(30 - 154)	SW846 8270C
2,4,6-Trichloro-phenol	81	(39 - 115)	SW846 8270C
2,4-Dichlorophenol	81	(34 - 115)	SW846 8270C
2,4-Dimethylphenol	68	(31 - 120)	SW846 8270C
2,4-Dinitrophenol	79	(29 - 146)	SW846 8270C
2,6-Dinitrotoluene	91	(43 - 122)	SW846 8270C
2-Chloronaphthalene	73	(35 - 115)	SW846 8270C
2-Methylnaphthalene	77	(32 - 115)	SW846 8270C
2-Methylphenol	81	(30 - 116)	SW846 8270C
2-Nitroaniline	91	(36 - 140)	SW846 8270C
2-Nitrophenol	86	(33 - 115)	SW846 8270C
3,3'-Dichlorobenzidine	62	(30 - 160)	SW846 8270C
3-Nitroaniline	84	(30 - 138)	SW846 8270C
4,6-Dinitro-2-methylphenol	75	(42 - 144)	SW846 8270C
4-Bromophenyl phenyl ether	80	(43 - 118)	SW846 8270C
4-Chloroaniline	79	(30 - 133)	SW846 8270C
4-Chlorophenyl phenyl ether	80	(40 - 115)	SW846 8270C
Butyl benzyl phthalate	86	(37 - 136)	SW846 8270C
Carbazole	83	(49 - 126)	SW846 8270C
Chrysene	83	(42 - 142)	SW846 8270C
Dibenz(a,h)anthracene	80	(38 - 130)	SW846 8270C
Dibenzofuran	82	(40 - 115)	SW846 8270C
Diethyl phthalate	89	(43 - 132)	SW846 8270C
Dimethyl phthalate	87	(42 - 116)	SW846 8270C
Di-n-octyl phthalate	93	(36 - 151)	SW846 8270C
Fluoranthene	86	(47 - 132)	SW846 8270C
Fluorene	81	(41 - 115)	SW846 8270C
Hexachlorobenzene	78	(42 - 123)	SW846 8270C
Hexachlorobutadiene	43	(30 - 120)	SW846 8270C
Hexachloroethane	44	(30 - 120)	SW846 8270C
Isophorone	93	(33 - 115)	SW846 8270C
Naphthalene	78	(30 - 119)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G160103 **Work Order #...:** LGKH61AC **Matrix.....:** WATER
LCS Lot-Sample#: A9G160000-122

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Nitrobenzene	**87**	**(31 - 115)**	**SW846 8270C**
N-Nitrosodiphenylamine	**78**	**(35 - 124)**	**SW846 8270C**
Phenanthrene	**78**	**(45 - 117)**	**SW846 8270C**
Indeno(1,2,3-cd)pyrene	**81**	**(37 - 130)**	**SW846 8270C**
Di-n-butyl phthalate	**96**	**(46 - 123)**	**SW846 8270C**
Hexachlorocyclopenta-diene	**44**	**(30 - 115)**	**SW846 8270C**
Benzoic acid	**87**	**(30 - 136)**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	80	(50 - 150)
2-Fluorobiphenyl	69	(50 - 150)
Terphenyl-d14	82	(50 - 150)
Phenol-d5	82	(50 - 150)
2-Fluorophenol	79	(50 - 150)
2,4,6-Tribromophenol	85	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G160103 Work Order #...: LGKJC1AC Matrix.....: WATER
LCS Lot-Sample#: A9G160000-123
Prep Date.....: 07/16/09 Analysis Date..: 07/29/09
Prep Batch #...: 9197123
Dilution Factor: 1 Final Wgt/Vol..: 2 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,2,4-Trichloro-benzene	63	(30 - 120)	SW846 8270C
Acenaphthene	88	(31 - 120)	SW846 8270C
2,4-Dinitrotoluene	101	(34 - 151)	SW846 8270C
Pyrene	91	(35 - 139)	SW846 8270C
N-Nitrosodi-n-propyl-amine	96	(30 - 132)	SW846 8270C
1,4-Dichlorobenzene	66	(30 - 115)	SW846 8270C
Pentachlorophenol	56	(30 - 150)	SW846 8270C
Phenol	88	(30 - 115)	SW846 8270C
2-Chlorophenol	87	(30 - 120)	SW846 8270C
4-Chloro-3-methylphenol	89	(31 - 121)	SW846 8270C
4-Nitrophenol	80	(30 - 138)	SW846 8270C
1,2-Dichlorobenzene	67	(30 - 120)	SW846 8270C
1,3-Dichlorobenzene	59	(30 - 120)	SW846 8270C
2,4,5-Trichloro-phenol	87	(36 - 135)	SW846 8270C
4-Methylphenol	89	(31 - 115)	SW846 8270C
4-Nitroaniline	95	(30 - 140)	SW846 8270C
Acenaphthylene	96	(37 - 115)	SW846 8270C
Anthracene	96	(45 - 118)	SW846 8270C
Benzo(a)anthracene	91	(43 - 138)	SW846 8270C
Benzo(a)pyrene	86	(38 - 144)	SW846 8270C
Benzo(b)fluoranthene	90	(31 - 146)	SW846 8270C
Benzo(ghi)perylene	96	(35 - 129)	SW846 8270C
Benzo(k)fluoranthene	96	(40 - 127)	SW846 8270C
bis(2-Chloroethoxy) methane	92	(30 - 115)	SW846 8270C
bis(2-Chloroethyl)-ether	90	(30 - 115)	SW846 8270C
bis(2-Chloroisopropyl) ether	94	(50 - 150)	SW846 8270C
bis(2-Ethylhexyl) phthalate	104	(30 - 154)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G160103 Work Order #...: LGKJC1AC Matrix.....: WATER
LCS Lot-Sample#: A9G160000-123

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
2,4,6-Trichloro-phenol	85	(39 - 115)	SW846 8270C
2,4-Dichlorophenol	87	(34 - 115)	SW846 8270C
2,4-Dimethylphenol	71	(31 - 120)	SW846 8270C
2,4-Dinitrophenol	71	(29 - 146)	SW846 8270C
2,6-Dinitrotoluene	100	(43 - 122)	SW846 8270C
2-Chloronaphthalene	82	(35 - 115)	SW846 8270C
2-Methylnaphthalene	84	(32 - 115)	SW846 8270C
2-Methylphenol	84	(30 - 116)	SW846 8270C
2-Nitroaniline	95	(36 - 140)	SW846 8270C
2-Nitrophenol	89	(33 - 115)	SW846 8270C
3,3'-Dichlorobenzidine	61	(30 - 160)	SW846 8270C
3-Nitroaniline	91	(30 - 138)	SW846 8270C
4,6-Dinitro-2-methylphenol	77	(42 - 144)	SW846 8270C
4-Bromophenyl phenyl ether	96	(43 - 118)	SW846 8270C
4-Chloroaniline	77	(30 - 133)	SW846 8270C
4-Chlorophenyl phenyl ether	89	(40 - 115)	SW846 8270C
Butyl benzyl phthalate	96	(37 - 136)	SW846 8270C
Carbazole	96	(49 - 126)	SW846 8270C
Chrysene	94	(42 - 142)	SW846 8270C
Dibenz(a,h)anthracene	97	(38 - 130)	SW846 8270C
Dibenzofuran	92	(40 - 115)	SW846 8270C
Diethyl phthalate	97	(43 - 132)	SW846 8270C
Dimethyl phthalate	95	(42 - 116)	SW846 8270C
Di-n-octyl phthalate	108	(36 - 151)	SW846 8270C
Fluoranthene	100	(47 - 132)	SW846 8270C
Fluorene	90	(41 - 115)	SW846 8270C
Hexachlorobenzene	89	(42 - 123)	SW846 8270C
Hexachlorobutadiene	47	(30 - 120)	SW846 8270C
Hexachloroethane	48	(30 - 120)	SW846 8270C
Isophorone	99	(33 - 115)	SW846 8270C
Naphthalene	83	(30 - 119)	SW846 8270C
Nitrobenzene	94	(31 - 115)	SW846 8270C
N-Nitrosodiphenylamine	87	(35 - 124)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G160103 **Work Order #...:** LGKJC1AC **Matrix.....:** WATER
LCS Lot-Sample#: A9G160000-123

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Phenanthrene	**91**	**(45 - 117)**	**SW846 8270C**
Indeno(1,2,3-cd)pyrene	**97**	**(37 - 130)**	**SW846 8270C**
Di-n-butyl phthalate	**106**	**(46 - 123)**	**SW846 8270C**
Hexachlorocyclopenta-diene	**53**	**(30 - 115)**	**SW846 8270C**
Benzoic acid	**80**	**(30 - 136)**	**SW846 8270C**
Benzyl alcohol	**95**	**(29 - 115)**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	79	(50 - 150)
2-Fluorobiphenyl	71	(50 - 150)
Terphenyl-d14	83	(50 - 150)
Phenol-d5	80	(50 - 150)
2-Fluorophenol	80	(50 - 150)
2,4,6-Tribromophenol	80	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G160103 Work Order #...: LGJ9N1AF-MS Matrix.....: WG
MS Lot-Sample #: A9G160103-002 LGJ9N1AG-MSD
Date Sampled...: 07/15/09 08:35 Date Received..: 07/16/09
Prep Date.....: 07/16/09 Analysis Date..: 07/30/09
Prep Batch #...: 9197122
Dilution Factor: 1 Initial Wgt/Vol: 500 mL Final Wgt/Vol..: 2 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,2,4-Trichloro-benzene	54	(45 - 135)			SW846 8270C
	56	(45 - 135)	3.8	(0-40)	SW846 8270C
Acenaphthene	71	(45 - 135)			SW846 8270C
	73	(45 - 135)	2.2	(0-40)	SW846 8270C
2,4-Dinitrotoluene	82	(45 - 135)			SW846 8270C
	86	(45 - 135)	4.2	(0-40)	SW846 8270C
Pyrene	73	(45 - 135)			SW846 8270C
	75	(45 - 135)	2.2	(0-40)	SW846 8270C
N-Nitrosodi-n-propyl-amine	81	(45 - 135)			SW846 8270C
	81	(45 - 135)	0.76	(0-40)	SW846 8270C
1,4-Dichlorobenzene	60	(45 - 135)			SW846 8270C
	62	(45 - 135)	4.0	(0-40)	SW846 8270C
Pentachlorophenol	58	(45 - 135)			SW846 8270C
	55	(45 - 135)	5.9	(0-40)	SW846 8270C
Phenol	73	(45 - 135)			SW846 8270C
	76	(45 - 135)	4.5	(0-40)	SW846 8270C
2-Chlorophenol	72	(45 - 135)			SW846 8270C
	74	(45 - 135)	3.6	(0-40)	SW846 8270C
4-Chloro-3-methylphenol	74	(45 - 135)			SW846 8270C
	78	(45 - 135)	6.0	(0-40)	SW846 8270C
4-Nitrophenol	72	(45 - 135)			SW846 8270C
	75	(45 - 135)	4.6	(0-40)	SW846 8270C
Acenaphthylene	77	(45 - 135)			SW846 8270C
	80	(45 - 135)	3.1	(0-40)	SW846 8270C
Anthracene	76	(45 - 135)			SW846 8270C
	77	(45 - 135)	1.6	(0-40)	SW846 8270C
Benzo(a)anthracene	74	(45 - 135)			SW846 8270C
	76	(45 - 135)	1.5	(0-40)	SW846 8270C
Benzo(b)fluoranthene	67	(45 - 135)			SW846 8270C
	75	(45 - 135)	10	(0-40)	SW846 8270C
Benzo(k)fluoranthene	78	(45 - 135)			SW846 8270C
	75	(45 - 135)	3.9	(0-40)	SW846 8270C
Benzo(ghi)perylene	75	(45 - 135)			SW846 8270C
	76	(45 - 135)	1.7	(0-40)	SW846 8270C
Benzo(a)pyrene	68	(45 - 135)			SW846 8270C
	69	(45 - 135)	2.2	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G160103 Work Order #...: LGJ9N1AF-MS Matrix.....: WG
MS Lot-Sample #: A9G160103-002 LGJ9N1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
bis(2-Chloroethoxy) methane	75	(45 - 135)			SW846 8270C
	79	(45 - 135)	5.0	(0-40)	SW846 8270C
bis(2-Chloroethyl)-ether	89	(45 - 135)			SW846 8270C
	95	(45 - 135)	5.8	(0-40)	SW846 8270C
bis(2-Chloroisopropyl) ether	85	(45 - 135)			SW846 8270C
	86	(45 - 135)	1.3	(0-40)	SW846 8270C
bis(2-Ethylhexyl) phthalate	89	(45 - 135)			SW846 8270C
	84	(45 - 135)	5.4	(0-40)	SW846 8270C
4-Bromophenyl phenyl ether	73	(45 - 135)			SW846 8270C
	76	(45 - 135)	3.0	(0-40)	SW846 8270C
Butyl benzyl phthalate	81	(45 - 135)			SW846 8270C
	84	(45 - 135)	3.9	(0-40)	SW846 8270C
Carbazole	75	(45 - 135)			SW846 8270C
	76	(45 - 135)	2.1	(0-40)	SW846 8270C
4-Chloroaniline	70	(45 - 135)			SW846 8270C
	75	(45 - 135)	7.0	(0-40)	SW846 8270C
2-Chloronaphthalene	67	(45 - 135)			SW846 8270C
	68	(45 - 135)	2.2	(0-40)	SW846 8270C
4-Chlorophenyl phenyl ether	73	(45 - 135)			SW846 8270C
	75	(45 - 135)	2.7	(0-40)	SW846 8270C
Chrysene	75	(45 - 135)			SW846 8270C
	77	(45 - 135)	2.3	(0-40)	SW846 8270C
Dibenz(a,h)anthracene	75	(45 - 135)			SW846 8270C
	77	(45 - 135)	1.7	(0-40)	SW846 8270C
Dibenzofuran	75	(45 - 135)			SW846 8270C
	77	(45 - 135)	2.6	(0-40)	SW846 8270C
Di-n-butyl phthalate	86	(45 - 135)			SW846 8270C
	91	(45 - 135)	5.1	(0-40)	SW846 8270C
1,2-Dichlorobenzene	59	(45 - 135)			SW846 8270C
	62	(45 - 135)	4.0	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G160103 Work Order #...: LGJ9N1AF-MS Matrix.....: WG
MS Lot-Sample #: A9G160103-002 LGJ9N1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3-Dichlorobenzene	52	(45 - 135)			SW846 8270C
	53	(45 - 135)	1.8	(0-40)	SW846 8270C
3,3'-Dichlorobenzidine	52	(45 - 135)			SW846 8270C
	58	(45 - 135)	11	(0-40)	SW846 8270C
2,4-Dichlorophenol	73	(45 - 135)			SW846 8270C
	76	(45 - 135)	4.2	(0-40)	SW846 8270C
Diethyl phthalate	79	(45 - 135)			SW846 8270C
	83	(45 - 135)	4.9	(0-40)	SW846 8270C
2,4-Dimethylphenol	61	(45 - 135)			SW846 8270C
	65	(45 - 135)	6.5	(0-40)	SW846 8270C
Dimethyl phthalate	77	(45 - 135)			SW846 8270C
	80	(45 - 135)	3.4	(0-40)	SW846 8270C
4,6-Dinitro-2-methylphenol	62	(45 - 135)			SW846 8270C
	60	(45 - 135)	3.1	(0-40)	SW846 8270C
2,4-Dinitrophenol	67	(45 - 135)			SW846 8270C
	65	(45 - 135)	3.9	(0-40)	SW846 8270C
2,6-Dinitrotoluene	81	(45 - 135)			SW846 8270C
	84	(45 - 135)	3.7	(0-40)	SW846 8270C
Di-n-octyl phthalate	88	(45 - 135)			SW846 8270C
	91	(45 - 135)	3.2	(0-40)	SW846 8270C
Fluoranthene	79	(45 - 135)			SW846 8270C
	81	(45 - 135)	1.9	(0-40)	SW846 8270C
Fluorene	74	(45 - 135)			SW846 8270C
	76	(45 - 135)	2.4	(0-40)	SW846 8270C
Hexachlorobenzene	72	(45 - 135)			SW846 8270C
	74	(45 - 135)	3.6	(0-40)	SW846 8270C
Hexachlorobutadiene	44 a	(45 - 135)			SW846 8270C
	40 a	(45 - 135)	11	(0-40)	SW846 8270C
Hexachlorocyclopentadiene	46	(45 - 135)			SW846 8270C
	40 a	(45 - 135)	12	(0-40)	SW846 8270C
Hexachloroethane	45	(45 - 135)			SW846 8270C
	44 a	(45 - 135)	4.2	(0-40)	SW846 8270C
Indeno(1,2,3-cd)pyrene	76	(45 - 135)			SW846 8270C
	77	(45 - 135)	1.9	(0-40)	SW846 8270C
Isophorone	82	(45 - 135)			SW846 8270C
	86	(45 - 135)	4.6	(0-40)	SW846 8270C
2-Methylnaphthalene	70	(45 - 135)			SW846 8270C
	73	(45 - 135)	4.2	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G160103 **Work Order #...:** LGJ9N1AF-MS **Matrix.....:** WG
MS Lot-Sample #: A9G160103-002 LGJ9N1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Methylphenol	76	(45 - 135)			SW846 8270C
	77	(45 - 135)	1.5	(0-40)	SW846 8270C
4-Methylphenol	77	(45 - 135)			SW846 8270C
	78	(45 - 135)	0.62	(0-40)	SW846 8270C
Naphthalene	68	(45 - 135)			SW846 8270C
	72	(45 - 135)	5.4	(0-40)	SW846 8270C
2-Nitroaniline	81	(45 - 135)			SW846 8270C
	84	(45 - 135)	3.4	(0-40)	SW846 8270C
3-Nitroaniline	77	(45 - 135)			SW846 8270C
	80	(45 - 135)	3.2	(0-50)	SW846 8270C
4-Nitroaniline	80	(45 - 135)			SW846 8270C
	83	(45 - 135)	4.4	(0-40)	SW846 8270C
Nitrobenzene	77	(45 - 135)			SW846 8270C
	79	(45 - 135)	3.2	(0-40)	SW846 8270C
2-Nitrophenol	76	(45 - 135)			SW846 8270C
	78	(45 - 135)	3.0	(0-40)	SW846 8270C
N-Nitrosodiphenylamine	68	(45 - 135)			SW846 8270C
	69	(45 - 135)	1.4	(0-40)	SW846 8270C
Phenanthrene	72	(45 - 135)			SW846 8270C
	73	(45 - 135)	1.3	(0-40)	SW846 8270C
2,4,5-Trichloro-phenol	72	(45 - 135)			SW846 8270C
	76	(45 - 135)	4.5	(0-40)	SW846 8270C
2,4,6-Trichloro-phenol	72	(45 - 135)			SW846 8270C
	74	(45 - 135)	3.0	(0-40)	SW846 8270C
Benzoic acid	77	(45 - 135)			SW846 8270C
	79	(45 - 135)	2.1	(0-40)	SW846 8270C
Benzyl alcohol	81	(45 - 135)			SW846 8270C
	82	(45 - 135)	1.5	(0-40)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	69	(50 - 150)
	72	(50 - 150)
2-Fluorobiphenyl	61	(50 - 150)
	64	(50 - 150)
Terphenyl-d14	73	(50 - 150)
	76	(50 - 150)

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G160103 **Work Order #...:** LGJ9N1AF-MS **Matrix.....:** WG
MS Lot-Sample #: A9G160103-002 LGJ9N1AG-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Phenol-d5	73	(50 - 150)
	76	(50 - 150)
2-Fluorophenol	67	(50 - 150)
	66	(50 - 150)
2,4,6-Tribromophenol	73	(50 - 150)
	76	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G160103 Work Order #...: LGJ9W1AF-MS Matrix.....: WG
MS Lot-Sample #: A9G160103-006 LGJ9W1AG-MSD
Date Sampled...: 07/15/09 11:55 Date Received..: 07/16/09
Prep Date.....: 07/16/09 Analysis Date..: 07/30/09
Prep Batch #...: 9197122
Dilution Factor: 1 Initial Wgt/Vol: 510 mL Final Wgt/Vol..: 2 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,2,4-Trichloro-benzene	54	(45 - 135)			SW846 8270C
	60	(45 - 135)	11	(0-40)	SW846 8270C
Acenaphthene	74	(45 - 135)			SW846 8270C
	77	(45 - 135)	4.8	(0-40)	SW846 8270C
2,4-Dinitrotoluene	87	(45 - 135)			SW846 8270C
	89	(45 - 135)	3.1	(0-40)	SW846 8270C
Pyrene	73	(45 - 135)			SW846 8270C
	78	(45 - 135)	7.1	(0-40)	SW846 8270C
N-Nitrosodi-n-propyl-amine	82	(45 - 135)			SW846 8270C
	86	(45 - 135)	4.7	(0-40)	SW846 8270C
1,4-Dichlorobenzene	58	(45 - 135)			SW846 8270C
	67	(45 - 135)	14	(0-40)	SW846 8270C
Pentachlorophenol	56	(45 - 135)			SW846 8270C
	57	(45 - 135)	2.3	(0-40)	SW846 8270C
Phenol	74	(45 - 135)			SW846 8270C
	74	(45 - 135)	0.37	(0-40)	SW846 8270C
2-Chlorophenol	72	(45 - 135)			SW846 8270C
	74	(45 - 135)	2.6	(0-40)	SW846 8270C
4-Chloro-3-methylphenol	77	(45 - 135)			SW846 8270C
	77	(45 - 135)	0.75	(0-40)	SW846 8270C
4-Nitrophenol	71	(45 - 135)			SW846 8270C
	77	(45 - 135)	7.6	(0-40)	SW846 8270C
Acenaphthylene	80	(45 - 135)			SW846 8270C
	84	(45 - 135)	4.8	(0-40)	SW846 8270C
Anthracene	75	(45 - 135)			SW846 8270C
	80	(45 - 135)	5.2	(0-40)	SW846 8270C
Benzo(a)anthracene	75	(45 - 135)			SW846 8270C
	79	(45 - 135)	5.2	(0-40)	SW846 8270C
Benzo(b)fluoranthene	69	(45 - 135)			SW846 8270C
	75	(45 - 135)	8.1	(0-40)	SW846 8270C
Benzo(k)fluoranthene	77	(45 - 135)			SW846 8270C
	79	(45 - 135)	3.0	(0-40)	SW846 8270C
Benzo(ghi)perylene	75	(45 - 135)			SW846 8270C
	79	(45 - 135)	4.6	(0-40)	SW846 8270C
Benzo(a)pyrene	69	(45 - 135)			SW846 8270C
	72	(45 - 135)	4.1	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G160103 Work Order #...: LGJ9W1AF-MS Matrix.....: WG
MS Lot-Sample #: A9G160103-006 LGJ9W1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
bis(2-Chloroethoxy) methane	77	(45 - 135)			SW846 8270C
	79	(45 - 135)	2.8	(0-40)	SW846 8270C
bis(2-Chloroethyl)-ether	82	(45 - 135)			SW846 8270C
	82	(45 - 135)	0.62	(0-40)	SW846 8270C
bis(2-Chloroisopropyl) ether	85	(45 - 135)			SW846 8270C
	87	(45 - 135)	2.2	(0-40)	SW846 8270C
bis(2-Ethylhexyl) phthalate	91	(45 - 135)			SW846 8270C
	89	(45 - 135)	1.6	(0-40)	SW846 8270C
4-Bromophenyl phenyl ether	72	(45 - 135)			SW846 8270C
	77	(45 - 135)	6.9	(0-40)	SW846 8270C
Butyl benzyl phthalate	81	(45 - 135)			SW846 8270C
	86	(45 - 135)	6.6	(0-40)	SW846 8270C
Carbazole	76	(45 - 135)			SW846 8270C
	79	(45 - 135)	4.2	(0-40)	SW846 8270C
4-Chloroaniline	64	(45 - 135)			SW846 8270C
	66	(45 - 135)	3.0	(0-40)	SW846 8270C
2-Chloronaphthalene	67	(45 - 135)			SW846 8270C
	72	(45 - 135)	7.1	(0-40)	SW846 8270C
4-Chlorophenyl phenyl ether	74	(45 - 135)			SW846 8270C
	78	(45 - 135)	5.3	(0-40)	SW846 8270C
Chrysene	77	(45 - 135)			SW846 8270C
	80	(45 - 135)	4.1	(0-40)	SW846 8270C
Dibenz(a,h)anthracene	76	(45 - 135)			SW846 8270C
	80	(45 - 135)	5.2	(0-40)	SW846 8270C
Dibenzofuran	77	(45 - 135)			SW846 8270C
	81	(45 - 135)	4.8	(0-40)	SW846 8270C
Di-n-butyl phthalate	88	(45 - 135)			SW846 8270C
	92	(45 - 135)	5.0	(0-40)	SW846 8270C
1,2-Dichlorobenzene	58	(45 - 135)			SW846 8270C
	66	(45 - 135)	13	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G160103 Work Order #...: LGJ9W1AF-MS Matrix.....: WG
MS Lot-Sample #: A9G160103-006 LGJ9W1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3-Dichlorobenzene	49	(45 - 135)			SW846 8270C
	58	(45 - 135)	15	(0-40)	SW846 8270C
3,3'-Dichlorobenzidine	30 a	(45 - 135)			SW846 8270C
	21 a	(45 - 135)	34	(0-40)	SW846 8270C
2,4-Dichlorophenol	76	(45 - 135)			SW846 8270C
	76	(45 - 135)	0.83	(0-40)	SW846 8270C
Diethyl phthalate	83	(45 - 135)			SW846 8270C
	84	(45 - 135)	1.8	(0-40)	SW846 8270C
2,4-Dimethylphenol	59	(45 - 135)			SW846 8270C
	51	(45 - 135)	13	(0-40)	SW846 8270C
Dimethyl phthalate	81	(45 - 135)			SW846 8270C
	83	(45 - 135)	2.5	(0-40)	SW846 8270C
4,6-Dinitro-2-methylphenol	62	(45 - 135)			SW846 8270C
	68	(45 - 135)	8.8	(0-40)	SW846 8270C
2,4-Dinitrophenol	68	(45 - 135)			SW846 8270C
	73	(45 - 135)	7.7	(0-40)	SW846 8270C
2,6-Dinitrotoluene	84	(45 - 135)			SW846 8270C
	86	(45 - 135)	2.9	(0-40)	SW846 8270C
Di-n-octyl phthalate	87	(45 - 135)			SW846 8270C
	93	(45 - 135)	6.8	(0-40)	SW846 8270C
Fluoranthene	78	(45 - 135)			SW846 8270C
	83	(45 - 135)	6.6	(0-40)	SW846 8270C
Fluorene	76	(45 - 135)			SW846 8270C
	79	(45 - 135)	4.1	(0-40)	SW846 8270C
Hexachlorobenzene	72	(45 - 135)			SW846 8270C
	75	(45 - 135)	5.3	(0-40)	SW846 8270C
Hexachlorobutadiene	37 a	(45 - 135)			SW846 8270C
	47	(45 - 135)	23	(0-40)	SW846 8270C
Hexachlorocyclopentadiene	42 a	(45 - 135)			SW846 8270C
	50	(45 - 135)	16	(0-40)	SW846 8270C
Hexachloroethane	40 a	(45 - 135)			SW846 8270C
	49	(45 - 135)	20	(0-40)	SW846 8270C
Indeno(1,2,3-cd)pyrene	77	(45 - 135)			SW846 8270C
	80	(45 - 135)	4.4	(0-40)	SW846 8270C
Isophorone	85	(45 - 135)			SW846 8270C
	88	(45 - 135)	2.6	(0-40)	SW846 8270C
2-Methylnaphthalene	72	(45 - 135)			SW846 8270C
	77	(45 - 135)	7.2	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G160103 **Work Order #...:** LGJ9W1AF-MS **Matrix.....:** WG
MS Lot-Sample #: A9G160103-006 LGJ9W1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Methylphenol	75	(45 - 135)			SW846 8270C
	75	(45 - 135)	0.30	(0-40)	SW846 8270C
4-Methylphenol	76	(45 - 135)			SW846 8270C
	77	(45 - 135)	0.76	(0-40)	SW846 8270C
Naphthalene	71	(45 - 135)			SW846 8270C
	75	(45 - 135)	6.3	(0-40)	SW846 8270C
2-Nitroaniline	84	(45 - 135)			SW846 8270C
	86	(45 - 135)	2.2	(0-40)	SW846 8270C
3-Nitroaniline	79	(45 - 135)			SW846 8270C
	79	(45 - 135)	1.2	(0-50)	SW846 8270C
4-Nitroaniline	81	(45 - 135)			SW846 8270C
	85	(45 - 135)	3.8	(0-40)	SW846 8270C
Nitrobenzene	80	(45 - 135)			SW846 8270C
	81	(45 - 135)	2.2	(0-40)	SW846 8270C
2-Nitrophenol	79	(45 - 135)			SW846 8270C
	81	(45 - 135)	2.2	(0-40)	SW846 8270C
N-Nitrosodiphenylamine	55	(45 - 135)			SW846 8270C
	53	(45 - 135)	4.3	(0-40)	SW846 8270C
Phenanthrene	71	(45 - 135)			SW846 8270C
	76	(45 - 135)	5.8	(0-40)	SW846 8270C
2,4,5-Trichloro-phenol	75	(45 - 135)			SW846 8270C
	79	(45 - 135)	5.5	(0-40)	SW846 8270C
2,4,6-Trichloro-phenol	74	(45 - 135)			SW846 8270C
	77	(45 - 135)	2.9	(0-40)	SW846 8270C
Benzoic acid	79	(45 - 135)			SW846 8270C
	80	(45 - 135)	1.3	(0-40)	SW846 8270C
Benzyl alcohol	81	(45 - 135)			SW846 8270C
	84	(45 - 135)	3.2	(0-40)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	74	(50 - 150)
	75	(50 - 150)
2-Fluorobiphenyl	65	(50 - 150)
	68	(50 - 150)
Terphenyl-d14	77	(50 - 150)
	80	(50 - 150)

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G160103 **Work Order #...:** LGJ9W1AF-MS **Matrix.....:** WG
MS Lot-Sample #: A9G160103-006 LGJ9W1AG-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Phenol-d5	74	(50 - 150)
	74	(50 - 150)
2-Fluorophenol	74	(50 - 150)
	74	(50 - 150)
2,4,6-Tribromophenol	77	(50 - 150)
	78	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G160103 **Work Order #...:** LGG2M1AF-MS **Matrix.....:** WATER
MS Lot-Sample #: A9G150104-008 LGG2M1AG-MSD
Date Sampled...: 07/14/09 13:50 **Date Received..:** 07/15/09
Prep Date.....: 07/16/09 **Analysis Date..:** 07/30/09
Prep Batch #...: 9197123
Dilution Factor: 1 **Initial Wgt/Vol:** 525 mL **Final Wgt/Vol..:** 2 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,2,4-Trichloro-benzene	56	(45 - 135)			SW846 8270C
	53	(45 - 135)	5.2	(0-40)	SW846 8270C
Acenaphthene	80	(45 - 135)			SW846 8270C
	75	(45 - 135)	5.8	(0-40)	SW846 8270C
2,4-Dinitrotoluene	94	(45 - 135)			SW846 8270C
	88	(45 - 135)	7.1	(0-40)	SW846 8270C
Pyrene	82	(45 - 135)			SW846 8270C
	78	(45 - 135)	5.8	(0-40)	SW846 8270C
N-Nitrosodi-n-propyl-amine	95	(45 - 135)			SW846 8270C
	88	(45 - 135)	8.0	(0-40)	SW846 8270C
1,4-Dichlorobenzene	59	(45 - 135)			SW846 8270C
	57	(45 - 135)	3.2	(0-40)	SW846 8270C
Pentachlorophenol	64	(45 - 135)			SW846 8270C
	56	(45 - 135)	15	(0-40)	SW846 8270C
Phenol	85	(45 - 135)			SW846 8270C
	79	(45 - 135)	7.0	(0-40)	SW846 8270C
2-Chlorophenol	83	(45 - 135)			SW846 8270C
	78	(45 - 135)	6.6	(0-40)	SW846 8270C
4-Chloro-3-methylphenol	83	(45 - 135)			SW846 8270C
	80	(45 - 135)	4.6	(0-40)	SW846 8270C
4-Nitrophenol	85	(45 - 135)			SW846 8270C
	77	(45 - 135)	9.5	(0-40)	SW846 8270C
Acenaphthylene	87	(45 - 135)			SW846 8270C
	83	(45 - 135)	5.1	(0-40)	SW846 8270C
Anthracene	86	(45 - 135)			SW846 8270C
	80	(45 - 135)	6.4	(0-40)	SW846 8270C
Benzo(a)anthracene	83	(45 - 135)			SW846 8270C
	78	(45 - 135)	6.1	(0-40)	SW846 8270C
Benzo(b)fluoranthene	79	(45 - 135)			SW846 8270C
	78	(45 - 135)	1.2	(0-40)	SW846 8270C
Benzo(k)fluoranthene	93	(45 - 135)			SW846 8270C
	83	(45 - 135)	11	(0-40)	SW846 8270C
Benzo(ghi)perylene	85	(45 - 135)			SW846 8270C
	82	(45 - 135)	3.4	(0-40)	SW846 8270C
Benzo(a)pyrene	79	(45 - 135)			SW846 8270C
	75	(45 - 135)	5.1	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G160103 **Work Order #...:** LGG2M1AF-MS **Matrix.....:** WATER
MS Lot-Sample #: A9G150104-008 LGG2M1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
bis(2-Chloroethoxy) methane	84	(45 - 135)			SW846 8270C
	80	(45 - 135)	5.0	(0-40)	SW846 8270C
bis(2-Chloroethyl)- ether	81	(45 - 135)			SW846 8270C
	78	(45 - 135)	4.0	(0-40)	SW846 8270C
bis(2-Chloroisopropyl) ether	96	(45 - 135)			SW846 8270C
	88	(45 - 135)	8.8	(0-40)	SW846 8270C
bis(2-Ethylhexyl) phthalate	102	(45 - 135)			SW846 8270C
	85	(45 - 135)	17	(0-40)	SW846 8270C
4-Bromophenyl phenyl ether	84	(45 - 135)			SW846 8270C
	80	(45 - 135)	4.7	(0-40)	SW846 8270C
Butyl benzyl phthalate	91	(45 - 135)			SW846 8270C
	85	(45 - 135)	7.8	(0-40)	SW846 8270C
Carbazole	87	(45 - 135)			SW846 8270C
	81	(45 - 135)	6.9	(0-40)	SW846 8270C
4-Chloroaniline	79	(45 - 135)			SW846 8270C
	76	(45 - 135)	3.8	(0-40)	SW846 8270C
2-Chloronaphthalene	74	(45 - 135)			SW846 8270C
	70	(45 - 135)	5.7	(0-40)	SW846 8270C
4-Chlorophenyl phenyl ether	83	(45 - 135)			SW846 8270C
	77	(45 - 135)	6.5	(0-40)	SW846 8270C
Chrysene	85	(45 - 135)			SW846 8270C
	81	(45 - 135)	4.9	(0-40)	SW846 8270C
Dibenz(a,h)anthracene	88	(45 - 135)			SW846 8270C
	84	(45 - 135)	4.6	(0-40)	SW846 8270C
Dibenzofuran	84	(45 - 135)			SW846 8270C
	79	(45 - 135)	6.4	(0-40)	SW846 8270C
Di-n-butyl phthalate	102	(45 - 135)			SW846 8270C
	95	(45 - 135)	7.0	(0-40)	SW846 8270C
1,2-Dichlorobenzene	62	(45 - 135)			SW846 8270C
	59	(45 - 135)	4.6	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G160103 **Work Order #...:** LGG2M1AF-MS **Matrix.....:** WATER
MS Lot-Sample #: A9G150104-008 LGG2M1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3-Dichlorobenzene	53	(45 - 135)			SW846 8270C
	52	(45 - 135)	2.9	(0-40)	SW846 8270C
3,3'-Dichlorobenzidine	50	(45 - 135)			SW846 8270C
	45	(45 - 135)	11	(0-40)	SW846 8270C
2,4-Dichlorophenol	82	(45 - 135)			SW846 8270C
	78	(45 - 135)	5.3	(0-40)	SW846 8270C
Diethyl phthalate	90	(45 - 135)			SW846 8270C
	84	(45 - 135)	6.6	(0-40)	SW846 8270C
2,4-Dimethylphenol	68	(45 - 135)			SW846 8270C
	65	(45 - 135)	4.0	(0-40)	SW846 8270C
Dimethyl phthalate	87	(45 - 135)			SW846 8270C
	82	(45 - 135)	5.8	(0-40)	SW846 8270C
4,6-Dinitro-2-methylphenol	78	(45 - 135)			SW846 8270C
	72	(45 - 135)	7.6	(0-40)	SW846 8270C
2,4-Dinitrophenol	83	(45 - 135)			SW846 8270C
	77	(45 - 135)	7.3	(0-40)	SW846 8270C
2,6-Dinitrotoluene	92	(45 - 135)			SW846 8270C
	87	(45 - 135)	5.5	(0-40)	SW846 8270C
Di-n-octyl phthalate	101	(45 - 135)			SW846 8270C
	96	(45 - 135)	5.2	(0-40)	SW846 8270C
Fluoranthene	92	(45 - 135)			SW846 8270C
	85	(45 - 135)	7.1	(0-40)	SW846 8270C
Fluorene	84	(45 - 135)			SW846 8270C
	79	(45 - 135)	6.2	(0-40)	SW846 8270C
Hexachlorobenzene	80	(45 - 135)			SW846 8270C
	75	(45 - 135)	6.5	(0-40)	SW846 8270C
Hexachlorobutadiene	43 a	(45 - 135)			SW846 8270C
	42 a	(45 - 135)	2.8	(0-40)	SW846 8270C
Hexachlorocyclopentadiene	47	(45 - 135)			SW846 8270C
	42 a	(45 - 135)	12	(0-40)	SW846 8270C
Hexachloroethane	44 a	(45 - 135)			SW846 8270C
	43 a	(45 - 135)	0.42	(0-40)	SW846 8270C
Indeno(1,2,3-cd)pyrene	87	(45 - 135)			SW846 8270C
	84	(45 - 135)	3.3	(0-40)	SW846 8270C
Isophorone	92	(45 - 135)			SW846 8270C
	88	(45 - 135)	4.4	(0-40)	SW846 8270C
2-Methylnaphthalene	76	(45 - 135)			SW846 8270C
	72	(45 - 135)	6.2	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G160103 **Work Order #...:** LGG2M1AF-MS **Matrix.....:** WATER
MS Lot-Sample #: A9G150104-008 LGG2M1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Methylphenol	81	(45 - 135)			SW846 8270C
	75	(45 - 135)	7.6	(0-40)	SW846 8270C
4-Methylphenol	86	(45 - 135)			SW846 8270C
	79	(45 - 135)	8.6	(0-40)	SW846 8270C
Naphthalene	75	(45 - 135)			SW846 8270C
	72	(45 - 135)	4.8	(0-40)	SW846 8270C
2-Nitroaniline	92	(45 - 135)			SW846 8270C
	87	(45 - 135)	5.4	(0-40)	SW846 8270C
3-Nitroaniline	86	(45 - 135)			SW846 8270C
	81	(45 - 135)	6.2	(0-50)	SW846 8270C
4-Nitroaniline	90	(45 - 135)			SW846 8270C
	85	(45 - 135)	6.5	(0-40)	SW846 8270C
Nitrobenzene	87	(45 - 135)			SW846 8270C
	83	(45 - 135)	4.0	(0-40)	SW846 8270C
2-Nitrophenol	86	(45 - 135)			SW846 8270C
	82	(45 - 135)	4.6	(0-40)	SW846 8270C
N-Nitrosodiphenylamine	74	(45 - 135)			SW846 8270C
	70	(45 - 135)	5.5	(0-40)	SW846 8270C
Phenanthrene	81	(45 - 135)			SW846 8270C
	77	(45 - 135)	5.8	(0-40)	SW846 8270C
2,4,5-Trichloro-phenol	77	(45 - 135)			SW846 8270C
	78	(45 - 135)	0.83	(0-40)	SW846 8270C
2,4,6-Trichloro-phenol	82	(45 - 135)			SW846 8270C
	77	(45 - 135)	6.4	(0-40)	SW846 8270C
Benzoic acid	90	(45 - 135)			SW846 8270C
	83	(45 - 135)	6.9	(0-40)	SW846 8270C
Benzyl alcohol	93	(45 - 135)			SW846 8270C
	85	(45 - 135)	9.3	(0-40)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	75	(50 - 150)
	77	(50 - 150)
2-Fluorobiphenyl	65	(50 - 150)
	64	(50 - 150)
Terphenyl-d14	78	(50 - 150)
	77	(50 - 150)

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G160103 **Work Order #...:** LGG2M1AF-MS **Matrix.....:** WATER
MS Lot-Sample #: A9G150104-008 LGG2M1AG-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Phenol-d5	78	(50 - 150)
	78	(50 - 150)
2-Fluorophenol	75	(50 - 150)
	77	(50 - 150)
2,4,6-Tribromophenol	79	(50 - 150)
	78	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

TestAmerica North Canton

Semivolatile REPORT SW-846 Method 8270

Data file : \\cansvr11\dd\chem\MSS\a4hp7.i\90803a.b\7QCMRL.D
Lab Smp Id: qcmrl
Inj Date : 03-AUG-2009 13:39
Operator : 001710 Inst ID: a4hp7.i
Smp Info : qcmrl,90803a.b,8270C-625,1-827042d.sub
Misc Info :
Comment :
Method : \\cansvr11\dd\chem\MSS\a4hp7.i\90803a.b\8270C-625.m
Meth Date : 03-Aug-2009 14:07 ulmanm Quant Type: ISTD
Cal Date : 03-AUG-2009 10:19 Cal File: 7SMH0803.D
Als bottle: 12 QC Sample: mrl
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: qcmrl.sub
Target Version: 4.14
Processing Host: CANPMSSV06

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	2000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	0.50000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 1 1,4-Dichlorobenzene-d4	152	3.599	3.599	(1.000)	236106	2.00000	
* 2 Naphthalene-d8	136	4.492	4.498	(1.000)	1011711	2.00000	
* 3 Acenaphthene-d10	164	5.765	5.766	(1.000)	527442	2.00000	
* 4 Phenanthrene-d10	188	6.851	6.851	(1.000)	818071	2.00000	
* 5 Chrysene-d12	240	8.841	8.846	(1.000)	678576	2.00000	
* 6 Perylene-d12	264	10.355	10.365	(1.000)	641164	2.00000	
9 Pyridine	79	1.995	2.000	(0.554)	649432	2.38160	9.5264
10 N-Nitrosodimethylamine	74	1.968	1.968	(0.547)	372694	2.40632	9.6253
11 Ethyl methacrylate	69	2.198	2.198	(0.611)	572745	2.42024	9.6810
12 3-Chloropropionitrile	54	2.374	2.375	(0.660)	290977	2.44438	9.7775
13 Malononitrile	66	2.508	2.508	(0.697)	769704	2.36965	9.4786
209 Benzaldehyde	77	3.310	3.311	(0.920)	444958	2.58531	10.341
21 Aniline	93	3.369	3.375	(0.936)	1017277	2.38548	9.5419
22 Phenol	94	3.305	3.305	(0.918)	755899	2.37070	9.4828
23 bis(2-Chloroethyl)ether	93	3.391	3.396	(0.942)	650476	2.57772	10.311(QM)
24 2-Chlorophenol	128	3.455	3.455	(0.960)	455429	2.37754	9.5102
26 1,3-Dichlorobenzene	146	3.562	3.567	(0.990)	426889	2.42121	9.6848
27 1,4-Dichlorobenzene	146	3.610	3.610	(1.003)	413571	2.47445	9.8978

28 1,2-Dichlorobenzene	146	3.722	3.722 (1.034)	411228	2.43166	9.7266
29 Benzyl Alcohol	108	3.669	3.669 (1.019)	335390	2.35582	9.4233

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
30 2-Methylphenol	108	3.722	3.722	(1.034)	492564	2.35189	9.4075
31 bis(2-Chloroisopropyl)ether	45	3.754	3.755	(1.043)	647440	2.40332	9.6133
37 Acetophenone	105	3.861	3.867	(1.073)	703234	2.35337	9.4135
32 N-Nitroso-di-n-propylamine	70	3.845	3.851	(1.068)	506182	2.41362	9.6545
192 4-Methylphenol	108	3.824	3.829	(1.062)	529112	2.41805	9.6722
34 Hexachloroethane	117	3.958	3.958	(1.100)	178067	2.36133	9.4453
35 Nitrobenzene	77	3.990	3.990	(0.888)	665490	2.35444	9.4177
41 Isophorone	82	4.150	4.150	(0.924)	1247586	2.37417	9.4967
42 2-Nitrophenol	139	4.214	4.215	(0.938)	251418	2.42958	9.7183
43 2,4-Dimethylphenol	107	4.204	4.204	(0.936)	558212	2.40308	9.6123
44 bis(2-Chloroethoxy)methane	93	4.279	4.279	(0.952)	672199	2.37297	9.4919
46 2,4-Toluenediamene	121	5.311	5.316	(1.182)	225937	2.91985	11.679
47 1,3,5-Trichlorobenzene	180	4.220	4.220	(0.939)	392265	2.41083	9.6433
48 2,4-Dichlorophenol	162	4.375	4.375	(0.974)	316252	2.43080	9.7232
49 Benzoic Acid	122	4.252	4.273	(0.946)	524569	4.38613	17.544(QM)
50 1,2,4-Trichlorobenzeue	180	4.444	4.444	(0.989)	337936	2.38964	9.5586
51 Naphthalene	128	4.509	4.514	(1.004)	1377050	2.34620	9.3848
52 4-Chloroaniline	127	4.525	4.530	(1.007)	620876	2.48987	9.9595
56 Hexachlorobutadiene	225	4.583	4.584	(1.020)	161343	2.42170	9.6868
210 Caprolactam	113	4.771	4.781	(1.062)	163036	2.40630	9.6252
57 1,2,3-Trichlorobenzene	180	4.610	4.610	(1.026)	310125	2.38879	9.5552
59 4-Chloro-3-Methylphenol	107	4.845	4.851	(1.079)	467053	2.36733	9.4693
62 2-Methylnaphthalene	142	5.001	5.006	(1.113)	777991	2.39317	9.5727
63 1-Methylnaphthalene	142	5.075	5.076	(1.130)	789146	2.37950	9.5180
64 Hexachlorocyclopentadiene	237	5.108	5.108	(0.886)	173862	2.42246	9.6898
66 2,4,6-Trichlorophenol	196	5.188	5.193	(0.900)	220004	2.43133	9.7253
67 2,4,5-Trichlorophenol	196	5.220	5.220	(0.905)	249440	2.47826	9.9130
211 1,1'-Biphenyl	154	5.332	5.332	(0.925)	966323	2.36114	9.4446
68 1,2,3,5-Tetrachlorobenzene	216	5.108	5.113	(0.886)	304122	2.38683	9.5473
70 2-Chloronaphthalene	162	5.359	5.359	(0.929)	718148	2.31440	9.2576
73 2-Nitroaniline	65	5.412	5.418	(0.939)	368705	2.37324	9.4930
74 1,2,3,4-Tetrachlorobenzene	216	5.332	5.332	(0.925)	284386	2.39384	9.5754
76 Dimethylphthalate	163	5.525	5.530	(0.958)	834921	2.38823	9.5529
78 2,6-Dinitrotoluene	165	5.578	5.584	(0.968)	197060	2.40072	9.6029
79 Acenaphthylene	152	5.664	5.669	(0.982)	1254692	2.37210	9.4884
80 1,2-Dinitrobenzene	168	5.626	5.632	(0.976)	95684	2.38302	9.5321
81 3-Nitroaniline	138	5.707	5.712	(0.990)	227227	2.43979	9.7591
82 Acenaphthene	153	5.787	5.792	(1.004)	780376	2.40412	9.6165
83 2,4-Dinitrophenol	184	5.782	5.787	(1.003)	256444	4.50628	18.025(Q)
85 4-Nitrophenol	109	5.798	5.798	(1.006)	129540	2.33964	9.3585
86 Dibenzofuran	168	5.910	5.915	(1.025)	1036103	2.37304	9.4921
87 2,4-Dinitrotoluene	165	5.872	5.878	(1.019)	260880	2.40862	9.6345
91 2,3,5,6-Tetrachlorophenol	232	5.958	5.958	(1.033)	170784	2.39495	9.5798
93 Diethylphthalate	149	6.033	6.033	(1.046)	858835	2.36484	9.4594
94 Fluorene	166	6.161	6.161	(1.069)	863275	2.36423	9.4569
95 4-Chlorophenyl-phenylether	204	6.140	6.145	(1.065)	374559	2.42170	9.6868
96 4-Nitroaniline	138	6.151	6.156	(1.067)	245177	2.45046	9.8018
98 4,6-Dinitro-2-methylphenol	198	6.172	6.177	(0.901)	148990	2.29279	9.1712
99 N-Nitrosodiphenylamine	169	6.220	6.226	(0.908)	644777	2.39369	9.5748
100 1,2-Diphenylhydrazine	77	6.258	6.258	(0.913)	1453109	2.43009	9.7203
106 4-Bromophenyl-phenylether	248	6.504	6.504	(0.949)	183571	2.38576	9.5430
107 Hexachlorobenzene	284	6.562	6.563	(0.958)	173214	2.27997	9.1199

212	Atrazine	200	6.584	6.589 (0.961)	174468	2.47080	9.8832
111	Pentachlorophenol	266	6.696	6.702 (0.977)	253005	4.93224	19[illegible]

TestAmerica North Canton

Semivolatile REPORT SW-846 Method 8270

Data file : \\cansvr11\dd\chem\MSS\a4hp7.i\90803a.b\7QCMRLC2.D
Lab Smp Id: qcmrl
Inj Date : 03-AUG-2009 20:38
Operator : 001710 Inst ID: a4hp7.i
Smp Info : qcmrl,90803a.b,8270C-625,1-827042d.sub
Misc Info :
Comment :
Method : \\cansvr11\dd\chem\MSS\a4hp7.i\90803a.b\8270C-625.m
Meth Date : 03-Aug-2009 14:07 ulmanm Quant Type: ISTD
Cal Date : 03-AUG-2009 10:19 Cal File: 7SMH0803.D
Als bottle: 33 QC Sample: mrl
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: qcmrl.sub
Target Version: 4.14
Processing Host: CANPMSSV06

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	2000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	0.50000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 1 1,4-Dichlorobenzene-d4	152	3.599	3.599	(1.000)	243155	2.00000	
* 2 Naphthalene-d8	136	4.492	4.498	(1.000)	1047593	2.00000	
* 3 Acenaphthene-d10	164	5.765	5.766	(1.000)	539716	2.00000	
* 4 Phenanthrene-d10	188	6.851	6.851	(1.000)	839058	2.00000	
* 5 Chrysene-d12	240	8.830	8.846	(1.000)	682291	2.00000	
* 6 Perylene-d12	264	10.349	10.365	(1.000)	655302	2.00000	
9 Pyridine	79	1.995	2.000	(0.554)	647997	2.30745	9.2298
10 N-Nitrosodimethylamine	74	1.968	1.968	(0.547)	366082	2.29511	9.1804
11 Ethyl methacrylate	69	2.198	2.198	(0.611)	568728	2.33360	9.3344
12 3-Chloropropionitrile	54	2.369	2.375	(0.658)	282359	2.30322	9.2129
13 Malononitrile	66	2.508	2.508	(0.697)	737987	2.20614	8.8245
209 Benzaldehyde	77	3.310	3.311	(0.920)	446520	2.51348	10.054
21 Aniline	93	3.369	3.375	(0.936)	995822	2.26000	9.0400
22 Phenol	94	3.305	3.305	(0.918)	733554	2.23393	8.9357
23 bis(2-Chloroethyl)ether	93	3.391	3.396	(0.942)	689615	2.65359	10.614(M)
24 2-Chlorophenol	128	3.455	3.455	(0.960)	443918	2.25026	9.0010
26 1,3-Dichlorobenzene	146	3.562	3.567	(0.990)	423499	2.33235	9.3294
27 1,4-Dichlorobenzene	146	3.610	3.610	(1.003)	382677	2.22323	8.8929

28 1,2-Dichlorobenzene	146	3.717	3.722 (1.033)	409949	2.35382	9.4153
29 Benzyl Alcohol	108	3.669	3.669 (1.019)	284435	1.93999	7.7599

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
30 2-Methylphenol	108	3.722	3.722	(1.034)	526756	2.44223	9.7689(M)
31 bis(2-Chloroisopropyl)ether	45	3.754	3.755	(1.043)	689860	2.48655	9.9462
37 Acetophenone	105	3.861	3.867	(1.073)	707775	2.29990	9.1996
32 N-Nitroso-di-n-propylamine	70	3.845	3.851	(1.068)	502526	2.32673	9.3069
192 4-Methylphenol	108	3.824	3.829	(1.062)	532552	2.36322	9.4529
34 Hexachloroethane	117	3.958	3.958	(1.100)	178781	2.30207	9.2083
35 Nitrobenzene	77	3.990	3.990	(0.888)	660752	2.25760	9.0304
41 Isophorone	82	4.150	4.150	(0.924)	1244577	2.28732	9.1493
42 2-Nitrophenol	139	4.214	4.215	(0.938)	241161	2.25063	9.0025
43 2,4-Dimethylphenol	107	4.204	4.204	(0.936)	550510	2.28874	9.1550
44 bis(2-Chloroethoxy)methane	93	4.279	4.279	(0.952)	667021	2.27404	9.0962
46 2,4-Toluenediamene	121	5.311	5.316	(1.182)	274463	3.43516	13.741
47 1,3,5-Trichlorobenzene	180	4.220	4.220	(0.939)	399883	2.37347	9.4939
48 2,4-Dichlorophenol	162	4.375	4.375	(0.974)	308255	2.28818	9.1527
49 Benzoic Acid	122	4.236	4.273	(0.943)	337523	2.98086	11.923(RM)
50 1,2,4-Trichlorobenzene	180	4.444	4.444	(0.989)	340330	2.32414	9.2966
51 Naphthalene	128	4.509	4.514	(1.004)	1399778	2.30324	9.2129
52 4-Chloroaniline	127	4.525	4.530	(1.007)	623146	2.41338	9.6535
56 Hexachlorobutadiene	225	4.583	4.584	(1.020)	164683	2.38716	9.5486
210 Caprolactam	113	4.765	4.781	(1.061)	154361	2.20023	8.8009
57 1,2,3-Trichlorobenzene	180	4.610	4.610	(1.026)	311377	2.31628	9.2651
59 4-Chloro-3-Methylphenol	107	4.851	4.851	(1.080)	467910	2.29044	9.1617
62 2-Methylnaphthalene	142	5.001	5.006	(1.113)	783617	2.32791	9.3116
63 1-Methylnaphthalene	142	5.075	5.076	(1.130)	793656	2.31113	9.2445
64 Hexachlorocyclopentadiene	237	5.108	5.108	(0.886)	150183	2.04495	8.1798
66 2,4,6-Trichlorophenol	196	5.193	5.193	(0.901)	205830	2.22296	8.8918
67 2,4,5-Trichlorophenol	196	5.220	5.220	(0.905)	236013	2.29153	9.1661
211 1,1'-Biphenyl	154	5.332	5.332	(0.925)	973510	2.32461	9.2984
68 1,2,3,5-Tetrachlorobenzene	216	5.108	5.113	(0.886)	304953	2.33893	9.3557
70 2-Chloronaphthalene	162	5.359	5.359	(0.929)	705071	2.22059	8.8823
73 2-Nitroaniline	65	5.412	5.418	(0.939)	357612	2.24949	8.9980
74 1,2,3,4-Tetrachlorobenzene	216	5.332	5.332	(0.925)	286949	2.36048	9.4419
76 Dimethylphthalate	163	5.525	5.530	(0.958)	821538	2.29651	9.1860
78 2,6-Dinitrotoluene	165	5.578	5.584	(0.968)	187780	2.23564	8.9426
79 Acenaphthylene	152	5.664	5.669	(0.982)	1249644	2.30883	9.2353
80 1,2-Dinitrobenzene	168	5.626	5.632	(0.976)	91457	2.22595	8.9038
81 3-Nitroaniline	138	5.707	5.712	(0.990)	221500	2.32421	9.2968
82 Acenaphthene	153	5.787	5.792	(1.004)	772774	2.32656	9.3062
83 2,4-Dinitrophenol	184	5.792	5.787	(1.005)	23289	1.02580	[illegible](QRM)
85 4-Nitrophenol	109	5.803	5.798	(1.006)	110213	1.94530	7.7812(QM)
86 Dibenzofuran	168	5.910	5.915	(1.025)	1035222	2.31710	9.2684
87 2,4-Dinitrotolnene	165	5.872	5.878	(1.019)	240674	2.17153	8.6861
91 2,3,5,6-Tetrachlorophenol	232	5.958	5.958	(1.033)	143928	1.97244	7.8898
93 Diethylphthalate	149	6.028	6.033	(1.045)	839662	2.25947	9.0379
94 Fluorene	166	6.161	6.161	(1.069)	856481	2.29228	9.1691
95 4-Chlorophenyl-phenylether	204	6.140	6.145	(1.065)	368069	2.32562	9.3025
96 4-Nitroaniline	138	6.156	6.156	(1.068)	229998	2.24648	8.9859
98 4,6-Dinitro-2-methylphenol	198	6.172	6.177	(0.901)	59786	1.02611	[illegible](QRM)
99 N-Nitrosodiphenylamine	169	6.220	6.226	(0.908)	628871	2.27624	9.1050
100 1,2-Diphenylhydrazine	77	6.258	6.258	(0.913)	1416648	2.30985	9.2394
106 4-Bromophenyl-phenylether	248	6.504	6.504	(0.949)	178277	2.25901	9.0360
107 Hexachlorobenzene	284	6.562	6.563	(0.958)	172508	2.21388	8.8555

212 Atrazine	200	6.584	6.589 (0.961)	171062	2.36197	9.4479
111 Pentachlorophenol	266	6.701	6.702 (0.978)	151088	2.87174	11.487(RM)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
115 Phenanthrene	178	6.867	6.873	(1.002)	1186302	2.25976	9.0390
116 Anthracene	178	6.905	6.910	(1.008)	1187838	2.28862	9.1545
119 Carbazole	167	7.006	7.012	(1.023)	1169245	2.32904	9.3161
120 Di-n-Butylphthalate	149	7.215	7.215	(1.053)	1483814	2.31649	9.2659
123 Fluoranthene	202	7.739	7.745	(1.130)	1190086	2.29170	9.1668
124 Benzidine	184	7.814	7.814	(0.885)	735122	2.32482	9.2993
125 Pyrene	202	7.916	7.921	(0.896)	1245383	2.30755	9.2302
131 Butylbenzylphthalate	149	8.327	8.338	(0.943)	654986	2.35916	9.4366
133 3,3'-Dimethoxybenzidine	244	8.729	8.745	(0.988)	232183	2.41978	9.6791
135 3,3'-Dichlorobenzidine	252	8.766	8.788	(0.993)	416018	2.42627	9.7051
136 Benzo(a)Anthracene	228	8.820	8.836	(0.999)	1112751	2.31126	9.2450
137 Chrysene	228	8.852	8.868	(1.002)	1097034	2.36961	9.4784
138 4,4'-Methylene bis(o-chloroan	231	8.761	8.782	(0.992)	219211	2.41407	9.6563
139 bis(2-ethylhexyl)Phthalate	149	8.745	8.761	(0.990)	936806	2.35763	9.4305
140 Di-n-octylphthalate	149	9.317	9.338	(0.900)	1513768	2.32150	9.2860
141 Benzo(b)fluoranthene	252	9.868	9.895	(0.953)	972620	2.26754	9.0702
142 Benzo(k)fluoranthene	252	9.900	9.927	(0.957)	1159807	2.49232	9.9693
146 Benzo(a)pyrene	252	10.280	10.301	(0.993)	971401	2.36687	9.4675
149 Indeno(1,2,3-cd)pyrene	276	12.013	12.040	(1.161)	1007610	2.37017	9.4807
150 Dibenz(a,h)anthracene	278	12.029	12.061	(1.162)	843266	2.33788	9.3515
151 Benzo(g,h,i)perylene	276	12.526	12.558	(1.210)	830544	2.35107	9.4043
198 1,4-Dioxane	88	1.791	1.802	(0.498)	224911	2.33038	9.3215
101 Diphenylamine	169	6.220	6.226	(0.908)	628871	2.27624	9.1050

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

TestAmerica North Canton

Semivolatile REPORT SW-846 Method 8270

Data file : \\cansvr11\dd\chem\MSS\a4hp7.i\90803a.b\7QCMDLL1.D
Lab Smp Id: qcmrl
Inj Date : 03-AUG-2009 20:59
Operator : 001710 Inst ID: a4hp7.i
Smp Info : qcmrl,90803a.b,8270C-625,1-827042d.sub
Misc Info :
Comment :
Method : \\cansvr11\dd\chem\MSS\a4hp7.i\90803a.b\8270C-625.m
Meth Date : 04-Aug-2009 09:48 ulmanm Quant Type: ISTD
Cal Date : 03-AUG-2009 10:19 Cal File: 7SMH0803.D
Als bottle: 34 QC Sample: mrl
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: qcmrl.sub
Target Version: 4.14
Processing Host: CANPMSSV06

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (NG)
* 1 1,4-Dichlorobenzene-d4	152	3.599	3.599	(1.000)	341997	2.00000	(Q)
* 2 Naphthalene-d8	136	4.492	4.498	(1.000)	1434688	2.00000	
* 3 Acenaphthene-d10	164	5.765	5.766	(1.000)	737130	2.00000	
* 4 Phenanthrene-d10	188	6.851	6.851	(1.000)	1163862	2.00000	
* 5 Chrysene-d12	240	8.825	8.846	(1.000)	966660	2.00000	
* 6 Perylene-d12	264	10.344	10.365	(1.000)	924470	2.00000	
9 Pyridine	79	2.000	2.000	(0.556)	18365	0.04650	0.046496
10 N-Nitrosodimethylamine	74	1.968	1.968	(0.547)	12314	0.05489	0.054889(QM)
11 Ethyl methacrylate	69	2.198	2.198	(0.611)	16777	0.04894	0.048944
12 3-Chloropropionitrile	54	2.369	2.375	(0.658)	11222	0.06508	0.065083
13 Malononitrile	66	2.508	2.508	(0.697)	25198	0.05356	0.053556
209 Benzaldehyde	77	3.310	3.311	(0.920)	17433	0.11142	0.11142
21 Aniline	93	Compound Not Detected.					
22 Phenol	94	3.305	3.305	(0.918)	20225	0.04379	0.043791
23 bis(2-Chloroethyl)ether	93	3.391	3.396	(0.942)	24172	0.06613	0.066130(M)
24 2-Chlorophenol	128	3.455	3.455	(0.960)	11929	0.04299	0.042993
26 1,3-Dichlorobenzene	146	3.562	3.567	(0.990)	14789	0.05791	0.057908
27 1,4-Dichlorobenzene	146	3.610	3.610	(1.003)	14281	0.05899	0.058989(M)
28 1,2-Dichlorobenzene	146	3.717	3.722	(1.033)	15098	0.06163	0.061634
29 Benzyl Alcohol	108	3.669	3.669	(1.019)	5739	0.02783	0.027830
30 2-Methylphenol	108	3.722	3.722	(1.034)	12734	0.04198	0.041976
31 bis(2-Chloroisopropyl)ether	45	3.754	3.755	(1.043)	25514	0.06538	0.065385
37 Acetophenone	105	3.861	3.867	(1.073)	21473	0.04961	0.049610
32 N-Nitroso-di-n-propylamine	70	3.845	3.851	(1.068)	14758	0.04858	0.048582
192 4-Methylphenol	108	3.824	3.829	(1.062)	11512	0.03632	0.036321
34 Hexachloroethane	117	3.958	3.958	(1.100)	7229	0.06618	0.066181(QM)
35 Nitrobenzene	77	3.990	3.990	(0.888)	25298	0.06311	0.063115
41 Isophorone	82	4.145	4.150	(0.923)	37089	0.04977	0.049772
42 2-Nitrophenol	139	4.214	4.215	(0.938)	4414	0.03008	0.030079(Q)
43 2,4-Dimethylphenol	107	4.204	4.204	(0.936)	12342	0.03747	0.037467
44 bis(2-Chloroethoxy)methane	93	4.279	4.279	(0.952)	25526	0.06354	0.063544

46	2,4-Toluenediamene	121	Compound Not Detected.
47	1,3,5-Trichlorobenzene	180	Compound Not Detected.

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (NG)
48 2,4-Dichlorophenol	162	4.380	4.375	(0.975)	4448	0.02411	0.024109
49 Benzoic Acid	122	Compound Not Detected.					
50 1,2,4-Trichlorobenzene	180	4.444	4.444	(0.989)	12413	0.06190	0.061898
51 Naphthalene	128	4.508	4.514	(1.004)	44689	0.05369	0.053693
52 4-Chloroaniline	127	4.525	4.530	(1.007)	14309	0.04047	0.040465
56 Hexachlorobutadiene	225	4.578	4.584	(1.019)	5815	0.06155	0.061549
210 Caprolactam	113	4.755	4.781	(1.058)	2375	0.02472	0.024719(Q)
57 1,2,3-Trichlorobenzene	180	4.610	4.610	(1.026)	11367	0.06174	0.061743
59 4-Chloro-3-Methylphenol	107	4.856	4.851	(1.081)	6580	0.02352	0.023519
62 2-Methylnaphthalene	142	5.001	5.006	(1.113)	23008	0.04991	0.049909
63 1-Methylnaphthalene	142	5.075	5.076	(1.130)	23532	0.05004	0.050036
64 Hexachlorocyclopentadiene	237	5.108	5.108	(0.886)	2777	0.02769	0.027686(M)
66 2,4,6-Trichlorophenol	196	5.209	5.193	(0.904)	1574	0.01245	0.012446
67 2,4,5-Trichlorophenol	196	5.236	5.220	(0.908)	4349	0.03092	0.030917(QM)
211 1,1'-Biphenyl	154	5.332	5.332	(0.925)	27443	0.04798	0.047980
68 1,2,3,5-Tetrachlorobenzene	216	5.108	5.113	(0.886)	12477	0.07007	0.070067
70 2-Chloronaphthalene	162	5.359	5.359	(0.929)	24187	0.05577	0.055775
73 2-Nitroaniline	65	5.418	5.418	(0.940)	8822	0.04063	0.040631(QM)
74 1,2,3,4-Tetrachlorobenzene	216	5.327	5.332	(0.924)	10421	0.06277	0.062766
76 Dimethylphthalate	163	5.525	5.530	(0.958)	22804	0.04667	0.046674
78 2,6-Dinitrotoluene	165	5.578	5.584	(0.968)	5727	0.04992	0.049923
79 Aceuaphthylene	152	5.664	5.669	(0.982)	35820	0.04846	0.048456
80 1,2-Dinitrobenzene	168	5.626	5.632	(0.976)	2417	0.04307	0.043072(Q)
81 3-Nitroaniline	138	5.717	5.712	(0.992)	4803	0.03690	0.036901
82 Acenaphthene	153	5.787	5.792	(1.004)	24405	0.05380	0.053797
83 2,4-Dinitrophenol	184	Compound Not Detected.					
85 4-Nitrophenol	109	Compound Not Detected.					
86 Dibenzofuran	168	5.910	5.915	(1.025)	31438	0.05152	0.051521
87 2,4-Dinitrotoluene	165	5.878	5.878	(1.019)	6320	0.04175	0.041752(QM)
91 2,3,5,6-Tetrachlorophenol	232	Compound Not Detected.					
93 Diethylphthalate	149	6.028	6.033	(1.045)	26519	0.05225	0.052249
94 Fluorene	166	6.161	6.161	(1.069)	25771	0.05050	0.050501
95 4-Chlorophenyl-phenylether	204	6.140	6.145	(1.065)	12229	0.05657	0.056574
96 4-Nitroaniline	138	6.172	6.156	(1.071)	5030	0.03597	0.035972
98 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
99 N-Nitrosodiphenylamine	169	6.225	6.226	(0.909)	16234	0.04236	0.042362
100 1,2-Diphenylhydrazine	77	6.257	6.258	(0.913)	40887	0.04806	0.048062
106 4-Bromophenyl-phenylether	248	6.504	6.504	(0.949)	6194	0.05658	0.056583
107 Hexachlorobenzene	284	6.562	6.563	(0.958)	6591	0.06098	0.060980
212 Atrazine	200	6.584	6.589	(0.961)	4774	0.04752	0.047522
111 Pentachlorophenol	266	Compound Not Detected.					
115 Phenanthrene	178	6.867	6.873	(1.002)	37932	0.05209	0.052091
116 Anthracene	178	6.905	6.910	(1.008)	38928	0.05407	0.054072
119 Carbazole	167	7.012	7.012	(1.023)	35856	0.05149	0.051490
120 Di-n-Butylphthalate	149	7.215	7.215	(1.053)	47837	0.05384	0.053840
123 Fluoranthene	202	7.739	7.745	(1.130)	37630	0.05224	0.052240
124 Benzidine	184	7.814	7.814	(0.885)	11745	0.02622	0.026217
125 Pyrene	202	7.916	7.921	(0.897)	40186	0.05256	0.052555
131 Butylbenzylphthalate	149	8.327	8.338	(0.944)	24408	0.06205	0.062052
133 3,3'-Dimethoxybenzidine	244	Compound Not Detected.					
135 3,3'-Dichlorobenzidine	252	8.766	8.788	(0.993)	11583	0.04768	0.047681
136 Benzo(a)Anthracene	228	8.814	8.836	(0.999)	35429	0.05194	0.051940

TestAmerica North Canton

Semivolatile REPORT SW-846 Method 8270

Data file : \\cansvr11\dd\chem\MSS\a4hp7.i\90803a.b\7QCMDLL2.D
Lab Smp Id: qcmrl
Inj Date : 03-AUG-2009 21:18
Operator : 001710 Inst ID: a4hp7.i
Smp Info : qcmrl,90803a.b,8270C-625,1-827042d.sub
Misc Info :
Comment :
Method : \\cansvr11\dd\chem\MSS\a4hp7.i\90803a.b\8270C-625.m
Meth Date : 04-Aug-2009 09:48 ulmanm Quant Type: ISTD
Cal Date : 03-AUG-2009 10:19 Cal File: 7SMH0803.D
Als bottle: 35 QC Sample: mrl
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: qcmrl.sub
Target Version: 4.14
Processing Host: CANPMSSV06

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (NG)
* 1 1,4-Dichlorobenzene-d4	152	3.599	3.599	(1.000)	338505	2.00000	(Q)
* 2 Naphthalene-d8	136	4.493	4.498	(1.000)	1440878	2.00000	
* 3 Acenaphthene-d10	164	5.766	5.766	(1.000)	725515	2.00000	
* 4 Phenanthrene-d10	188	6.851	6.851	(1.000)	1112169	2.00000	
* 5 Chrysene-d12	240	8.820	8.846	(1.000)	924822	2.00000	
* 6 Perylene-d12	264	10.339	10.365	(1.000)	893018	2.00000	
9 Pyridine	79	1.995	2.000	(0.554)	94580	0.24192	0.24192
10 N-Nitrosodimethylamine	74	1.963	1.968	(0.545)	58789	0.26475	0.26475
11 Ethyl methacrylate	69	2.193	2.198	(0.609)	84761	0.24982	0.24982
12 3-Chloropropionitrile	54	2.369	2.375	(0.658)	44980	0.26356	0.26356
13 Malononitrile	66	2.508	2.508	(0.697)	117131	0.25152	0.25152
209 Benzaldehyde	77	3.305	3.311	(0.918)	72080	0.30859	0.30858
21 Aniline	93	3.369	3.375	(0.936)	179308	0.22442	0.22442
22 Phenol	94	3.305	3.305	(0.918)	113509	0.24830	0.24830
23 bis(2-Chloroethyl)ether	93	3.391	3.396	(0.942)	103136	0.28507	0.28507(M)
24 2-Chlorophenol	128	3.455	3.455	(0.960)	66293	0.24139	0.24139
26 1,3-Dichlorobenzene	146	3.562	3.567	(0.990)	68387	0.27054	0.27054
27 1,4-Dichlorobenzene	146	3.610	3.610	(1.003)	63408	0.26462	0.26462
28 1,2-Dichlorobenzene	146	3.717	3.722	(1.033)	66398	0.27385	0.27385
29 Benzyl Alcohol	108	3.669	3.669	(1.019)	32180	0.15766	0.15766
30 2-Methylphenol	108	3.722	3.722	(1.034)	65592	0.21845	0.21845
31 bis(2-Chloroisopropyl)ether	45	3.754	3.755	(1.043)	108547	0.28104	0.28104
37 Acetophenone	105	3.861	3.867	(1.073)	108024	0.25215	0.25214
32 N-Nitroso-di-n-propylamine	70	3.845	3.851	(1.068)	76351	0.25393	0.25393
192 4-Methylphenol	108	3.824	3.829	(1.062)	75774	0.24154	0.24154
34 Hexachloroethane	117	3.958	3.958	(1.100)	27069	0.25037	0.25037
35 Nitrobenzene	77	3.990	3.990	(0.888)	106748	0.26518	0.26518
41 Isophorone	82	4.145	4.150	(0.923)	181650	0.24272	0.24272
42 2-Nitrophenol	139	4.209	4.215	(0.937)	30687	0.20822	0.20822(Q)
43 2,4-Dimethylphenol	107	4.204	4.204	(0.936)	76870	0.23236	0.23236
44 bis(2-Chloroethoxy)methane	93	4.273	4.279	(0.951)	104545	0.25914	0.25914

46	2,4-Toluenediamene	121	5.311	5.316 (1.182)	34240	0.25984	0.25984
47	1,3,5-Trichlorobenzene	180	4.220	4.220 (0.939)	71304	0.30770	0.30770

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (NG)
48 2,4-Dichlorophenol	162	4.375	4.375	(0.974)	35847	0.19346	0.19346
49 Benzoic Acid	122	Compound Not Detected.					
50 1,2,4-Trichlorobenzene	180	4.444	4.444	(0.989)	52890	0.26260	0.26260
51 Naphthalene	128	4.509	4.514	(1.004)	210101	0.25135	0.25135
52 4-Chloroaniline	127	4.525	4.530	(1.007)	85553	0.24090	0.24090
56 Hexachlorobutadiene	225	4.578	4.584	(1.019)	25035	0.26384	0.26384
210 Caprolactam	113	4.755	4.781	(1.058)	18667	0.19345	0.19345
57 1,2,3-Trichlorobenzene	180	4.610	4.610	(1.026)	50162	0.27130	0.27130
59 4-Chloro-3-Methylphenol	107	4.851	4.851	(1.080)	52304	0.18615	0.18615
62 2-Methylnaphthalene	142	5.001	5.006	(1.113)	115753	0.25001	0.25001
63 1-Methylnaphthalene	142	5.076	5.076	(1.130)	114747	0.24294	0.24294
64 Hexachlorocyclopentadiene	237	5.108	5.108	(0.886)	16853	0.17071	0.17071
66 2,4,6-Trichlorophenol	196	5.193	5.193	(0.901)	22026	0.17696	0.17696
67 2,4,5-Trichlorophenol	196	5.225	5.220	(0.906)	30992	0.22385	0.22385
211 1,1'-Biphenyl	154	5.332	5.332	(0.925)	141375	0.25113	0.25113
68 1,2,3,5-Tetrachlorobenzene	216	5.108	5.113	(0.886)	46705	0.26648	0.26648
70 2-Chloronaphthalene	162	5.359	5.359	(0.929)	106606	0.24977	0.24977
73 2-Nitroaniline	65	5.413	5.418	(0.939)	47230	0.22101	0.22101
74 1,2,3,4-Tetrachlorobenzene	216	5.327	5.332	(0.924)	44845	0.27443	0.27443
76 Dimethylphthalate	163	5.525	5.530	(0.958)	115407	0.23999	0.23999
78 2,6-Dinitrotoluene	165	5.578	5.584	(0.968)	22842	0.20230	0.20230
79 Acenaphthylene	152	5.664	5.669	(0.982)	185692	0.25522	0.25522
80 1,2-Dinitrobenzene	168	5.621	5.632	(0.975)	12867	0.23297	0.23297
81 3-Nitroaniline	138	5.712	5.712	(0.991)	28020	0.21872	0.21872
82 Acenaphthene	153	5.787	5.792	(1.004)	116236	0.26033	0.26033(Q)
83 2,4-Dinitrophenol	184	Compound Not Detected.					
85 4-Nitrophenol	109	5.819	5.798	(1.009)	9504	0.12479	0.12479(QM)
86 Dibenzofuran	168	5.910	5.915	(1.025)	155887	0.25956	0.25956
87 2,4-Dinitrotoluene	165	5.873	5.878	(1.019)	30677	0.20591	0.20590
91 2,3,5,6-Tetrachlorophenol	232	5.969	5.958	(1.035)	9912	0.10105	0.10105(Q)
93 Diethylphthalate	149	6.028	6.033	(1.045)	121770	0.24376	0.24376
94 Fluorene	166	6.161	6.161	(1.069)	128881	0.25660	0.25660
95 4-Chlorophenyl-phenylether	204	6.140	6.145	(1.065)	55942	0.26295	0.26294
96 4-Nitroaniline	138	6.161	6.156	(1.069)	27748	0.20162	0.20162
98 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
99 N-Nitrosodiphenylamine	169	6.220	6.226	(0.908)	90906	0.24824	0.24824
100 1,2-Diphenylhydrazine	77	6.258	6.258	(0.913)	202763	0.24942	0.24942
106 4-Bromophenyl-phenylether	248	6.504	6.504	(0.949)	27312	0.26109	0.26109
107 Hexachlorobenzene	284	6.562	6.563	(0.958)	27564	0.26688	0.26688
212 Atrazine	200	6.584	6.589	(0.961)	25252	0.26305	0.26305
111 Pentachlorophenol	266	Compound Not Detected.					
115 Phenanthrene	178	6.867	6.873	(1.002)	182607	0.26242	0.26242
116 Anthracene	178	6.905	6.910	(1.008)	170246	0.24747	0.24746
119 Carbazole	167	7.012	7.012	(1.023)	176305	0.26495	0.26494
120 Di-n-Butylphthalate	149	7.210	7.215	(1.052)	212263	0.25000	0.25000
123 Fluoranthene	202	7.739	7.745	(1.130)	175771	0.25536	0.25536
124 Benzidine	184	7.814	7.814	(0.886)	70110	0.16358	0.16358
125 Pyrene	202	7.916	7.921	(0.898)	190964	0.26104	0.26104
131 Butylbenzylphthalate	149	8.322	8.338	(0.944)	95918	0.25488	0.25488
133 3,3'-Dimethoxybenzidine	244	8.723	8.745	(0.989)	26140	0.20098	0.20098
135 3,3'-Dichlorobenzidine	252	8.761	8.788	(0.993)	53774	0.23137	0.23137
136 Benzo(a)Anthracene	228	8.814	8.836	(0.999)	163051	0.24985	0.24985

TestAmerica North Canton

Semivolatile REPORT SW-846 Method 8270

Data file : \\cansvr11\dd\chem\MSS\a4hp7.i\90803a.b\7QCMDLL3.D
Lab Smp Id: qcmrl
Inj Date : 03-AUG-2009 21:38
Operator : 001710 Inst ID: a4hp7.i
Smp Info : qcmrl,90803a.b,8270C-625,1-827042d.sub
Misc Info :
Comment :
Method : \\cansvr11\dd\chem\MSS\a4hp7.i\90803a.b\8270C-625.m
Meth Date : 04-Aug-2009 09:48 ulmanm Quant Type: ISTD
Cal Date : 03-AUG-2009 10:19 Cal File: 7SMH0803.D
Als bottle: 36 QC Sample: mrl
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: qcmrl.sub
Target Version: 4.14
Processing Host: CANPMSSV06

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (NG)
* 1 1,4-Dichlorobenzene-d4	152	3.599	3.599	(1.000)	325228	2.00000	(Q)
* 2 Naphthalene-d8	136	4.493	4.498	(1.000)	1364338	2.00000	
* 3 Acenaphthene-d10	164	5.765	5.766	(1.000)	692556	2.00000	
* 4 Phenanthrene-d10	188	6.851	6.851	(1.000)	1100212	2.00000	
* 5 Chrysene-d12	240	8.830	8.846	(1.000)	894339	2.00000	
* 6 Perylene-d12	264	10.344	10.365	(1.000)	848046	2.00000	
9 Pyridine	79	2.000	2.000	(0.556)	183819	0.48938	0.48938
10 N-Nitrosodimethylamine	74	1.968	1.968	(0.547)	102485	0.48038	0.48038
11 Ethyl methacrylate	69	2.198	2.198	(0.611)	157085	0.48189	0.48189
12 3-Chloropropionitrile	54	2.369	2.375	(0.658)	79241	0.48326	0.48326
13 Malononitrile	66	2.508	2.508	(0.697)	221163	0.49430	0.49430
209 Benzaldehyde	77	3.310	3.311	(0.920)	128998	0.53723	0.53722
21 Aniline	93	3.369	3.375	(0.936)	343759	0.51785	0.51785
22 Phenol	94	3.305	3.305	(0.918)	204377	0.46533	0.46533
23 bis(2-Chloroethyl)ether	93	3.391	3.396	(0.942)	189814	0.54607	0.54607(M)
24 2-Chlorophenol	128	3.455	3.455	(0.960)	126215	0.47834	0.47834
26 1,3-Dichlorobenzene	146	3.562	3.567	(0.990)	125892	0.51836	0.51836
27 1,4-Dichlorobenzene	146	3.610	3.610	(1.003)	110800	0.48127	0.48127
28 1,2-Dichlorobenzene	146	3.717	3.722	(1.033)	115398	0.49538	0.49538
29 Benzyl Alcohol	108	3.669	3.669	(1.019)	76568	0.39044	0.39044
30 2-Methylphenol	108	3.722	3.722	(1.034)	139652	0.48408	0.48408
31 bis(2-Chloroisopropyl)ether	45	3.754	3.755	(1.043)	193714	0.52203	0.52203
37 Acetophenone	105	3.861	3.867	(1.073)	195261	0.47438	0.47438
32 N-Nitroso-di-n-propylamine	70	3.845	3.851	(1.068)	136799	0.47355	0.47355
192 4-Methylphenol	108	3.824	3.829	(1.062)	136521	0.45294	0.45294
34 Hexachloroethane	117	3.958	3.958	(1.100)	51285	0.49372	0.49372
35 Nitrobenzene	77	3.990	3.990	(0.888)	187089	0.49083	0.49083
41 Isophorone	82	4.145	4.150	(0.923)	332263	0.46888	0.46888
42 2-Nitrophenol	139	4.209	4.215	(0.937)	59552	0.42674	0.42674
43 2,4-Dimethylphenol	107	4.204	4.204	(0.936)	139142	0.44418	0.44418
44 bis(2-Chloroethoxy)methane	93	4.279	4.279	(0.952)	185940	0.48675	0.48674

46	2,4-Toluenediamene	121	5.311	5.316 (1.182)	71345	0.64021	0.64021
47	1,3,5-Trichlorobenzene	180	4.220	4.220 (0.939)	111192	0.50675	0.50675

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (NG)
48 2,4-Dichlorophenol	162	4.375	4.375	(0.974)	73102	0.41666	0.41666
49 Benzoic Acid	122	4.230	4.273	(0.942)	20518	0.75960	0.75960(QM)
50 1,2,4-Trichlorobenzene	180	4.444	4.444	(0.989)	94437	0.49519	0.49519
51 Naphthalene	128	4.509	4.514	(1.004)	375299	0.47416	0.47416
52 4-Chloroaniline	127	4.525	4.530	(1.007)	158136	0.47026	0.47026
56 Hexachlorobutadiene	225	4.578	4.584	(1.019)	44479	0.49506	0.49506
210 Caprolactam	113	4.755	4.781	(1.058)	35768	0.39147	0.39147
57 1,2,3-Trichlorobenzene	180	4.610	4.610	(1.026)	87159	0.49784	0.49784
59 4-Chloro-3-Methylphenol	107	4.846	4.851	(1.079)	108711	0.40860	0.40860
62 2-Methylnaphthalene	142	5.001	5.006	(1.113)	214437	0.48914	0.48914
63 1-Methylnaphthalene	142	5.076	5.076	(1.130)	215459	0.48176	0.48176
64 Hexachlorocyclopentadiene	237	5.108	5.108	(0.886)	33367	0.35407	0.35407
66 2,4,6-Trichlorophenol	196	5.193	5.193	(0.901)	45494	0.38290	0.38290
67 2,4,5-Trichlorophenol	196	5.220	5.220	(0.905)	59679	0.45157	0.45157
211 1,1'-Biphenyl	154	5.332	5.332	(0.925)	263379	0.49012	0.49012
68 1,2,3,5-Tetrachlorobenzene	216	5.108	5.113	(0.886)	83631	0.49988	0.49988
70 2-Chloronaphthalene	162	5.359	5.359	(0.929)	191298	0.46952	0.46952
73 2-Nitroaniline	65	5.412	5.418	(0.939)	91087	0.44652	0.44652
74 1,2,3,4-Tetrachlorobenzene	216	5.327	5.332	(0.924)	74977	0.48066	0.48066
76 Dimethylphthalate	163	5.525	5.530	(0.958)	221327	0.48215	0.48215
78 2,6-Dinitrotoluene	165	5.578	5.584	(0.968)	47089	0.43690	0.43690
79 Acenaphthylene	152	5.664	5.669	(0.982)	329874	0.47497	0.47497
80 1,2-Dinitrobenzene	168	5.626	5.632	(0.976)	22871	0.43380	0.43380
81 3-Nitroaniline	138	5.707	5.712	(0.990)	52617	0.43027	0.43027
82 Acenaphthene	153	5.787	5.792	(1.004)	210542	0.49398	0.49398(Q)
83 2,4-Dinitrophenol	184	Compound Not Detected.					
85 4-Nitrophenol	109	5.835	5.798	(1.012)	19184	0.26388	0.26388(QM)
86 Dibenzofuran	168	5.910	5.915	(1.025)	282947	0.49354	0.49354
87 2,4-Dinitrotoluene	165	5.872	5.878	(1.019)	56046	0.39409	0.39409
91 2,3,5,6-Tetrachlorophenol	232	5.963	5.958	(1.034)	23439	0.25033	0.25033
93 Diethylphthalate	149	6.028	6.033	(1.045)	224100	0.46995	0.46995
94 Fluorene	166	6.161	6.161	(1.069)	231279	0.48239	0.48239
95 4-Chlorophenyl-phenylether	204	6.140	6.145	(1.065)	102156	0.50302	0.50302
96 4-Nitroaniline	138	6.156	6.156	(1.068)	57670	0.43897	0.43897
98 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
99 N-Nitrosodiphenylamine	169	6.220	6.226	(0.908)	175719	0.48506	0.48506
100 1,2-Diphenylhydrazine	77	6.258	6.258	(0.913)	373962	0.46501	0.46501
106 4-Bromophenyl-phenylether	248	6.504	6.504	(0.949)	49137	0.47484	0.47484
107 Hexachlorobenzene	284	6.562	6.563	(0.958)	48140	0.47116	0.47116
212 Atrazine	200	6.584	6.589	(0.961)	44748	0.47121	0.47120
111 Pentachlorophenol	266	6.728	6.702	(0.982)	10680	0.15481	0.15481(QM)
115 Phenanthrene	178	6.867	6.873	(1.002)	327799	0.47620	0.47620
116 Anthracene	178	6.905	6.910	(1.008)	328814	0.48315	0.48315
119 Carbazole	167	7.006	7.012	(1.023)	311686	0.47348	0.47348
120 Di-n-Butylphthalate	149	7.215	7.215	(1.053)	387610	0.46149	0.46149
123 Fluoranthene	202	7.739	7.745	(1.130)	323018	0.47438	0.47438
124 Benzidine	184	7.814	7.814	(0.885)	155513	0.37520	0.37520
125 Pyrene	202	7.916	7.921	(0.896)	344888	0.48752	0.48752
131 Butylbenzylphthalate	149	8.327	8.338	(0.943)	173061	0.47555	0.47554
133 3,3'-Dimethoxybenzidine	244	8.723	8.745	(0.988)	53507	0.42543	0.42542
135 3,3'-Dichlorobenzidine	252	8.766	8.788	(0.993)	101417	0.45124	0.45124
136 Benzo(a)Anthracene	228	8.820	8.836	(0.999)	300206	0.47570	0.47570

5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: NORTH CANTON Contract:

Lab Code: TALCAN Case No.: SAS No.: SDG No.: A9G160103

Lab File ID: 7DF0803 DFTPP Injection Date: 08/03/09

Instrument ID: A4HP7 DFTPP Injection Time: 1000

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	51.6
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	75.5
70	Less than 2.0% of mass 69	0.3 (0.5)1
127	25.0 - 75.0% of mass 198	62.0
197	Less than 1.0% of mass 198	0.3
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.7
275	10.0 - 30.0% of mass 198	21.9
365	Greater than 0.75% of mass 198	1.8
441	Present, but less than mass 443	7.5
442	40.0 - 110.0% of mass 198	52.2
443	15.0 - 24.0% of mass 442	10.1 (19.3)2

1-Value is % of mass 69 2-Value is % of mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD006	L6	7SMH0803	08/03/09	1019
02	SSTD005	L5	7SMM0803	08/03/09	1039
03	SSTD004	L4	7SM0803	08/03/09	1059
04	SSTD003	L3	7SML0803	08/03/09	1119
05	SSTD002	L2	7SL0803	08/03/09	1139
06	SSTD001	L1	7SLL0803	08/03/09	1159
07	SSTD007	L7	7SH0803	08/03/09	1219
08	SSTD008	L8	7SHH0803	08/03/09	1239
09	SSTD009	L9	7HHH0803	08/03/09	1259
10	FWGLL11MW-010	LGKAX1AC	LGKAX1AC	08/03/09	1459
11	FWGLL11MW-DUP	LGKA21AC	LGKA21AC	08/03/09	1519
12	FWGASYMW-001	LGKA61AC	LGKA61AC	08/03/09	1539
13	FWGEQUIPRINS	LGKA81AC	LGKA81AC	08/03/09	1559
14	FWGASYMW-002	LGKCA1AC	LGKCA1AC	08/03/09	1619
15	FWGLL11MW-005	LGKCJ1AC	LGKCJ1AC	08/03/09	1639
16	FWGLL11MW-003	LGKCN1AC	LGKCN1AC	08/03/09	1659
17	FWGLL11MW-009	LGKCQ1AC	LGKCQ1AC	08/03/09	1719
18	FWGLL11MW-006	LGJ911AC	LGJ911AC	08/03/09	1739
19					
20					
21					
22					

R 2,4-dinitrophenol
4,6-Dinitro-2-methylphenol
MRL outliers < 50
No passing MDL ✓

PESTICIDE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 28, 2009

SDG: A9G160103 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.6 – 4.8 °C. Upon receipt, it was documented by the laboratory, that the samples were not frozen and in good condition. Therefore, no qualifications were made to sample results based on temperatures less than 2°C.	QAPP Table 4-2, NELAC
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-5
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-5
7. Was a DDT standard analyzed every 12 hours? Was the DDT %breakdown < 15%?	✓				LCG Table 4 >15%=J/R
8. Was an endrin standard analyzed every 12 hours? Was endrin %breakdown <15%?	✓				LCG Table 4 >15%=J/R
9. Does the initial calibration curve consist of 5 concentration levels?	✓			Instrument A2HP3 7/07/09, 7/17/09 stds = 0.05, 0.25, 0.50, 1.0, 2.5, 5.0, 7.5, 10.0, 12.5 ng on column	LCG Table 4 R
10. Were the %RSDs for each analyte ≤ 20%? OR was the average %RSD ≤ 20% with the r^2 >0.990?	✓				LCG Table 4 RSD>20% or r<0.99=J/R
11. Was a blank run prior to the initial calibration?			✓	No data provided to evaluate.	
12. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓			7/18/09	LCG Table 4 R
13. Was a MRL Verification performed at the beginning and end of the sequence or every 12 hours with results 70-130%?	✓				LCG Table 4 >130%=J; 65-70%%=J/UJ; <65%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 28, 2009

SDG: A9G160103 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
14. Was a second source (ICV) verification analyzed after the ICAL? Were results 85-115%?	✓			7/20/09@1308	LCG Table 4 >115%=J; 80-85%=J/UJ; <80%=J/R
15. Was a CCV run every 12 hours?	✓				LCG Table 4
16. Was the %D for all target analytes ≤15%? OR was the average %D ≤ 15% with no individual analyte >30%?		✓		• The avg %D for the tox CCV analyzed on 7/20/09 @1442 on the primary column was above limits at 20.8%. No qualifications were made as there were no detected toxaphene concentrations. Documentation provided in SDG A9G140103. • The avg %D for the tox CCV analyzed on 7/29/09 @1250 on the primary column was above limits at 18.4%. No qualifications were made as there were no detected toxaphene concentrations.	LCG Table 4 D>30% (neg) =J/R D>30% (pos) = J
17. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 4
18. Were target analytes < ½ the MRL?	✓				LCG Table 4 <5x=B
20. Was a field blank collected and analyzed?	✓			FWGEQUIPRinse3-1425-GW	
20. Were target analytes in the field blank analyses (equipment) <1/2 the MRL?	✓				<5x =B
21. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 4
22. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR.	LCG Appendix C >UL=J; 30%-LL=J/UJ; <30%=J/R
23. Was a MS/MSD pair prepared with each batch?	✓				LCG Table 4
24. Was the MS/MSD parent a Ravenna sample?	✓			Sample FWGLL10mw-004c-1392-GW and FWGLL11mw-004c-1397-GW were the parent MS/MSD samples from this SDG.	
25. Were MS/MSD recoveries 40-140% and RPD ≤20%?	✓			Checked by ADR	*QAPP Table 3-2*, Pj

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 28, 2009

SDG: A9G160103 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
26. Were surrogate recoveries 50-150%?		✓		The surrogate, DCB, recovered below control limits in samples FWGASYmw-001c-1403-GW, FWGASYmw-002c-1404-GW, FWGASYmw-003c-1405-GW, FWGASYmw-004c-1406-GW, FWGASYmw-005c-1407-GW, FWGLL11mw-001c-1395-GW, FWGLL11mw-003c-1396-GW, FWGLL11mw-008c-1400-GW, FWGLL11mw-010c-1402-GW and FWGLL11mw-DUP5-11417-GW. The associated results were qualified as estimated, "UJ".	LCG Table 4 >150%=J; 10% -50%=J/UJ; <10%=J/R
27. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓			Sample FWGLL11mw-DUP5-1417-GW was the field duplicate for sample FWGLL11mw-010c-1402-GW and FWGLL10mw-DUP4-1416-GW was the field duplicate for sample FWGLL10mw-006c-1394-GW.	QAPP Table 3-2 RPD >30=J
28. Were all positive results verified by a second column confirmation? Were the RPDs ≤ 40?	✓			Only detected concentrations above the RL were evaluated.	LCG Table 4 >40 RPD=J
29. Were reported sample concentrations within calibration range?	✓				
30. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
31. Were lab comments included in report? If yes, summarize contents.	✓			See narrative.	

References:

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 4 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-004C-1392-GW

GC Semivolatiles

Lot-Sample #...: A9G160103-002 Work Order #...: LGJ9N1AH Matrix.....: WG
Date Sampled...: 07/15/09 08:35 Date Received..: 07/16/09
Prep Date.....: 07/16/09 Analysis Date..: 07/29/09
Prep Batch #...: 9197128
Dilution Factor: 1 Initial Wgt/Vol: 1010 mL Final Wgt/Vol..: 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	81	(50 - 150)
Decachlorobiphenyl	78	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-005C-1393-GW

GC Semivolatiles

Lot-Sample #...: A9G160103-004 **Work Order #...:** LGJ9T1AD **Matrix.....:** WG
Date Sampled...: 07/15/09 10:35 **Date Received..:** 07/16/09
Prep Date.....: 07/17/09 **Analysis Date..:** 07/23/09
Prep Batch #...: 9198024
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	85	(50 - 150)
Decachlorobiphenyl	66	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-004C-1397-GW

GC Semivolatiles

Lot-Sample #...: A9G160103-006 Work Order #...: LGJ9W1AH Matrix.....: WG
Date Sampled...: 07/15/09 11:55 Date Received..: 07/16/09
Prep Date.....: 07/17/09 Analysis Date..: 07/23/09
Prep Batch #...: 9198024 Initial Wgt/Vol: 1020 mL Final Wgt/Vol..: 5 mL
Dilution Factor: 1 Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	83	(50 - 150)
Decachlorobiphenyl	58	(50 - 150)

North Canton

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-006C-1399-GW

GC Semivolatiles

Lot-Sample #...: A9G160103-008 Work Order #...: LGJ911AD Matrix.....: WG
Date Sampled...: 07/15/09 14:05 Date Received..: 07/16/09
Prep Date.....: 07/17/09 Analysis Date..: 07/23/09
Prep Batch #...: 9198024 Initial Wgt/Vol: 1040 mL Final Wgt/Vol..: 5 mL
Dilution Factor: 1 Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	84	(50 - 150)
Decachlorobiphenyl	52	(50 - 150)

North Canton

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-003C-1405-GW

GC Semivolatiles

Lot-Sample #...: A9G160103-010
Date Sampled...: 07/15/09 15:30
Prep Date.....: 07/17/09
Prep Batch #...: 9198024
Dilution Factor: 1

Work Order #...: LGJ951AD
Date Received..: 07/16/09
Analysis Date..: 07/23/09

Initial Wgt/Vol: 1050 mL
Method.....: SW846 8081A

Matrix.....: WG

Final Wgt/Vol..: 5 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	76	(50 - 150)
Decachlorobiphenyl	31 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

North Canton

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-004C-1406-GW

GC Semivolatiles

Lot-Sample #...: A9G160103-012 Work Order #...: LGJ991AD Matrix.....: WG
Date Sampled...: 07/15/09 16:45 Date Received..: 07/16/09
Prep Date.....: 07/17/09 Analysis Date..: 07/23/09
Prep Batch #...: 9198024 Initial Wgt/Vol: 1040 mL Final Wgt/Vol..: 5 mL
Dilution Factor: 1 Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	80	(50 - 150)
Decachlorobiphenyl	43 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

North Canton

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-006C-1394-GW

GC Semivolatiles

Lot-Sample #...: A9G160103-015
Date Sampled...: 07/15/09 08:50
Prep Date.....: 07/17/09
Prep Batch #...: 9198024
Dilution Factor: 1

Work Order #...: LGKAQ1AD
Date Received..: 07/16/09
Analysis Date..: 07/23/09

Initial Wgt/Vol: 930 mL
Method.....: SW846 8081A

Matrix.....: WG

Final Wgt/Vol..: 5 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	80	(50 - 150)
Decachlorobiphenyl	60	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-DUP4-1416-GW

GC Semivolatiles

Lot-Sample #...: A9G160103-017 Work Order #...: LGKAT1AD Matrix.....: WG
Date Sampled...: 07/15/09 10:00 Date Received..: 07/16/09
Prep Date.....: 07/17/09 Analysis Date..: 07/23/09
Prep Batch #...: 9198024
Dilution Factor: 1 Initial Wgt/Vol: 800 mL Final Wgt/Vol..: 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	74	(50 - 150)
Decachlorobiphenyl	57	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-010C-1402-GW

GC Semivolatiles

Lot-Sample #...: A9G160103-019
Date Sampled...: 07/15/09 11:00
Prep Date.....: 07/17/09
Prep Batch #...: 9198024
Dilution Factor: 1

Work Order #...: LGKAX1AD
Date Received..: 07/16/09
Analysis Date..: 07/23/09

Initial Wgt/Vol: 980 mL
Method.....: SW846 8081A

Matrix.....: WG

Final Wgt/Vol..: 5 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	83	(50 - 150)
Decachlorobiphenyl	43 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

North Canton

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-DUP5-1417-GW

GC Semivolatiles

Lot-Sample #...: A9G160103-021
Date Sampled...: 07/15/09 12:00
Prep Date.....: 07/17/09
Prep Batch #...: 9198024
Dilution Factor: 1

Work Order #...: LGKA21AD
Date Received..: 07/16/09
Analysis Date..: 07/23/09

Initial Wgt/Vol: 1050 mL
Method.....: SW846 8081A

Matrix.....: WG

Final Wgt/Vol..: 5 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	82	(50 - 150)
Decachlorobiphenyl	46 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

North Canton

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-001C-1403-GW

GC Semivolatiles

Lot-Sample #...: A9G160103-023 Work Order #...: LGKA61AD Matrix.....: WG
Date Sampled...: 07/15/09 14:10 Date Received..: 07/16/09
Prep Date.....: 07/17/09 Analysis Date..: 07/23/09
Prep Batch #...: 9198024 Initial Wgt/Vol: 1040 mL Final Wgt/Vol..: 5 mL
Dilution Factor: 1 Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	82	(50 - 150)
Decachlorobiphenyl	31 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

North Canton

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1425-GW

GC Semivolatiles

Lot-Sample #...: A9G160103-025 Work Order #...: LGKA81AD Matrix.....: WQ
Date Sampled...: 07/15/09 14:50 Date Received..: 07/16/09
Prep Date.....: 07/17/09 Analysis Date..: 07/23/09
Prep Batch #...: 9198024 Initial Wgt/Vol: 880 mL Final Wgt/Vol..: 5 mL
Dilution Factor: 1 Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	78	(50 - 150)
Decachlorobiphenyl	72	(50 - 150)

North Canton

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-002C-1404-GW

GC Semivolatiles

Lot-Sample #...: A9G160103-026 Work Order #...: LGKCA1AD Matrix.....: WG
Date Sampled...: 07/15/09 15:20 Date Received..: 07/16/09
Prep Date.....: 07/17/09 Analysis Date..: 07/23/09
Prep Batch #...: 9198024 Initial Wgt/Vol: 1050 mL Final Wgt/Vol..: 5 mL
Dilution Factor: 1 Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	88	(50 - 150)
Decachlorobiphenyl	27 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-005C-1398-GW

GC Semivolatiles

Lot-Sample #...: A9G160103-029 **Work Order #...:** LGKCJ1AD **Matrix.....:** WG
Date Sampled...: 07/15/09 08:45 **Date Received..:** 07/16/09
Prep Date.....: 07/17/09 **Analysis Date..:** 07/23/09
Prep Batch #...: 9198024
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	83	(50 - 150)
Decachlorobiphenyl	61	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-003C-1396-GW

GC Semivolatiles

Lot-Sample #...: A9G160103-031 Work Order #...: LGKCN1AD Matrix.....: WG
Date Sampled...: 07/15/09 10:25 Date Received..: 07/16/09
Prep Date.....: 07/17/09 Analysis Date..: 07/23/09
Prep Batch #...: 9198024 Initial Wgt/Vol: 1020 mL Final Wgt/Vol..: 5 mL
Dilution Factor: 1 Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	84	(50 - 150)
Decachlorobiphenyl	47 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

North Canton

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-009C-1401-GW

GC Semivolatiles

Lot-Sample #...: A9G160103-033 Work Order #...: LGKCQ1AD Matrix.....: WG
Date Sampled...: 07/15/09 11:50 Date Received..: 07/16/09
Prep Date.....: 07/17/09 Analysis Date..: 07/23/09
Prep Batch #...: 9198024 Initial Wgt/Vol: 1050 mL Final Wgt/Vol..: 5 mL
Dilution Factor: 1 Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	**0.029 J**	**0.030**	**ug/L**	**0.0084**
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	73	(50 - 150)
Decachlorobiphenyl	50	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

North Canton

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-008C-1400-GW

GC Semivolatiles

Lot-Sample #...: A9G160103-035 Work Order #...: LGKCT1AD Matrix.....: WG
Date Sampled...: 07/15/09 13:10 Date Received..: 07/16/09
Prep Date.....: 07/17/09 Analysis Date..: 07/23/09
Prep Batch #...: 9198024 Initial Wgt/Vol: 1050 mL Final Wgt/Vol..: 5 mL
Dilution Factor: 1 Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	76	(50 - 150)
Decachlorobiphenyl	30 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

North Canton

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-001C-1395-GW

GC Semivolatiles

Lot-Sample #...: A9G160103-037 Work Order #...: LGKCW1AD Matrix.....: WG
Date Sampled...: 07/15/09 14:30 Date Received..: 07/16/09
Prep Date.....: 07/17/09 Analysis Date..: 07/24/09
Prep Batch #...: 9198024 Initial Wgt/Vol: 1050 mL Final Wgt/Vol..: 5 mL
Dilution Factor: 1 Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	85	(50 - 150)
Decachlorobiphenyl	24 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-005C-1407-GW

GC Semivolatiles

Lot-Sample #...: A9G160103-039 Work Order #...: LGKC01AD Matrix.....: WG
Date Sampled...: 07/15/09 16:20 Date Received..: 07/16/09
Prep Date.....: 07/17/09 Analysis Date..: 07/24/09
Prep Batch #...: 9198024
Dilution Factor: 1 Initial Wgt/Vol: 1050 mL Final Wgt/Vol..: 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	79	(50 - 150)
Decachlorobiphenyl	39 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

North Canton

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A9G160103
MB Lot-Sample #: A9G160000-128

Work Order #...: LGKJE1AA

Matrix.....: WATER

Prep Date.....: 07/16/09
Prep Batch #...: 9197128
Initial Wgt/Vol: 1000 mL

Final Wgt/Vol..: 5 mL

Analysis Date..: 07/29/09
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
alpha-BHC	ND	0.030	ug/L	SW846 8081A
beta-BHC	ND	0.030	ug/L	SW846 8081A
delta-BHC	ND	0.030	ug/L	SW846 8081A
gamma-BHC (Lindane)	ND	0.030	ug/L	SW846 8081A
Heptachlor	ND	0.030	ug/L	SW846 8081A
Aldrin	ND	0.030	ug/L	SW846 8081A
Heptachlor epoxide	ND	0.030	ug/L	SW846 8081A
Endosulfan I	ND	0.025	ug/L	SW846 8081A
Dieldrin	ND	0.030	ug/L	SW846 8081A
4,4'-DDE	ND	0.030	ug/L	SW846 8081A
Endrin	ND	0.030	ug/L	SW846 8081A
Endosulfan II	ND	0.025	ug/L	SW846 8081A
4,4'-DDD	ND	0.030	ug/L	SW846 8081A
Endosulfan sulfate	ND	0.030	ug/L	SW846 8081A
4,4'-DDT	ND	0.030	ug/L	SW846 8081A
Methoxychlor	ND	0.10	ug/L	SW846 8081A
Endrin ketone	ND	0.030	ug/L	SW846 8081A
Endrin aldehyde	ND	0.030	ug/L	SW846 8081A
alpha-Chlordane	ND	0.030	ug/L	SW846 8081A
gamma-Chlordane	ND	0.030	ug/L	SW846 8081A
Toxaphene	ND	2.0	ug/L	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	89	(50 - 150)
Decachlorobiphenyl	82	(50 - 150)

NOTE(S):
Calculations are performed before rounding to avoid round-off errors in calculated results.

North Canton

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A9G160103
MB Lot-Sample #: A9G170000-024

Work Order #...: LGL8K1AA

Matrix.....: WATER

Prep Date.....: 07/17/09
Prep Batch #...: 9198024
Initial Wgt/Vol: 1000 mL

Final Wgt/Vol..: 5 mL

Analysis Date..: 07/23/09
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
alpha-BHC	ND	0.030	ug/L	SW846 8081A
beta-BHC	ND	0.030	ug/L	SW846 8081A
delta-BHC	ND	0.030	ug/L	SW846 8081A
gamma-BHC (Lindane)	ND	0.030	ug/L	SW846 8081A
Heptachlor	ND	0.030	ug/L	SW846 8081A
Aldrin	ND	0.030	ug/L	SW846 8081A
Heptachlor epoxide	ND	0.030	ug/L	SW846 8081A
Endosulfan I	ND	0.025	ug/L	SW846 8081A
Dieldrin	ND	0.030	ug/L	SW846 8081A
4,4'-DDE	ND	0.030	ug/L	SW846 8081A
Endrin	ND	0.030	ug/L	SW846 8081A
Endosulfan II	ND	0.025	ug/L	SW846 8081A
4,4'-DDD	ND	0.030	ug/L	SW846 8081A
Endosulfan sulfate	ND	0.030	ug/L	SW846 8081A
4,4'-DDT	ND	0.030	ug/L	SW846 8081A
Methoxychlor	ND	0.10	ug/L	SW846 8081A
Endrin ketone	ND	0.030	ug/L	SW846 8081A
Endrin aldehyde	ND	0.030	ug/L	SW846 8081A
alpha-Chlordane	ND	0.030	ug/L	SW846 8081A
gamma-Chlordane	ND	0.030	ug/L	SW846 8081A
Toxaphene	ND	2.0	ug/L	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	84	(50 - 150)
Decachlorobiphenyl	74	(50 - 150)

NOTE(S):
Calculations are performed before rounding to avoid round-off errors in calculated results.

North Canton

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A9G160103
LCS Lot-Sample#: A9G160000-128
Prep Date.....: 07/16/09
Prep Batch #...: 9197128
Dilution Factor: 2
Initial Wgt/Vol: 1000 mL

Work Order #...: LGKJE1AC
Analysis Date..: 07/29/09
Final Wgt/Vol..: 5 mL

Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
alpha-BHC	95	(44 - 137)	SW846 8081A
beta-BHC	95	(50 - 135)	SW846 8081A
delta-BHC	86	(58 - 160)	SW846 8081A
gamma-BHC (Lindane)	95	(58 - 127)	SW846 8081A
Heptachlor	92	(48 - 150)	SW846 8081A
Aldrin	93	(53 - 128)	SW846 8081A
Heptachlor epoxide	93	(50 - 127)	SW846 8081A
Endosulfan I	61	(50 - 160)	SW846 8081A
Dieldrin	95	(50 - 124)	SW846 8081A
4,4'-DDE	95	(50 - 130)	SW846 8081A
Endrin	81	(50 - 137)	SW846 8081A
Endosulfan II	66	(50 - 144)	SW846 8081A
4,4'-DDD	98	(50 - 137)	SW846 8081A
Endosulfan sulfate	90	(50 - 160)	SW846 8081A
4,4'-DDT	90	(50 - 145)	SW846 8081A
Methoxychlor	83	(50 - 160)	SW846 8081A
Endrin ketone	87	(50 - 150)	SW846 8081A
Endrin aldehyde	79	(30 - 160)	SW846 8081A
alpha-Chlordane	96	(50 - 122)	SW846 8081A
gamma-Chlordane	97	(50 - 130)	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	87	(50 - 150)
Decachlorobiphenyl	33 *	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

* Surrogate recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A9G160103
LCS Lot-Sample#: A9G170000-024
Prep Date.....: 07/17/09
Prep Batch #...: 9198024
Dilution Factor: 2
Initial Wgt/Vol: 1000 mL

Work Order #...: LGL8K1AC
Analysis Date..: 07/23/09
Final Wgt/Vol..: 5 mL

Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
alpha-BHC	89	(44 - 137)	SW846 8081A
beta-BHC	88	(50 - 135)	SW846 8081A
delta-BHC	93	(58 - 160)	SW846 8081A
gamma-BHC (Lindane)	87	(58 - 127)	SW846 8081A
Heptachlor	82	(48 - 150)	SW846 8081A
Aldrin	87	(53 - 128)	SW846 8081A
Heptachlor epoxide	89	(50 - 127)	SW846 8081A
Endosulfan I	62	(50 - 160)	SW846 8081A
Dieldrin	84	(50 - 124)	SW846 8081A
4,4'-DDE	93	(50 - 130)	SW846 8081A
Endrin	90	(50 - 137)	SW846 8081A
Endosulfan II	66	(50 - 144)	SW846 8081A
4,4'-DDD	91	(50 - 137)	SW846 8081A
Endosulfan sulfate	86	(50 - 160)	SW846 8081A
4,4'-DDT	86	(50 - 145)	SW846 8081A
Methoxychlor	85	(50 - 160)	SW846 8081A
Endrin ketone	80	(50 - 150)	SW846 8081A
Endrin aldehyde	71	(30 - 160)	SW846 8081A
alpha-Chlordane	90	(50 - 122)	SW846 8081A
gamma-Chlordane	90	(50 - 130)	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	76	(50 - 150)
Decachlorobiphenyl	41 *	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

* Surrogate recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A9G160103
MS Lot-Sample #: A9G160103-002
Date Sampled...: 07/15/09 08:35
Prep Date.....: 07/16/09
Prep Batch #...: 9197128
Dilution Factor: 2

Work Order #...: LGJ9N1AJ-MS
LGJ9N1AK-MSD
Date Received..: 07/16/09
Analysis Date..: 07/29/09

Initial Wgt/Vol: 500 mL

Matrix.....: WG

Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
alpha-BHC	92	(50 - 150)			SW846 8081A
	91	(50 - 150)	1.5	(0-50)	SW846 8081A
beta-BHC	87	(50 - 150)			SW846 8081A
	84	(50 - 150)	3.7	(0-50)	SW846 8081A
delta-BHC	81	(50 - 150)			SW846 8081A
	78	(50 - 150)	2.9	(0-50)	SW846 8081A
gamma-BHC (Lindane)	88	(50 - 150)			SW846 8081A
	82	(50 - 150)	7.7	(0-50)	SW846 8081A
Heptachlor	88	(50 - 150)			SW846 8081A
	83	(50 - 150)	5.3	(0-50)	SW846 8081A
Aldrin	91	(50 - 150)			SW846 8081A
	92	(50 - 150)	1.2	(0-50)	SW846 8081A
Heptachlor epoxide	88	(50 - 150)			SW846 8081A
	85	(50 - 150)	3.2	(0-50)	SW846 8081A
Endosulfan I	62	(50 - 150)			SW846 8081A
	60	(50 - 150)	3.6	(0-50)	SW846 8081A
Dieldrin	89	(50 - 150)			SW846 8081A
	86	(50 - 150)	3.4	(0-50)	SW846 8081A
4,4'-DDE	89	(50 - 150)			SW846 8081A
	91	(50 - 150)	2.3	(0-50)	SW846 8081A
Endrin	86	(50 - 150)			SW846 8081A
	80	(50 - 150)	7.1	(0-50)	SW846 8081A
Endosulfan II	63	(50 - 150)			SW846 8081A
	60	(50 - 150)	6.1	(0-50)	SW846 8081A
4,4'-DDD	93	(50 - 150)			SW846 8081A
	87	(50 - 150)	6.0	(0-50)	SW846 8081A
Endosulfan sulfate	87	(50 - 150)			SW846 8081A
	80	(50 - 150)	7.6	(0-50)	SW846 8081A
4,4'-DDT	85	(50 - 150)			SW846 8081A
	78	(50 - 150)	8.5	(0-50)	SW846 8081A
Methoxychlor	83	(50 - 150)			SW846 8081A
	77	(50 - 150)	7.1	(0-50)	SW846 8081A
Endrin ketone	84	(50 - 150)			SW846 8081A
	77	(50 - 150)	8.1	(0-50)	SW846 8081A
Endrin aldehyde	75	(50 - 150)			SW846 8081A
	69	(50 - 150)	7.5	(0-50)	SW846 8081A
alpha-Chlordane	90	(50 - 150)			SW846 8081A
	88	(50 - 150)	2.2	(0-50)	SW846 8081A
gamma-Chlordane	92	(50 - 150)			SW846 8081A
	86	(50 - 150)	6.0	(0-50)	SW846 8081A

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A9G160103 **Work Order #...:** LGJ9N1AJ-MS **Matrix.....:** WG
MS Lot-Sample #: A9G160103-002 LGJ9N1AK-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	87	(50 - 150)
	90	(50 - 150)
Decachlorobiphenyl	83	(50 - 150)
	75	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A9G160103
MS Lot-Sample #: A9G160103-006
Date Sampled...: 07/15/09 11:55
Prep Date.....: 07/17/09
Prep Batch #...: 9198024
Dilution Factor: 2

Work Order #...: LGJ9W1AJ-MS
LGJ9W1AK-MSD
Date Received..: 07/16/09
Analysis Date..: 07/23/09

Initial Wgt/Vol: 510 mL

Matrix.....: WG

Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
alpha-BHC	105	(50 - 150)			SW846 8081A
beta-BHC	119	(50 - 150)	12	(0-50)	SW846 8081A
delta-BHC	103	(50 - 150)			SW846 8081A
gamma-BHC (Lindane)	116	(50 - 150)	12	(0-50)	SW846 8081A
Heptachlor	102	(50 - 150)			SW846 8081A
Aldrin	113	(50 - 150)	10	(0-50)	SW846 8081A
Heptachlor epoxide	97	(50 - 150)			SW846 8081A
Endosulfan I	110	(50 - 150)	13	(0-50)	SW846 8081A
Dieldrin	83	(50 - 150)			SW846 8081A
4,4'-DDE	95	(50 - 150)	14	(0-50)	SW846 8081A
Endrin	91	(50 - 150)			SW846 8081A
Endosulfan II	103	(50 - 150)	12	(0-50)	SW846 8081A
4,4'-DDD	97	(50 - 150)			SW846 8081A
Endosulfan sulfate	108	(50 - 150)	11	(0-50)	SW846 8081A
4,4'-DDT	71	(50 - 150)			SW846 8081A
Methoxychlor	79	(50 - 150)	11	(0-50)	SW846 8081A
Endrin ketone	90	(50 - 150)			SW846 8081A
Endrin aldehyde	100	(50 - 150)	11	(0-50)	SW846 8081A
alpha-Chlordane	88	(50 - 150)			SW846 8081A
gamma-Chlordane	99	(50 - 150)	12	(0-50)	SW846 8081A
	99	(50 - 150)			SW846 8081A
	112	(50 - 150)	12	(0-50)	SW846 8081A
	69	(50 - 150)			SW846 8081A
	78	(50 - 150)	12	(0-50)	SW846 8081A
	96	(50 - 150)			SW846 8081A
	109	(50 - 150)	13	(0-50)	SW846 8081A
	89	(50 - 150)			SW846 8081A
	103	(50 - 150)	14	(0-50)	SW846 8081A
	78	(50 - 150)			SW846 8081A
	93	(50 - 150)	17	(0-50)	SW846 8081A
	79	(50 - 150)			SW846 8081A
	98	(50 - 150)	21	(0-50)	SW846 8081A
	83	(50 - 150)			SW846 8081A
	99	(50 - 150)	17	(0-50)	SW846 8081A
	71	(50 - 150)			SW846 8081A
	82	(50 - 150)	14	(0-50)	SW846 8081A
	94	(50 - 150)			SW846 8081A
	105	(50 - 150)	11	(0-50)	SW846 8081A
	92	(50 - 150)			SW846 8081A
	102	(50 - 150)	11	(0-50)	SW846 8081A

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A9G160103 **Work Order #...:** LGJ9W1AJ-MS **Matrix.....:** WG
MS Lot-Sample #: A9G160103-006 LGJ9W1AK-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	84	(50 - 150)
	99	(50 - 150)
Decachlorobiphenyl	61	(50 - 150)
	72	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Data File: \\cansvr11\dd\chem\GCS\a2hp3.i\90729-1.b\007F0701.D Page 1
Report Date: 30-Jul-2009 06:29

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a2hp3.i Injection Date: 29-JUL-2009 12:50
Lab File ID: 007F0701.D Init. Cal. Date(s): 11-JUN-2009 17-JUL-2009
Analysis Type: Init. Cal. Times: 10:46 23:09
Lab Sample ID: TOX3 G098 Quant Type: ESTD
Method: \\cansvr11\dd\chem\GCS\a2hp3.i\90729-1.b\PEST3.m

COMPOUND	RRF / AMOUNT	RF0.025	CCAL RRF0.025	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
19 Toxaphene(1)	2881793	3487314	3487314	0.010	-21.01194	15.00000	Averaged	<-
(2)	5553596	6712248	6712248	0.010	-20.86311	15.00000	Averaged	<-
(3)	5517531	6623520	6623520	0.010	-20.04499	15.00000	Averaged	<-
(4)	6787850	7861937	7861937	0.010	-15.82367	15.00000	Averaged	<-
(5)	3889276	4451154	4451154	0.010	-14.44685	15.00000	Averaged	

Average %D / Drift Results.

Calculated Average %D/Drift = 18.43811
Maximun Average %D/Drift = 15.00000
* Failed Average %D/Drift Test.

POLYCHLORINATED BIPHENYLS DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/August 28, 2009

SDG: A9G160103 R0
Analysis: SW846 8082

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.6 – 4.8 °C. Upon receipt, it was documented by the laboratory, that the samples were not frozen and in good condition. Therefore, no qualifications were made to sample results based on temperatures less than 2°C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-5
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-5
7. Does the initial calibration curve consist of 5 concentration levels of Aroclors 1016 and 1260?	✓			Instrument A2HP2; ICAL on 7/02/09 Stds = 0.05, 0.1, 0.2, 0.5, 1.0, 2.0	LCG Table 3 R
8. Was the % RSD ≤ 20%? Were the r^2s >0.990?	✓				LCG Table 3 RSD>20% or r<0.99= J/R
9. Was a MDL Level Verification performed once per quarter? Were all target analytes detected?	✓			7/18/09	LCG Table 3 R
10. Was a MRL Level Verification performed at the beginning and end of the sequence or every 12 hours? Were the results 70-130%	✓				LCG Table 3 >130%=J; 65-70%=J/UJ; <65%=J/R
11. Was a second source (ICV) verification performed after the ICAL? Were results 85-115%?	✓			7/2/09 @ 0350	LCG Table 3 >115%=J; 80-85%=J/UJ; <80%=J/R
12. Were single standards of the other five Aroclors run to aid in pattern recognition and to determine a single point calibration factor?	✓				Method 8082 Section 5.6.2

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/August 28, 2009

SDG: A9G160103 R0
Analysis: SW846 8082

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
13. Was a CCV run every 12 hours?	✓				LCG Table 3
14. Was the % D ≤ 15 % for each analyte or the average %D across all analytes ≤ 15% with a maximum %D for each target analyte ≤30%?	✓				LCG Table 3 D>30% (neg) =J/R D>30% (pos) =J
15. Was a method blank prepared and analyzed with each batch?	✓			Section checked by ADR	LCG Table 5
16. Were target analytes <1/2 the MRL?	✓				LCG Table 5 <5x = B
17. Was an equipment blank collected and analyzed?	✓			FWGEQUIPRinse3-1425-GW	
18. Were target analytes in the field blank analyses (equipment) <1/2 the MRL?	✓			Section checked by ADR	<5x = B
19. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 3
20. Were the LCS recoveries within limits specified in LCG Appendix C?	✓				LCG Appendix C >UL=J; LL-30%=J/UJ; <30%=J/R
21. Was a MS/MSD pair prepared with each batch?	✓				LCG Table 3
22. Was the MS/MSD parent a Ravenna sample?	✓			Sample FWGLL10mw-004c-1392-GW and FWGLL11mw-004c-1397-GW were the parent MS/MSD samples from this SDG.	
23. Were MS/MSD recoveries 50-150% and RPD ≤20%?	✓				QAPP Table 3-2 Pj
24. Was the surrogate spiked into all samples?	✓				
25. Were surrogate recoveries 50-150%?		✓		The surrogate, DCB, recovered below control limits in samples FWGASYmw-001c-1403-GW, FWGASYmw-002c-1404-GW, FWGASYmw-003c-1405-GW, FWGASYmw-004c-1406-GW, FWGASYmw-005c-1407-GW, FWGLL11mw-001c-1395-GW, FWGLL11mw-003c-1396-GW, FWGLL11mw-008c-1400-GW and FWGLL11mw-010c-1402-GW.The associated results were qualified as estimated, "UJ".	LCG Table 3 >150%=J; 10-50%=J/UJ; <10%=R

Ravenna, OH Data Review Checklist

SDG: A9G160103 R0
Analysis: SW846 8082

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/August 28, 2009

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
26. Was a field duplicate analyzed? Were the RPDs <30%?	✓			Sample FWGLL11mw-DUP5-1417-GW was the field duplicate for sample FWGLL11mw-010c-1402-GW and FWGLL10mw-DUP4-1416-GW was the field duplicate for sample FWGLL10mw-006c-1394-GW.	QAPP Table 3-2 RPD >30=J
27. Were all positive results verified by a second dissimilar column confirmation? Was the RPD ≤ 40?	✓				LCG Table 3 RPD>40=J
28. Were reported sample concentrations within calibration range?	✓				
29. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
30. Were lab comments included in report? If yes, summarize contents.	✓			See narrative for surrogate outliers.	

References:

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 3 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments: As the second column is used only for confirmation and there were no detected aroclors in the samples, only the front column was evaluated.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-004C-1392-GW

GC Semivolatiles

Lot-Sample #...: A9G160103-002
Date Sampled...: 07/15/09 08:35
Prep Date.....: 07/16/09
Prep Batch #...: 9197130
Dilution Factor: 1

Work Order #...: LGJ9N1AP
Date Received..: 07/16/09
Analysis Date..: 07/21/09

Initial Wgt/Vol: 1010 mL
Method.....: SW846 8082

Matrix.....: WG

Final Wgt/Vol..: 5 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	89	(50 - 150)
Decachlorobiphenyl	97	(50 - 150)

North Canton

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-005C-1393-GW

GC Semivolatiles

Lot-Sample #...: A9G160103-004 Work Order #...: LGJ9T1AF Matrix.....: WG
Date Sampled...: 07/15/09 10:35 Date Received..: 07/16/09
Prep Date.....: 07/17/09 Analysis Date..: 07/21/09
Prep Batch #...: 9198025 Initial Wgt/Vol: 1000 mL Final Wgt/Vol..: 5 mL
Dilution Factor: 1 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	86	(50 - 150)
Decachlorobiphenyl	76	(50 - 150)

North Canton

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-004C-1397-GW

GC Semivolatiles

Lot-Sample #...: A9G160103-006 **Work Order #...:** LGJ9W1AP **Matrix.....:** WG
Date Sampled...: 07/15/09 11:55 **Date Received..:** 07/16/09
Prep Date.....: 07/17/09 **Analysis Date..:** 07/21/09
Prep Batch #...: 9198025
Dilution Factor: 1 **Initial Wgt/Vol:** 1020 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	85	(50 - 150)
Decachlorobiphenyl	62	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-006C-1399-GW

GC Semivolatiles

Lot-Sample #...:	A9G160103-008	**Work Order #...:**	LGJ911AF	**Matrix.....:**	WG
Date Sampled...:	07/15/09 14:05	**Date Received..:**	07/16/09		
Prep Date.....:	07/17/09	**Analysis Date..:**	07/21/09		
Prep Batch #...:	9198025				
Dilution Factor:	1	**Initial Wgt/Vol:**	1040 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	77	(50 - 150)
Decachlorobiphenyl	56	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-003C-1405-GW

GC Semivolatiles

Lot-Sample #...: A9G160103-010 **Work Order #...:** LGJ951AF **Matrix.....:** WG
Date Sampled...: 07/15/09 15:30 **Date Received..:** 07/16/09
Prep Date.....: 07/17/09 **Analysis Date..:** 07/21/09
Prep Batch #...: 9198025
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	70	(50 - 150)
Decachlorobiphenyl	33 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-004C-1406-GW

GC Semivolatiles

Lot-Sample #...: A9G160103-012 **Work Order #...:** LGJ991AF **Matrix.....:** WG
Date Sampled...: 07/15/09 16:45 **Date Received..:** 07/16/09
Prep Date.....: 07/17/09 **Analysis Date..:** 07/21/09
Prep Batch #...: 9198025
Dilution Factor: 1 **Initial Wgt/Vol:** 1040 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	80	(50 - 150)
Decachlorobiphenyl	45 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-006C-1394-GW

GC Semivolatiles

Lot-Sample #...:	A9G160103-015	**Work Order #...:**	LGKAQ1AF	**Matrix.....:**	WG
Date Sampled...:	07/15/09 08:50	**Date Received..:**	07/16/09		
Prep Date.....:	07/17/09	**Analysis Date..:**	07/21/09		
Prep Batch #...:	9198025				
Dilution Factor:	1	**Initial Wgt/Vol:**	930 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	77	(50 - 150)
Decachlorobiphenyl	72	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-DUP4-1416-GW

GC Semivolatiles

Lot-Sample #...: A9G160103-017 **Work Order #...:** LGKAT1AF **Matrix.....:** WG
Date Sampled...: 07/15/09 10:00 **Date Received..:** 07/16/09
Prep Date.....: 07/17/09 **Analysis Date..:** 07/21/09
Prep Batch #...: 9198025
Dilution Factor: 1 **Initial Wgt/Vol:** 800 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	78	(50 - 150)
Decachlorobiphenyl	71	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-010C-1402-GW

GC Semivolatiles

Lot-Sample #...:	A9G160103-019	**Work Order #...:**	LGKAX1AF	**Matrix.....:**	WG
Date Sampled...:	07/15/09 11:00	**Date Received..:**	07/16/09		
Prep Date.....:	07/17/09	**Analysis Date..:**	07/21/09		
Prep Batch #...:	9198025				
Dilution Factor:	1	**Initial Wgt/Vol:**	980 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	79	(50 - 150)
Decachlorobiphenyl	49 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-DUP5-1417-GW

GC Semivolatiles

Lot-Sample #...:	A9G160103-021	**Work Order #...:**	LGKA21AF	**Matrix.....:**	WG
Date Sampled...:	07/15/09 12:00	**Date Received..:**	07/16/09		
Prep Date.....:	07/17/09	**Analysis Date..:**	07/21/09		
Prep Batch #...:	9198025				
Dilution Factor:	1	**Initial Wgt/Vol:**	1050 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	79	(50 - 150)
Decachlorobiphenyl	55	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-001C-1403-GW

GC Semivolatiles

Lot-Sample #...: A9G160103-023 Work Order #...: LGKA61AF Matrix.....: WG
Date Sampled...: 07/15/09 14:10 Date Received..: 07/16/09
Prep Date.....: 07/17/09 Analysis Date..: 07/21/09
Prep Batch #...: 9198025
Dilution Factor: 1 Initial Wgt/Vol: 1040 mL Final Wgt/Vol..: 5 mL
Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	78	(50 - 150)
Decachlorobiphenyl	37 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1425-GW

GC Semivolatiles

Lot-Sample #...: A9G160103-025 **Work Order #...:** LGKA81AF **Matrix.....:** WQ
Date Sampled...: 07/15/09 14:50 **Date Received..:** 07/16/09
Prep Date.....: 07/17/09 **Analysis Date..:** 07/21/09
Prep Batch #...: 9198025
Dilution Factor: 1 **Initial Wgt/Vol:** 880 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	78	(50 - 150)
Decachlorobiphenyl	86	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-002C-1404-GW

GC Semivolatiles

Lot-Sample #...:	A9G160103-026	**Work Order #...:**	LGKCA1AF	**Matrix.....:**	WG
Date Sampled...:	07/15/09 15:20	**Date Received..:**	07/16/09		
Prep Date.....:	07/17/09	**Analysis Date..:**	07/21/09		
Prep Batch #...:	9198025				
Dilution Factor:	1	**Initial Wgt/Vol:**	1050 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	90	(50 - 150)
Decachlorobiphenyl	31 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-005C-1398-GW

GC Semivolatiles

Lot-Sample #...:	A9G160103-029	**Work Order #...:**	LGKCJ1AF	**Matrix.....:**	WG
Date Sampled...:	07/15/09 08:45	**Date Received..:**	07/16/09		
Prep Date.....:	07/17/09	**Analysis Date..:**	07/21/09		
Prep Batch #...:	9198025				
Dilution Factor:	1	**Initial Wgt/Vol:**	1050 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	82	(50 - 150)
Decachlorobiphenyl	71	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-003C-1396-GW

GC Semivolatiles

Lot-Sample #...:	A9G160103-031	**Work Order #...:**	LGKCN1AF	**Matrix.....:**	WG
Date Sampled...:	07/15/09 10:25	**Date Received..:**	07/16/09		
Prep Date.....:	07/17/09	**Analysis Date..:**	07/21/09		
Prep Batch #...:	9198025				
Dilution Factor:	1	**Initial Wgt/Vol:**	1020 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	85	(50 - 150)
Decachlorobiphenyl	54	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-009C-1401-GW

GC Semivolatiles

Lot-Sample #...: A9G160103-033 Work Order #...: LGKCQ1AF Matrix.....: WG
Date Sampled...: 07/15/09 11:50 Date Received..: 07/16/09
Prep Date.....: 07/17/09 Analysis Date..: 07/21/09
Prep Batch #...: 9198025
Dilution Factor: 1 Initial Wgt/Vol: 1050 mL Final Wgt/Vol..: 5 mL
Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	67	(50 - 150)
Decachlorobiphenyl	60	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-008C-1400-GW

GC Semivolatiles

Lot-Sample #...: A9G160103-035 Work Order #...: LGKCT1AF Matrix.....: WG
Date Sampled...: 07/15/09 13:10 Date Received..: 07/16/09
Prep Date.....: 07/17/09 Analysis Date..: 07/21/09
Prep Batch #...: 9198025
Dilution Factor: 1 Initial Wgt/Vol: 1050 mL Final Wgt/Vol..: 5 mL
Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	76	(50 - 150)
Decachlorobiphenyl	41 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-001C-1395-GW

GC Semivolatiles

Lot-Sample #...: A9G160103-037 **Work Order #...:** LGKCW1AF **Matrix.....:** WG
Date Sampled...: 07/15/09 14:30 **Date Received..:** 07/16/09
Prep Date.....: 07/17/09 **Analysis Date..:** 07/21/09
Prep Batch #...: 9198025
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	85	(50 - 150)
Decachlorobiphenyl	28 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-005C-1407-GW

GC Semivolatiles

Lot-Sample #...: A9G160103-039
Date Sampled...: 07/15/09 16:20
Prep Date.....: 07/17/09
Prep Batch #...: 9198025
Dilution Factor: 1

Work Order #...: LGKC01AF
Date Received..: 07/16/09
Analysis Date..: 07/21/09

Initial Wgt/Vol: 1050 mL
Method.....: SW846 8082

Matrix.....: WG

Final Wgt/Vol..: 5 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	78	(50 - 150)
Decachlorobiphenyl	52	(50 - 150)

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A9G160103 **Work Order #...:** LGKJG1AA **Matrix.....:** WATER
MB Lot-Sample #: A9G160000-130

Prep Date.....: 07/16/09 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 07/21/09 **Prep Batch #...:** 9197130
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	0.50	ug/L	SW846 8082
Aroclor 1221	ND	0.50	ug/L	SW846 8082
Aroclor 1232	ND	0.50	ug/L	SW846 8082
Aroclor 1242	ND	0.50	ug/L	SW846 8082
Aroclor 1248	ND	0.50	ug/L	SW846 8082
Aroclor 1254	ND	0.50	ug/L	SW846 8082
Aroclor 1260	ND	0.50	ug/L	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	92	(50 - 150)
Decachlorobiphenyl	102	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A9G160103 **Work Order #...:** LGL8L1AA **Matrix.....:** WATER
MB Lot-Sample #: A9G170000-025

Prep Date.....: 07/17/09 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 07/21/09 **Prep Batch #...:** 9198025
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	0.50	ug/L	SW846 8082
Aroclor 1221	ND	0.50	ug/L	SW846 8082
Aroclor 1232	ND	0.50	ug/L	SW846 8082
Aroclor 1242	ND	0.50	ug/L	SW846 8082
Aroclor 1248	ND	0.50	ug/L	SW846 8082
Aroclor 1254	ND	0.50	ug/L	SW846 8082
Aroclor 1260	ND	0.50	ug/L	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	73	(50 - 150)
Decachlorobiphenyl	91	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A9G160103 **Work Order #...:** LGKJG1AC **Matrix.....:** WATER
LCS Lot-Sample#: A9G160000-130
Prep Date.....: 07/16/09 **Analysis Date..:** 07/21/09
Prep Batch #...: 9197130
Dilution Factor: 2 **Final Wgt/Vol..:** 5 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Aroclor 1016	**82**	**(58 - 141)**	**SW846 8082**
Aroclor 1260	**92**	**(71 - 143)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	84	(50 - 150)
Decachlorobiphenyl	64	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A9G160103
LCS Lot-Sample#: A9G170000-025
Prep Date.....: 07/17/09
Prep Batch #...: 9198025
Dilution Factor: 2
Initial Wgt/Vol: 1000 mL

Work Order #...: LGL8L1AC
Analysis Date..: 07/21/09
Final Wgt/Vol..: 5 mL

Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Aroclor 1016	**92**	**(58 - 141)**	**SW846 8082**
Aroclor 1260	**106**	**(71 - 143)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	94	(50 - 150)
Decachlorobiphenyl	53	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A9G160103 **Work Order #...:** LGJ9N1AQ-MS **Matrix.....:** WG
MS Lot-Sample #: A9G160103-002 LGJ9N1AR-MSD
Date Sampled...: 07/15/09 08:35 **Date Received..:** 07/16/09
Prep Date.....: 07/16/09 **Analysis Date..:** 07/21/09
Prep Batch #...: 9197130
Dilution Factor: 2 **Initial Wgt/Vol:** 500 mL **Final Wgt/Vol..:** 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**89**	**(50 - 150)**			**SW846 8082**
	82	**(50 - 150)**	**8.0**	**(0-50)**	**SW846 8082**
Aroclor 1260	**99**	**(50 - 150)**			**SW846 8082**
	91	**(50 - 150)**	**8.0**	**(0-50)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	100	(50 - 150)
	77	(50 - 150)
Decachlorobiphenyl	107	(50 - 150)
	97	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A9G160103 **Work Order #...:** LGJ9W1AQ-MS **Matrix.....:** WG
MS Lot-Sample #: A9G160103-006 LGJ9W1AR-MSD
Date Sampled...: 07/15/09 11:55 **Date Received..:** 07/16/09
Prep Date.....: 07/17/09 **Analysis Date..:** 07/21/09
Prep Batch #...: 9198025
Dilution Factor: 2 **Initial Wgt/Vol:** 495 mL **Final Wgt/Vol..:** 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**104**	**(50 - 150)**			**SW846 8082**
	110	**(50 - 150)**	**5.5**	**(0-50)**	**SW846 8082**
Aroclor 1260	**120**	**(50 - 150)**			**SW846 8082**
	126	**(50 - 150)**	**4.8**	**(0-50)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	113	(50 - 150)
	129	(50 - 150)
Decachlorobiphenyl	125	(50 - 150)
	132	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METALS DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 28, 2009

SDG: A9G160103 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.6 – 4.8 °C. Upon receipt, it was documented by the laboratory, that the samples were not frozen and in good condition. Therefore, no qualifications were made to sample results based on temperatures less than 2°C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	✓				QAPP Table 3-8
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-8
7. Did the initial calibration curve range include 3 standards and a blank?	✓				LCG Table 7 R
8. Was the ICAL performed daily?	✓				LCG Table 7 R
9. Was the correlation coefficient r≥0.995 for each analyte?	✓				LCG Table 7 R<0.995=J/R
10. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓				LCG Table 7 R
11. Was a MRL Level Verification performed at the beginning of the daily sequence? Were results 70-130%?		✓		The MRL analyzed 7/28/09 @ 1034 had zinc recover above limits at 136%. Detected concentrations of zinc were qualified as estimated, "J".	LCG Table 7 >130%=J; 65-70%=J/UJ; <65%=J/R
12. Was the ICV (second source verification) analyzed after the ICAL?	✓				LCG Table 7
13. Were all analytes within 90-110% in the ICV?	✓				LCG Table 7 J>110%=J; 90-85%=J/UJ; <85%=J/R
14. Was the ICB analyzed after the ICV with results <1/2 the MRL?		✓		The ICB analyzed 7/20/09 had detected potassium at 147ug/L. The potassium results for FWGLL10mw-004c-1392-GF, FWGLL10mw-005c-1393-GF, FWGLL11mw-006c-1399-GF, FWGEQUIPRinse3-1425-GW, FWGASYmw-002c-1404-GF and FWGLL11mw-005c-1398-GF were qualified, "U", as the detected concentrations were <5x blank contamination. No qualifications were made for due to negative blanks, since the LCG doesn't specifically address negative blank values.	LCG Table 7 < 5x = U

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 28, 2009

SDG: A9G160103 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
15. Were CCVs analyzed every 10 samples and at the end of the analytical sequence?	✓				LCG Table 7
16. Were CCV results within 90 to 110%?	✓				LCG Table 7 >110%=J 90-85%=J/UJ; <85%=J/R
17. Were the CCBs run every 10 samples and at the end of the analytical sequence? Were results <1/2 the MRL?		✓		ICP The CCBs analyzed 7/20/09 had detected potassium from 143ug/L to 149ug/L. The potassium results for FWGLL10mw-004c-1392-GF, FWGLL10mw-005c-1393-GF, FWGLL11mw-006c-1399-GF, FWGEQUIPRinse3-1425-GW, FWGASYmw-002c-1404-GF and FWGLL11mw-005c-1398-GF were qualified, "U", as the detected concentrations were <5x blank contamination. ICPMS The CCBs analyzed 7/28/09 had detected antimony at 0.065ug/L, cadmium from 0.033ug/L to 0.065ug/L and iron from 11.2ug/L to 14.5ug/L. • The iron results for samples FWGLL10mw-DUP4-1416-GF and FWGLL11mw-003c-1396-GF were qualified, "U" as the results were <5x CCB contamination. • No other qualifications were made as the all other contaminants were either nondetect or >5x contamination. No qualifications were made for due to negative blanks, since the LCG doesn't specifically address negative blank values.	LCG Table 7 <5x = U
18. Was an Interelement Check Standard run at the beginning of the analytical sequence?	✓				LCG Table 7
19. Was the ICS recovery within 80 to 120% of true value for each element of interest?	✓				LCG Table 7 >120%=J; 50-79%=J/UJ; <50%=Pj/R
21. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 7
22. Were target analytes <1/2 the MRL in the method blank?		✓		ADR checked section; Potassium was detected in the method blank at 149ug/L and zinc at 6.8ug/L. All detected potassium and zinc results <5x contamination were qualified, "B".	LCG Table 7 <5x = B
23. Was a field blank collected and analyzed?	✓			FWGEQUIPRinse3-1425-GW	
24. Were target analytes reported in the field blank analyses >1/2 the MRL?	✓			ADR checked section; FWGEQUIPRinse3-1425-GW had potassium detected at 150ug/L and zinc at 2.5ug/L. All detected potassium and zinc results <5x contamination were qualified, "B".	<5x=B

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 28, 2009

SDG: A9G160103 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
25. Was a LCS prepared and analyzed with each batch?	✓				LCG Table 7
26. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR.	LCG Appendix C >UL=J; 60%-LL= J/UJ; <60%=J/R
27. Was a MS prepared with each batch?	✓				LCG Table 7
28. Was the MS and Lab Duplicate parent a Ravenna sample?	✓			Sample FWGLL10mw-004c-1392-GF and FWGLL11mw-004c-1397-GF were the parent MS/MSD samples from this SDG.	
29. Were the MS recoveries within 75-125%?	✓			Checked by ADR.	LCG Table 7 >125% = J 30% - 75% = J/UJ <30% = J/R
30. Was the lab sample duplicate RPD ≤ 20%?		✓		Only detected results above RL were evaluated. The duplicate RPD analyzed on sample FWGLL11mw-004c-1397-GF was above control limits at 74% for iron. All detected iron results were qualified as estimated, "J".	LCG Table 7 >20% = J
31. Was a Post Digestion Spike analyzed as needed? Were results within 75-125%?			✓		LCG Table 7 >125%=J; 30-75%=J/UJ; <30%=R
32. Was a serial dilution performed as needed?			✓		
33. Was the 4 fold dilution within ± 10% of the original result?			✓		LCG Table 7 >10%=J
34. Was a field duplicate analyzed? Were the RPDs ± 30%?		✓		Sample FWGLL11mw-DUP5-1417-GF was the field duplicate for sample FWGLL11mw-010c-1402-GF and FWGLL10mw-DUP4-1416-GF was the field duplicate for sample FWGLL10mw-006c-1394-GF. The manganese duplicate RPD for FWGLL11mw-DUP5-1417-GF and FWGLL11mw-010c-1402-GF was above control limits at 66.9% and iron at 123%. The FWGLL11mw-DUP5-1417-GF and FWGLL11mw-010c-1402-GF iron and manganese results were qualified as estimated, "J".	QAPP Table 3-2 >30% = J
35. Were sample concentrations within calibration range?	✓				
36. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
37. Were lab comments included in report? If yes, summarize contents.	✓			See narrative.	

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 28, 2009

SDG: A9G160103 R0
Analysis: SW846 6010B/6020

References:
Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 9 and Attachment A "Data Validation Guidelines: Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 28, 2009

SDG: A9G160103 R0
Analysis: SW846 7470A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.6 – 4.8 °C. Upon receipt, it was documented by the laboratory, that the samples were not frozen and in good condition. Therefore, no qualifications were made to sample results based on temperatures less than 2°C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	✓				QAPP Table 3.8
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-8
7. Did the initial calibration curve range include 5 standards and a blank?	✓				LCG Table 9 R
8. Was the correlation coefficient ≥ 0.995 for Hg?	✓				LCG Table 9 R<0.995=J/R
9. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓				LCG Table 9 R
10. Was a MRL Level Verification performed at the beginning of every daily analytical sequence with 70-130%?	✓				LCG Table 9 >130%=J; 70-65%=J/UJ; <65%=J/R
11. Was the ICV analyzed after the ICAL but before samples with recoveries between 80-120%?	✓				LCG Table 9 >120%=J; 80-75%=J/UJ; <75%=J/R
12. Was the ICB analyzed after the ICAL with results <1/2 the MRL?	✓			No qualifications were made due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.	LCG Table 9 <5x = U
13. Were the CCVs analyzed every 10 samples and at the end of the analytical sequence?	✓				LCG Table 9
14. Were CCV results within 80 to 120%?	✓				LCG Table 9 >120%=J; 80-75%=J/UJ; <75%=J/R
15. Were the CCBs analyzed every 10 samples and at the end of the analytical sequence? Were results <1/2 the MRL?	✓			No qualifications were made for due to negative blanks since the LCG doesn't specifically address negative blank values.	LCG Table 9 <5x = U

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 28, 2009

SDG: A9G160103 R0
Analysis: SW846 7470A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
16. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 9
17. Were target analytes detected in the method blank <1/2 the MRL?	✓				LCG Table 9 <5x = B
18. Was a field blank collected and analyzed?	✓			FWGEQUIPRinse3-1425-GW	
19. Were target analytes reported in the field blank analyses at <1/2 the MRL?	✓				<5x=B
20. Was a LCS prepared and analyzed with each batch?	✓				LCG Table 9
21. Were the LCS recoveries within 80-120%?	✓			Checked by ADR.	LCG Table 9 J>120%=J; 50-79%=J/UJ; <50%=R
22. Was a MS prepared with each batch?	✓				LCG Table 9
23. Was the MS and Lab Duplicate parent sample a Ravenna sample?	✓			Sample FWGLL10mw-004c-1392-GF and FWGLL11mw-004c-1397-GF were the parent MS/MSD samples from this SDG.	
24. Were the MS recoveries within 80-120%?	✓			Checked by ADR.	LCG Table 9 >125% = J 30% - 75% = J/UJ <30% = J/R
25. Was the Matrix Duplicate RPD ± 20%?	✓				LCG Table 9 >20% = J
26. Was a field duplicate analyzed? Were the RPDs ± 30%?	✓			Checked by ADR. Sample FWGLL11mw-DUP5-1417-GF was the field duplicate for sample FWGLL11mw-010c-1402-GF and FWGLL10mw-DUP4-1416-GF was the field duplicate for sample FWGLL10mw-006c-1394-GF.	QAPP Table 3-2
27. Were sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
29. Were lab comments included in report? If yes, summarize contents.		✓			

References:
Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 9 and Attachment A "Data Validation Guidelines:
Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-004C-1392-GF

TOTAL Metals

Lot-Sample #...: A9G160103-003 Matrix.....: WG
Date Sampled...: 07/15/09 08:35 Date Received..: 07/16/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9198016						
Silver	ND	5.0 Dilution Factor: 1 Instrument ID..: I5	ug/L	SW846 6010B Analysis Time..: 15:31 MDL.....: 2.2	07/17-07/20/09 Analyst ID.....: 000079	LGJ9P1CA
Aluminum	ND	50.0 Dilution Factor: 1 Instrument ID..: I8	ug/L	SW846 6020 Analysis Time..: 11:59 MDL.....: 19.0	07/17-07/28/09 Analyst ID.....: 001637	LGJ9P1AA
Arsenic	ND	5.0 Dilution Factor: 1 Instrument ID..: I5	ug/L	SW846 6010B Analysis Time..: 15:31 MDL.....: 3.2	07/17-07/20/09 Analyst ID.....: 000079	LGJ9P1A1
Barium	**3.1 B**	**10.0** Dilution Factor: 1 Instrument ID..: I5	**ug/L**	**SW846 6010B** Analysis Time..: 15:31 MDL.....: 0.67	**07/17-07/20/09** Analyst ID.....: 000079	**LGJ9P1CE**
Beryllium	ND	1.0 Dilution Factor: 1 Instrument ID..: I8	ug/L	SW846 6020 Analysis Time..: 13:10 MDL.....: 0.20	07/17-07/31/09 Analyst ID.....: 001637	LGJ9P1AE
Calcium	**64600**	**1000** Dilution Factor: 1 Instrument ID..: I5	**ug/L**	**SW846 6010B** Analysis Time..: 15:31 MDL.....: 130	**07/17-07/20/09** Analyst ID.....: 000079	**LGJ9P1CH**
Cadmium	ND	0.50 Dilution Factor: 1 Instrument ID..: I8	ug/L	SW846 6020 Analysis Time..: 11:59 MDL.....: 0.13	07/17-07/28/09 Analyst ID.....: 001637	LGJ9P1AH
Cobalt	ND	5.0 Dilution Factor: 1 Instrument ID..: I5	ug/L	SW846 6010B Analysis Time..: 15:31 MDL.....: 1.7	07/17-07/20/09 Analyst ID.....: 000079	LGJ9P1CL
Chromium	ND	5.0 Dilution Factor: 1 Instrument ID..: I5	ug/L	SW846 6010B Analysis Time..: 15:31 MDL.....: 2.2	07/17-07/20/09 Analyst ID.....: 000079	LGJ9P1CP
Copper	ND	5.0 Dilution Factor: 1 Instrument ID..: I5	ug/L	SW846 6010B Analysis Time..: 15:31 MDL.....: 4.5	07/17-07/20/09 Analyst ID.....: 000079	LGJ9P1CT

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-004C-1392-GF

TOTAL Metals

Matrix.....: WG

Lot-Sample #...: A9G160103-003

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020 Analysis Time..: 11:59 MDL.....: 26.0	07/17-07/28/09 Analyst ID.....: 001637	LGJ9P1AL
		Dilution Factor: 1 Instrument ID..: I8				
Mercury	ND	0.20	ug/L	SW846 7470A Analysis Time..: 15:40 MDL.....: 0.12	07/17-07/21/09 Analyst ID.....: 001576	LGJ9P1DH
		Dilution Factor: 1 Instrument ID..: H4				
Potassium	**673 B,J**	**1000**	**ug/L**	**SW846 6010B** Analysis Time..: 15:31 MDL.....: 72.0	**07/17-07/20/09** Analyst ID.....: 000079	**LGJ9P1CW**
		Dilution Factor: 1 Instrument ID..: I5				
Magnesium	**18900**	**1000**	**ug/L**	**SW846 6010B** Analysis Time..: 15:31 MDL.....: 34.0	**07/17-07/20/09** Analyst ID.....: 000079	**LGJ9P1C1**
		Dilution Factor: 1 Instrument ID..: I5				
Manganese	**9.7 B,E**	**10.0**	**ug/L**	**SW846 6010B** Analysis Time..: 15:31 MDL.....: 0.41	**07/17-07/20/09** Analyst ID.....: 000079	**LGJ9P1C4**
		Dilution Factor: 1 Instrument ID..: I5				
Sodium	**4150**	**1000**	**ug/L**	**SW846 6010B** Analysis Time..: 15:31 MDL.....: 590	**07/17-07/20/09** Analyst ID.....: 000079	**LGJ9P1C7**
		Dilution Factor: 1 Instrument ID..: I5				
Nickel	ND	10.0	ug/L	SW846 6010B Analysis Time..: 15:31 MDL.....: 3.2	07/17-07/20/09 Analyst ID.....: 000079	LGJ9P1DA
		Dilution Factor: 1 Instrument ID..: I5				
Lead	ND	3.0	ug/L	SW846 6010B Analysis Time..: 15:31 MDL.....: 1.9	07/17-07/20/09 Analyst ID.....: 000079	LGJ9P1A4
		Dilution Factor: 1 Instrument ID..: I5				
Antimony	ND	2.0	ug/L	SW846 6020 Analysis Time..: 11:59 MDL.....: 0.13	07/17-07/28/09 Analyst ID.....: 001637	LGJ9P1AP
		Dilution Factor: 1 Instrument ID..: I8				
Selenium	ND	5.0	ug/L	SW846 6010B Analysis Time..: 15:31 MDL.....: 4.1	07/17-07/20/09 Analyst ID.....: 000079	LGJ9P1A7
		Dilution Factor: 1 Instrument ID..: I5				

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-004C-1392-GF

TOTAL Metals

Lot-Sample #...: A9G160103-003 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/17-07/28/09	LGJ9P1AW
		Dilution Factor: 1		Analysis Time..: 11:59	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGJ9P1DE
		Dilution Factor: 1		Analysis Time..: 15:31	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**5.3 B,J**	**10.0**	**ug/L**	**SW846 6020**	**07/17-07/28/09**	**LGJ9P1AT**
		Dilution Factor: 1		Analysis Time..: 11:59	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

E Matrix interference.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-005C-1393-GF

TOTAL Metals

Lot-Sample #...: A9G160103-005 **Matrix.....:** WG
Date Sampled...: 07/15/09 10:35 **Date Received..:** 07/16/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9198016						
Silver	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGJ9V1AQ
		Dilution Factor: 1		Analysis Time..: 16:01	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/17-07/28/09	LGJ9V1AE
		Dilution Factor: 1		Analysis Time..: 12:17	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGJ9V1AA
		Dilution Factor: 1		Analysis Time..: 16:01	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**4.2 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGJ9V1AR**
		Dilution Factor: 1		Analysis Time..: 16:01	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/17-07/31/09	LGJ9V1AF
		Dilution Factor: 1		Analysis Time..: 13:29	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**64000**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGJ9V1AT**
		Dilution Factor: 1		Analysis Time..: 16:01	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/17-07/28/09	LGJ9V1AG
		Dilution Factor: 1		Analysis Time..: 12:17	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGJ9V1AU
		Dilution Factor: 1		Analysis Time..: 16:01	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGJ9V1AV
		Dilution Factor: 1		Analysis Time..: 16:01	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGJ9V1AW
		Dilution Factor: 1		Analysis Time..: 16:01	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-005C-1393-GF

TOTAL Metals

Lot-Sample #...: A9G160103-005 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/17-07/28/09	LGJ9V1AH
		Dilution Factor: 1		Analysis Time..: 12:17	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/17-07/21/09	LGJ9V1A2
		Dilution Factor: 1		Analysis Time..: 15:59	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.12		
Potassium	**684 B,J**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGJ9V1AX**
		Dilution Factor: 1		Analysis Time..: 16:01	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**14800**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGJ9V1AM**
		Dilution Factor: 1		Analysis Time..: 16:01	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**5.6 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGJ9V1AN**
		Dilution Factor: 1		Analysis Time..: 16:01	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**3520**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGJ9V1AP**
		Dilution Factor: 1		Analysis Time..: 16:01	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGJ9V1A0
		Dilution Factor: 1		Analysis Time..: 16:01	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/17-07/20/09	LGJ9V1AC
		Dilution Factor: 1		Analysis Time..: 16:01	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/17-07/28/09	LGJ9V1AJ
		Dilution Factor: 1		Analysis Time..: 12:17	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGJ9V1AD
		Dilution Factor: 1		Analysis Time..: 16:01	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-005C-1393-GF

TOTAL Metals

Lot-Sample #...: A9G160103-005 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/17-07/28/09	LGJ9V1AL
		Dilution Factor: 1		Analysis Time..: 12:17	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGJ9V1A1
		Dilution Factor: 1		Analysis Time..: 16:01	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	2.6 B,J	10.0	ug/L	SW846 6020	07/17-07/28/09	LGJ9V1AK
		Dilution Factor: 1		Analysis Time..: 12:17	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-004C-1397-GF

TOTAL Metals

Lot-Sample #...: A9G160103-007 **Matrix.....:** WG
Date Sampled...: 07/15/09 11:55 **Date Received..:** 07/16/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9198016						
Silver	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGJ9X1CL
		Dilution Factor: 1		Analysis Time..: 16:06	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/17-07/28/09	LGJ9X1AL
		Dilution Factor: 1		Analysis Time..: 12:21	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGJ9X1AA
		Dilution Factor: 1		Analysis Time..: 16:06	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**57.6**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGJ9X1CP**
		Dilution Factor: 1		Analysis Time..: 16:06	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/17-07/31/09	LGJ9X1AP
		Dilution Factor: 1		Analysis Time..: 13:33	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**81600**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGJ9X1CT**
		Dilution Factor: 1		Analysis Time..: 16:06	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	**3.2**	**0.50**	**ug/L**	**SW846 6020**	**07/17-07/28/09**	**LGJ9X1AT**
		Dilution Factor: 1		Analysis Time..: 12:21	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGJ9X1CW
		Dilution Factor: 1		Analysis Time..: 16:06	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGJ9X1C1
		Dilution Factor: 1		Analysis Time..: 16:06	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGJ9X1C4
		Dilution Factor: 1		Analysis Time..: 16:06	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-004C-1397-GF

TOTAL Metals

Lot-Sample #...: A9G160103-007 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**157**	**50.0**	**ug/L**	**SW846 6020**	**07/17-07/28/09**	**LGJ9X1AW**
		Dilution Factor: 1		Analysis Time..: 12:21	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/17-07/21/09	LGJ9X1DH
		Dilution Factor: 1		Analysis Time..: 15:35	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.12		
Potassium	**1140 J,E**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGJ9X1C7**
		Dilution Factor: 1		Analysis Time..: 16:06	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**27000**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGJ9X1CA**
		Dilution Factor: 1		Analysis Time..: 16:06	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**609**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGJ9X1CE**
		Dilution Factor: 1		Analysis Time..: 16:06	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**13000**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGJ9X1CH**
		Dilution Factor: 1		Analysis Time..: 16:06	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGJ9X1DA
		Dilution Factor: 1		Analysis Time..: 16:06	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/17-07/20/09	LGJ9X1AE
		Dilution Factor: 1		Analysis Time..: 16:06	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/17-07/28/09	LGJ9X1A1
		Dilution Factor: 1		Analysis Time..: 12:21	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGJ9X1AH
		Dilution Factor: 1		Analysis Time..: 16:06	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-004C-1397-GF

TOTAL Metals

Lot-Sample #...: A9G160103-007 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/17-07/28/09	LGJ9X1A7
		Dilution Factor: 1		Analysis Time..: 12:21	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGJ9X1DE
		Dilution Factor: 1		Analysis Time..: 16:06	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**36.9 J**	**10.0**	**ug/L**	**SW846 6020**	**07/17-07/28/09**	**LGJ9X1A4**
		Dilution Factor: 1		Analysis Time..: 12:21	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

E Matrix interference.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-006C-1399-GF

TOTAL Metals

Lot-Sample #...: A9G160103-009 **Matrix.....:** WG
Date Sampled...: 07/15/09 14:05 **Date Received..:** 07/16/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9198016						
Silver	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGJ931AQ
		Dilution Factor: 1		Analysis Time..: 16:25	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/17-07/28/09	LGJ931AE
		Dilution Factor: 1		Analysis Time..: 12:40	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGJ931AA
		Dilution Factor: 1		Analysis Time..: 16:25	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**22.4**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGJ931AR**
		Dilution Factor: 1		Analysis Time..: 16:25	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/17-07/31/09	LGJ931AF
		Dilution Factor: 1		Analysis Time..: 14:02	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**76300**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGJ931AT**
		Dilution Factor: 1		Analysis Time..: 16:25	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/17-07/28/09	LGJ931AG
		Dilution Factor: 1		Analysis Time..: 12:40	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGJ931AU
		Dilution Factor: 1		Analysis Time..: 16:25	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGJ931AV
		Dilution Factor: 1		Analysis Time..: 16:25	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGJ931AW
		Dilution Factor: 1		Analysis Time..: 16:25	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-006C-1399-GF

TOTAL Metals

Lot-Sample #...: A9G160103-009 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/17-07/28/09	LGJ931AH
		Dilution Factor: 1		Analysis Time..: 12:40	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/17-07/21/09	LGJ931A2
		Dilution Factor: 1		Analysis Time..: 16:08	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.12		
Potassium	**656 B,J**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGJ931AX**
		Dilution Factor: 1		Analysis Time..: 16:25	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**15600**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGJ931AM**
		Dilution Factor: 1		Analysis Time..: 16:25	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**0.56 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGJ931AN**
		Dilution Factor: 1		Analysis Time..: 16:25	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**6800**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGJ931AP**
		Dilution Factor: 1		Analysis Time..: 16:25	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGJ931A0
		Dilution Factor: 1		Analysis Time..: 16:25	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/17-07/20/09	LGJ931AC
		Dilution Factor: 1		Analysis Time..: 16:25	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/17-07/28/09	LGJ931AJ
		Dilution Factor: 1		Analysis Time..: 12:40	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGJ931AD
		Dilution Factor: 1		Analysis Time..: 16:25	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-006C-1399-GF

TOTAL Metals

Lot-Sample #...: A9G160103-009 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/17-07/28/09	LGJ931AL
		Dilution Factor: 1		Analysis Time..: 12:40	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGJ931A1
		Dilution Factor: 1		Analysis Time..: 16:25	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	5.1 B,J	10.0	ug/L	SW846 6020	07/17-07/28/09	LGJ931AK
		Dilution Factor: 1		Analysis Time..: 12:40	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-003C-1405-GF

TOTAL Metals

Lot-Sample #...: A9G160103-011 Matrix.....: WG
Date Sampled...: 07/15/09 15:30 Date Received..: 07/16/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9198016						
Silver	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGJ971AQ
		Dilution Factor: 1		Analysis Time..: 16:30	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/17-07/28/09	LGJ971AE
		Dilution Factor: 1		Analysis Time..: 12:54	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**4.9 B**	**5.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGJ971AA**
		Dilution Factor: 1		Analysis Time..: 16:30	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**19.8**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGJ971AR**
		Dilution Factor: 1		Analysis Time..: 16:30	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/17-07/28/09	LGJ971AF
		Dilution Factor: 1		Analysis Time..: 12:54	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**200000**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGJ971AT**
		Dilution Factor: 1		Analysis Time..: 16:30	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/17-07/28/09	LGJ971AG
		Dilution Factor: 1		Analysis Time..: 12:54	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGJ971AU
		Dilution Factor: 1		Analysis Time..: 16:30	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGJ971AV
		Dilution Factor: 1		Analysis Time..: 16:30	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGJ971AW
		Dilution Factor: 1		Analysis Time..: 16:30	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-003C-1405-GF

TOTAL Metals

Lot-Sample #...: A9G160103-011 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**2420**	**50.0**	**ug/L**	**SW846 6020**	**07/17-07/28/09**	**LGJ971AH**
		Dilution Factor: 1		Analysis Time..: 12:54	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/17-07/21/09	LGJ971A2
		Dilution Factor: 1		Analysis Time..: 15:56	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.12		
Potassium	**1490 J**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGJ971AX**
		Dilution Factor: 1		Analysis Time..: 16:30	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**69900**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGJ971AM**
		Dilution Factor: 1		Analysis Time..: 16:30	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**532**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGJ971AN**
		Dilution Factor: 1		Analysis Time..: 16:30	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**27300**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGJ971AP**
		Dilution Factor: 1		Analysis Time..: 16:30	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGJ971A0
		Dilution Factor: 1		Analysis Time..: 16:30	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/17-07/20/09	LGJ971AC
		Dilution Factor: 1		Analysis Time..: 16:30	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/17-07/28/09	LGJ971AJ
		Dilution Factor: 1		Analysis Time..: 12:54	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGJ971AD
		Dilution Factor: 1		Analysis Time..: 16:30	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-003C-1405-GF

TOTAL Metals

Lot-Sample #...: A9G160103-011 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/17-07/28/09	LGJ971AL
		Dilution Factor: 1		Analysis Time..: 12:54	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGJ971A1
		Dilution Factor: 1		Analysis Time..: 16:30	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**2.6 B,J**	**10.0**	**ug/L**	**SW846 6020**	**07/17-07/28/09**	**LGJ971AK**
		Dilution Factor: 1		Analysis Time..: 12:54	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-004C-1406-GF

TOTAL Metals

Lot-Sample #...: A9G160103-013 **Matrix.....:** WG
Date Sampled...: 07/15/09 16:45 **Date Received..:** 07/16/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9198016						
Silver	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKAG1AQ
		Dilution Factor: 1		Analysis Time..: 16:34	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/17-07/28/09	LGKAG1AE
		Dilution Factor: 1		Analysis Time..: 12:58	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**19.0**	**5.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKAG1AA**
		Dilution Factor: 1		Analysis Time..: 16:34	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**10.6**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKAG1AR**
		Dilution Factor: 1		Analysis Time..: 16:34	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/17-07/28/09	LGKAG1AF
		Dilution Factor: 1		Analysis Time..: 12:58	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**139000**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKAG1AT**
		Dilution Factor: 1		Analysis Time..: 16:34	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/17-07/28/09	LGKAG1AG
		Dilution Factor: 1		Analysis Time..: 12:58	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKAG1AU
		Dilution Factor: 1		Analysis Time..: 16:34	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKAG1AV
		Dilution Factor: 1		Analysis Time..: 16:34	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKAG1AW
		Dilution Factor: 1		Analysis Time..: 16:34	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-004C-1406-GF

TOTAL Metals

Lot-Sample #...: A9G160103-013 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**1760**	**50.0**	**ug/L**	**SW846 6020**	**07/17-07/28/09**	**LGKAG1AH**
		Dilution Factor: 1		Analysis Time..: 12:58	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/17-07/21/09	LGKAG1A2
		Dilution Factor: 1		Analysis Time..: 16:16	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.12		
Potassium	**4150 J**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKAG1AX**
		Dilution Factor: 1		Analysis Time..: 16:34	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**70200**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKAG1AM**
		Dilution Factor: 1		Analysis Time..: 16:34	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	200	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKAG1AN**
		Dilution Factor: 1		Analysis Time..: 16:34	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**46400**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKAG1AP**
		Dilution Factor: 1		Analysis Time..: 16:34	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGKAG1A0
		Dilution Factor: 1		Analysis Time..: 16:34	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/17-07/20/09	LGKAG1AC
		Dilution Factor: 1		Analysis Time..: 16:34	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/17-07/28/09	LGKAG1AJ
		Dilution Factor: 1		Analysis Time..: 12:58	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKAG1AD
		Dilution Factor: 1		Analysis Time..: 16:34	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-004C-1406-GF

TOTAL Metals

Lot-Sample #...: A9G160103-013 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/17-07/28/09	LGKAG1AL
		Dilution Factor: 1		Analysis Time..: 12:58	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGKAG1A1
		Dilution Factor: 1		Analysis Time..: 16:34	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**4.6 B,J**	**10.0**	**ug/L**	**SW846 6020**	**07/17-07/28/09**	**LGKAG1AK**
		Dilution Factor: 1		Analysis Time..: 12:58	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-006C-1394-GF

TOTAL Metals

Lot-Sample #...: A9G160103-016 **Matrix.....:** WG
Date Sampled...: 07/15/09 08:50 **Date Received..:** 07/16/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9198016						
Silver	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKAR1AQ
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	**21.2 B**	**50.0**	**ug/L**	**SW846 6020**	**07/17-07/28/09**	**LGKAR1AE**
		Dilution Factor: 1		Analysis Time..: 13:03	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKAR1AA
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**12.5**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKAR1AR**
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/17-07/28/09	LGKAR1AF
		Dilution Factor: 1		Analysis Time..: 13:03	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**18200**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKAR1AT**
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/17-07/28/09	LGKAR1AG
		Dilution Factor: 1		Analysis Time..: 13:03	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKAR1AU
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKAR1AV
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKAR1AW
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-006C-1394-GF

TOTAL Metals

Lot-Sample #...: A9G160103-016 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/17-07/28/09	LGKAR1AH
		Dilution Factor: 1		Analysis Time..: 13:03	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/17-07/21/09	LGKAR1A2
		Dilution Factor: 1		Analysis Time..: 16:15	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.12		
Potassium	**940 B,J**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKAR1AX**
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**7070**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKAR1AM**
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**1.6 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKAR1AN**
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**2620**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKAR1AP**
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGKAR1A0
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/17-07/20/09	LGKAR1AC
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/17-07/28/09	LGKAR1AJ
		Dilution Factor: 1		Analysis Time..: 13:03	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKAR1AD
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-006C-1394-GF

TOTAL Metals

Lot-Sample #...: A9G160103-016 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/17-07/28/09	LGKAR1AL
		Dilution Factor: 1		Analysis Time..: 13:03	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGKAR1A1
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**3.3 B,J**	**10.0**	**ug/L**	**SW846 6020**	**07/17-07/28/09**	**LGKAR1AK**
		Dilution Factor: 1		Analysis Time..: 13:03	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-DUP4-1416-GF

TOTAL Metals

Lot-Sample #...: A9G160103-018 **Matrix.....:** WG
Date Sampled...: 07/15/09 10:00 **Date Received..:** 07/16/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9198016						
Silver	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKAW1AQ
		Dilution Factor: 1		Analysis Time..: 16:43	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	**20.6 B**	**50.0**	**ug/L**	**SW846 6020**	**07/17-07/28/09**	**LGKAW1AE**
		Dilution Factor: 1		Analysis Time..: 13:07	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKAW1AA
		Dilution Factor: 1		Analysis Time..: 16:43	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**12.3**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKAW1AR**
		Dilution Factor: 1		Analysis Time..: 16:43	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/17-07/28/09	LGKAW1AF
		Dilution Factor: 1		Analysis Time..: 13:07	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**17700**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKAW1AT**
		Dilution Factor: 1		Analysis Time..: 16:43	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/17-07/28/09	LGKAW1AG
		Dilution Factor: 1		Analysis Time..: 13:07	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKAW1AU
		Dilution Factor: 1		Analysis Time..: 16:43	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKAW1AV
		Dilution Factor: 1		Analysis Time..: 16:43	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKAW1AW
		Dilution Factor: 1		Analysis Time..: 16:43	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-DUP4-1416-GF

TOTAL Metals

Lot-Sample #...: A9G160103-018 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**37.0 B**	**50.0**	**ug/L**	**SW846 6020**	**07/17-07/28/09**	**LGKAW1AH**
		Dilution Factor: 1		Analysis Time..: 13:07	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/17-07/21/09	LGKAW1A2
		Dilution Factor: 1		Analysis Time..: 16:05	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.12		
Potassium	**926 B,J**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKAW1AX**
		Dilution Factor: 1		Analysis Time..: 16:43	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**6880**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKAW1AM**
		Dilution Factor: 1		Analysis Time..: 16:43	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**5.0 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKAW1AN**
		Dilution Factor: 1		Analysis Time..: 16:43	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**2670**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKAW1AP**
		Dilution Factor: 1		Analysis Time..: 16:43	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGKAW1A0
		Dilution Factor: 1		Analysis Time..: 16:43	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/17-07/20/09	LGKAW1AC
		Dilution Factor: 1		Analysis Time..: 16:43	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/17-07/28/09	LGKAW1AJ
		Dilution Factor: 1		Analysis Time..: 13:07	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKAW1AD
		Dilution Factor: 1		Analysis Time..: 16:43	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-DUP4-1416-GF

TOTAL Metals

Lot-Sample #...: A9G160103-018 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/17-07/28/09	LGKAW1AL
		Dilution Factor: 1		Analysis Time..: 13:07	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGKAW1A1
		Dilution Factor: 1		Analysis Time..: 16:43	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**3.1 B,J**	**10.0**	**ug/L**	**SW846 6020**	**07/17-07/28/09**	**LGKAW1AK**
		Dilution Factor: 1		Analysis Time..: 13:07	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-010C-1402-GF

TOTAL Metals

Lot-Sample #...: A9G160103-020 **Matrix.....:** WG
Date Sampled...: 07/15/09 11:00 **Date Received..:** 07/16/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9198016						
Silver	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKA11AQ
		Dilution Factor: 1		Analysis Time..: 17:00	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	**59.0**	**50.0**	**ug/L**	**SW846 6020**	**07/17-07/28/09**	**LGKA11AE**
		Dilution Factor: 1		Analysis Time..: 13:11	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**5.8**	**5.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKA11AA**
		Dilution Factor: 1		Analysis Time..: 17:00	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**96.3**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKA11AR**
		Dilution Factor: 1		Analysis Time..: 17:00	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/17-07/28/09	LGKA11AF
		Dilution Factor: 1		Analysis Time..: 13:11	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**80200**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKA11AT**
		Dilution Factor: 1		Analysis Time..: 17:00	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/17-07/28/09	LGKA11AG
		Dilution Factor: 1		Analysis Time..: 13:11	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKA11AU
		Dilution Factor: 1		Analysis Time..: 17:00	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKA11AV
		Dilution Factor: 1		Analysis Time..: 17:00	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKA11AW
		Dilution Factor: 1		Analysis Time..: 17:00	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-010C-1402-GF

TOTAL Metals

Lot-Sample #...: A9G160103-020 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**1420**	**50.0**	**ug/L**	**SW846 6020**	**07/17-07/28/09**	**LGKA11AH**
		Dilution Factor: 1		Analysis Time..: 13:11	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/17-07/21/09	LGKA11A2
		Dilution Factor: 1		Analysis Time..: 16:21	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.12		
Potassium	**1380 J**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKA11AX**
		Dilution Factor: 1		Analysis Time..: 17:00	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**31500**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKA11AM**
		Dilution Factor: 1		Analysis Time..: 17:00	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**967**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKA11AN**
		Dilution Factor: 1		Analysis Time..: 17:00	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**17900**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKA11AP**
		Dilution Factor: 1		Analysis Time..: 17:00	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGKA11A0
		Dilution Factor: 1		Analysis Time..: 17:00	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/17-07/20/09	LGKA11AC
		Dilution Factor: 1		Analysis Time..: 17:00	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/17-07/28/09	LGKA11AJ
		Dilution Factor: 1		Analysis Time..: 13:11	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKA11AD
		Dilution Factor: 1		Analysis Time..: 17:00	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-010C-1402-GF

TOTAL Metals

Lot-Sample #...: A9G160103-020 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/17-07/28/09	LGKA11AL
		Dilution Factor: 1		Analysis Time..: 13:11	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGKA11A1
		Dilution Factor: 1		Analysis Time..: 17:00	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**7.8 B,J**	**10.0**	**ug/L**	**SW846 6020**	**07/17-07/28/09**	**LGKA11AK**
		Dilution Factor: 1		Analysis Time..: 13:11	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-DUP5-1417-GF

TOTAL Metals

Lot-Sample #...: A9G160103-022 **Matrix.....:** WG
Date Sampled...: 07/15/09 12:00 **Date Received..:** 07/16/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9198016						
Silver	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKA51AQ
		Dilution Factor: 1		Analysis Time..: 17:04	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/17-07/28/09	LGKA51AE
		Dilution Factor: 1		Analysis Time..: 13:15	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**3.3 B**	**5.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKA51AA**
		Dilution Factor: 1		Analysis Time..: 17:04	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**86.8**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKA51AR**
		Dilution Factor: 1		Analysis Time..: 17:04	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/17-07/28/09	LGKA51AF
		Dilution Factor: 1		Analysis Time..: 13:15	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**84600**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKA51AT**
		Dilution Factor: 1		Analysis Time..: 17:04	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/17-07/28/09	LGKA51AG
		Dilution Factor: 1		Analysis Time..: 13:15	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKA51AU
		Dilution Factor: 1		Analysis Time..: 17:04	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKA51AV
		Dilution Factor: 1		Analysis Time..: 17:04	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKA51AW
		Dilution Factor: 1		Analysis Time..: 17:04	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-DUP5-1417-GF

TOTAL Metals

Lot-Sample #...: A9G160103-022 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**338**	**50.0**	**ug/L**	**SW846 6020**	**07/17-07/28/09**	**LGKA51AH**
		Dilution Factor: 1		Analysis Time..: 13:15	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/17-07/21/09	LGKA51A2
		Dilution Factor: 1		Analysis Time..: 16:18	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.12		
Potassium	**1460 J**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKA51AX**
		Dilution Factor: 1		Analysis Time..: 17:04	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**33500**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKA51AM**
		Dilution Factor: 1		Analysis Time..: 17:04	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**482**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKA51AN**
		Dilution Factor: 1		Analysis Time..: 17:04	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**19800**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKA51AP**
		Dilution Factor: 1		Analysis Time..: 17:04	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGKA51A0
		Dilution Factor: 1		Analysis Time..: 17:04	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/17-07/20/09	LGKA51AC
		Dilution Factor: 1		Analysis Time..: 17:04	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/17-07/28/09	LGKA51AJ
		Dilution Factor: 1		Analysis Time..: 13:15	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKA51AD
		Dilution Factor: 1		Analysis Time..: 17:04	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-DUP5-1417-GF

TOTAL Metals

Lot-Sample #...: A9G160103-022 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/17-07/28/09	LGKA51AL
		Dilution Factor: 1		Analysis Time..: 13:15	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGKA51A1
		Dilution Factor: 1		Analysis Time..: 17:04	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**8.2 B,J**	**10.0**	**ug/L**	**SW846 6020**	**07/17-07/28/09**	**LGKA51AK**
		Dilution Factor: 1		Analysis Time..: 13:15	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-001C-1403-GF

TOTAL Metals

Lot-Sample #...: A9G160103-024 **Matrix.....:** WG
Date Sampled...: 07/15/09 14:10 **Date Received..:** 07/16/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9198016						
Silver	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKA71AQ
		Dilution Factor: 1		Analysis Time..: 17:09	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/17-07/28/09	LGKA71AE
		Dilution Factor: 1		Analysis Time..: 13:19	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKA71AA
		Dilution Factor: 1		Analysis Time..: 17:09	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**14.4**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKA71AR**
		Dilution Factor: 1		Analysis Time..: 17:09	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/17-07/28/09	LGKA71AF
		Dilution Factor: 1		Analysis Time..: 13:19	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**121000**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKA71AT**
		Dilution Factor: 1		Analysis Time..: 17:09	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/17-07/28/09	LGKA71AG
		Dilution Factor: 1		Analysis Time..: 13:19	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKA71AU
		Dilution Factor: 1		Analysis Time..: 17:09	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKA71AV
		Dilution Factor: 1		Analysis Time..: 17:09	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKA71AW
		Dilution Factor: 1		Analysis Time..: 17:09	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-001C-1403-GF

TOTAL Metals

Lot-Sample #...: A9G160103-024 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**300**	**50.0**	**ug/L**	**SW846 6020**	**07/17-07/28/09**	**LGKA71AH**
		Dilution Factor: 1		Analysis Time..: 13:19	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/17-07/21/09	LGKA71A2
		Dilution Factor: 1		Analysis Time..: 15:46	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.12		
Potassium	**1090 J**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKA71AX**
		Dilution Factor: 1		Analysis Time..: 17:09	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**38500**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKA71AM**
		Dilution Factor: 1		Analysis Time..: 17:09	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**895**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKA71AN**
		Dilution Factor: 1		Analysis Time..: 17:09	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**5980**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKA71AP**
		Dilution Factor: 1		Analysis Time..: 17:09	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGKA71A0
		Dilution Factor: 1		Analysis Time..: 17:09	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/17-07/20/09	LGKA71AC
		Dilution Factor: 1		Analysis Time..: 17:09	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/17-07/28/09	LGKA71AJ
		Dilution Factor: 1		Analysis Time..: 13:19	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKA71AD
		Dilution Factor: 1		Analysis Time..: 17:09	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-001C-1403-GF

TOTAL Metals

Lot-Sample #...: A9G160103-024 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/17-07/28/09	LGKA71AL
		Dilution Factor: 1		Analysis Time..: 13:19	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGKA71A1
		Dilution Factor: 1		Analysis Time..: 17:09	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**20.4 J**	**10.0**	**ug/L**	**SW846 6020**	**07/17-07/28/09**	**LGKA71AK**
		Dilution Factor: 1		Analysis Time..: 13:19	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1425-GW

TOTAL Metals

Lot-Sample #...: A9G160103-025 **Matrix.....:** WQ
Date Sampled...: 07/15/09 14:50 **Date Received..:** 07/16/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9198016						
Silver	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKA81AT
		Dilution Factor: 1		Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/17-07/28/09	LGKA81AG
		Dilution Factor: 1		Analysis Time..: 13:23	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKA81AP
		Dilution Factor: 1		Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGKA81AU
		Dilution Factor: 1		Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/17-07/28/09	LGKA81AH
		Dilution Factor: 1		Analysis Time..: 13:23	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	ND	1000	ug/L	SW846 6010B	07/17-07/20/09	LGKA81AV
		Dilution Factor: 1		Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/17-07/28/09	LGKA81AJ
		Dilution Factor: 1		Analysis Time..: 13:23	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKA81AW
		Dilution Factor: 1		Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKA81AX
		Dilution Factor: 1		Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKA81A0
		Dilution Factor: 1		Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1425-GW

TOTAL Metals

Lot-Sample #...: A9G160103-025 Matrix.....: WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/17-07/28/09	LGKA81AK
		Dilution Factor: 1		Analysis Time..: 13:23	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/17-07/21/09	LGKA81A7
		Dilution Factor: 1		Analysis Time..: 16:10	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.12		
Potassium	**150 B,J**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKA81A1**
		Dilution Factor: 1		Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	ND	1000	ug/L	SW846 6010B	07/17-07/20/09	LGKA81A2
		Dilution Factor: 1		Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGKA81A3
		Dilution Factor: 1		Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	ND	1000	ug/L	SW846 6010B	07/17-07/20/09	LGKA81A4
		Dilution Factor: 1		Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGKA81A5
		Dilution Factor: 1		Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/17-07/20/09	LGKA81AQ
		Dilution Factor: 1		Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/17-07/28/09	LGKA81AL
		Dilution Factor: 1		Analysis Time..: 13:23	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKA81AR
		Dilution Factor: 1		Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1425-GW

TOTAL Metals

Lot-Sample #...: A9G160103-025 **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/17-07/28/09	LGKA81AN
		Dilution Factor: 1		Analysis Time..: 13:23	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGKA81A6
		Dilution Factor: 1		Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**2.5 B,J**	**10.0**	**ug/L**	**SW846 6020**	**07/17-07/28/09**	**LGKA81AM**
		Dilution Factor: 1		Analysis Time..: 13:23	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-002C-1404-GF

TOTAL Metals

Lot-Sample #...: A9G160103-027 **Matrix.....:** WG
Date Sampled...: 07/15/09 15:20 **Date Received..:** 07/16/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9198016						
Silver	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCG1AQ
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/17-07/28/09	LGKCG1AE
		Dilution Factor: 1		Analysis Time..: 13:27	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCG1AA
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**8.6 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKCG1AR**
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/17-07/28/09	LGKCG1AF
		Dilution Factor: 1		Analysis Time..: 13:27	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**78700**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKCG1AT**
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/17-07/28/09	LGKCG1AG
		Dilution Factor: 1		Analysis Time..: 13:27	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCG1AU
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCG1AV
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCG1AW
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-002C-1404-GF

TOTAL Metals

Lot-Sample #...: A9G160103-027 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/17-07/28/09	LGKCG1AH
		Dilution Factor: 1		Analysis Time..: 13:27	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/17-07/21/09	LGKCG1A2
		Dilution Factor: 1		Analysis Time..: 16:02	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.12		
Potassium	**590 B,J**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKCG1AX**
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**16700**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKCG1AM**
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**3.9 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKCG1AN**
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**2580**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKCG1AP**
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCG1A0
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCG1AC
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/17-07/28/09	LGKCG1AJ
		Dilution Factor: 1		Analysis Time..: 13:27	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCG1AD
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-002C-1404-GF

TOTAL Metals

Lot-Sample #...: A9G160103-027 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/17-07/28/09	LGKCG1AL
		Dilution Factor: 1		Analysis Time..: 13:27	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCG1A1
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	ND	10.0	ug/L	SW846 6020	07/17-07/28/09	LGKCG1AK
		Dilution Factor: 1		Analysis Time..: 13:27	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-005C-1398-GF

TOTAL Metals

Lot-Sample #...: A9G160103-030 **Matrix.....:** WG
Date Sampled...: 07/15/09 08:45 **Date Received..:** 07/16/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9198016						
Silver	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCM1AQ
		Dilution Factor: 1		Analysis Time..: 17:22	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	**66.2**	**50.0**	**ug/L**	**SW846 6020**	**07/17-07/28/09**	**LGKCM1AE**
		Dilution Factor: 1		Analysis Time..: 13:31	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCM1AA
		Dilution Factor: 1		Analysis Time..: 17:22	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**29.7**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKCM1AR**
		Dilution Factor: 1		Analysis Time..: 17:22	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/17-07/28/09	LGKCM1AF
		Dilution Factor: 1		Analysis Time..: 13:31	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**8580**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKCM1AT**
		Dilution Factor: 1		Analysis Time..: 17:22	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/17-07/28/09	LGKCM1AG
		Dilution Factor: 1		Analysis Time..: 13:31	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCM1AU
		Dilution Factor: 1		Analysis Time..: 17:22	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCM1AV
		Dilution Factor: 1		Analysis Time..: 17:22	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCM1AW
		Dilution Factor: 1		Analysis Time..: 17:22	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-005C-1398-GF

TOTAL Metals

Lot-Sample #...: A9G160103-030 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/17-07/28/09	LGKCM1AH
		Dilution Factor: 1		Analysis Time..: 13:31	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/17-07/21/09	LGKCM1A2
		Dilution Factor: 1		Analysis Time..: 16:04	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.12		
Potassium	**545 B,J**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKCM1AX**
		Dilution Factor: 1		Analysis Time..: 17:22	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**4410**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKCM1AM**
		Dilution Factor: 1		Analysis Time..: 17:22	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**35.6**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKCM1AN**
		Dilution Factor: 1		Analysis Time..: 17:22	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**2550**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKCM1AP**
		Dilution Factor: 1		Analysis Time..: 17:22	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	**9.9 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKCM1A0**
		Dilution Factor: 1		Analysis Time..: 17:22	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCM1AC
		Dilution Factor: 1		Analysis Time..: 17:22	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/17-07/28/09	LGKCM1AJ
		Dilution Factor: 1		Analysis Time..: 13:31	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCM1AD
		Dilution Factor: 1		Analysis Time..: 17:22	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-005C-1398-GF

TOTAL Metals

Lot-Sample #...: A9G160103-030 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/17-07/28/09	LGKCM1AL
		Dilution Factor: 1		Analysis Time..: 13:31	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCM1A1
		Dilution Factor: 1		Analysis Time..: 17:22	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**17.0 J**	**10.0**	**ug/L**	**SW846 6020**	**07/17-07/28/09**	**LGKCM1AK**
		Dilution Factor: 1		Analysis Time..: 13:31	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-003C-1396-GF

TOTAL Metals

Lot-Sample #...: A9G160103-032 **Matrix.....:** WG
Date Sampled...: 07/15/09 10:25 **Date Received..:** 07/16/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9198016						
Silver	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCP1AQ
		Dilution Factor: 1		Analysis Time..: 17:27	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/17-07/28/09	LGKCP1AE
		Dilution Factor: 1		Analysis Time..: 13:46	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCP1AA
		Dilution Factor: 1		Analysis Time..: 17:27	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**29.5**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKCP1AR**
		Dilution Factor: 1		Analysis Time..: 17:27	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/17-07/31/09	LGKCP1AF
		Dilution Factor: 1		Analysis Time..: 14:06	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**104000**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKCP1AT**
		Dilution Factor: 1		Analysis Time..: 17:27	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/17-07/28/09	LGKCP1AG
		Dilution Factor: 1		Analysis Time..: 13:46	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCP1AU
		Dilution Factor: 1		Analysis Time..: 17:27	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCP1AV
		Dilution Factor: 1		Analysis Time..: 17:27	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCP1AW
		Dilution Factor: 1		Analysis Time..: 17:27	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-003C-1396-GF

TOTAL Metals

Lot-Sample #...: A9G160103-032 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**68.8**	**50.0**	**ug/L**	**SW846 6020**	**07/17-07/28/09**	**LGKCP1AH**
		Dilution Factor: 1		Analysis Time..: 13:46	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/17-07/21/09	LGKCP1A2
		Dilution Factor: 1		Analysis Time..: 16:07	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.12		
Potassium	**1030 J**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKCP1AX**
		Dilution Factor: 1		Analysis Time..: 17:27	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**31000**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKCP1AM**
		Dilution Factor: 1		Analysis Time..: 17:27	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**690**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKCP1AN**
		Dilution Factor: 1		Analysis Time..: 17:27	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**10700**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKCP1AP**
		Dilution Factor: 1		Analysis Time..: 17:27	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCP1A0
		Dilution Factor: 1		Analysis Time..: 17:27	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCP1AC
		Dilution Factor: 1		Analysis Time..: 17:27	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/17-07/28/09	LGKCP1AJ
		Dilution Factor: 1		Analysis Time..: 13:46	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCP1AD
		Dilution Factor: 1		Analysis Time..: 17:27	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-003C-1396-GF

TOTAL Metals

Lot-Sample #...: A9G160103-032 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/17-07/28/09	LGKCP1AL
		Dilution Factor: 1		Analysis Time..: 13:46	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCP1A1
		Dilution Factor: 1		Analysis Time..: 17:27	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**19.5 J**	**10.0**	**ug/L**	**SW846 6020**	**07/17-07/28/09**	**LGKCP1AK**
		Dilution Factor: 1		Analysis Time..: 13:46	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-009C-1401-GF

TOTAL Metals

Lot-Sample #...: A9G160103-034 **Matrix.....:** WG
Date Sampled...: 07/15/09 11:50 **Date Received..:** 07/16/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9198016						
Silver	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCR1AQ
		Dilution Factor: 1		Analysis Time..: 17:31	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/17-07/28/09	LGKCR1AE
		Dilution Factor: 1		Analysis Time..: 13:50	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCR1AA
		Dilution Factor: 1		Analysis Time..: 17:31	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**75.2**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKCR1AR**
		Dilution Factor: 1		Analysis Time..: 17:31	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/17-07/31/09	LGKCR1AF
		Dilution Factor: 1		Analysis Time..: 14:10	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**84400**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKCR1AT**
		Dilution Factor: 1		Analysis Time..: 17:31	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/17-07/28/09	LGKCR1AG
		Dilution Factor: 1		Analysis Time..: 13:50	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCR1AU
		Dilution Factor: 1		Analysis Time..: 17:31	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCR1AV
		Dilution Factor: 1		Analysis Time..: 17:31	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCR1AW
		Dilution Factor: 1		Analysis Time..: 17:31	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-009C-1401-GF

TOTAL Metals

Lot-Sample #...: A9G160103-034 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/17-07/28/09	LGKCR1AH
		Dilution Factor: 1		Analysis Time..: 13:50	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/17-07/21/09	LGKCR1A2
		Dilution Factor: 1		Analysis Time..: 16:20	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.12		
Potassium	**954 B,J**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKCR1AX**
		Dilution Factor: 1		Analysis Time..: 17:31	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**27700**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKCR1AM**
		Dilution Factor: 1		Analysis Time..: 17:31	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**804**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKCR1AN**
		Dilution Factor: 1		Analysis Time..: 17:31	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**12400**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKCR1AP**
		Dilution Factor: 1		Analysis Time..: 17:31	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCR1A0
		Dilution Factor: 1		Analysis Time..: 17:31	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCR1AC
		Dilution Factor: 1		Analysis Time..: 17:31	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/17-07/28/09	LGKCR1AJ
		Dilution Factor: 1		Analysis Time..: 13:50	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCR1AD
		Dilution Factor: 1		Analysis Time..: 17:31	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-009C-1401-GF

TOTAL Metals

Lot-Sample #...: A9G160103-034 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/17-07/28/09	LGKCR1AL
		Dilution Factor: 1		Analysis Time..: 13:50	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCR1A1
		Dilution Factor: 1		Analysis Time..: 17:31	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	ND	10.0	ug/L	SW846 6020	07/17-07/28/09	LGKCR1AK
		Dilution Factor: 1		Analysis Time..: 13:50	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-008C-1400-GF

TOTAL Metals

Lot-Sample #...: A9G160103-036 **Matrix.....:** WG
Date Sampled...: 07/15/09 13:10 **Date Received..:** 07/16/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9198016						
Silver	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCV1AQ
		Dilution Factor: 1		Analysis Time..: 17:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/17-07/28/09	LGKCV1AE
		Dilution Factor: 1		Analysis Time..: 13:54	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCV1AA
		Dilution Factor: 1		Analysis Time..: 17:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**32.0**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKCV1AR**
		Dilution Factor: 1		Analysis Time..: 17:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/17-07/31/09	LGKCV1AF
		Dilution Factor: 1		Analysis Time..: 14:14	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**111000**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKCV1AT**
		Dilution Factor: 1		Analysis Time..: 17:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/17-07/28/09	LGKCV1AG
		Dilution Factor: 1		Analysis Time..: 13:54	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCV1AU
		Dilution Factor: 1		Analysis Time..: 17:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCV1AV
		Dilution Factor: 1		Analysis Time..: 17:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCV1AW
		Dilution Factor: 1		Analysis Time..: 17:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-008C-1400-GF

TOTAL Metals

Lot-Sample #...: A9G160103-036 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/17-07/28/09	LGKCV1AH
		Dilution Factor: 1		Analysis Time..: 13:54	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/17-07/21/09	LGKCV1A2
		Dilution Factor: 1		Analysis Time..: 15:54	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.12		
Potassium	**878 B,J**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKCV1AX**
		Dilution Factor: 1		Analysis Time..: 17:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**31700**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKCV1AM**
		Dilution Factor: 1		Analysis Time..: 17:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**37.7**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKCV1AN**
		Dilution Factor: 1		Analysis Time..: 17:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**5390**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKCV1AP**
		Dilution Factor: 1		Analysis Time..: 17:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCV1A0
		Dilution Factor: 1		Analysis Time..: 17:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCV1AC
		Dilution Factor: 1		Analysis Time..: 17:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/17-07/28/09	LGKCV1AJ
		Dilution Factor: 1		Analysis Time..: 13:54	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCV1AD
		Dilution Factor: 1		Analysis Time..: 17:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-008C-1400-GF

TOTAL Metals

Lot-Sample #...: A9G160103-036 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/17-07/28/09	LGKCV1AL
		Dilution Factor: 1		Analysis Time..: 13:54	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCV1A1
		Dilution Factor: 1		Analysis Time..: 17:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	ND	10.0	ug/L	SW846 6020	07/17-07/28/09	LGKCV1AK
		Dilution Factor: 1		Analysis Time..: 13:54	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-001C-1395-GF

TOTAL Metals

Lot-Sample #...: A9G160103-038 **Matrix.....:** WG
Date Sampled...: 07/15/09 14:30 **Date Received..:** 07/16/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9198016						
Silver	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCX1AQ
		Dilution Factor: 1		Analysis Time..: 17:41	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/17-07/28/09	LGKCX1AE
		Dilution Factor: 1		Analysis Time..: 13:58	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCX1AA
		Dilution Factor: 1		Analysis Time..: 17:41	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**27.4**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKCX1AR**
		Dilution Factor: 1		Analysis Time..: 17:41	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/17-07/31/09	LGKCX1AF
		Dilution Factor: 1		Analysis Time..: 14:18	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**81400**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKCX1AT**
		Dilution Factor: 1		Analysis Time..: 17:41	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/17-07/28/09	LGKCX1AG
		Dilution Factor: 1		Analysis Time..: 13:58	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCX1AU
		Dilution Factor: 1		Analysis Time..: 17:41	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCX1AV
		Dilution Factor: 1		Analysis Time..: 17:41	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCX1AW
		Dilution Factor: 1		Analysis Time..: 17:41	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-001C-1395-GF

TOTAL Metals

Lot-Sample #...: A9G160103-038 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/17-07/28/09	LGKCX1AH
		Dilution Factor: 1		Analysis Time..: 13:58	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/17-07/21/09	LGKCX1A2
		Dilution Factor: 1		Analysis Time..: 15:57	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.12		
Potassium	**818 B,J**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKCX1AX**
		Dilution Factor: 1		Analysis Time..: 17:41	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**27800**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKCX1AM**
		Dilution Factor: 1		Analysis Time..: 17:41	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**575**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKCX1AN**
		Dilution Factor: 1		Analysis Time..: 17:41	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**17900**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKCX1AP**
		Dilution Factor: 1		Analysis Time..: 17:41	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCX1A0
		Dilution Factor: 1		Analysis Time..: 17:41	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCX1AC
		Dilution Factor: 1		Analysis Time..: 17:41	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/17-07/28/09	LGKCX1AJ
		Dilution Factor: 1		Analysis Time..: 13:58	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCX1AD
		Dilution Factor: 1		Analysis Time..: 17:41	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-001C-1395-GF

TOTAL Metals

Lot-Sample #...: A9G160103-038 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/17-07/28/09	LGKCX1AL
		Dilution Factor: 1		Analysis Time..: 13:58	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGKCX1A1
		Dilution Factor: 1		Analysis Time..: 17:41	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**2.4 B,J**	**10.0**	**ug/L**	**SW846 6020**	**07/17-07/28/09**	**LGKCX1AK**
		Dilution Factor: 1		Analysis Time..: 13:58	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-005C-1407-GF

TOTAL Metals

Lot-Sample #...: A9G160103-040 **Matrix.....:** WG
Date Sampled...: 07/15/09 16:20 **Date Received..:** 07/16/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9198016						
Silver	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKC31AQ
		Dilution Factor: 1		Analysis Time..: 17:57	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/17-07/28/09	LGKC31AE
		Dilution Factor: 1		Analysis Time..: 14:02	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKC31AA
		Dilution Factor: 1		Analysis Time..: 17:57	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**27.6**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKC31AR**
		Dilution Factor: 1		Analysis Time..: 17:57	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/17-07/31/09	LGKC31AF
		Dilution Factor: 1		Analysis Time..: 14:22	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**149000**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKC31AT**
		Dilution Factor: 1		Analysis Time..: 17:57	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/17-07/28/09	LGKC31AG
		Dilution Factor: 1		Analysis Time..: 14:02	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKC31AU
		Dilution Factor: 1		Analysis Time..: 17:57	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKC31AV
		Dilution Factor: 1		Analysis Time..: 17:57	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKC31AW
		Dilution Factor: 1		Analysis Time..: 17:57	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-005C-1407-GF

TOTAL Metals

Lot-Sample #...: A9G160103-040 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/17-07/28/09	LGKC31AH
		Dilution Factor: 1		Analysis Time..: 14:02	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/17-07/21/09	LGKC31A2
		Dilution Factor: 1		Analysis Time..: 15:47	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.12		
Potassium	**2080 J**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKC31AX**
		Dilution Factor: 1		Analysis Time..: 17:57	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**43700**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKC31AM**
		Dilution Factor: 1		Analysis Time..: 17:57	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**194**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKC31AN**
		Dilution Factor: 1		Analysis Time..: 17:57	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**41300**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGKC31AP**
		Dilution Factor: 1		Analysis Time..: 17:57	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGKC31A0
		Dilution Factor: 1		Analysis Time..: 17:57	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/17-07/20/09	LGKC31AC
		Dilution Factor: 1		Analysis Time..: 17:57	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/17-07/28/09	LGKC31AJ
		Dilution Factor: 1		Analysis Time..: 14:02	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGKC31AD
		Dilution Factor: 1		Analysis Time..: 17:57	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-005C-1407-GF

TOTAL Metals

Lot-Sample #...: A9G160103-040 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/17-07/28/09	LGKC31AL
		Dilution Factor: 1		Analysis Time..: 14:02	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGKC31A1
		Dilution Factor: 1		Analysis Time..: 17:57	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**2.7 B,J**	**10.0**	**ug/L**	**SW846 6020**	**07/17-07/28/09**	**LGKC31AK**
		Dilution Factor: 1		Analysis Time..: 14:02	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A9G160103 **Matrix.....:** WATER

MB Lot-Sample #: A9G170000-016 **Prep Batch #...:** 9198016

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Aluminum	ND	50.0	ug/L	SW846 6020	07/17-07/28/09	LGL741AA
		Dilution Factor: 1				
		Analysis Time..: 11:38		Analyst ID.....: 001637	Instrument ID..: I8	
Antimony	ND	2.0	ug/L	SW846 6020	07/17-07/28/09	LGL741AF
		Dilution Factor: 1				
		Analysis Time..: 11:38		Analyst ID.....: 001637	Instrument ID..: I8	
Arsenic	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGL741AJ
		Dilution Factor: 1				
		Analysis Time..: 15:21		Analyst ID.....: 000079	Instrument ID..: I5	
Barium	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGL741AN
		Dilution Factor: 1				
		Analysis Time..: 15:21		Analyst ID.....: 000079	Instrument ID..: I5	
Beryllium	ND	1.0	ug/L	SW846 6020	07/17-07/31/09	LGL741AC
		Dilution Factor: 1				
		Analysis Time..: 12:49		Analyst ID.....: 001637	Instrument ID..: I8	
Cadmium	ND	0.50	ug/L	SW846 6020	07/17-07/28/09	LGL741AD
		Dilution Factor: 1				
		Analysis Time..: 11:38		Analyst ID.....: 001637	Instrument ID..: I8	
Calcium	ND	1000	ug/L	SW846 6010B	07/17-07/20/09	LGL741AP
		Dilution Factor: 1				
		Analysis Time..: 15:21		Analyst ID.....: 000079	Instrument ID..: I5	
Chromium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGL741AR
		Dilution Factor: 1				
		Analysis Time..: 15:21		Analyst ID.....: 000079	Instrument ID..: I5	
Cobalt	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGL741AQ
		Dilution Factor: 1				
		Analysis Time..: 15:21		Analyst ID.....: 000079	Instrument ID..: I5	
Copper	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGL741AT
		Dilution Factor: 1				
		Analysis Time..: 15:21		Analyst ID.....: 000079	Instrument ID..: I5	
Iron	ND	50.0	ug/L	SW846 6020	07/17-07/28/09	LGL741AE
		Dilution Factor: 1				
		Analysis Time..: 11:38		Analyst ID.....: 001637	Instrument ID..: I8	

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A9G160103 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Lead	ND	3.0	ug/L	SW846 6010B	07/17-07/20/09	LGL741AK
		Dilution Factor: 1				
		Analysis Time..: 15:21		Analyst ID.....: 000079	Instrument ID..: I5	
Magnesium	ND	1000	ug/L	SW846 6010B	07/17-07/20/09	LGL741AV
		Dilution Factor: 1				
		Analysis Time..: 15:21		Analyst ID.....: 000079	Instrument ID..: I5	
Manganese	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGL741AW
		Dilution Factor: 1				
		Analysis Time..: 15:21		Analyst ID.....: 000079	Instrument ID..: I5	
Mercury	ND	0.20	ug/L	SW846 7470A	07/17-07/21/09	LGL741A2
		Dilution Factor: 1				
		Analysis Time..: 15:31		Analyst ID.....: 001576	Instrument ID..: H4	
Nickel	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGL741A0
		Dilution Factor: 1				
		Analysis Time..: 15:21		Analyst ID.....: 000079	Instrument ID..: I5	
Potassium	**149 B**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGL741AU**
		Dilution Factor: 1				
		Analysis Time..: 15:21		Analyst ID.....: 000079	Instrument ID..: I5	
Selenium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGL741AL
		Dilution Factor: 1				
		Analysis Time..: 15:21		Analyst ID.....: 000079	Instrument ID..: I5	
Silver	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGL741AM
		Dilution Factor: 1				
		Analysis Time..: 15:21		Analyst ID.....: 000079	Instrument ID..: I5	
Sodium	ND	1000	ug/L	SW846 6010B	07/17-07/20/09	LGL741AX
		Dilution Factor: 1				
		Analysis Time..: 15:21		Analyst ID.....: 000079	Instrument ID..: I5	
Thallium	ND	1.0	ug/L	SW846 6020	07/17-07/28/09	LGL741AH
		Dilution Factor: 1				
		Analysis Time..: 11:38		Analyst ID.....: 001637	Instrument ID..: I8	
Vanadium	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGL741A1
		Dilution Factor: 1				
		Analysis Time..: 15:21		Analyst ID.....: 000079	Instrument ID..: I5	
Zinc	**6.8 B**	**10.0**	**ug/L**	**SW846 6020**	**07/17-07/28/09**	**LGL741AG**
		Dilution Factor: 1				
		Analysis Time..: 11:38		Analyst ID.....: 001637	Instrument ID..: I8	

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A9G160103 Matrix.....: WATER

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A9G160103 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A9G170000-016 **Prep Batch #...:** 9198016					
Aluminum	106	(80 - 120)	SW846 6020	07/17-07/28/09	LGL741A3
		Dilution Factor: 1	Analysis Time..: 11:42	Analyst ID.....: 001637	
		Instrument ID..: I8			
Beryllium	106	(80 - 120)	SW846 6020	07/17-07/31/09	LGL741A4
		Dilution Factor: 1	Analysis Time..: 13:04	Analyst ID.....: 001637	
		Instrument ID..: I8			
Cadmium	108	(80 - 120)	SW846 6020	07/17-07/28/09	LGL741A5
		Dilution Factor: 1	Analysis Time..: 11:42	Analyst ID.....: 001637	
		Instrument ID..: I8			
Iron	102	(80 - 120)	SW846 6020	07/17-07/28/09	LGL741A6
		Dilution Factor: 1	Analysis Time..: 11:42	Analyst ID.....: 001637	
		Instrument ID..: I8			
Antimony	103	(80 - 120)	SW846 6020	07/17-07/28/09	LGL741A7
		Dilution Factor: 1	Analysis Time..: 11:42	Analyst ID.....: 001637	
		Instrument ID..: I8			
Zinc	108	(80 - 120)	SW846 6020	07/17-07/28/09	LGL741A8
		Dilution Factor: 1	Analysis Time..: 11:42	Analyst ID.....: 001637	
		Instrument ID..: I8			
Thallium	96	(80 - 120)	SW846 6020	07/17-07/28/09	LGL741A9
		Dilution Factor: 1	Analysis Time..: 11:42	Analyst ID.....: 001637	
		Instrument ID..: I8			
Arsenic	100	(80 - 120)	SW846 6010B	07/17-07/20/09	LGL741CA
		Dilution Factor: 1	Analysis Time..: 15:26	Analyst ID.....: 000079	
		Instrument ID..: I5			
Lead	104	(80 - 120)	SW846 6010B	07/17-07/20/09	LGL741CC
		Dilution Factor: 1	Analysis Time..: 15:26	Analyst ID.....: 000079	
		Instrument ID..: I5			
Selenium	105	(80 - 120)	SW846 6010B	07/17-07/20/09	LGL741CD
		Dilution Factor: 1	Analysis Time..: 15:26	Analyst ID.....: 000079	
		Instrument ID..: I5			

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A9G160103 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Silver	118	(80 - 120)	SW846 6010B	07/17-07/20/09	LGL741CE
		Dilution Factor: 1	Analysis Time..: 15:26	Analyst ID.....: 000079	
		Instrument ID..: I5			
Barium	104	(80 - 120)	SW846 6010B	07/17-07/20/09	LGL741CF
		Dilution Factor: 1	Analysis Time..: 15:26	Analyst ID.....: 000079	
		Instrument ID..: I5			
Calcium	106	(80 - 120)	SW846 6010B	07/17-07/20/09	LGL741CG
		Dilution Factor: 1	Analysis Time..: 15:26	Analyst ID.....: 000079	
		Instrument ID..: I5			
Cobalt	105	(80 - 120)	SW846 6010B	07/17-07/20/09	LGL741CH
		Dilution Factor: 1	Analysis Time..: 15:26	Analyst ID.....: 000079	
		Instrument ID..: I5			
Chromium	103	(80 - 120)	SW846 6010B	07/17-07/20/09	LGL741CJ
		Dilution Factor: 1	Analysis Time..: 15:26	Analyst ID.....: 000079	
		Instrument ID..: I5			
Copper	105	(80 - 120)	SW846 6010B	07/17-07/20/09	LGL741CK
		Dilution Factor: 1	Analysis Time..: 15:26	Analyst ID.....: 000079	
		Instrument ID..: I5			
Potassium	104	(80 - 120)	SW846 6010B	07/17-07/20/09	LGL741CL
		Dilution Factor: 1	Analysis Time..: 15:26	Analyst ID.....: 000079	
		Instrument ID..: I5			
Magnesium	107	(80 - 120)	SW846 6010B	07/17-07/20/09	LGL741CM
		Dilution Factor: 1	Analysis Time..: 15:26	Analyst ID.....: 000079	
		Instrument ID..: I5			
Manganese	107	(80 - 120)	SW846 6010B	07/17-07/20/09	LGL741CN
		Dilution Factor: 1	Analysis Time..: 15:26	Analyst ID.....: 000079	
		Instrument ID..: I5			
Sodium	107	(80 - 120)	SW846 6010B	07/17-07/20/09	LGL741CP
		Dilution Factor: 1	Analysis Time..: 15:26	Analyst ID.....: 000079	
		Instrument ID..: I5			
Nickel	108	(80 - 120)	SW846 6010B	07/17-07/20/09	LGL741CQ
		Dilution Factor: 1	Analysis Time..: 15:26	Analyst ID.....: 000079	
		Instrument ID..: I5			

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A9G160103 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	103	(80 - 120)	SW846 6010B	07/17-07/20/09	LGL741CR
		Dilution Factor: 1	Analysis Time..: 15:26	Analyst ID.....: 000079	
		Instrument ID..: I5			
Mercury	83	(80 - 120)	SW846 7470A	07/17-07/21/09	LGL741CT
		Dilution Factor: 1	Analysis Time..: 15:33	Analyst ID.....: 001576	
		Instrument ID..: H4			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A9G160103 **Matrix.....:** WG
Date Sampled...: 07/15/09 08:35 **Date Received..:** 07/16/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A9G160103-003 **Prep Batch #...:** 9198016					
Aluminum	106	(75 - 125)	SW846 6020	07/17-07/28/09	LGJ9P1AC
		Dilution Factor: 1	Analysis Time..: 11:59	Instrument ID..: I8	
		Analyst ID.....: 001637			
Antimony	104	(75 - 125)	SW846 6020	07/17-07/28/09	LGJ9P1AQ
		Dilution Factor: 1	Analysis Time..: 11:59	Instrument ID..: I8	
		Analyst ID.....: 001637			
Arsenic	100	(75 - 125)	SW846 6010B	07/17-07/20/09	LGJ9P1A2
		Dilution Factor: 1	Analysis Time..: 15:31	Instrument ID..: I5	
		Analyst ID.....: 000079			
Barium	103	(75 - 125)	SW846 6010B	07/17-07/20/09	LGJ9P1CF
		Dilution Factor: 1	Analysis Time..: 15:31	Instrument ID..: I5	
		Analyst ID.....: 000079			
Beryllium	105	(75 - 125)	SW846 6020	07/17-07/31/09	LGJ9P1AF
		Dilution Factor: 1	Analysis Time..: 13:10	Instrument ID..: I8	
		Analyst ID.....: 001637			
Cadmium	106	(75 - 125)	SW846 6020	07/17-07/28/09	LGJ9P1AJ
		Dilution Factor: 1	Analysis Time..: 11:59	Instrument ID..: I8	
		Analyst ID.....: 001637			
Calcium	102	(75 - 125)	SW846 6010B	07/17-07/20/09	LGJ9P1CJ
		Dilution Factor: 1	Analysis Time..: 15:31	Instrument ID..: I5	
		Analyst ID.....: 000079			
Chromium	102	(75 - 125)	SW846 6010B	07/17-07/20/09	LGJ9P1CQ
		Dilution Factor: 1	Analysis Time..: 15:31	Instrument ID..: I5	
		Analyst ID.....: 000079			
Cobalt	103	(75 - 125)	SW846 6010B	07/17-07/20/09	LGJ9P1CM
		Dilution Factor: 1	Analysis Time..: 15:31	Instrument ID..: I5	
		Analyst ID.....: 000079			
Copper	103	(75 - 125)	SW846 6010B	07/17-07/20/09	LGJ9P1CU
		Dilution Factor: 1	Analysis Time..: 15:31	Instrument ID..: I5	
		Analyst ID.....: 000079			

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A9G160103 **Matrix.....:** WG
Date Sampled...: 07/15/09 08:35 **Date Received..:** 07/16/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	104	(75 - 125)	SW846 6020	07/17-07/28/09	LGJ9P1AM
		Dilution Factor: 1	Analysis Time..: 11:59	Instrument ID..: I8	
		Analyst ID.....: 001637			
Lead	103	(75 - 125)	SW846 6010B	07/17-07/20/09	LGJ9P1A5
		Dilution Factor: 1	Analysis Time..: 15:31	Instrument ID..: I5	
		Analyst ID.....: 000079			
Magnesium	105	(75 - 125)	SW846 6010B	07/17-07/20/09	LGJ9P1C2
		Dilution Factor: 1	Analysis Time..: 15:31	Instrument ID..: I5	
		Analyst ID.....: 000079			
Manganese	106	(75 - 125)	SW846 6010B	07/17-07/20/09	LGJ9P1C5
		Dilution Factor: 1	Analysis Time..: 15:31	Instrument ID..: I5	
		Analyst ID.....: 000079			
Mercury	91	(80 - 120)	SW846 7470A	07/17-07/21/09	LGJ9P1DJ
		Dilution Factor: 1	Analysis Time..: 15:40	Instrument ID..: H4	
		Analyst ID.....: 001576			
Nickel	107	(75 - 125)	SW846 6010B	07/17-07/20/09	LGJ9P1DC
		Dilution Factor: 1	Analysis Time..: 15:31	Instrument ID..: I5	
		Analyst ID.....: 000079			
Potassium	103	(75 - 125)	SW846 6010B	07/17-07/20/09	LGJ9P1CX
		Dilution Factor: 1	Analysis Time..: 15:31	Instrument ID..: I5	
		Analyst ID.....: 000079			
Selenium	104	(75 - 125)	SW846 6010B	07/17-07/20/09	LGJ9P1A8
		Dilution Factor: 1	Analysis Time..: 15:31	Instrument ID..: I5	
		Analyst ID.....: 000079			
Silver	116	(75 - 125)	SW846 6010B	07/17-07/20/09	LGJ9P1CC
		Dilution Factor: 1	Analysis Time..: 15:31	Instrument ID..: I5	
		Analyst ID.....: 000079			
Sodium	105	(75 - 125)	SW846 6010B	07/17-07/20/09	LGJ9P1C8
		Dilution Factor: 1	Analysis Time..: 15:31	Instrument ID..: I5	
		Analyst ID.....: 000079			
Thallium	99	(75 - 125)	SW846 6020	07/17-07/28/09	LGJ9P1AX
		Dilution Factor: 1	Analysis Time..: 11:59	Instrument ID..: I8	
		Analyst ID.....: 001637			

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A9G160103 **Matrix.....:** WG
Date Sampled...: 07/15/09 08:35 **Date Received..:** 07/16/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	101	(75 - 125)	SW846 6010B	07/17-07/20/09	LGJ9P1DF
		Dilution Factor: 1	Analysis Time..: 15:31	Instrument ID..: I5	
		Analyst ID.....: 000079			
Zinc	98	(75 - 125)	SW846 6020	07/17-07/28/09	LGJ9P1AU
		Dilution Factor: 1	Analysis Time..: 11:59	Instrument ID..: I8	
		Analyst ID.....: 001637			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A9G160103 **Matrix.....:** WG
Date Sampled...: 07/15/09 11:55 **Date Received..:** 07/16/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A9G160103-007 **Prep Batch #...:** 9198016					
Aluminum	104	(75 - 125)	SW846 6020	07/17-07/28/09	LGJ9X1AM
		Dilution Factor: 1	Analysis Time..: 12:21	Instrument ID..: I8	
		Analyst ID.....: 001637			
Antimony	103	(75 - 125)	SW846 6020	07/17-07/28/09	LGJ9X1A2
		Dilution Factor: 1	Analysis Time..: 12:21	Instrument ID..: I8	
		Analyst ID.....: 001637			
Arsenic	98	(75 - 125)	SW846 6010B	07/17-07/20/09	LGJ9X1AC
		Dilution Factor: 1	Analysis Time..: 16:06	Instrument ID..: I5	
		Analyst ID.....: 000079			
Barium	101	(75 - 125)	SW846 6010B	07/17-07/20/09	LGJ9X1CQ
		Dilution Factor: 1	Analysis Time..: 16:06	Instrument ID..: I5	
		Analyst ID.....: 000079			
Beryllium	103	(75 - 125)	SW846 6020	07/17-07/31/09	LGJ9X1AQ
		Dilution Factor: 1	Analysis Time..: 13:33	Instrument ID..: I8	
		Analyst ID.....: 001637			
Cadmium	105	(75 - 125)	SW846 6020	07/17-07/28/09	LGJ9X1AU
		Dilution Factor: 1	Analysis Time..: 12:21	Instrument ID..: I8	
		Analyst ID.....: 001637			
Calcium	107	(75 - 125)	SW846 6010B	07/17-07/20/09	LGJ9X1CU
		Dilution Factor: 1	Analysis Time..: 16:06	Instrument ID..: I5	
		Analyst ID.....: 000079			
Chromium	99	(75 - 125)	SW846 6010B	07/17-07/20/09	LGJ9X1C2
		Dilution Factor: 1	Analysis Time..: 16:06	Instrument ID..: I5	
		Analyst ID.....: 000079			
Cobalt	101	(75 - 125)	SW846 6010B	07/17-07/20/09	LGJ9X1CX
		Dilution Factor: 1	Analysis Time..: 16:06	Instrument ID..: I5	
		Analyst ID.....: 000079			
Copper	101	(75 - 125)	SW846 6010B	07/17-07/20/09	LGJ9X1C5
		Dilution Factor: 1	Analysis Time..: 16:06	Instrument ID..: I5	
		Analyst ID.....: 000079			

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A9G160103 **Matrix.....:** WG
Date Sampled...: 07/15/09 11:55 **Date Received..:** 07/16/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	103	(75 - 125)	SW846 6020	07/17-07/28/09	LGJ9X1AX
		Dilution Factor: 1	Analysis Time..: 12:21	Instrument ID..: I8	
		Analyst ID.....: 001637			
Lead	101	(75 - 125)	SW846 6010B	07/17-07/20/09	LGJ9X1AF
		Dilution Factor: 1	Analysis Time..: 16:06	Instrument ID..: I5	
		Analyst ID.....: 000079			
Magnesium	105	(75 - 125)	SW846 6010B	07/17-07/20/09	LGJ9X1CC
		Dilution Factor: 1	Analysis Time..: 16:06	Instrument ID..: I5	
		Analyst ID.....: 000079			
Manganese	109	(75 - 125)	SW846 6010B	07/17-07/20/09	LGJ9X1CF
		Dilution Factor: 1	Analysis Time..: 16:06	Instrument ID..: I5	
		Analyst ID.....: 000079			
Mercury	88	(80 - 120)	SW846 7470A	07/17-07/21/09	LGJ9X1DJ
		Dilution Factor: 1	Analysis Time..: 15:35	Instrument ID..: H4	
		Analyst ID.....: 001576			
Nickel	105	(75 - 125)	SW846 6010B	07/17-07/20/09	LGJ9X1DC
		Dilution Factor: 1	Analysis Time..: 16:06	Instrument ID..: I5	
		Analyst ID.....: 000079			
Potassium	102	(75 - 125)	SW846 6010B	07/17-07/20/09	LGJ9X1C8
		Dilution Factor: 1	Analysis Time..: 16:06	Instrument ID..: I5	
		Analyst ID.....: 000079			
Selenium	102	(75 - 125)	SW846 6010B	07/17-07/20/09	LGJ9X1AJ
		Dilution Factor: 1	Analysis Time..: 16:06	Instrument ID..: I5	
		Analyst ID.....: 000079			
Silver	116	(75 - 125)	SW846 6010B	07/17-07/20/09	LGJ9X1CM
		Dilution Factor: 1	Analysis Time..: 16:06	Instrument ID..: I5	
		Analyst ID.....: 000079			
Sodium	104	(75 - 125)	SW846 6010B	07/17-07/20/09	LGJ9X1CJ
		Dilution Factor: 1	Analysis Time..: 16:06	Instrument ID..: I5	
		Analyst ID.....: 000079			
Thallium	98	(75 - 125)	SW846 6020	07/17-07/28/09	LGJ9X1A8
		Dilution Factor: 1	Analysis Time..: 12:21	Instrument ID..: I8	
		Analyst ID.....: 001637			

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A9G160103 **Matrix.....:** WG
Date Sampled...: 07/15/09 11:55 **Date Received..:** 07/16/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	99	(75 - 125)	SW846 6010B	07/17-07/20/09	LGJ9X1DF
		Dilution Factor: 1	Analysis Time..: 16:06	Instrument ID..: I5	
		Analyst ID.....: 000079			
Zinc	97	(75 - 125)	SW846 6020	07/17-07/28/09	LGJ9X1A5
		Dilution Factor: 1	Analysis Time..: 12:21	Instrument ID..: I8	
		Analyst ID.....: 001637			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Client Lot #...: A9G160103 **Work Order #...:** LGJ9P-SMP LGJ9P-DUP **Matrix.....:** WG

Date Sampled...: 07/15/09 08:35 **Date Received..:** 07/16/09

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Silver						SD Lot-Sample #:	A9G160103-003	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/17-07/20/09	9198016
		Dilution Factor: 1				Analysis Time..: 15:31	Analyst ID.....: 000079	
		Instrument ID..: I5						
Aluminum						SD Lot-Sample #:	A9G160103-003	
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/17-07/28/09	9198016
		Dilution Factor: 1				Analysis Time..: 11:59	Analyst ID.....: 001637	
		Instrument ID..: I8						
Arsenic						SD Lot-Sample #:	A9G160103-003	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/17-07/20/09	9198016
		Dilution Factor: 1				Analysis Time..: 15:31	Analyst ID.....: 000079	
		Instrument ID..: I5						
Barium						SD Lot-Sample #:	A9G160103-003	
	3.1 B	3.1 B	ug/L	0.92	(0-20)	SW846 6010B	07/17-07/20/09	9198016
		Dilution Factor: 1				Analysis Time..: 15:31	Analyst ID.....: 000079	
		Instrument ID..: I5						
Beryllium						SD Lot-Sample #:	A9G160103-003	
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/17-07/31/09	9198016
		Dilution Factor: 1				Analysis Time..: 13:10	Analyst ID.....: 001637	
		Instrument ID..: I8						
Calcium						SD Lot-Sample #:	A9G160103-003	
	64600	67200	ug/L	4.0	(0-20)	SW846 6010B	07/17-07/20/09	9198016
		Dilution Factor: 1				Analysis Time..: 15:31	Analyst ID.....: 000079	
		Instrument ID..: I5						
Cadmium						SD Lot-Sample #:	A9G160103-003	
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/17-07/28/09	9198016
		Dilution Factor: 1				Analysis Time..: 11:59	Analyst ID.....: 001637	
		Instrument ID..: I8						
Cobalt						SD Lot-Sample #:	A9G160103-003	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/17-07/20/09	9198016
		Dilution Factor: 1				Analysis Time..: 15:31	Analyst ID.....: 000079	
		Instrument ID..: I5						
Chromium						SD Lot-Sample #:	A9G160103-003	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/17-07/20/09	9198016
		Dilution Factor: 1				Analysis Time..: 15:31	Analyst ID.....: 000079	
		Instrument ID..: I5						

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SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A9G160103-000 **Work Order #...:** LGJ9P-SMP LGJ9P-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Copper						SD Lot-Sample #:	A9G160103-003	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/17-07/20/09	9198016
			Dilution Factor: 1			Analysis Time..: 15:31	Analyst ID.....: 000079	
			Instrument ID..: I5					
Iron						SD Lot-Sample #:	A9G160103-003	
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/17-07/28/09	9198016
			Dilution Factor: 1			Analysis Time..: 11:59	Analyst ID.....: 001637	
			Instrument ID..: I8					
Mercury						SD Lot-Sample #:	A9G160103-003	
	ND	ND	ug/L	0	(0-20)	SW846 7470A	07/17-07/21/09	9198016
			Dilution Factor: 1			Analysis Time..: 15:40	Analyst ID.....: 001576	
			Instrument ID..: H4					
Potassium						SD Lot-Sample #:	A9G160103-003	
	673 B,J	673 B	ug/L	0.016	(0-20)	SW846 6010B	07/17-07/20/09	9198016
			Dilution Factor: 1			Analysis Time..: 15:31	Analyst ID.....: 000079	
			Instrument ID..: I5					
Magnesium						SD Lot-Sample #:	A9G160103-003	
	18900	19700	ug/L	4.1	(0-20)	SW846 6010B	07/17-07/20/09	9198016
			Dilution Factor: 1			Analysis Time..: 15:31	Analyst ID.....: 000079	
			Instrument ID..: I5					
Manganese						SD Lot-Sample #:	A9G160103-003	
	9.7 B,E	10.6	ug/L	9.0	(0-20)	SW846 6010B	07/17-07/20/09	9198016
			Dilution Factor: 1			Analysis Time..: 15:31	Analyst ID.....: 000079	
			Instrument ID..: I5					
Sodium						SD Lot-Sample #:	A9G160103-003	
	4150	4000	ug/L	3.7	(0-20)	SW846 6010B	07/17-07/20/09	9198016
			Dilution Factor: 1			Analysis Time..: 15:31	Analyst ID.....: 000079	
			Instrument ID..: I5					
Nickel						SD Lot-Sample #:	A9G160103-003	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/17-07/20/09	9198016
			Dilution Factor: 1			Analysis Time..: 15:31	Analyst ID.....: 000079	
			Instrument ID..: I5					
Lead						SD Lot-Sample #:	A9G160103-003	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/17-07/20/09	9198016
			Dilution Factor: 1			Analysis Time..: 15:31	Analyst ID.....: 000079	
			Instrument ID..: I5					

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SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A9G160103-000 **Work Order #...:** LGJ9P-SMP LGJ9P-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Antimony						SD Lot-Sample #:	A9G160103-003	
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/17-07/28/09	9198016
			Dilution Factor: 1			Analysis Time..: 11:59	Analyst ID.....: 001637	
			Instrument ID..: I8					
Selenium						SD Lot-Sample #:	A9G160103-003	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/17-07/20/09	9198016
			Dilution Factor: 1			Analysis Time..: 15:31	Analyst ID.....: 000079	
			Instrument ID..: I5					
Thallium						SD Lot-Sample #:	A9G160103-003	
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/17-07/28/09	9198016
			Dilution Factor: 1			Analysis Time..: 11:59	Analyst ID.....: 001637	
			Instrument ID..: I8					
Vanadium						SD Lot-Sample #:	A9G160103-003	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/17-07/20/09	9198016
			Dilution Factor: 1			Analysis Time..: 15:31	Analyst ID.....: 000079	
			Instrument ID..: I5					
Zinc						SD Lot-Sample #:	A9G160103-003	
	5.3 B,J	ND	ug/L	200	(0-20)	SW846 6020	07/17-07/28/09	9198016
			Dilution Factor: 1			Analysis Time..: 11:59	Analyst ID.....: 001637	
			Instrument ID..: I8					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

E Matrix interference.

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Client Lot #...: A9G160103 **Work Order #...:** LGJ9X-SMP LGJ9X-DUP **Matrix.....:** WG

Date Sampled...: 07/15/09 11:55 **Date Received..:** 07/16/09

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Silver						SD Lot-Sample #:	A9G160103-007	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/17-07/20/09	9198016
			Dilution Factor: 1			Analysis Time..: 16:06	Analyst ID.....: 000079	
			Instrument ID..: I5					
Aluminum						SD Lot-Sample #:	A9G160103-007	
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/17-07/28/09	9198016
			Dilution Factor: 1			Analysis Time..: 12:21	Analyst ID.....: 001637	
			Instrument ID..: I8					
Arsenic						SD Lot-Sample #:	A9G160103-007	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/17-07/20/09	9198016
			Dilution Factor: 1			Analysis Time..: 16:06	Analyst ID.....: 000079	
			Instrument ID..: I5					
Barium						SD Lot-Sample #:	A9G160103-007	
	57.6	58.2	ug/L	0.93	(0-20)	SW846 6010B	07/17-07/20/09	9198016
			Dilution Factor: 1			Analysis Time..: 16:06	Analyst ID.....: 000079	
			Instrument ID..: I5					
Beryllium						SD Lot-Sample #:	A9G160103-007	
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/17-07/31/09	9198016
			Dilution Factor: 1			Analysis Time..: 13:33	Analyst ID.....: 001637	
			Instrument ID..: I8					
Calcium						SD Lot-Sample #:	A9G160103-007	
	81600	82500	ug/L	1.1	(0-20)	SW846 6010B	07/17-07/20/09	9198016
			Dilution Factor: 1			Analysis Time..: 16:06	Analyst ID.....: 000079	
			Instrument ID..: I5					
Cadmium						SD Lot-Sample #:	A9G160103-007	
	3.2	3.2	ug/L	1.3	(0-20)	SW846 6020	07/17-07/28/09	9198016
			Dilution Factor: 1			Analysis Time..: 12:21	Analyst ID.....: 001637	
			Instrument ID..: I8					
Cobalt						SD Lot-Sample #:	A9G160103-007	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/17-07/20/09	9198016
			Dilution Factor: 1			Analysis Time..: 16:06	Analyst ID.....: 000079	
			Instrument ID..: I5					
Chromium						SD Lot-Sample #:	A9G160103-007	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/17-07/20/09	9198016
			Dilution Factor: 1			Analysis Time..: 16:06	Analyst ID.....: 000079	
			Instrument ID..: I5					

(Continued on next page)

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A9G160103-000 **Work Order #...:** LGJ9X-SMP LGJ9X-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Copper						SD Lot-Sample #:	A9G160103-007	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/17-07/20/09	9198016
			Dilution Factor: 1			Analysis Time..: 16:06	Analyst ID.....: 000079	
			Instrument ID..: I5					
Iron						SD Lot-Sample #:	A9G160103-007	
	157	72.6	ug/L	74	(0-20)	SW846 6020	07/17-07/28/09	9198016
			Dilution Factor: 1			Analysis Time..: 12:21	Analyst ID.....: 001637	
			Instrument ID..: I8					
Mercury						SD Lot-Sample #:	A9G160103-007	
	ND	ND	ug/L	0	(0-20)	SW846 7470A	07/17-07/21/09	9198016
			Dilution Factor: 1			Analysis Time..: 15:35	Analyst ID.....: 001576	
			Instrument ID..: H4					
Potassium						SD Lot-Sample #:	A9G160103-007	
	1140 J,E	1170	ug/L	1.7	(0-20)	SW846 6010B	07/17-07/20/09	9198016
			Dilution Factor: 1			Analysis Time..: 16:06	Analyst ID.....: 000079	
			Instrument ID..: I5					
Magnesium						SD Lot-Sample #:	A9G160103-007	
	27000	27400	ug/L	1.3	(0-20)	SW846 6010B	07/17-07/20/09	9198016
			Dilution Factor: 1			Analysis Time..: 16:06	Analyst ID.....: 000079	
			Instrument ID..: I5					
Manganese						SD Lot-Sample #:	A9G160103-007	
	609	624	ug/L	2.4	(0-20)	SW846 6010B	07/17-07/20/09	9198016
			Dilution Factor: 1			Analysis Time..: 16:06	Analyst ID.....: 000079	
			Instrument ID..: I5					
Sodium						SD Lot-Sample #:	A9G160103-007	
	13000	13200	ug/L	1.5	(0-20)	SW846 6010B	07/17-07/20/09	9198016
			Dilution Factor: 1			Analysis Time..: 16:06	Analyst ID.....: 000079	
			Instrument ID..: I5					
Nickel						SD Lot-Sample #:	A9G160103-007	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/17-07/20/09	9198016
			Dilution Factor: 1			Analysis Time..: 16:06	Analyst ID.....: 000079	
			Instrument ID..: I5					
Lead						SD Lot-Sample #:	A9G160103-007	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/17-07/20/09	9198016
			Dilution Factor: 1			Analysis Time..: 16:06	Analyst ID.....: 000079	
			Instrument ID..: I5					

(Continued on next page)

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A9G160103-000 **Work Order #...:** LGJ9X-SMP LGJ9X-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Antimony						SD Lot-Sample #:	A9G160103-007	
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/17-07/28/09	9198016
			Dilution Factor: 1			Analysis Time..: 12:21	Analyst ID.....: 001637	
			Instrument ID..: I8					
Selenium						SD Lot-Sample #:	A9G160103-007	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/17-07/20/09	9198016
			Dilution Factor: 1			Analysis Time..: 16:06	Analyst ID.....: 000079	
			Instrument ID..: I5					
Thallium						SD Lot-Sample #:	A9G160103-007	
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/17-07/28/09	9198016
			Dilution Factor: 1			Analysis Time..: 12:21	Analyst ID.....: 001637	
			Instrument ID..: I8					
Vanadium						SD Lot-Sample #:	A9G160103-007	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/17-07/20/09	9198016
			Dilution Factor: 1			Analysis Time..: 16:06	Analyst ID.....: 000079	
			Instrument ID..: I5					
Zinc						SD Lot-Sample #:	A9G160103-007	
	36.9 J	37.0	ug/L	0.46	(0-20)	SW846 6020	07/17-07/28/09	9198016
			Dilution Factor: 1			Analysis Time..: 12:21	Analyst ID.....: 001637	
			Instrument ID..: I8					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

E Matrix interference.

TestAmerica North Canton

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: I50720B.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 07/20/09 12:46 PM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	189.042	5	2.9	U								
Barium	493.409	10	0.2	U								
Calcium	317.933	1000	**-49.0**	**B**								
Chromium	267.716	5	1.1	U								
Cobalt	228.616	5	0.5	U								
Copper	324.753	5	1.0	U								
Lead	220.353	3	1.1	U								
Magnesium	279.078	1000	3.9	U								
Manganese	257.61	10	0.1	U								
Nickel	231.604	10	1.2	U								
Potassium	766.491	1000	~~147.0~~	~~B~~								
Selenium	196.026	5	3.6	U								
Silver	328.068	5	1.1	U								
Sodium	330.232	1000	**-570.0**	**B**								
Vanadium	292.402	10	0.8	U								

U
K 2735

5.21.0

U Result is less than the IDL
B Result is between IDL and RL

Form 3 Equivalent

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: I50720B.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 07/20/09 1:18 PM		CCB 07/20/09 2:57 PM		CCB 07/20/09 3:57 PM		CCB 07/20/09 4:55 PM		CCB 07/20/09 5:52 PM	
			Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	189.042	5	2.9	U	2.9	U	2.9	U	2.9	U	2.9	U
Barium	493.409	10	0.2	U	0.2	U	0.2	U	0.2	U	**-0.3**	**B**
Calcium	317.933	1000	**-57.0**	**B**	**-58.0**	**B**	**-58.0**	**B**	40.9	U	40.9	U
Chromium	267.716	5	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U
Cobalt	228.616	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Copper	324.753	5	1.0	U	1.0	U	1.0	U	1.0	U	**-1.9**	**B**
Lead	220.353	3	1.1	U	**-1.2**	**B**	1.1	U	1.1	U	**-1.7**	**B**
Magnesium	279.078	1000	3.9	U	3.9	U	3.9	U	3.9	U	**-24.0**	**B**
Manganese	257.61	10	0.1	U	0.1	U	0.1	U	0.1	U	**-0.5**	**B**
Nickel	231.604	10	1.2	U	**-1.2**	**B**	**-1.3**	**B**	1.2	U	1.2	U
Potassium	766.491	1000	**147.0**	**B**	**146.0**	**B**	**144.0**	**B**	**145.0**	**B**	**143.0**	**B**
Selenium	196.026	5	**-3.9**	**B**	3.6	U	3.6	U	3.6	U	3.6	U
Silver	328.068	5	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U
Sodium	330.232	1000	**-620.0**	**B**	**-540.0**	**B**	**-610.0**	**B**	**-560.0**	**B**	**-760.0**	**B**
Vanadium	292.402	10	0.8	U	0.8	U	0.8	U	0.8	U	**-2.7**	**B**

u K results
K < 745

U Result is less than the IDL
B Result is between IDL and RL

Form 3 Equivalent

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: I50720B.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 07/20/09 6:53 PM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	189.042	5	2.9	U								
Barium	493.409	10	0.2	U								
Calcium	317.933	1000	40.9	U								
Chromium	267.716	5	1.1	U								
Cobalt	228.616	5	0.5	U								
Copper	324.753	5	1.0	U								
Lead	220.353	3	**-1.4**	**B**								
Magnesium	279.078	1000	3.9	U								
Manganese	257.61	10	0.1	U								
Nickel	231.604	10	**-1.4**	**B**								
Potassium	766.491	1000	~~149.0~~	~~B~~								
Selenium	196.026	5	3.6	U								
Silver	328.068	5	1.1	U								
Sodium	330.232	1000	503.0	U								
Vanadium	292.402	10	0.8	U								

U Result is less than the IDL
B Result is between IDL and RL

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: I80728A.csv

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 07/28/09 10:55 AM Found	Q	CCB 07/28/09 11:05 AM Found	Q	CCB 1 07/28/09 11:55 AM Found	Q	CCB 2 07/28/09 12:50 PM Found	Q	CCB 3 07/28/09 1:42 PM Found	Q
Aluminum	27	50	8.2	U	8.2	U	8.2	U	8.2	U	8.2	U
Antimony	121	2	0.055	U	0.055	U	0.055	U	**0.065**	~~B~~	0.055	U
Beryllium	9	1	0.037	U	0.037	U	0.037	U	0.037	U	0.037	U
Cadmium	111	0.5	0.027	U	0.027	U	~~**0.033**~~	~~B~~	~~**0.065**~~	~~B~~	~~**0.042**~~	~~B~~
Iron	56	50	11	U	11	U	~~**11.2**~~	~~B~~	**14.5**	B	11	U
Thallium	205	1	0.12	U	0.12	U	0.12	U	0.12	U	0.12	U
Zinc	66	10	0.85	U	0.85	U	0.85	U	0.85	U	0.85	U

U results for:
Sb < 0.325
Cd < 0.325
Fe < 73

5.04.5

U Result is less than the IDL
B Result is between IDL and RL

Form 3 Equivalent

TestAmerica North Canton

Metals Data Reporting Form

Contract Required Detection Limit Standard

Instrument: ICPMS **Units:** ug/L

Chart Number: I80728A.csv **Acceptable Range:** 70% - 130%

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	True Conc	CRI 07/28/09 10:34 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Aluminum	27	50.0	62.62	**125.2**								
Antimony	121	2.0	2.02	**101.0**								
Beryllium	9	1.0	1.03	**102.9**								
Cadmium	111	0.5	0.53	**105.5**								
Iron	56	50.0	50.36	**100.7**								
Thallium	205	1.0	0.92	**92.5**								
Zinc	66	10.0	13.63	**136.3**								

EXECUTIVE SUMMARY - Detection Highlights

A9G160103

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGTEAM1-TRIP 07/15/09 08:00 001				
Acetone	3.0 J	10	ug/L	SW846 8260B
FWGLL10mw-004C-1392-GW 07/15/09 08:35 002				
bis(2-Ethylhexyl) phthalate	2.2 J,B	10	ug/L	SW846 8270C
FWGLL10mw-004C-1392-GF 07/15/09 08:35 003				
Zinc	5.3 B,J	10.0	ug/L	SW846 6020
Barium	3.1 B	10.0	ug/L	SW846 6010B
Calcium	64600	1000	ug/L	SW846 6010B
Potassium U	673 B,J	1000	ug/L	SW846 6010B
Magnesium	18900	1000	ug/L	SW846 6010B
Manganese	9.7 B,E	10.0	ug/L	SW846 6010B
Sodium	4150	1000	ug/L	SW846 6010B
FWGLL10mw-005C-1393-GW 07/15/09 10:35 004				
bis(2-Ethylhexyl) phthalate	3.5 J,B	10	ug/L	SW846 8270C
FWGLL10mw-005C-1393-GF 07/15/09 10:35 005				
Zinc	2.6 B,J	10.0	ug/L	SW846 6020
Barium	4.2 B	10.0	ug/L	SW846 6010B
Calcium	64000	1000	ug/L	SW846 6010B
Potassium U	684 B,J	1000	ug/L	SW846 6010B
Magnesium	14800	1000	ug/L	SW846 6010B
Manganese	5.6 B	10.0	ug/L	SW846 6010B
Sodium	3520	1000	ug/L	SW846 6010B
FWGLL11mw-004C-1397-GW 07/15/09 11:55 006				
bis(2-Ethylhexyl) phthalate	1.3 J,B	10	ug/L	SW846 8270C
FWGLL11mw-004C-1397-GF 07/15/09 11:55 007				
Cadmium	3.2	0.50	ug/L	SW846 6020
Iron	157	50.0	ug/L	SW846 6020
Zinc	36.9 J	10.0	ug/L	SW846 6020
Barium	57.6	10.0	ug/L	SW846 6010B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A9G160103

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGLL11mw-004C-1397-GF 07/15/09 11:55 007				
Calcium	81600	1000	ug/L	SW846 6010B
Potassium	1140 J,E	1000	ug/L	SW846 6010B
Magnesium	27000	1000	ug/L	SW846 6010B
Manganese	609	10.0	ug/L	SW846 6010B
Sodium	13000	1000	ug/L	SW846 6010B
FWGLL11mw-006C-1399-GW 07/15/09 14:05 008				
bis(2-Ethylhexyl) phthalate	2.9 J,B	10	ug/L	SW846 8270C
FWGLL11mw-006C-1399-GF 07/15/09 14:05 009				
Zinc	5.1 B,J	10.0	ug/L	SW846 6020
Barium	22.4	10.0	ug/L	SW846 6010B
Calcium	76300	1000	ug/L	SW846 6010B
Potassium U	656 B,J	1000	ug/L	SW846 6010B
Magnesium	15600	1000	ug/L	SW846 6010B
Manganese	0.56 B	10.0	ug/L	SW846 6010B
Sodium	6800	1000	ug/L	SW846 6010B
FWGASYmw-003C-1405-GW 07/15/09 15:30 010				
bis(2-Ethylhexyl) phthalate	1.5 J,B	10	ug/L	SW846 8270C
FWGASYmw-003C-1405-GF 07/15/09 15:30 011				
Iron	2420	50.0	ug/L	SW846 6020
Zinc	2.6 B,J	10.0	ug/L	SW846 6020
Arsenic	4.9 B	5.0	ug/L	SW846 6010B
Barium	19.8	10.0	ug/L	SW846 6010B
Calcium	200000	1000	ug/L	SW846 6010B
Potassium	1490 J	1000	ug/L	SW846 6010B
Magnesium	69900	1000	ug/L	SW846 6010B
Manganese	532	10.0	ug/L	SW846 6010B
Sodium	27300	1000	ug/L	SW846 6010B
FWGASYmw-004C-1406-GW 07/15/09 16:45 012				
bis(2-Ethylhexyl) phthalate	1.4 J,B	10	ug/L	SW846 8270C

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A9G160103

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGASYmw-004C-1406-GF 07/15/09 16:45 013				
Iron	1760	50.0	ug/L	SW846 6020
Zinc	4.6 B,J	10.0	ug/L	SW846 6020
Arsenic	19.0	5.0	ug/L	SW846 6010B
Barium	10.6	10.0	ug/L	SW846 6010B
Calcium	139000	1000	ug/L	SW846 6010B
Potassium	4150 J	1000	ug/L	SW846 6010B
Magnesium	70200	1000	ug/L	SW846 6010B
Manganese	200	10.0	ug/L	SW846 6010B
Sodium	46400	1000	ug/L	SW846 6010B
FWGTEAM2-TRIP 07/15/09 08:00 014				
Acetone	3.2 J	10	ug/L	SW846 8260B
FWGLL10mw-006C-1394-GW 07/15/09 08:50 015				
bis(2-Ethylhexyl) phthalate	0.98 J,B	10	ug/L	SW846 8270C
FWGLL10mw-006C-1394-GF 07/15/09 08:50 016				
Aluminum	21.2 B	50.0	ug/L	SW846 6020
Zinc	3.3 B,J	10.0	ug/L	SW846 6020
Barium	12.5	10.0	ug/L	SW846 6010B
Calcium	18200	1000	ug/L	SW846 6010B
Potassium	940 B,J	1000	ug/L	SW846 6010B
Magnesium	7070	1000	ug/L	SW846 6010B
Manganese	1.6 B	10.0	ug/L	SW846 6010B
Sodium	2620	1000	ug/L	SW846 6010B
FWGLL10mw-DUP4-1416-GF 07/15/09 10:00 018				
Aluminum	20.6 B	50.0	ug/L	SW846 6020
Iron U	37.0 B	50.0	ug/L	SW846 6020
Zinc	3.1 B,J	10.0	ug/L	SW846 6020
Barium	12.3	10.0	ug/L	SW846 6010B
Calcium	17700	1000	ug/L	SW846 6010B
Potassium	926 B,J	1000	ug/L	SW846 6010B
Magnesium	6880	1000	ug/L	SW846 6010B
Manganese	5.0 B	10.0	ug/L	SW846 6010B
Sodium	2670	1000	ug/L	SW846 6010B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A9G160103

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGLL11mw-010C-1402-GW 07/15/09 11:00	**019**			
bis(2-Ethylhexyl) phthalate	1.1 J,B	10	ug/L	SW846 8270C
FWGLL11mw-010C-1402-GF 07/15/09 11:00	**020**			
Aluminum	59.0	50.0	ug/L	SW846 6020
Iron	1420	50.0	ug/L	SW846 6020
Zinc	7.8 B,J	10.0	ug/L	SW846 6020
Arsenic	5.8	5.0	ug/L	SW846 6010B
Barium	96.3	10.0	ug/L	SW846 6010B
Calcium	80200	1000	ug/L	SW846 6010B
Potassium	1380 J	1000	ug/L	SW846 6010B
Magnesium	31500	1000	ug/L	SW846 6010B
Manganese	967	10.0	ug/L	SW846 6010B
Sodium	17900	1000	ug/L	SW846 6010B
FWGLL11mw-DUP5-1417-GW 07/15/09 12:00	**021**			
bis(2-Ethylhexyl) phthalate	2.0 J,B	10	ug/L	SW846 8270C
FWGLL11mw-DUP5-1417-GF 07/15/09 12:00	**022**			
Iron	338	50.0	ug/L	SW846 6020
Zinc	8.2 B,J	10.0	ug/L	SW846 6020
Arsenic	3.3 B	5.0	ug/L	SW846 6010B
Barium	86.8	10.0	ug/L	SW846 6010B
Calcium	84600	1000	ug/L	SW846 6010B
Potassium	1460 J	1000	ug/L	SW846 6010B
Magnesium	33500	1000	ug/L	SW846 6010B
Manganese	482	10.0	ug/L	SW846 6010B
Sodium	19800	1000	ug/L	SW846 6010B
FWGASYmw-001C-1403-GW 07/15/09 14:10	**023**			
bis(2-Ethylhexyl) phthalate	1.7 J,B	10	ug/L	SW846 8270C
FWGASYmw-001C-1403-GF 07/15/09 14:10	**024**			
Iron	300	50.0	ug/L	SW846 6020
Zinc	20.4 J	10.0	ug/L	SW846 6020
Barium	14.4	10.0	ug/L	SW846 6010B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A9G160103

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGASYmw-001C-1403-GF 07/15/09 14:10 024				
Calcium	121000	1000	ug/L	SW846 6010B
Potassium	1090 J	1000	ug/L	SW846 6010B
Magnesium	38500	1000	ug/L	SW846 6010B
Manganese	895	10.0	ug/L	SW846 6010B
Sodium	5980	1000	ug/L	SW846 6010B
FWGEQUIPRINSE3-1425-GW 07/15/09 14:50 025				
Zinc	2.5 B,J	10.0	ug/L	SW846 6020
Potassium U	150 B,J	1000	ug/L	SW846 6010B
o-Xylene	0.37 J	1.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	0.76 J	2.0	ug/L	SW846 8260B
Methylene chloride	3.0 B	2.0	ug/L	SW846 8260B
Acetone	6.9 J	10	ug/L	SW846 8260B
2-Butanone	0.79 J	10	ug/L	SW846 8260B
Benzene	0.43 J	1.0	ug/L	SW846 8260B
Toluene	1.2	1.0	ug/L	SW846 8260B
Xylenes (total)	1.1 J	2.0	ug/L	SW846 8260B
FWGASYmw-002C-1404-GW 07/15/09 15:20 026				
bis(2-Ethylhexyl) phthalate	1.3 J,B	10	ug/L	SW846 8270C
FWGASYmw-002C-1404-GF 07/15/09 15:20 027				
Barium	8.6 B	10.0	ug/L	SW846 6010B
Calcium	78700	1000	ug/L	SW846 6010B
Potassium U	590 B,J	1000	ug/L	SW846 6010B
Magnesium	16700	1000	ug/L	SW846 6010B
Manganese	3.9 B	10.0	ug/L	SW846 6010B
Sodium	2580	1000	ug/L	SW846 6010B
FWGTEAM3-TRIP 07/15/09 07:45 028				
Acetone	3.2 J	10	ug/L	SW846 8260B
FWGLL11mw-005C-1398-GW 07/15/09 08:45 029				
bis(2-Ethylhexyl) phthalate	1.0 J,B	10	ug/L	SW846 8270C
Acetone	1.2 J	10	ug/L	SW846 8260B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A9G160103

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGLL11mw-005C-1398-GF 07/15/09 08:45 030				
Aluminum	66.2	50.0	ug/L	SW846 6020
Zinc	17.0 J	10.0	ug/L	SW846 6020
Barium	29.7	10.0	ug/L	SW846 6010B
Calcium	8580	1000	ug/L	SW846 6010B
Potassium U	545 B,J	1000	ug/L	SW846 6010B
Magnesium	4410	1000	ug/L	SW846 6010B
Manganese	35.6	10.0	ug/L	SW846 6010B
Sodium	2550	1000	ug/L	SW846 6010B
Nickel	9.9 B	10.0	ug/L	SW846 6010B
FWGLL11mw-003C-1396-GW 07/15/09 10:25 031				
bis(2-Ethylhexyl) phthalate	1.2 J,B	10	ug/L	SW846 8270C
FWGLL11mw-003C-1396-GF 07/15/09 10:25 032				
Iron U	68.8	50.0	ug/L	SW846 6020
Zinc	19.5 J	10.0	ug/L	SW846 6020
Barium	29.5	10.0	ug/L	SW846 6010B
Calcium	104000	1000	ug/L	SW846 6010B
Potassium	1030 J	1000	ug/L	SW846 6010B
Magnesium	31000	1000	ug/L	SW846 6010B
Manganese	690	10.0	ug/L	SW846 6010B
Sodium	10700	1000	ug/L	SW846 6010B
FWGLL11mw-009C-1401-GW 07/15/09 11:50 033				
beta-BHC	0.029 J	0.030	ug/L	SW846 8081A
bis(2-Ethylhexyl) phthalate	5.9 J,B	10	ug/L	SW846 8270C
Tetrachloroethene	3.8	1.0	ug/L	SW846 8260B
FWGLL11mw-009C-1401-GF 07/15/09 11:50 034				
Barium	75.2	10.0	ug/L	SW846 6010B
Calcium	84400	1000	ug/L	SW846 6010B
Potassium	954 B,J	1000	ug/L	SW846 6010B
Magnesium	27700	1000	ug/L	SW846 6010B
Manganese	804	10.0	ug/L	SW846 6010B
Sodium	12400	1000	ug/L	SW846 6010B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A9G160103

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGLL11mw-008C-1400-GW 07/15/09 13:10	**035**			
bis(2-Ethylhexyl) phthalate	3.5 J,B	10	ug/L	SW846 8270C
Chloromethane	0.69 J	1.0	ug/L	SW846 8260B
FWGLL11mw-008C-1400-GF 07/15/09 13:10	**036**			
Barium	32.0	10.0	ug/L	SW846 6010B
Calcium	111000	1000	ug/L	SW846 6010B
Potassium	878 B,J	1000	ug/L	SW846 6010B
Magnesium	31700	1000	ug/L	SW846 6010B
Manganese	37.7	10.0	ug/L	SW846 6010B
Sodium	5390	1000	ug/L	SW846 6010B
FWGLL11mw-001C-1395-GW 07/15/09 14:30	**037**			
bis(2-Ethylhexyl) phthalate	1.1 J,B	10	ug/L	SW846 8270C
FWGLL11mw-001C-1395-GF 07/15/09 14:30	**038**			
Zinc	2.4 B,J	10.0	ug/L	SW846 6020
Barium	27.4	10.0	ug/L	SW846 6010B
Calcium	81400	1000	ug/L	SW846 6010B
Potassium	818 B,J	1000	ug/L	SW846 6010B
Magnesium	27800	1000	ug/L	SW846 6010B
Manganese	575	10.0	ug/L	SW846 6010B
Sodium	17900	1000	ug/L	SW846 6010B
FWGASYmw-005C-1407-GW 07/15/09 16:20	**039**			
Benzoic acid	12	10	ug/L	SW846 8270C
bis(2-Ethylhexyl) phthalate	1.9 J,B	10	ug/L	SW846 8270C
FWGASYmw-005C-1407-GF 07/15/09 16:20	**040**			
Zinc	2.7 B,J	10.0	ug/L	SW846 6020
Barium	27.6	10.0	ug/L	SW846 6010B
Calcium	149000	1000	ug/L	SW846 6010B
Potassium	2080 J	1000	ug/L	SW846 6010B
Magnesium	43700	1000	ug/L	SW846 6010B
Manganese	194	10.0	ug/L	SW846 6010B
Sodium	41300	1000	ug/L	SW846 6010B

GENERAL CHEMISTRY DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 28, 2009

SDG: A9G160103 R0
Analysis: SW846 9012

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.6 – 4.8 °C. Upon receipt, it was documented by the laboratory, that the samples were not frozen and in good condition. Therefore, no qualifications were made to sample results based on temperatures less than 2°C.	QAPP Table 4-2
3. Were holding times met?		✓			QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-9
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-9
7. Does the initial calibration curve consist of at least 6 standards and one blank?	✓				LCG Table 10 R
8. Was the correlation coefficient R ≥ 0.995?	✓				LCG Table 10 R<0.995=-J/R
9. Were % RSDs ≤ 10% in all standards and ICV/CCVs?	✓				LCG Table 10 RSD%>10=J
10. Were a high and low standard distilled and compared to the undistilled standard? Were the results within ± 10%?			✓		LCG Table 10 R
11. Was an MDL Level Verification performed at least once per quarter with all target analytes detected?	✓				LCG Table 10 R
12. Was a MRL Level Verification performed at the beginning of every daily sequence? Were results within 70-130%?	✓				LCG Table 10 >130%=J; 65-70%=J/UJ; <65%=J/R
13. Was a second source verification (ICV) analyzed after the ICAL and all analytes 85-115%?	✓				LCG Table 10 >115%=J; 80-85%=J/UJ; <80%=J/R
14. Was the ICB analyzed after the ICV with results <1/2 the MRL?	✓				LCG Table 7 < 5x = U

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 28, 2009

SDG: A9G160103 R0
Analysis: SW846 9012

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
15. Was a CCV run at the beginning and end of the analytical sequence?	✓				LCG Table 10
16. Were the CCV results 80-120%?	✓				LCG Table 10 >120%=J; 75-80%=J/UJ; <75%=J/R
17. Was a method blank prepared and analyzed with each batch?	✓				
18. Were target analytes detected in the method blank >1/2 the MRL?	✓			Checked by ADR.	LCG Table 10 <5x=B
19. Was a field blank collected and analyzed?	✓			FWGEQUIPRinse3-1425-GW	
20. Were target analytes in the field blank analyses <1/2 the MRL?	✓				<5x=B
21. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓			Checked by ADR. Sample FWGLL11mw-DUP5-1417-GW was the field duplicate for sample FWGLL11mw-010c-1402-GW and FWGLL10mw-DUP4-1416-GW was the field duplicate for sample FWGLL10mw-006c-1394-GW.	QAPP Table 3-2 >30% = J
22. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 10
23. Were the LCS recoveries 80-120%?	✓			Checked by ADR.	LCG Table 10 >120%=J; 50-79%=J/UJ; <50%=R
24. Was a MS prepared once per every 10 samples?	✓				LCG Table 10
25. Was the MS parent a Ravenna sample?	✓			Sample FWGLL10mw-004c-1392-GW and FWGLL11mw-004c-1397-GW were the parent MS/MSD samples from this SDG.	
26. Were MS recoveries 80-120%?		✓		Checked by ADR. The matrix spike duplicate analyzed on sample FWGLL11mw-004c-1397-GW was below control limits at 62% with an RPD of 36%. The cyanide results associated with batch 9198345 were qualified as estimated, "J/UJ".	QAPP Table 3-2 >120%=J; 30-79%=J/UJ; <30%=J/R
27. Were reported sample concentrations within calibration range?	✓				

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 28, 2009

SDG: A9G160103 R0
Analysis: SW846 9012

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
29. Were lab comments included in report? If yes, summarize contents.		✓			

References: Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 10 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-004C-1392-GW

General Chemistry

Lot-Sample #...: A9G160103-002 **Work Order #...:** LGJ9N **Matrix.....:** WG
Date Sampled...: 07/15/09 08:35 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/17/09	9198345

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-005C-1393-GW

General Chemistry

Lot-Sample #...: A9G160103-004 **Work Order #...:** LGJ9T **Matrix.....:** WG
Date Sampled...: 07/15/09 10:35 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/17/09	9198345

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-004C-1397-GW

General Chemistry

Lot-Sample #...: A9G160103-006 **Work Order #...:** LGJ9W **Matrix.....:** WG
Date Sampled...: 07/15/09 11:55 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/17/09	9198345

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-006C-1399-GW

General Chemistry

Lot-Sample #...: A9G160103-008 **Work Order #...:** LGJ91 **Matrix.....:** WG
Date Sampled...: 07/15/09 14:05 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/17/09	9198345

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-003C-1405-GW

General Chemistry

Lot-Sample #...: A9G160103-010 **Work Order #...:** LGJ95 **Matrix.....:** WG
Date Sampled...: 07/15/09 15:30 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/17/09	9198345

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-004C-1406-GW

General Chemistry

Lot-Sample #...: A9G160103-012 **Work Order #...:** LGJ99 **Matrix.....:** WG
Date Sampled...: 07/15/09 16:45 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/17/09	9198345

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-006C-1394-GW

General Chemistry

Lot-Sample #...: A9G160103-015 **Work Order #...:** LGKAQ **Matrix.....:** WG
Date Sampled...: 07/15/09 08:50 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/17/09	9198345

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-DUP4-1416-GW

General Chemistry

Lot-Sample #...: A9G160103-017 **Work Order #...:** LGKAT **Matrix.....:** WG
Date Sampled...: 07/15/09 10:00 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/17/09	9198345

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-010C-1402-GW

General Chemistry

Lot-Sample #...: A9G160103-019 **Work Order #...:** LGKAX **Matrix.....:** WG
Date Sampled...: 07/15/09 11:00 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/17/09	9198345

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-DUP5-1417-GW

General Chemistry

Lot-Sample #...: A9G160103-021 **Work Order #...:** LGKA2 **Matrix.....:** WG
Date Sampled...: 07/15/09 12:00 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/17/09	9198345

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-001C-1403-GW

General Chemistry

Lot-Sample #...: A9G160103-023 **Work Order #...:** LGKA6 **Matrix.....:** WG
Date Sampled...: 07/15/09 14:10 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/17/09	9198345

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1425-GW

General Chemistry

Lot-Sample #...: A9G160103-025 **Work Order #...:** LGKA8 **Matrix.....:** WQ
Date Sampled...: 07/15/09 14:50 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/17/09	9198345

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-002C-1404-GW

General Chemistry

Lot-Sample #...: A9G160103-026 **Work Order #...:** LGKCA **Matrix.....:** WG
Date Sampled...: 07/15/09 15:20 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/17/09	9198345

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-005C-1398-GW

General Chemistry

Lot-Sample #...: A9G160103-029 **Work Order #...:** LGKCJ **Matrix.....:** WG
Date Sampled...: 07/15/09 08:45 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/17/09	9198345

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-003C-1396-GW

General Chemistry

Lot-Sample #...: A9G160103-031 **Work Order #...:** LGKCN **Matrix.....:** WG
Date Sampled...: 07/15/09 10:25 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/17/09	9198345

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-009C-1401-GW

General Chemistry

Lot-Sample #...: A9G160103-033 **Work Order #...:** LGKCQ **Matrix.....:** WG
Date Sampled...: 07/15/09 11:50 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/17/09	9198345

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-008C-1400-GW

General Chemistry

Lot-Sample #...: A9G160103-035 **Work Order #...:** LGKCT **Matrix.....:** WG
Date Sampled...: 07/15/09 13:10 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/17/09	9198345

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-001C-1395-GW

General Chemistry

Lot-Sample #...: A9G160103-037 **Work Order #...:** LGKCW **Matrix.....:** WG
Date Sampled...: 07/15/09 14:30 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/17/09	9198345

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-005C-1407-GW

General Chemistry

Lot-Sample #...: A9G160103-039 **Work Order #...:** LGKC0 **Matrix.....:** WG
Date Sampled...: 07/15/09 16:20 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/20/09	9201357
		Dilution Factor: 1		MDL.....: 0.0050		

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A9G160103 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: LGNFR1AA		MB Lot-Sample #:	A9G170000-345	
	ND	0.010	mg/L	SW846 9012A	07/17/09	9198345
		Dilution Factor: 1				
Cyanide, Total		Work Order #: LGQGX1AA		MB Lot-Sample #:	A9G200000-357	
	ND	0.010	mg/L	SW846 9012A	07/20/09	9201357
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A9G160103 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: LGNFR1AC	LCS Lot-Sample#: A9G170000-345		
	95	(80 - 120)	SW846 9012A	07/17/09	9198345
		Dilution Factor: 1			
Cyanide, Total		Work Order #: LGQGX1AC	LCS Lot-Sample#: A9G200000-357		
	83	(80 - 120)	SW846 9012A	07/20/09	9201357
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A9G160103 **Matrix.....:** WG
Date Sampled...: 07/15/09 11:55 **Date Received..:** 07/16/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#: LGJ9N1AM-MS/LGJ9N1AN-MSD				MS Lot-Sample #: A9G160103-002	
	93	(80 - 120)			SW846 9012A	07/17/09	9198345
	90	(80 - 120)	3.0	(0-20)	SW846 9012A	07/17/09	9198345
		Dilution Factor: 1					
Cyanide, Total		WO#: LGJ9W1AM-MS/LGJ9W1AN-MSD				MS Lot-Sample #: A9G160103-006	
	62 N	(80 - 120)			SW846 9012A	07/17/09	9198345
	89 *	(80 - 120)	36	(0-20)	SW846 9012A	07/17/09	9198345
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

* Relative percent difference (RPD) is outside stated control limits.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A9G160103 **Matrix.....:** WATER
Date Sampled...: 07/15/09 15:45 **Date Received..:** 07/16/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#:	LGKD91AU-MS/LGKD91AV-MSD			MS Lot-Sample #:	A9G160109-001
	80	(80 - 120)			SW846 9012A	07/20/09	9201357
	88	(80 - 120)	9.5	(0-20)	SW846 9012A	07/20/09	9201357
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Appendix I

Reason Code Library: Example 1

Category	Code
Low Bias Indicator	-
High Bias Indicator	+
Temperature	A
Holding Times	
Sampling to Analysis	C
Sampling to Extraction	D
Extaction to Analysis	E
Method Blanks	F
Surrogate Recovery	G
MS/MSD	
MS/MSD Recovery	H
MS/MSD RPD	I
LCS	
LCS Recovery	J
LCS RPD	K
Reporting Limits	L
Field QC	
Field Blank	M
Equipment Blank	N
Trip Blank	O
Field Duplicate	P

Category	Code
Initial Calibration	
Initial Calibration RRF	Q
Initial Calibration RSD	R
Initial Calibration Cor. Coef	S
Initial Calibration Verification	
Initial Calibration Verificaton RRF	T
Initial CalibrationVerification %D	U
Continuing Calibration	
Continuing Calibraiton RRF	V
Continuing Calibration %D	W
GC/MS Tune	
GC/MS Tune for Initial Calibration	X
GC/MS Tune for Continuing Calibration	Y
Laboratory Duplicate	Z
Categories not Assessed by Automated Data Review*	
Internal Standards	Is
Calibration Blanks	Cb
Resolution Check Mixture	Rm
Performance Evaluation Mixture	Pm
Professional Judgement	Pj

* Qualifiers for data-review categories not assessed by automated data review are manually entered by the user. The application automaticallly adds reason codes listed here when the user manually adds qualifiers for these categories if the option for applying reason codes was selected during automated data review.

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G160103										
6010B	FWGASYmw-002C-1404-GF	AQ	N							
				Barium	10.0	8.6B		J	ug/L	L
				Manganese	10.0	3.9B		J	ug/L	L
				Potassium	1000	590B J		UJB	ug/L	Cb,N,F,L
6010B	FWGASYmw-003C-1405-GF	AQ	N							
				Arsenic	5.0	4.9B		J	ug/L	L
6010B	FWGEQUIPRINSE3-1425-GW	AQ	EB							
				Potassium	1000	150B J		UJB	ug/L	Cb,F,L
6010B	FWGLL10mw-004C-1392-GF	AQ	N							
				Barium	10.0	3.1B		J	ug/L	L
				Manganese	10.0	9.7B E		J	ug/L	L
				Potassium	1000	673B J		UJB	ug/L	L,N,F,Cb
6010B	FWGLL10mw-005C-1393-GF	AQ	N							
				Barium	10.0	4.2B		J	ug/L	L
				Manganese	10.0	5.6B		J	ug/L	L
				Potassium	1000	684B J		UJB	ug/L	Cb,N,F,L
6010B	FWGLL10mw-006C-1394-GF	AQ	N							
				Manganese	10.0	1.6B		J	ug/L	L,P
				Potassium	1000	940B J		J	ug/L	L
6010B	FWGLL10mw-DUP4-1416-GF	AQ	FD							
				Manganese	10.0	5.0B		J	ug/L	L
				Potassium	1000	926B J		J	ug/L	L
6010B	FWGLL11mw-001C-1395-GF	AQ	N							
				Potassium	1000	818B J		J	ug/L	L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G160103										
6010B	FWGLL11mw-005C-1398-GF	AQ	N							
				Nickel	10.0	9.9B		J	ug/L	L
				Potassium	1000	545B J		UJB	ug/L	Cb,N,F,L
6010B	FWGLL11mw-006C-1399-GF	AQ	N							
				Manganese	10.0	0.56B		J	ug/L	L
				Potassium	1000	656B J		UJB	ug/L	Cb,N,F,L
6010B	FWGLL11mw-008C-1400-GF	AQ	N							
				Potassium	1000	878B J		J	ug/L	L
6010B	FWGLL11mw-009C-1401-GF	AQ	N							
				Potassium	1000	954B J		J	ug/L	L
6010B	FWGLL11mw-010C-1402-GF	AQ	N							
				Manganese	10.0	967		J	ug/L	Pj,P
6010B	FWGLL11mw-DUP5-1417-GF	AQ	FD							
				Arsenic	5.0	3.3B		J	ug/L	L
				Manganese	10.0	482		J	ug/L	Pj
6020	FWGASYmw-001C-1403-GF	AQ	N							
				Iron	50.0	300		J	ug/L	Pj
				Zinc	10.0	20.4J		JB	ug/L	Pj,F
6020	FWGASYmw-003C-1405-GF	AQ	N							
				Iron	50.0	2420		J	ug/L	Pj,Z
				Zinc	10.0	2.6B J		JB	ug/L	Pj,N,F,L
6020	FWGASYmw-004C-1406-GF	AQ	N							
				Iron	50.0	1760		J	ug/L	Pj,Z
				Zinc	10.0	4.6B J		JB	ug/L	Pj,N,F,L

N = Normal Sample *TB = Trip Blank*
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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G160103										
6020	FWGASYmw-005C-1407-GF	AQ	N							
				Zinc	10.0	2.7B J		JB	ug/L	Pj,N,F,L
6020	FWGEQUIPRINSE3-1425-GW	AQ	EB							
				Zinc	10.0	2.5B J		JB	ug/L	Pj,F,L
6020	FWGLL10mw-004C-1392-GF	AQ	N							
				Zinc	10.0	5.3B J		JB	ug/L	Pj,N,F,L
6020	FWGLL10mw-005C-1393-GF	AQ	N							
				Zinc	10.0	2.6B J		JB	ug/L	Pj,N,F,L
6020	FWGLL10mw-006C-1394-GF	AQ	N							
				Aluminum	50.0	21.2B		J	ug/L	L
				Zinc	10.0	3.3B J		JB	ug/L	Pj,N,F,L
6020	FWGLL10mw-DUP4-1416-GF	AQ	FD							
				Aluminum	50.0	20.6B		J	ug/L	L
				Iron	50.0	37.0B		UJ	ug/L	Pj,Z,L,Cb
				Zinc	10.0	3.1B J		UJ	ug/L	Pj,N,F,L
6020	FWGLL11mw-001C-1395-GF	AQ	N							
				Zinc	10.0	2.4B J		JB	ug/L	Pj,N,F,L
6020	FWGLL11mw-003C-1396-GF	AQ	N							
				Iron	50.0	68.8		UJ	ug/L	Pj,Z,Cb
				Zinc	10.0	19.5J		JB	ug/L	Pj,F
6020	FWGLL11mw-004C-1397-GF	AQ	N							
				Iron	50.0	157		J	ug/L	Pj,Z
				Zinc	10.0	36.9J		J	ug/L	Pj

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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G160103										
6020	FWGLL11mw-005C-1398-GF	AQ	N							
				Iron	50.0	50.0U		UJ	ug/L	Pj,Cb
				Zinc	10.0	17.0J		JB	ug/L	Pj,F
6020	FWGLL11mw-006C-1399-GF	AQ	N							
				Zinc	10.0	5.1B J		JB	ug/L	Pj,N,F,L
6020	FWGLL11mw-010C-1402-GF	AQ	N							
				Iron	50.0	1420		J	ug/L	Pj,P,Z
				Zinc	10.0	7.8B J		JB	ug/L	Pj,N,F,L
6020	FWGLL11mw-DUP5-1417-GF	AQ	FD							
				Iron	50.0	338		J	ug/L	Pj,Z
				Zinc	10.0	8.2B J		UJ	ug/L	Pj,N,F,L

N = Normal Sample *TB = Trip Blank*
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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G160103										
8081A	FWGASYmw-001C-1403-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G160103										
8081A	FWGASYmw-002C-1404-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G160103										
8081A	FWGASYmw-003C-1405-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G160103										
8081A	FWGASYmw-004C-1406-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G160103										
8081A	FWGASYmw-005C-1407-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G160103										
8081A	FWGLL11mw-001C-1395-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G160103										
8081A	FWGLL11mw-003C-1396-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G160103										
8081A	FWGLL11mw-008C-1400-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G
8081A	FWGLL11mw-009C-1401-GW	AQ	N							
				beta-BHC	0.030	0.029J		J	ug/L	L

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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G160103										
8081A	FWGLL11mw-010C-1402-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G160103										
8081A	FWGLL11mw-DUP5-1417-GW	AQ	FD							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G
8082	FWGASYmw-001C-1403-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G

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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G160103										
8082	FWGASYmw-002C-1404-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G
8082	FWGASYmw-003C-1405-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G
8082	FWGASYmw-004C-1406-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G

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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G160103										
8082	FWGLL11mw-001C-1395-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G
8082	FWGLL11mw-008C-1400-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G
8082	FWGLL11mw-010C-1402-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G
8260B	FWGASYmw-001C-1403-GW	AQ	N							
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J

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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G160103										
8260B	FWGASYmw-002C-1404-GW	AQ	N							
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGASYmw-003C-1405-GW	AQ	N							
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGASYmw-004C-1406-GW	AQ	N							
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGASYmw-005C-1407-GW	AQ	N							
				2-Hexanone	10	10U		UJ	ug/L	Pj
				Acetone	10	10U		UJ	ug/L	Pj
				Carbon disulfide	1.0	1.0U		UJ	ug/L	Pj
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	J,U
				Methylene chloride	2.0	2.0U		UJ	ug/L	Pj
8260B	FWGEQUIPRINSE3-1425-GW	AQ	EB							
				2-Butanone	10	0.79J		J	ug/L	L
				Acetone	10	6.9J		JB	ug/L	O,L
				Benzene	1.0	0.43J		J	ug/L	L
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				M&P-XYLENES	2.0	0.76J		J	ug/L	L
				Methylene chloride	2.0	3.0B		B	ug/L	F
				o-Xylene	1.0	0.37J		J	ug/L	L
				TOTAL XYLENES	2.0	1.1J		J	ug/L	L
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J

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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G160103										
8260B	FWGLL10mw-004C-1392-GW	AQ	N							
				Chloroethane	1.0	1.0U		UJ	ug/L	H,J
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGLL10mw-005C-1393-GW	AQ	N							
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGLL10mw-006C-1394-GW	AQ	N							
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGLL10mw-DUP4-1416-GW	AQ	FD							
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGLL11mw-001C-1395-GW	AQ	N							
				2-Hexanone	10	10U		UJ	ug/L	Pj
				Acetone	10	10U		UJ	ug/L	Pj
				Carbon disulfide	1.0	1.0U		UJ	ug/L	Pj
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	J,U
				Methylene chloride	2.0	2.0U		UJ	ug/L	Pj
8260B	FWGLL11mw-003C-1396-GW	AQ	N							
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGLL11mw-004C-1397-GW	AQ	N							
				Chloroethane	1.0	1.0U		UJ	ug/L	H,J
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J

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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G160103										
8260B	FWGLL11mw-005C-1398-GW	AQ	N							
				Acetone	10	1.2J		JB	ug/L	Pj,N,L,O
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGLL11mw-006C-1399-GW	AQ	N							
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGLL11mw-008C-1400-GW	AQ	N							
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	0.69J		J	ug/L	L
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGLL11mw-009C-1401-GW	AQ	N							
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGLL11mw-010C-1402-GW	AQ	N							
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGLL11mw-DUP5-1417-GW	AQ	FD							
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGTEAM1-TRIP	AQ	TB							
				Acetone	10	3.0J		J	ug/L	Pj,L
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J

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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G160103										
8260B	FWGTEAM2-TRIP	AQ	TB							
				Acetone	10	3.2J		J	ug/L	Pj,L
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8260B	FWGTEAM3-TRIP	AQ	TB							
				Acetone	10	3.2J		J	ug/L	Pj,L
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Vinyl chloride	1.0	1.0U		UJ	ug/L	J
8270C	FWGASYmw-001C-1403-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		R	ug/L	Pj
				4,6-Dinitro-2-methylphenol	5.0	5.0U		R	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	1.7J B		JB	ug/L	L,F
8270C	FWGASYmw-002C-1404-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		R	ug/L	Pj
				4,6-Dinitro-2-methylphenol	5.0	5.0U		R	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	1.3J B		JB	ug/L	L,F
8270C	FWGASYmw-003C-1405-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	1.5J B		JB	ug/L	L,F
8270C	FWGASYmw-004C-1406-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	1.4J B		JB	ug/L	L,F
8270C	FWGASYmw-005C-1407-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	1.9J B		JB	ug/L	L,F
8270C	FWGEQUIPRINSE3-1425-GW	AQ	EB							
				2,4-Dinitrophenol	5.0	5.0U		R	ug/L	Pj
				4,6-Dinitro-2-methylphenol	5.0	5.0U		R	ug/L	Pj

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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G160103										
8270C	FWGLL10mw-004C-1392-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	2.2J B		JB	ug/L	L,F
8270C	FWGLL10mw-005C-1393-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	3.5J B		JB	ug/L	L,F
8270C	FWGLL10mw-006C-1394-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	0.98J B		JB	ug/L	L,P,F
8270C	FWGLL11mw-001C-1395-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	1.1J B		JB	ug/L	L,F
8270C	FWGLL11mw-003C-1396-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		R	ug/L	Pj
				4,6-Dinitro-2-methylphenol	5.0	5.0U		R	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	1.2J B		JB	ug/L	L,F
8270C	FWGLL11mw-004C-1397-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	1.3J B		JB	ug/L	L,F
8270C	FWGLL11mw-005C-1398-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		R	ug/L	Pj
				4,6-Dinitro-2-methylphenol	5.0	5.0U		R	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	1.0J B		JB	ug/L	L,F
8270C	FWGLL11mw-006C-1399-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		R	ug/L	Pj
				4,6-Dinitro-2-methylphenol	5.0	5.0U		R	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	2.9J B		JB	ug/L	L,F
8270C	FWGLL11mw-008C-1400-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	3.5J B		JB	ug/L	L,F

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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G160103										
8270C	FWGLL11mw-009C-1401-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		R	ug/L	Pj
				4,6-Dinitro-2-methylphenol	5.0	5.0U		R	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	5.9J B		JB	ug/L	L,F
8270C	FWGLL11mw-010C-1402-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		R	ug/L	Pj
				4,6-Dinitro-2-methylphenol	5.0	5.0U		R	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	1.1J B		JB	ug/L	L,P,F
8270C	FWGLL11mw-DUP5-1417-GW	AQ	FD							
				2,4-Dinitrophenol	5.0	5.0U		R	ug/L	Pj
				4,6-Dinitro-2-methylphenol	5.0	5.0U		R	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	2.0J B		UJ	ug/L	L,F
9012A	FWGASYmw-001C-1403-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGASYmw-002C-1404-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGASYmw-003C-1405-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGASYmw-004C-1406-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGEQUIPRINSE3-1425-GW	AQ	EB							
				Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGLL10mw-004C-1392-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	I,H

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G160103										
9012A	FWGLL10mw-005C-1393-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGLL10mw-006C-1394-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGLL10mw-DUP4-1416-GW	AQ	FD							
				Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGLL11mw-001C-1395-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGLL11mw-003C-1396-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGLL11mw-004C-1397-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGLL11mw-005C-1398-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGLL11mw-006C-1399-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGLL11mw-008C-1400-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGLL11mw-009C-1401-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGLL11mw-010C-1402-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	I,H

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G160103										
9012A	FWGLL11mw-DUP5-1417-GW	AQ	FD							
				Cyanide	0.010	0.010U		UJ	mg/L	I,H

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

QC Outlier Report: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: A9G160103 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGEQUIPRINSE3-1425	A9G160103025	6010B	AQ	Calcium	U	1000	100.00	ug/L
				Magnesium	U	1000	100.00	ug/L
				Sodium	U	1000	200.00	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: **30240.0006 - RVAAP (OH)**

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A9G160103 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGASYmw-001C-1403-	A9G160103023	8270C	AQ	bis(2-Ethylhexyl) phthalate	J B	1.7	10	ug/L
FWGASYmw-002C-1404-	A9G160103027	6010B		Barium	B	8.6	10.0	ug/L
				Manganese	B	3.9	10.0	ug/L
				Potassium	B J	590	1000	ug/L
FWGASYmw-002C-1404-	A9G160103026	8270C		bis(2-Ethylhexyl) phthalate	J B	1.3	10	ug/L
FWGASYmw-003C-1405-	A9G160103011	6010B		Arsenic	B	4.9	5.0	ug/L
		6020		Zinc	B J	2.6	10.0	ug/L
FWGASYmw-003C-1405-	A9G160103010	8270C		bis(2-Ethylhexyl) phthalate	J B	1.5	10	ug/L
FWGASYmw-004C-1406-	A9G160103013	6020		Zinc	B J	4.6	10.0	ug/L
FWGASYmw-004C-1406-	A9G160103012	8270C		bis(2-Ethylhexyl) phthalate	J B	1.4	10	ug/L
FWGASYmw-005C-1407-	A9G160103040	6020		Zinc	B J	2.7	10.0	ug/L
FWGASYmw-005C-1407-	A9G160103039	8270C		bis(2-Ethylhexyl) phthalate	J B	1.9	10	ug/L
FWGEQUIPRINSE3-1425	A9G160103025	6010B		Potassium	B J	150	1000	ug/L
		6020		Zinc	B J	2.5	10.0	ug/L
		8260B		2-Butanone	J	0.79	10	ug/L
				Acetone	J	6.9	10	ug/L
				Benzene	J	0.43	1.0	ug/L
				M&P-XYLENES	J	0.76	2.0	ug/L
				o-Xylene	J	0.37	1.0	ug/L
				TOTAL XYLENES	J	1.1	2.0	ug/L
FWGLL10mw-004C-1392-	A9G160103003	6010B		Barium	B	3.1	10.0	ug/L
				Manganese	B E	9.7	10.0	ug/L
				Potassium	B J	673	1000	ug/L
		6020		Zinc	B J	5.3	10.0	ug/L
FWGLL10mw-004C-1392-	A9G160103002	8270C		bis(2-Ethylhexyl) phthalate	J B	2.2	10	ug/L
FWGLL10mw-005C-1393-	A9G160103005	6010B		Barium	B	4.2	10.0	ug/L
				Manganese	B	5.6	10.0	ug/L
				Potassium	B J	684	1000	ug/L
		6020		Zinc	B J	2.6	10.0	ug/L
FWGLL10mw-005C-1393-	A9G160103004	8270C		bis(2-Ethylhexyl) phthalate	J B	3.5	10	ug/L
FWGLL10mw-006C-1394-	A9G160103016	6010B		Manganese	B	1.6	10.0	ug/L
				Potassium	B J	940	1000	ug/L
		6020		Aluminum	B	21.2	50.0	ug/L
				Zinc	B J	3.3	10.0	ug/L
FWGLL10mw-006C-1394-	A9G160103015	8270C		bis(2-Ethylhexyl) phthalate	J B	0.98	10	ug/L
FWGLL10mw-DUP4-1416	A9G160103018	6010B		Manganese	B	5.0	10.0	ug/L

Project Number and Name: **30240.0006 - RVAAP (OH)**

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A9G160103 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGLL10mw-DUP4-1416	A9G160103018	6010B	AQ	Potassium	B J	926	1000	ug/L
		6020		Aluminum	B	20.6	50.0	ug/L
				Iron	B	37.0	50.0	ug/L
				Zinc	B J	3.1	10.0	ug/L
FWGLL11mw-001C-1395-	A9G160103038	6010B		Potassium	B J	818	1000	ug/L
		6020		Zinc	B J	2.4	10.0	ug/L
FWGLL11mw-001C-1395-	A9G160103037	8270C		bis(2-Ethylhexyl) phthalate	J B	1.1	10	ug/L
FWGLL11mw-003C-1396-	A9G160103031			bis(2-Ethylhexyl) phthalate	J B	1.2	10	ug/L
FWGLL11mw-004C-1397-	A9G160103006			bis(2-Ethylhexyl) phthalate	J B	1.3	10	ug/L
FWGLL11mw-005C-1398-	A9G160103030	6010B		Nickel	B	9.9	10.0	ug/L
				Potassium	B J	545	1000	ug/L
FWGLL11mw-005C-1398-	A9G160103029	8260B		Acetone	J	1.2	10	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	1.0	10	ug/L
FWGLL11mw-006C-1399-	A9G160103009	6010B		Manganese	B	0.56	10.0	ug/L
				Potassium	B J	656	1000	ug/L
		6020		Zinc	B J	5.1	10.0	ug/L
FWGLL11mw-006C-1399-	A9G160103008	8270C		bis(2-Ethylhexyl) phthalate	J B	2.9	10	ug/L
FWGLL11mw-008C-1400-	A9G160103036	6010B		Potassium	B J	878	1000	ug/L
FWGLL11mw-008C-1400-	A9G160103035	8260B		Chloromethane	J	0.69	1.0	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	3.5	10	ug/L
FWGLL11mw-009C-1401-	A9G160103034	6010B		Potassium	B J	954	1000	ug/L
FWGLL11mw-009C-1401-	A9G160103033	8081A		beta-BHC	J	0.029	0.030	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	5.9	10	ug/L
FWGLL11mw-010C-1402-	A9G160103020	6020		Zinc	B J	7.8	10.0	ug/L
FWGLL11mw-010C-1402-	A9G160103019	8270C		bis(2-Ethylhexyl) phthalate	J B	1.1	10	ug/L
FWGLL11mw-DUP5-1417	A9G160103022	6010B		Arsenic	B	3.3	5.0	ug/L
		6020		Zinc	B J	8.2	10.0	ug/L
FWGLL11mw-DUP5-1417	A9G160103021	8270C		bis(2-Ethylhexyl) phthalate	J B	2.0	10	ug/L
FWGTEAM1-TRIP	A9G160103001	8260B		Acetone	J	3.0	10	ug/L
FWGTEAM2-TRIP	A9G160103014			Acetone	J	3.2	10	ug/L
FWGTEAM3-TRIP	A9G160103028			Acetone	J	3.2	10	ug/L

Method Blank Outlier Report

Lab Reporting Batch : A9G160103
Analysis Method : 8260B
Preparation Type : 5030B
Method Blank Lab Sample ID : A9G200000377B

Lab ID: TALCAN
Analysis Date : 07/20/2009
Preparation Date : 07/20/2009
Preparation Batch : 9201377

Methylene chloride	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	0.38	2.0	ug/L	J	Common Contaminant

Methylene chloride was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
FWGEQUIPRINSE3-1425-G	A9G160103025	1	3.0	B	ug/L

QC Outlier Report: Trip Blank

Lab Reporting Batch : A9G160103
Method/Preparation Batch : 9201377 / 9201377
Client Sample ID : FWGTEAM1-TRIP
Lab Sample ID : A9G160103001

Lab ID: TALCAN
Analysis Date : 07/20/2009
Preparation Date : 07/20/2009
Preparation Type : 5030B

Analysis Method : 8260B

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	3.0	10	ug/L	J	Common Contaminant

Acetone contamination found in the trip blank did not qualify any samples.

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	3.2	10	ug/L	J	Common Contaminant

Acetone was qualified due to trip blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
[illegible]	[illegible]	1	6.9	J	ug/L

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	3.2	10	ug/L	J	Common Contaminant

Acetone was qualified due to trip blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
[illegible]	[illegible]	1	1.2	J	ug/L

Laboratory Control Sample / Laboratory Control Sample Duplicate Outlier Report

Method Batch : 9201377 **Analysis Method :** 8260B **Analysis Date :** 07/20/2009

Preparation Batch : 9201377 **Preparation Type :** 5030B **Preparation Date :** 07/20/2009

Lab Reporting Batch : A9G160103 **Lab ID:** TALCAN

			Reported Values		Project Limits (Percent)			
LCS Lab Sample ID	**Matrix**	**Analyte Name**	**Percent Recovery**	**RPD**	**Rejection Point**	**Lower Limit**	**Upper Limit**	**RPD**
A9G200000377C	AQ	Chloroethane	56		30.00	72.00	129.00	30.00
		Vinyl chloride	65		30.00	73.00	134.00	30.00
A9G200000377L		Chloroethane	59	4.5	30.00	72.00	129.00	30.00
		Vinyl chloride	68	3.8	30.00	73.00	134.00	30.00

Associated Samples

Client Sample ID	**Lab Sample ID**
FWGASYmw-001C-1403-GW	A9G160103023
FWGASYmw-002C-1404-GW	A9G160103026
FWGASYmw-003C-1405-GW	A9G160103010
FWGASYmw-004C-1406-GW	A9G160103012
FWGEQUIPRINSE3-1425-GW	A9G160103025
FWGLL10mw-004C-1392-GW	A9G160103002
FWGLL10mw-005C-1393-GW	A9G160103004
FWGLL10mw-006C-1394-GW	A9G160103015
FWGLL10mw-DUP4-1416-GW	A9G160103017
FWGLL11mw-003C-1396-GW	A9G160103031
FWGLL11mw-004C-1397-GW	A9G160103006
FWGLL11mw-005C-1398-GW	A9G160103029
FWGLL11mw-006C-1399-GW	A9G160103008
FWGLL11mw-008C-1400-GW	A9G160103035
FWGLL11mw-009C-1401-GW	A9G160103033
FWGLL11mw-010C-1402-GW	A9G160103019
FWGLL11mw-DUP5-1417-GW	A9G160103021
FWGTEAM1-TRIP	A9G160103001
FWGTEAM2-TRIP	A9G160103014
FWGTEAM3-TRIP	A9G160103028

Scope of Data Qualification: The outlier in the LCS qualifies that analyte in all samples with the same Preparation Batch ID as the LCS

Project Number and Name: 30240.0006 - RVAAP (OH)

Laboratory Control Sample / Laboratory Control Sample Duplicate Outlier Report

Method Batch : 9202112 **Analysis Method :** 8260B **Analysis Date :** 07/21/2009

Preparation Batch : 9202112 **Preparation Type :** 5030B **Preparation Date :** 07/21/2009

Lab Reporting Batch : A9G160103 **Lab ID:** TALCAN

			Reported Values		Project Limits (Percent)			
LCS Lab Sample ID	**Matrix**	**Analyte Name**	**Percent Recovery**	**RPD**	**Rejection Point**	**Lower Limit**	**Upper Limit**	**RPD**
A9G210000112C	AQ	Chloroethane	65		30.00	72.00	129.00	30.00
A9G210000112L		Chloroethane	64	1.2	30.00	72.00	129.00	30.00
		Chloromethane	55	21	30.00	58.00	135.00	30.00

Associated Samples

Client Sample ID	**Lab Sample ID**
FWGASYmw-005C-1407-GW	A9G160103039
FWGLL11mw-001C-1395-GW	A9G160103037

Scope of Data Qualification: The outlier in the LCS qualifies that analyte in all samples with the same Preparation Batch ID as the LCS

Project Number and Name: 30240.0006 - RVAAP (OH)

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 9201377 **Analysis Method :** 8260B **Analysis Date :** 07/20/2009

Preparation Batch : 9201377 **Preparation Type :** 5030B **Preparation Date :** 07/20/2009

Lab Reporting Batch : A9G160103 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Matrix	Analyte Name	Reported * Percent Recovery	Reported * RPD	Project Limits (Percent) Rejection Point**	Lower Limit	Upper Limit	RPD
FWGLL10mw-004C-1392	A9G160103002S	AQ	Carbon disulfide	140		0.00	70.00	130.00	30.00
			Chloroethane	65		0.00	70.00	130.00	30.00
FWGLL10mw-004C-1392	A9G160103002D		Bromomethane	65		0.00	70.00	130.00	30.00
			Carbon disulfide	141		0.00	70.00	130.00	30.00
			Chloroethane	61		0.00	70.00	130.00	30.00
FWGLL11mw-004C-1397	A9G160103006S		Carbon disulfide	146		0.00	70.00	130.00	30.00
			Chloroethane	67		0.00	70.00	130.00	30.00
FWGLL11mw-004C-1397	A9G160103006D		Carbon disulfide	152		0.00	70.00	130.00	30.00

Associated Samples: Parent sample only

Client Sample ID	Lab Sample ID
FWGLL10mw-004C-1392-GW	A9G160103002
FWGLL11mw-004C-1397-GW	A9G160103006

* Only those Percent Recovery and/or RPD values outside project limits are listed in this report.
** Metal are also assessed against an upper rejection point of 150 percent for waters and 200 percent for soils and sediments

Project Number and Name: 30240.0006 - RVAAP (OH)

QC Outlier Report: Equipment Blank

Lab Reporting Batch : A9G160103
Method/Preparation Batch : 9198016 / 9198016
Client Sample ID : FWGEQUIPRINSE3-1425-GW
Lab Sample ID : A9G160103025

Lab ID: TALCAN
Analysis Date : 07/20/2009
Preparation Date : 07/17/2009
Preparation Type : 3005A

Analysis Method : 6010B

Potassium	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	150	1000	ug/L	B J	

Potassium was qualified due to equipment blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGASYmw-002C-1404-GF	A9G160103027	1	590	B J	ug/L
FWGLL10mw-004C-1392-GF	A9G160103003	1	673	B J	ug/L
FWGLL10mw-005C-1393-GF	A9G160103005	1	684	B J	ug/L
FWGLL11mw-005C-1398-GF	A9G160103030	1	545	B J	ug/L
FWGLL11mw-006C-1399-GF	A9G160103009	1	656	B J	ug/L

Zinc	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	2.5	10.0	ug/L	B J	

Zinc was qualified due to equipment blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGASYmw-003C-1405-GF	A9G160103011	1	2.6	B J	ug/L
FWGASYmw-004C-1406-GF	A9G160103013	1	4.6	B J	ug/L
FWGASYmw-005C-1407-GF	A9G160103040	1	2.7	B J	ug/L
FWGLL10mw-004C-1392-GF	A9G160103003	1	5.3	B J	ug/L
FWGLL10mw-005C-1393-GF	A9G160103005	1	2.6	B J	ug/L
FWGLL10mw-006C-1394-GF	A9G160103016	1	3.3	B J	ug/L
FWGLL10mw-DUP4-1416-G	A9G160103018	1	3.1	B J	ug/L
FWGLL11mw-001C-1395-GF	A9G160103038	1	2.4	B J	ug/L
FWGLL11mw-006C-1399-GF	A9G160103009	1	5.1	B J	ug/L
FWGLL11mw-010C-1402-GF	A9G160103020	1	7.8	B J	ug/L
FWGLL11mw-DUP5-1417-G	A9G160103022	1	8.2	B J	ug/L

2-Butanone	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	0.79	10	ug/L	J	Common Contaminant

2-Butanone contamination found in the equipment blank did not qualify any samples.

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	6.9	10	ug/L	J	Common Contaminant

QC Outlier Report: Equipment Blank

Lab Reporting Batch : A9G160103
Method/Preparation Batch : 9201377 / 9201377
Client Sample ID : FWGEQUIPRINSE3-1425-GW
Lab Sample ID : A9G160103025

Lab ID: TALCAN
Analysis Date : 07/20/2009
Preparation Date : 07/20/2009
Preparation Type : 5030B

Analysis Method : 8260B

Acetone was qualified due to equipment blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGLL11me-005C-1398-G	A9G160103025	1	1.2	J	ug/L

Benzene	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	0.43	1.0	ug/L	J	

Benzene contamination found in the equipment blank did not qualify any samples.

M&P-XYLENES	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	0.76	2.0	ug/L	J	Common Contaminant

MP-XYLENES contamination found in the equipment blank did not qualify any samples.

Methylene chloride	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	3.0	2.0	ug/L	B	Common Contaminant

Methylene chloride contamination found in the equipment blank did not qualify any samples.

o-Xylene	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	0.37	1.0	ug/L	J	Common Contaminant

o-Xylene contamination found in the equipment blank did not qualify any samples.

Toluene	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	1.2	1.0	ug/L		Common Contaminant

Toluene contamination found in the equipment blank did not qualify any samples.

TOTAL XYLENES	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	1.1	2.0	ug/L	J	Common Contaminant

TOTAL XYLENES contamination found in the equipment blank did not qualify any samples.

Method Blank Outlier Report

Lab Reporting Batch : A9G160103
Analysis Method : 8270C
Preparation Type : 3520C
Method Blank Lab Sample ID : A9G160000122B

Lab ID: TALCAN
Analysis Date : 07/30/2009
Preparation Date : 07/16/2009
Preparation Batch : 9197122

bis(2-Ethylhexyl) phthalate	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	5.1	10	ug/L	J	Common Contaminant

bis(2-Ethylhexyl) phthalate was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
FWGASYmw-001C-1403-G	A9G160103023	1	1.7	J B	ug/L
FWGASYmw-002C-1404-G	A9G160103026	1	1.3	J B	ug/L
FWGASYmw-003C-1405-G	A9G160103010	1	1.5	J B	ug/L
FWGASYmw-004C-1406-G	A9G160103012	1	1.4	J B	ug/L
FWGLL10mw-004C-1392-G	A9G160103002	1	2.2	J B	ug/L
FWGLL10mw-005C-1393-G	A9G160103004	1	3.5	J B	ug/L
FWGLL10mw-006C-1394-G	A9G160103015	1	0.98	J B	ug/L
FWGLL11mw-003C-1396-G	A9G160103031	1	1.2	J B	ug/L
FWGLL11mw-004C-1397-G	A9G160103006	1	1.3	J B	ug/L
FWGLL11mw-005C-1398-G	A9G160103029	1	1.0	J B	ug/L
FWGLL11mw-006C-1399-G	A9G160103008	1	2.9	J B	ug/L
FWGLL11mw-009C-1401-G	A9G160103033	1	5.9	J B	ug/L
FWGLL11mw-010C-1402-G	A9G160103019	1	1.1	J B	ug/L
FWGLL11mw-DUP5-1417-G	A9G160103021	1	2.0	J B	ug/L

Method Blank Outlier Report

Lab Reporting Batch : A9G160103
Analysis Method : 8270C
Preparation Type : 3520C
Method Blank Lab Sample ID : A9G160000123B

Lab ID: TALCAN
Analysis Date : 07/29/2009
Preparation Date : 07/16/2009
Preparation Batch : 9197123

bis(2-Ethylhexyl) phthalate	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	1.4	10	ug/L	J	Common Contaminant

bis(2-Ethylhexyl) phthalate was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
FWGASYmw-005C-1407-G	A9G160103039	1	1.9	J B	ug/L
FWGLL11mw-001C-1395-G	A9G160103037	1	1.1	J B	ug/L
FWGLL11mw-008C-1400-G	A9G160103035	1	3.5	J B	ug/L

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 9197122 **Analysis Method :** 8270C **Analysis Date :** 07/30/2009

Preparation Batch : 9197122 **Preparation Type :** 3520C **Preparation Date :** 07/16/2009

Lab Reporting Batch : A9G160103 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Matrix	Analyte Name	Reported * Percent Recovery	Reported * RPD	Project Limits (Percent) Rejection Point**	Lower Limit	Upper Limit	RPD
FWGLL10mw-004C-1392	A9G160103002D	AQ	Hexachlorocyclopentadiene	40		0.00	45.00	135.00	40.00
			Hexachloroethane	44		0.00	45.00	135.00	40.00
FWGLL11mw-004C-1397	A9G160103006S		3,3'-Dichlorobenzidine	30		0.00	45.00	135.00	40.00
			Hexachlorocyclopentadiene	42		0.00	45.00	135.00	40.00
			Hexachloroethane	40		0.00	45.00	135.00	40.00
FWGLL11mw-004C-1397	A9G160103006D		3,3'-Dichlorobenzidine	21		0.00	45.00	135.00	40.00

Associated Samples: Parent sample only

Client Sample ID	Lab Sample ID
FWGLL10mw-004C-1392-GW	A9G160103002
FWGLL11mw-004C-1397-GW	A9G160103006

* Only those Percent Recovery and/or RPD values outside project limits are listed in this report.
** Metal are also assessed against an upper rejection point of 150 percent for waters and 200 percent for soils and sediments

Project Number and Name: 30240.0006 - RVAAP (OH)

Surrogate Recovery Outlier Report

Lab Report Batch: A9G160103 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Dilution	Matrix	Surrogate	Percent Recovery	Criteria (percent) Lower Limit	Upper Limit	Reject Point	Associated Target Analytes
FWGASYmw-001C-1403-GW	A9G160103023	8081A	1	AQ	Decachlorobiphenyl	31	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	37	50.0	150.0	10.0	All Target
FWGASYmw-002C-1404-GW	A9G160103026	8081A	1	AQ	Decachlorobiphenyl	27	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	31	50.0	150.0	10.0	All Target
FWGASYmw-003C-1405-GW	A9G160103010	8081A	1	AQ	Decachlorobiphenyl	31	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	33	50.0	150.0	10.0	All Target
FWGASYmw-004C-1406-GW	A9G160103012	8081A	1	AQ	Decachlorobiphenyl	43	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	45	50.0	150.0	10.0	All Target
FWGASYmw-005C-1407-GW	A9G160103039	8081A	1	AQ	Decachlorobiphenyl	39	50.0	150.0	10.0	All Target
FWGLL11mw-001C-1395-GW	A9G160103037	8081A	1	AQ	Decachlorobiphenyl	24	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	28	50.0	150.0	10.0	All Target
FWGLL11mw-003C-1396-GW	A9G160103031	8081A	1	AQ	Decachlorobiphenyl	47	50.0	150.0	10.0	All Target
FWGLL11mw-008C-1400-GW	A9G160103035	8081A	1	AQ	Decachlorobiphenyl	30	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	41	50.0	150.0	10.0	All Target
FWGLL11mw-010C-1402-GW	A9G160103019	8081A	1	AQ	Decachlorobiphenyl	43	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	49	50.0	150.0	10.0	All Target
FWGLL11mw-DUP5-1417-GW	A9G160103021	8081A	1	AQ	Decachlorobiphenyl	46	50.0	150.0	10.0	All Target

Project Number and Name: ***30240.0006 - RVAAP (OH)***

Method Blank Outlier Report

Lab Reporting Batch : A9G160103
Analysis Method : 6010B
Preparation Type : 3005A
Method Blank Lab Sample ID : A9G170000016B

Lab ID: TALCAN
Analysis Date : 07/20/2009
Preparation Date : 07/17/2009
Preparation Batch : 9198016

Potassium	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	149	1000	ug/L	B	

Potassium was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
FWGASYmw-002C-1404-GF	A9G160103027	1	590	B J	ug/L
FWGEQUIPRINSE3-1425-G	A9G160103025	1	150	B J	ug/L
FWGLL10mw-004C-1392-GF	A9G160103003	1	673	B J	ug/L
FWGLL10mw-005C-1393-GF	A9G160103005	1	684	B J	ug/L
FWGLL11mw-005C-1398-GF	A9G160103030	1	545	B J	ug/L
FWGLL11mw-006C-1399-GF	A9G160103009	1	656	B J	ug/L

Zinc	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	6.8	10.0	ug/L	B	

Zinc was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
FWGASYmw-001C-1403-GF	A9G160103024	1	20.4	J	ug/L
FWGASYmw-003C-1405-GF	A9G160103011	1	2.6	B J	ug/L
FWGASYmw-004C-1406-GF	A9G160103013	1	4.6	B J	ug/L
FWGASYmw-005C-1407-GF	A9G160103040	1	2.7	B J	ug/L
FWGEQUIPRINSE3-1425-G	A9G160103025	1	2.5	B J	ug/L
FWGLL10mw-004C-1392-GF	A9G160103003	1	5.3	B J	ug/L
FWGLL10mw-005C-1393-GF	A9G160103005	1	2.6	B J	ug/L
FWGLL10mw-006C-1394-GF	A9G160103016	1	3.3	B J	ug/L
FWGLL10mw-DUP4-1416-G	A9G160103018	1	3.1	B J	ug/L
FWGLL11mw-001C-1395-GF	A9G160103038	1	2.4	B J	ug/L
FWGLL11mw-003C-1396-GF	A9G160103032	1	19.5	J	ug/L
FWGLL11mw-005C-1398-GF	A9G160103030	1	17.0	J	ug/L
FWGLL11mw-006C-1399-GF	A9G160103009	1	5.1	B J	ug/L
FWGLL11mw-010C-1402-GF	A9G160103020	1	7.8	B J	ug/L
FWGLL11mw-DUP5-1417-G	A9G160103022	1	8.2	B J	ug/L

QC Outlier Report: Field Duplicates (Non-qualified Outliers)

Lab Report Batch: A9G160103 **Lab ID:** TALCAN

			Field Sample				Field Sample Duplicate						
Analysis Method	Matrix	Analyte Name	Client Sample ID	Ana Type	Result	Lab Qualifier	Client Sample Duplicate ID	Ana Type	Result	Lab Qualifier	RPD Dup* (%)	RPD Criteria (%)	Result Units
6010B	AQ	Manganese	FWGLL10mw-006	ES/TO	1.6	B	FWGLL10mw-DU	ES/TO	5.0	B	103.0	30	ug/L
6020	AQ	Iron		ES/TO	50.0	U		ES/TO	37.0	B	200.0	30	ug/L
8270C	AQ	bis(2-Ethylhexyl) phthalate	FWGLL10mw-006	RES	0.98	J B	FWGLL10mw-DU	RES	10	U	200.0	30	ug/L
6010B	AQ	Arsenic	FWGLL11mw-010	ES/TO	5.8		FWGLL11mw-DU	ES/TO	3.3	B	54.9	30	ug/L
	AQ	Manganese		ES/TO	967			ES/TO	482		66.9	30	ug/L
6020	AQ	Aluminum		ES/TO	59.0			ES/TO	50.0	U	200.0	30	ug/L
	AQ	Iron		ES/TO	1420			ES/TO	338		123.1	30	ug/L
8270C	AQ	bis(2-Ethylhexyl) phthalate	FWGLL11mw-010	RES	1.1	J B	FWGLL11mw-DU	RES	2.0	J B	58.1	30	ug/L

**Note: Outlier report also includes analytes detected in one sample but not in the related sample, i.e., analyte was detected in the field sample but not in the field duplicate sample, or vice versa. In this case, RPD value assigned to the field duplicate sample is 200.*

Project Number and Name: ***30240.0006 - RVAAP (OH)***

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 9198345 **Analysis Method :** 9012A **Analysis Date :** 07/17/2009

Preparation Batch : 9198345 **Preparation Type :** Gen Prep **Preparation Date :** 07/17/2009

Lab Reporting Batch : A9G160103 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Matrix	Analyte Name	Reported * Percent Recovery	Reported * RPD	Project Limits (Percent) Rejection Point**	Lower Limit	Upper Limit	RPD
FWGLL11mw-004C-1397	A9G160103006S	AQ	Cyanide	62		40.00	80.00	120.00	20.00
FWGLL11mw-004C-1397	A9G160103006D		Cyanide		36	40.00	80.00	120.00	20.00

Associated Samples: All samples in Method Batch

Client Sample ID	Lab Sample ID
FWGASYmw-001C-1403-GW	A9G160103023
FWGASYmw-002C-1404-GW	A9G160103026
FWGASYmw-003C-1405-GW	A9G160103010
FWGASYmw-004C-1406-GW	A9G160103012
FWGEQUIPRINSE3-1425-GW	A9G160103025
FWGLL10mw-004C-1392-GW	A9G160103002
FWGLL10mw-005C-1393-GW	A9G160103004
FWGLL10mw-006C-1394-GW	A9G160103015
FWGLL10mw-DUP4-1416-GW	A9G160103017
FWGLL11mw-001C-1395-GW	A9G160103037
FWGLL11mw-003C-1396-GW	A9G160103031
FWGLL11mw-004C-1397-GW	A9G160103006
FWGLL11mw-005C-1398-GW	A9G160103029
FWGLL11mw-006C-1399-GW	A9G160103008
FWGLL11mw-008C-1400-GW	A9G160103035
FWGLL11mw-009C-1401-GW	A9G160103033
FWGLL11mw-010C-1402-GW	A9G160103019
FWGLL11mw-DUP5-1417-GW	A9G160103021

* Only those Percent Recovery and/or RPD values outside project limits are listed in this report.
** Metal are also assessed against an upper rejection point of 150 percent for waters and 200 percent for soils and sediments

Project Number and Name: 30240.0006 - RVAAP (OH)

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGASYmw-001C-1403-GF **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G160103024

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6020						**Dilution: 1**															
Iron	300		ug/L		YES	J															Pj
Zinc	20.4		ug/L	J	YES	~~UJ~~ JB			~~U~~												Pj,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGASYmw-001C-1403-GW **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160103023

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	**UJ**							UJ								G
Aldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	**UJ**							UJ								G
beta-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
delta-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
Dieldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endosulfan I	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan II	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin ketone	0.030		ug/L	U	YES	**UJ**							UJ								G
gamma-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	**UJ**							UJ								G
Heptachlor	0.030		ug/L	U	YES	**UJ**							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	**UJ**							UJ								G
Methoxychlor	0.10		ug/L	U	YES	**UJ**							UJ								G
Toxaphene	2.0		ug/L	U	YES	**UJ**							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1260	0.50		ug/L	U	YES	**UJ**							UJ								G
Analysis Method : 8260B						**Dilution: 1**															
Chloroethane	1.0		ug/L	U	YES	**UJ**				UJ											J
Vinyl chloride	1.0		ug/L	U	YES	**UJ**				UJ											J

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGASYmw-001C-1403-GW **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160103023

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	**R**															Pj
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	**R**															Pj
bis(2-Ethylhexyl) phthalate	1.7		ug/L	J B	YES	~~UJ~~ JB			JB					J							L,F
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	**UJ**					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGASYmw-002C-1404-GF **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G160103027

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Barium	8.6		ug/L	B	YES	J								J							L
Manganese	3.9		ug/L	B	YES	J								J							L
Potassium	590		ug/L	B J	YES	UJ B			~~U~~ B					J		~~U~~ B					Cb,N,F,L
Analysis Method : 6020						**Dilution: 1**															
Iron	50.0		ug/L	U	YES	~~None~~ U															Pj
Zinc	10.0		ug/L	U	YES	~~None~~ U															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGASYmw-002C-1404-GW **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160103026

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	UJ							UJ								G
Aldrin	0.030		ug/L	U	YES	UJ							UJ								G
alpha-BHC	0.030		ug/L	U	YES	UJ							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	UJ							UJ								G
beta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
delta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
Dieldrin	0.030		ug/L	U	YES	UJ							UJ								G
Endosulfan I	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	UJ							UJ								G
Endrin	0.030		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.030		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	UJ							UJ								G
Methoxychlor	0.10		ug/L	U	YES	UJ							UJ								G
Toxaphene	2.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1260	0.50		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8260B						**Dilution: 1**															
Chloroethane	1.0		ug/L	U	YES	UJ				UJ											J
Vinyl chloride	1.0		ug/L	U	YES	UJ				UJ											J

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGASYmw-002C-1404-GW **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160103026

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	R															Pj
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	R															Pj
bis(2-Ethylhexyl) phthalate	1.3		ug/L	J B	YES	~~UJ~~ JB			~~J~~ B					J							L,F
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGASYmw-003C-1405-GF **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G160103011

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Arsenic	4.9		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Iron	2420		ug/L		YES	J						J									Pj,Z
Zinc	2.6		ug/L	B J	YES	~~U~~ JB			~~U~~ B					J		~~U~~ B					PJ,N,F,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGASYmw-003C-1405-GW **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160103010

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	**UJ**							UJ								G
Aldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	**UJ**							UJ								G
beta-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
delta-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
Dieldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endosulfan I	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan II	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin ketone	0.030		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	UJ							UJ								G
Methoxychlor	0.10		ug/L	U	YES	UJ							UJ								G
Toxaphene	2.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1260	0.50		ug/L	U	YES	**UJ**							UJ								G
Analysis Method : 8260B						**Dilution: 1**															
Chloroethane	1.0		ug/L	U	YES	**UJ**				UJ											J
Vinyl chloride	1.0		ug/L	U	YES	**UJ**				UJ											J

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGASYmw-003C-1405-GW **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160103010

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	1.5		ug/L	J B	YES	UJ ~~JB~~			~~J~~B					J							L,F
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGASYmw-004C-1406-GF **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G160103013

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6020						**Dilution: 1**															
Iron	1760		ug/L		YES	J						J									Pj,Z
Zinc	4.6		ug/L	B J	YES	~~UJ~~ JB			~~U~~B					J		~~U~~B					Pj,N,F,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGASYmw-004C-1406-GW **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160103012

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	**UJ**							UJ								G
Aldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	**UJ**							UJ								G
beta-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
delta-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
Dieldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endosulfan I	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan II	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin ketone	0.030		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	UJ							UJ								G
Methoxychlor	0.10		ug/L	U	YES	UJ							UJ								G
Toxaphene	2.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1260	0.50		ug/L	U	YES	**UJ**							UJ								G
Analysis Method : 8260B						**Dilution: 1**															
Chloroethane	1.0		ug/L	U	YES	UJ				UJ											J
Vinyl chloride	1.0		ug/L	U	YES	UJ				UJ											J

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGASYmw-004C-1406-GW **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160103012

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	1.4		ug/L	J B	YES	~~UJ~~ JB			~~J~~ B					J							L,F
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	**UJ**					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGASYmw-005C-1407-GF **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G160103040

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6020						**Dilution: 1**															
Iron	50.0		ug/L	U	YES	~~None~~ U															Pj
Zinc	2.7		ug/L	B J	YES	~~UJ~~ JB			~~U~~ B					J		~~U~~ B					Pj,N,F,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGASYmw-005C-1407-GW **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160103039

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	UJ							UJ								G
Aldrin	0.030		ug/L	U	YES	UJ							UJ								G
alpha-BHC	0.030		ug/L	U	YES	UJ							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	UJ							UJ								G
beta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
delta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
Dieldrin	0.030		ug/L	U	YES	UJ							UJ								G
Endosulfan I	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	UJ							UJ								G
Endrin	0.030		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.030		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	UJ							UJ								G
Methoxychlor	0.10		ug/L	U	YES	UJ							UJ								G
Toxaphene	2.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8260B						**Dilution: 1**															
2-Hexanone	10		ug/L	U	YES	UJ															Pj
Acetone	10		ug/L	U	YES	UJ															Pj
Carbon disulfide	1.0		ug/L	U	YES	UJ															Pj
Chloroethane	1.0		ug/L	U	YES	UJ				UJ											J
Chloromethane	1.0		ug/L	U	YES	UJ				UJ									UJ		J,U
Methylene chloride	2.0		ug/L	U	YES	UJ															Pj
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	1.9		ug/L	J B	YES	~~UJ~~	JB		~~UJ~~ B					J							L,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGEQUIPRINSE3-1425-GW **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160103025

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
2-Butanone	0.79		ug/L	J	YES	**J**								J							L
Acetone	6.9		ug/L	J	YES	~~U~~ JB								J		JB					O,L
Benzene	0.43		ug/L	J	YES	**J**								J							L
Chloroethane	1.0		ug/L	U	YES	**UJ**				UJ											J
M&P-XYLENES	0.76		ug/L	J	YES	**J**								J							L
Methylene chloride	3.0		ug/L	B	YES	~~U~~ B			JB												F
o-Xylene	0.37		ug/L	J	YES	**J**								J							L
TOTAL XYLENES	1.1		ug/L	J	YES	**J**								J							L
Vinyl chloride	1.0		ug/L	U	YES	**UJ**				UJ											J
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	**R**															Pj
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	**R**															Pj
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	**UJ**					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGEQUIPRINSE3-1425-GW **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G160103025

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Potassium	150		ug/L	B J	YES	UJ B			~~U~~ B					J							Cb,F,L
Analysis Method : 6020						**Dilution: 1**															
Iron	50.0		ug/L	U	YES	~~None~~ U															Pj
Zinc	2.5		ug/L	B J	YES	~~UJ~~ JB			~~U~~ B					J							Pj,F,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL10mw-004C-1392-GF **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G160103003

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Barium	3.1		ug/L	B	YES	J								J							L
Manganese	9.7		ug/L	B E	YES	J								J							L
Potassium	673		ug/L	B J	YES	~~UJ~~ JB			~~U~~ B					J		~~U~~ B					L,N,F
Analysis Method : 6020						**Dilution: 1**															
Iron	50.0		ug/L	U	YES	~~None~~ U															Pj
Zinc	5.3		ug/L	B J	YES	~~UJ~~ JB			U/B					J		~~U~~ B					Pj,N,F,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL10mw-004C-1392-GW **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160103002

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Chloroethane	1.0		ug/L	U	YES	UJ				UJ	UJ										H,J
Vinyl chloride	1.0		ug/L	U	YES	UJ				UJ											J
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	2.2		ug/L	J B	YES	~~UJ~~ J B			~~J~~ B					J							L,F
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL10mw-005C-1393-GF **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G160103005

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Barium	4.2		ug/L	B	YES	J								J							L
Manganese	5.6		ug/L	B	YES	J								J							L
Potassium	684		ug/L	B J	YES	UJ B			~~J~~B					J		~~J~~B					Cb,N,F,L
Analysis Method : 6020						**Dilution: 1**															
Iron	50.0		ug/L	U	YES	~~None~~ U															Pj
Zinc	2.6		ug/L	B J	YES	~~U~~ JB			~~J~~B					J		~~J~~B					Pj,N,F,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL10mw-005C-1393-GW **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160103004

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Chloroethane	1.0		ug/L	U	YES	UJ				UJ											J
Vinyl chloride	1.0		ug/L	U	YES	UJ				UJ											J
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	3.5		ug/L	J B	YES	~~UJ~~ J B			Y B					J							L,F
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL10mw-006C-1394-GF **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G160103016

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Manganese	1.6		ug/L	B	YES	J								J							L,P
Potassium	940		ug/L	B J	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Aluminum	21.2		ug/L	B	YES	J								J							L
Iron	50.0		ug/L	U	YES	~~None~~ U															Pj,P
Zinc	3.3		ug/L	B J	YES	~~UJ~~ J B			~~J~~B					J		~~J~~B					Pj,N,F,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL10mw-006C-1394-GW **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160103015

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Chloroethane	1.0		ug/L	U	YES	UJ				UJ											J
Vinyl chloride	1.0		ug/L	U	YES	UJ				UJ											J
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	0.98		ug/L	J B	YES	~~UJ~~ JB			~~J~~B					J							L,P,F
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL11mw-001C-1395-GF **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G160103038

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Potassium	818		ug/L	B J	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Iron	50.0		ug/L	U	YES	~~None~~ U															Pj
Zinc	2.4		ug/L	B J	YES	~~UJ~~ JB			UB					J		UB					Pj,N,F,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL11mw-001C-1395-GW **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160103037

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	**UJ**							UJ								G
Aldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	**UJ**							UJ								G
beta-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
delta-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
Dieldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endosulfan I	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan II	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin ketone	0.030		ug/L	U	YES	**UJ**							UJ								G
gamma-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	**UJ**							UJ								G
Heptachlor	0.030		ug/L	U	YES	**UJ**							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	**UJ**							UJ								G
Methoxychlor	0.10		ug/L	U	YES	**UJ**							UJ								G
Toxaphene	2.0		ug/L	U	YES	**UJ**							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1260	0.50		ug/L	U	YES	**UJ**							UJ								G
Analysis Method : 8260B						**Dilution: 1**															
2-Hexanone	10		ug/L	U	YES	**UJ**															Pj
Acetone	10		ug/L	U	YES	**UJ**															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL11mw-001C-1395-GW **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160103037

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Carbon disulfide	1.0		ug/L	U	YES	UJ															Pj
Chloroethane	1.0		ug/L	U	YES	UJ				UJ											J
Chloromethane	1.0		ug/L	U	YES	UJ				UJ									UJ		J,U
Methylene chloride	2.0		ug/L	U	YES	UJ															Pj
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	1.1		ug/L	J B	YES	~~UJ~~ J B			J B					J							L,F
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL11mw-003C-1396-GF **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G160103032

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6020						**Dilution: 1**															
Iron	68.8		ug/L		YES	UJ						J									Pj,Z,Cb
Zinc	19.5		ug/L	J	YES	~~UJ~~ JB			YB												Pj,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL11mw-003C-1396-GW **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160103031

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	**UJ**							UJ								G
Aldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	UJ							UJ								G
beta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
delta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
Dieldrin	0.030		ug/L	U	YES	UJ							UJ								G
Endosulfan I	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	UJ							UJ								G
Endrin	0.030		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.030		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	UJ							UJ								G
Methoxychlor	0.10		ug/L	U	YES	UJ							UJ								G
Toxaphene	2.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8260B						**Dilution: 1**															
Chloroethane	1.0		ug/L	U	YES	UJ				UJ											J
Vinyl chloride	1.0		ug/L	U	YES	UJ				UJ											J
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	**R**															Pj
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	**R**															Pj
bis(2-Ethylhexyl) phthalate	1.2		ug/L	J B	YES	~~UJ~~ J B			~~U~~					J							L,F
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

Project Number and Name: 30240.0006 - RVAAP (OH) **Library Used:** Ravenna GW

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL11mw-004C-1397-GF **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G160103007

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6020						**Dilution: 1**															
Iron	157		ug/L		YES	J						J									Pj,Z
Zinc	36.9		ug/L	J	YES	J															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL11mw-004C-1397-GW **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160103006

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Chloroethane	1.0		ug/L	U	YES	UJ				UJ	UJ										H,J
Vinyl chloride	1.0		ug/L	U	YES	UJ				UJ											J
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	1.3		ug/L	J B	YES	~~UJ~~ JB			~~Y~~ B					J							L,F
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL11mw-005C-1398-GF **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G160103030

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Nickel	9.9		ug/L	B	YES	J								J							L
Potassium	545		ug/L	B J	YES	UJ B			~~U~~ JB					J		~~U~~ JB					Cb,N,F,L
Analysis Method : 6020						**Dilution: 1**															
Iron	50.0		ug/L	U	YES	~~UJ B~~ UJ															Pj,Cb
Zinc	17.0		ug/L	J	YES	~~U~~ JB			~~U~~ JB												Pj,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL11mw-005C-1398-GW **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160103029

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Acetone	1.2		ug/L	J	YES	~~UJ~~ JB								J		~~U~~ B					Pj,N,L,O
Chloroethane	1.0		ug/L	U	YES	UJ				UJ											J
Vinyl chloride	1.0		ug/L	U	YES	UJ				UJ											J
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	R															Pj
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	R															Pj
bis(2-Ethylhexyl) phthalate	1.0		ug/L	J B	YES	~~UJ~~ JB			U B					J							L,F
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL11mw-006C-1399-GF **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G160103009

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Manganese	0.56		ug/L	B	YES	J								J							L
Potassium	656		ug/L	B J	YES	UJ B			~~J~~ B					J		~~J~~ B					Cb,N,F,L
Analysis Method : 6020						**Dilution: 1**															
Iron	50.0		ug/L	U	YES	~~None~~ U															Pj
Zinc	5.1		ug/L	B J	YES	~~UJ~~ JB			~~J~~ B					J		~~J~~ B					Pj,N,F,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL11mw-006C-1399-GW **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160103008

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Chloroethane	1.0		ug/L	U	YES	UJ				UJ											J
Vinyl chloride	1.0		ug/L	U	YES	UJ				UJ											J
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	R															Pj
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	R															Pj
bis(2-Ethylhexyl) phthalate	2.9		ug/L	J B	YES	~~UJ~~ JB			~~UJ~~ B					J							L,F
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL11mw-008C-1400-GF **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G160103036

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Potassium	878		ug/L	B J	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Iron	50.0		ug/L	U	YES	~~None~~	U														Pj
Zinc	10.0		ug/L	U	YES	~~None~~	U														Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL11mw-008C-1400-GW **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160103035

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	UJ							UJ								G
Aldrin	0.030		ug/L	U	YES	UJ							UJ								G
alpha-BHC	0.030		ug/L	U	YES	UJ							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	UJ							UJ								G
beta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
delta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
Dieldrin	0.030		ug/L	U	YES	UJ							UJ								G
Endosulfan I	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	UJ							UJ								G
Endrin	0.030		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.030		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	UJ							UJ								G
Methoxychlor	0.10		ug/L	U	YES	UJ							UJ								G
Toxaphene	2.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1260	0.50		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8260B						**Dilution: 1**															
Chloroethane	1.0		ug/L	U	YES	UJ				UJ											J
Chloromethane	0.69		ug/L	J	YES	J								J							L

Project Number and Name: **30240.0006 - RVAAP (OH)** **Library Used:** **Ravenna GW**

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL11mw-008C-1400-GW **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160103035

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Vinyl chloride	1.0		ug/L	U	YES	UJ				UJ											J
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	3.5		ug/L	J B	YES	~~UJ~~ UJB			~~J~~ JB					J							L,F
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL11mw-009C-1401-GF **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G160103034

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Potassium	954		ug/L	B J	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Iron	50.0		ug/L	U	YES	~~None~~ U															Pj
Zinc	10.0		ug/L	U	YES	~~None~~ U															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL11mw-009C-1401-GW **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160103033

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
beta-BHC	0.029		ug/L	J	YES	J								J							L
Analysis Method : 8260B						**Dilution: 1**															
Chloroethane	1.0		ug/L	U	YES	UJ				UJ											J
Vinyl chloride	1.0		ug/L	U	YES	UJ				UJ											J
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	R															Pj
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	R															Pj
bis(2-Ethylhexyl) phthalate	5.9		ug/L	J B	YES	~~UJ~~ JB			~~UJ~~ B					J							L,F
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL11mw-010C-1402-GF **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G160103020

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Manganese	967		ug/L		YES	J															Pj,P
Analysis Method : 6020						**Dilution: 1**															
Iron	1420		ug/L		YES	J						J									Pj,P,Z
Zinc	7.8		ug/L	B J	YES	~~U~~ JB			~~U~~ JB					J		~~U~~ JB					Pj,N,F,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL11mw-010C-1402-GW **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160103019

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	**UJ**							UJ								G
Aldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	**UJ**							UJ								G
beta-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
delta-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
Dieldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endosulfan I	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan II	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin ketone	0.030		ug/L	U	YES	**UJ**							UJ								G
gamma-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	**UJ**							UJ								G
Heptachlor	0.030		ug/L	U	YES	**UJ**							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	**UJ**							UJ								G
Methoxychlor	0.10		ug/L	U	YES	**UJ**							UJ								G
Toxaphene	2.0		ug/L	U	YES	**UJ**							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1260	0.50		ug/L	U	YES	**UJ**							UJ								G
Analysis Method : 8260B						**Dilution: 1**															
Chloroethane	1.0		ug/L	U	YES	**UJ**				UJ											J
Vinyl chloride	1.0		ug/L	U	YES	**UJ**				UJ											J

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL11mw-010C-1402-GW **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160103019

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	R															Pj
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	R															Pj
bis(2-Ethylhexyl) phthalate	1.1		ug/L	J B	YES	~~UJ~~ JB			~~U~~ B					J							L,P,F
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGTEAM1-TRIP **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160103001

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Acetone	3.0		ug/L	J	YES	**J**								J							Pj,L
Chloroethane	1.0		ug/L	U	YES	**UJ**				UJ											J
Vinyl chloride	1.0		ug/L	U	YES	**UJ**				UJ											J

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGTEAM2-TRIP **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160103014

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Acetone	3.2		ug/L	J	YES	**J**								J							Pj,L
Chloroethane	1.0		ug/L	U	YES	**UJ**				UJ											J
Vinyl chloride	1.0		ug/L	U	YES	**UJ**				UJ											J

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGTEAM3-TRIP **Lab Report Batch :** A9G160103 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160103028

Reviewed By / Date : Angye Dragotta 8/28/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Acetone	3.2		ug/L	J	YES	**J**								J							Pj,L
Chloroethane	1.0		ug/L	U	YES	**UJ**				UJ											J
Vinyl chloride	1.0		ug/L	U	YES	**UJ**				UJ											J

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2009 **Date:** September 15, 2009
STL Sample Delivery Group: A9G160107 **Revision:** 0

Data Validator: Angye Dragotta/Environmental Quality Management, Inc. (EQM, Inc.)

QA/QC Summary

On July 15, 2009 the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A9G160107.

Field Sample ID	Analytes	Method
FWGLL10mw-004c-1392-GW	Explosives	SW846 8330
FWGLL10mw-005c-1393-GW	Nitroguanidine	SW846 M8330
FWGLL11mw-004c-1397-GW	Nitrocellulose	SW846 353.2
FWGLL11mw-006c-1399-GW		
FWGASYmw-003c-1405-GW		
FWGASYmw-004c-1406-GW		
FWGLL10mw-006c-1394-GW		
FWGLL10mw-DUP4-1416-GW		
FWGLL11mw-010c-1402-GW		
FWGLL11mw-DUP5-1417-GW		
FWGASYmw-001c-1403-GW		
FWGEQUIPRINSE3-1425-GW		
FWGASYmw-002c-1404-GW		
FWGLL11mw-005c-1398-GW		
FWGLL11mw-003c-1396-GW		
FWGLL11mw-009c-1401-GW		
FWGLL11mw-008c-1400-GW		
FWGLL11mw-001c-1395-GW		
FWGASYmw-005c-1407-GW		

The data presented in this report were evaluated according to the *Final Quality Assurance Project Plan Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant Ravenna, OH, Portage Environmental, September 2004.* The following documents will be used as needed to supplement the project documentation: *Louisville Chemistry Guidelines, USACE, June 2002 version 5, EPA National Functional Guidelines (NFG) for Organic Data Review, EPA-540/R-99-008, October 1999, NFG for Inorganic Data Review, EPA-540/R-04-004, October 2004, Analytical Methods, and Laboratory Standard Operating Procedures*. These objectives represent accuracy and precision performance goals for each analytical method.

The coolers were received between 0.6 - 4.8 °C. Upon receipt, it was documented by the laboratory, that the samples were not frozen and in good condition. Therefore, no qualifications were made to sample results based on temperatures less than 2°C.

The completeness objective for the project was 90%. The completeness objective was met for this SDG, 100%. Limitations, if any, on the data are indicated with qualifiers detailed below.

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2009 **Date:** September 15, 2009
STL Sample Delivery Group: A9G160107 **Revision:** 0

All analytical results have been verified against compliance requirements specified in the project QAP, LCG, associated analytical methods and/or SOPs, as appropriate. Checklists used in review of the data have been inserted in the SDGs by parameter. Outliers have been noted below and results requiring qualification, as a result of this verification process, have been summarized in Appendix 1.

Explosives- 8330
The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- ICV and CCV criteria
- Retention time criteria
- MDL/MRL Level Verification
- Surrogate recovery criteria
- Equipment blank free from contamination
- LCS Recovery Criteria
- Field Duplicate RPD Criteria

4-Nitrotoluene appears to not have been spiked and/or recover in the calibration verifications; however the compound is co-eluting with 2-nitrotoluene. No qualifications made as LC9 was used as confirmation and the %D for 2-nitrotoluene were within criteria.

Initial Calibration Criteria
The initial calibration on LC10, as presented by the laboratory, had incorporated a reanalyzed STD3. While the laboratory analyzed an ICV following the first analysis of all the calibration standards, it was noted by EQM that the curve did not have a valid ICV following the re-analysis of STD 3. Since the laboratory reinjected STD3 because of problems associated with a target not required by this project, it was requested by EQM that the calibration with the initial analysis of STD 3 be used in the quantitation of the samples. The laboratory reprocessed the samples and submitted a revised data package for the reprocessed samples. EQM also requested a corrective action and the laboratory's corrective action response has been provided as part of the verification package.

Blanks
1,3,5-Trinitrobenzene was detected in the method blank at 0.036ug/L. Detected 1,3,5-trinitrobenzene results <5x contamination were qualified, "B".

Matrix Spike Recovery
The MSD for FWGLL11-004c-1397-GW recovered above control limits at 181% with an RPD of 38%. No qualifications were made as the LCS recovered within limits.

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2009 **Date:** September 15, 2009
STL Sample Delivery Group: A9G160107 **Revision:** 0

Nitroguanidine- 8330M
The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- Retention time criteria
- MRL level verification criteria
- MDL verification criteria
- ICV and CCV criteria
- The method blank and equipment blanks were free from contamination
- LCS/LCSD percent recoveries and RPD value criteria
- Matrix spike recovery criteria

No QC outliers were noted.

Nitrocellulose - 353.2
The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Sample preparation criteria
- Initial Calibration criteria
- ICV and CCV criteria
- The equipment rinse and method blanks were free from contamination
- MRL Level Verification criteria
- ICB and CCBs were free from contamination
- LCS/LCSD percent recoveries and RPD value criteria
- MS/MSD percent recoveries
- Nitrocellulose assay criteria

No QC outliers noted.

Data Validator: [illegible] 9/16/09
Date:

2nd Level Data Review: Erik Corbin
Date: 9/16/09

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

John Miller
Environmental Quality Management, Inc.
1800 Carillon Boulevard
Cincinnati, Ohio 45240

September 15, 2009

Subject: Method 8330 Calibration Corrective Action

Dear Mr. Miller:

During your company's data validation of one of our packages (TAL West Sacramento lot A9G140147) it was noted that one of our EPA Method 8330 initial calibrations had a problem. The analyst had set up the run with the calibration points followed by a blank and initial calibration verification (ICV). After those points had run the analyst found a problem with the injection of the third calibration standard. He marked this in the run log but only entered "bad standard" as the technical justification for a reinjection of the point. He then re-injected the third calibration standard and used the re-injected standard in the calibration curve. The analyst did not re-inject the ICV after the re-injected calibration point. This error was not caught during the second level review of the calibration curve.

An interview with the analyst and an examination of the raw data from this run brought out several points. The analyst had originally rejected the 3rd calibration injection because they had observed that the septum had been pushed into the vial by the needle. They observed that the picric acid response was disproportional to the other peaks and felt this might be due to the injection issue. This was the reasoning for the reinjection of the standard. Our re-examination of the data for the original injection showed that all the other peaks in that injection appeared to be satisfactory.

This series of events highlighted two problems with the process of calibration curve running. The first was that the analyst was not aware that the ICV needed to be re-run again if re-injections of calibration points occur after the original ICV injection. Secondly, the analyst had not sufficiently documented on the run list the technical justification for the re-injection of the calibration.

The root cause of the problem was that the analyst was unaware that an ICV is valid only if it is run after all the calibration points that are going to be used have been run. They were aware of the rule in general but had not thought through the situation where a calibration point had been re-injected. The fact that the second level review did not catch this indicated the issue may go beyond one analyst.

Our corrective action plan involved several items:

1) The initial calibration was re-calculated using the original injection of the 3rd calibration standard. This produced a curve that passed all criteria for all analytes except picric acid. Picric acid is not a target analyte for your samples. The ICV run after this recalculated curve was re-processed against it and passed all criteria. The data for your projects associated with the original curve were reprocessed against the new curve and were reported to you.

2) A completely new calibration curve will be in place before any new samples from your company are run for Method 8330. Neither version of the curve discussed above will be used.
3) During the lab's all staff meeting of September 10, 2009 I used part of the QA portion of the program to discuss with all staff the issues that this event brought out. The need to run ICVs after all calibration points was highlighted. I also re-iterated to the staff when initial calibration point re-injections are allowable and the necessity of documenting on the run list and raw data the exact technical justification for the reinjection.
4) In future internal area audits I will be paying particular attention to run lists and any deviations from acceptable calibration practice and documentation.

I apologize for any inconvenience that this issue has caused you and your colleagues. We believe our corrective actions will assure there will be no repeat of this data issue. TestAmerica is dedicated to supplying our clients with accurate and defensible data and we look forward to demonstrating this in our future work with you.

If you have any questions, please feel free to call me at (916) 374-4389.

Sincerely,

Douglas Weir
Quality Assurance Manager
TestAmerica Laboratories West Sacramento

Subject: RE: EQM
From: "Weir, Douglas" <Douglas.Weir@testamericainc.com>
Date: Tue, 15 Sep 2009 19:01:17 -0600
To: <ecorbin@eqm.com>
CC: "Herbert, David" <David.Herbert@testamericainc.com>, "Dahl, Karen" <Karen.Dahl@testamericainc.com>, "West Sacramento - QA" <WestSacramento-QA@testamericainc.com>, "Allameh, David" <David.Allameh@testamericainc.com>

Erik,

This was a reprocessing of data. The samples were reprocessed first. The analyst realized the CCVs had not been reprocessed and did so ~1 hour later. Since all samples and CCVs were reprocessed against the same curve, the order of the reprocessing should not have any impact on the data. I hope this answers your question. If I'm missing the thrust of your question please let me know.

Karen Dahl sent the corrective action letter out today.

Sincerely,

Doug Weir

DOUGLAS WEIR, Ph.D.
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From: Dahl, Karen
Sent: Tuesday, September 15, 2009 12:44 PM
To: West Sacramento - QA; Allameh, David
Cc: Herbert, David
Subject: EQM
Importance: High

More followup questions. This needs a response today please.

Dave, have you had a chance to look at the corrective action letter?

From: Erik Corbin [mailto:ecorbin@eqm.com]
Sent: Tuesday, September 15, 2009 10:39 AM
To: Dahl, Karen
Cc: Angye Dragotta; Thurza, Michael; John Miller; Jackie Doan; Loeb, Mark
Subject: Re: A9G160265 Explosives

Karen,

Thanks for the response. We just have a few requests for clarification.

In previous packages we have received from this project, the Meth Date stamp has had exactly the same date and time for both sample and QC within a sequence (i.e., processed all at the same time). Why were samples reprocessed separately from QC in this instance? What is the reasoning for processing samples prior to processing QC?

Also, do you know when the corrective action for this issue is scheduled for completion? We would like to include a copy of the CA in our report.

Thanks,

Erik Corbin

Environmental Quality Management, Inc.
513-825-7500 (voice)
513-825-7495 (fax)
ecorbin@eqm.com

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Dahl, Karen wrote:

Hello everyone. I hope you are all having a good day. Please see the paragraph below from the laboratory. Please let me know if you have any questions or if you need any additional information. Thank you

The "Meth Date" line on the area percent report is a time stamp for when the method file was accessed. The method is accessed at the beginning of a run, when a CCV is processed and when the sample is reprocessed. So when the samples that were originally run on 7-26-09 where reprocessed on 9-4-09, the method date changes to 9-4-09 to reflect the new method access time stamp. Additionally the CCVs will also have a different time stamp since the method was accessed when the CCVs were

reprocessed on 9-4-09.

-----Original Message-----
From: Erik Corbin [mailto:ecorbin@eqm.com]
Sent: Monday, September 14, 2009 3:06 PM
To: Loeb, Mark
Cc: Angye Dragotta; Dahl, Karen; Thurza, Michael; John Miller; Jackie Doan
Subject: Re: A9G160265 Explosives

Mark,

Based on our conversation several hours ago, we understand that you are looking into this issue. We also understand that Sacramento is busy currently with an external audit. However, if EQ is to meet our commitment to our client, it is imperative we receive a response on this

issue - so that we may proceed with our evaluation of the data - at your

earliest possible convenience.

Please advise.

Regards,

Erik Corbin

Environmental Quality Management, Inc.
513-825-7500 (voice)
513-825-7495 (fax)
ecorbin@eqm.com

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Angye Dragotta wrote:

I was looking at the explosives data sent Fri. (thanks by the way)

and had a question regarding the reprocessing of the data. You will find attached a runlog that has the samples from this SDG highlighted. I was wondering why the the samples and instrument QC have different method dates and times. Could you please check with West Sac and let me know as soon as possible?

Thanks

CASE NARRATIVE

A9G160107

The following report contains the analytical results for nineteen water samples submitted to TestAmerica North Canton by Environmental Quality Mgt., Inc. from the RVAAP (OH) Site, project number 30240.0006. The samples were received July 16, 2009, according to documented sample acceptance procedures.

The 8330 Explosives, Nitroguanidine, and 353.2 Nitrocellulose as N analyses were performed at the TestAmerica West Sacramento laboratory. Refer to TestAmerica West Sacramento narrative included in their data package for additional information.

TestAmerica utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Angye Dragotta, Erik Corbin, and Jackie Doan on July 31, 2009. A summary of QC data for these analyses is included at the back of the report.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Please refer to the Quality Control Elements Narrative following this case narrative for additional quality control information.

If you have any questions, please call the Project Manager, Mark J. Loeb, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT."

CASE NARRATIVE (continued)

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The coolers were received at temperatures ranging from 0.6 to 4.8°C.

See TestAmerica's Cooler Receipt Form for additional information.

NITROAROMATICS AND NITRAMINES-8330

The sample(s) that contained concentrations of target analyte(s) at a reportable level in the associated Method Blank(s) were flagged with "B". All target analytes in the Method Blank must be below the reporting limit (RL) or the associated sample(s) must be ND with the exception of common laboratory contaminants.

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

The matrix spike/matrix spike duplicate(s) for FWGLL11mw-004C-1397-GW had recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

GENERAL CHEMISTRY

The analytical results met the requirements of the laboratory's QA/QC program.

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

QUALITY CONTROL ELEMENTS NARRATIVE (continued)

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

TestAmerica Certifications and Approvals:

The laboratory is certified for the analytes listed on the documents below. These are available upon request.
California (#01144CA), Connecticut (#PH-0590), Florida (#E87225),
Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Nevada (#OH-000482008A), OhioVAP (#CL0024), Pennsylvania (#008), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit

N:\QAQC\Customer Service\Narrative - Combined RCRA _CWA 032609.doc

Case Narrative

TestAmerica West Sacramento Project Number A9G160107R

General Comments
This report contains revised 8330 results. As discussed, the original 8330 calibration curve included a point for the third calibration standard that had been acquired after the initial calibration verification (ICV) standard had been analyzed. The third calibration standard was originally analyzed before the ICV but was re-prepared and re-analyzed since it did not meet acceptance for picric acid. Per the laboratory's standard operating procedure the analyst should have re-analyzed the ICV after the third calibration standard was re-analyzed. Since all target analytes for this program met acceptance criteria in the original third calibration standard, the curve was reprocessed to include the original third calibration standard. The reprocessed curve passed all method criteria for all target analytes for this program. The ICV has now been acquired after all points of the initial calibration have been analyzed. All sample results have been reprocessed under this curve. Note: Upon the reprocessing of the data it was discovered that the incorrect dilution factor had been applied to sample FWGLL11mw-001C-1395-GW. The results & reporting limits have been corrected for this sample. The sample results are all still non-detect for this sample. The note in the original case narrative regarding elevated reporting limits for this sample has been removed from this case narrative.

Following US EPA Region V guidelines, manual integrations were performed only when necessary and are in compliance with the laboratory's standard operating procedure, Acceptable Manual Integration Practices, SOP No.: S-Q-004, including Addendum 1. The reason for the manual integration has been documented on the affected chromatogram, which is provided in the raw data package. The raw data also includes the original chromatogram prior to a manual integration being performed. The following required a manual integration:

8330 MDL Check on LC9 (analyzed on 7/24/09 @ 15:56) - 2,4,6-Trinitrotoluene

WATER, 8330, Explosives
Samples: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19
The matrix spikes, which were performed on sample 3, have a high matrix spike duplicate recovery for nitrobenzene due to possible matrix interferences. Since the laboratory control sample met acceptance criteria, no corrective action was performed.

There were no other anomalies associated with this project.

SAMPLE SUMMARY

A9G160107

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LGKD0	001	FWGLL10mw-004C-1392-GW	07/15/09	08:35
LGKD5	002	FWGLL10mw-005C-1393-GW	07/15/09	10:35
LGKD7	003	FWGLL11mw-004C-1397-GW	07/15/09	11:55
LGKEA	004	FWGLL11mw-006C-1399-GW	07/15/09	14:05
LGKEC	005	FWGASYmw-003C-1405-GW	07/15/09	15:30
LGKEG	006	FWGASYmw-004C-1406-GW	07/15/09	16:45
LGKEH	007	FWGLL10mw-006C-1394-GW	07/15/09	08:50
LGKEL	008	FWGLL10mw-DUP4-1416-GW	07/15/09	10:00
LGKEN	009	FWGLL11mw-010C-1402-GW	07/15/09	11:00
LGKEQ	010	FWGLL11mw-DUP5-1417-GW	07/15/09	12:00
LGKET	011	FWGASYmw-001C-1403-GW	07/15/09	14:10
LGKE0	012	FWGEQUIPRINSE3-1425-GW	07/15/09	14:50
LGKE5	013	FWGASYmw-002C-1404-GW	07/15/09	15:20
LGKE7	014	FWGLL11mw-005C-1398-GW	07/15/09	08:45
LGKFA	015	FWGLL11mw-003C-1396-GW	07/15/09	10:25
LGKFE	016	FWGLL11mw-009C-1401-GW	07/15/09	11:50
LGKFF	017	FWGLL11mw-008C-1400-GW	07/15/09	13:10
LGKFH	018	FWGLL11mw-001C-1395-GW	07/15/09	14:30
LGKFJ	019	FWGASYmw-005C-1407-GW	07/15/09	16:20

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

[redacted]

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

pg 2 COC #003183

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
EQM	John Miller	7-15-09	003182

Address	Telephone Number (Area Code)/Fax Number	Lab Number	Page
1800 Carillon Blvd	513 825 7500 (fax 7495)	3304979396	1 of 2

City	State	Zip Code	Site Contact	Lab Contact
Cincinnati	OH	45240	E Corbin	M Loeb

Project Name and Location (State)	Carrier/Waybill Number
RVAAP (OH) PN: 30240.0006	NA Lab Pickup

Contract/Purchase Order/Quote No.: PO # 15660

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Explo 8330	Propellants	Cyanide 9012	Metals 6010/6020 7470	Perchlorate	Special Instructions/ Conditions of Receipt
FWG Team1 - Trip	7/15/09	0800		X						2			X									Cooler ID
FWGLL10mw-004C-1392GW	7/15/09	0835		X			27			9	3		X	X	X	X	X	X	X			EC1
FWGLL10mw-004C-1392GF	7/15/09	0835		X			3		3											X	X	MSMSD 185,15,E-1
FWGLL10mw-005C-1393GW	7/15/09	1035		X			9			3	1		X	X	X	X	X	X	X			MSMSD 185,15,E-1
FWGLL10mw-005C-1393GF	7/15/09	1035		X			1		1											X	X	MD88
FWGLL11mw-004C-1397GW	7/15/09	1155		X			27			9	3		X	X	X	X	X	X	X			MD88
FWGLL11mw-004C-1397GF	7/15/09	1155		X			3		3											X	X	MSMSD 313,316,114
FWGLL11mw-006C-1399GW	7/15/09	1405		X			9			3	1		X	X	X	X	X	X	X			MSMSD 313,316,114
FWGLL11mw-006C-1399GF	7/15/09	1405		X			1		1											X	X	EC1
FWGASYmw-003C-1405GW	7/15/09	1530		X			9			3	1		X	X	X	X	X	X	X			EC1
FWGASYmw-003C-1405GF	7/15/09	1530		X			1		1											X	X	182
FWGASYmw-004C-1406GW	7/15/09			X			9			3	1		X	X	X	X	X	X	X			182
																						C99

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other person

QC Requirements (Specify): Metals/Perchlorates were field filtered

	Date	Time		Date	Time
1. Relinquished By: [signature]	7/15/09	1800	1. Received By: RC Robison	7/15/09	1800
2. Relinquished By: RC Robison	7/15/09	1950	2. Received By: Chris [signature]	7-16-09	8:00
3. Relinquished By			3. Received By		

Comments: Temps may not meet requirements if sample collection is close to lab pickup time

All VOCs in cooler EC1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

pg 1 COC #003182

TAL-4142 (0406)

Client: EQM	Project Manager: John Miller	Date: 7/15/09	Chain of Custody Number: 003183
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513 825 7500 (fax 7495)	Lab Number: 3049 79396	Page 2 of 2
City: Cincinnati; State: OH; Zip Code: 45240	Site Contact: E Corbin	Lab Contact: M Loeb	
Project Name and Location (State): RVAAP (OH) PN: 30240.0006	Carrier/Waybill Number: IVA Lab Pickup		
Contract/Purchase Order/Quote No.: PO # 151600			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		Analysis (Attach list if more space is needed): VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Expld 8330	Propellants	Cyanide 9012	Metals 6010/6020 7470	Perchlorates				Special Instructions/ Conditions of Receipt
FWGASYmw-004C-1406GF	7/15/09			X				1		1											X	X					Cooler ID C99

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other per SOW

QC Requirements (Specify): Metals/Perchlorates were field filtered

1. Relinquished By: [signature]	Date: 7/15/09	Time: 1800	1. Received By: RC Robison	Date: 7/15/09	Time: 1800
2. Relinquished By: RC Robison	Date: 7/15/09	Time: 1950	2. Received By:	Date:	Time:
3. Relinquished By:	Date:	Time:	3. Received By: [signature]	Date: 7-16-09	Time: 8:00

Comments: Temps may not meet requirements if sample collection is close to lab pickup time
All VOCs in cooler EC1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

15

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

pg2coc# = 003265

Client: EQM	Project Manager: John Miller	Date: 7-15-09	Chain of Custody Number: 003161
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513 825 7500 (fax 7495)	Lab Number: 3004979396	Page 1 of 2
City: Cincinnati State: OH Zip Code: 45240	Site Contact: E. Corbin	Lab Contact: M. Loeb	
Project Name and Location (State): RVAAP Ravenna Ohio	Carrier/Waybill Number: LAB PICK UP		
Contract/Purchase Order/Quote No.: PO# 15660 Ph# 30240.0006			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC 8260	SVOC 8270	PEST 8081	PCB 8082	EPA 8330	Propellants	Cyanide 9012	Metals 7470/6020	Perchlorates			Special Instructions/ Conditions of Receipt: Cooler ID #
FWG Team2-Trip	7-15-09	0800		X						2			X											
FWGL10mw-006C-1394-GW		0850		X			9			3	1		X	X	X	X	X	X	X					184
FWGL10MW-006C-1394-GF				X			1		1											X	X			184
FWGL10mw-DUP4-1416-GW		1000		X			9			3	1		X	X	X	X	X	X	X					M12
FWGL10mw-DUP4-1416-GF				X			1		1											X	X			M12
FWGL11mw-010C-1402-GW		1100		X			9			3	1		X	X	X	X	X	X	X					~~A25~~/757
FWGL11mw-010C-1402-GF				X			1		1											X	X		partial vol	757
FWGL11mw-DUP5-1417-GW		1200		X			9			3	1		X	X	X	X	X	X	X					Cletus
FWGL11mw-DUP5-1417-GF				X			1		1											X	X		partial vol	Cletus
FWGASYmw-001C-1403-GW		1410		X			9			3	1		X	X	X	X	X	X	X					PH12
FWGASYmw-001C-1403-GF				X			1		1											X	X			PH12
FWGEQUIPRinse3-1425-GW	7-15-09	1450		X			10		1	3	1		X	X	X	X	X	X	X	X	X		*NOT FILTERED*	ASD1

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other Per SOW

QC Requirements (Specify): metals/Perchlorates were field filtered

1. Relinquished By: [signature]	Date: 7/15/09	Time: 1800	1. Received By: RC Robison	Date: 7/15/09	Time: 1800
2. Relinquished By: RC Robison	Date: 7/15/09	Time: 1958	2. Received By: [signature]	Date: 7-16-09	Time: 8:00
3. Relinquished By:	Date:	Time:	3. Received By:	Date:	Time:

Comments: Temps may not meet requirements if sample collection is close to lab pick up time. All VOAs in cooler ASD1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North canton

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

pg1 COC# = 003161

Client: EQM	Project Manager: John Miller	Date: 7-15-09	Chain of Custody Number: 003265
Address: 1800 CARILLON BLVD	Telephone Number (Area Code)/Fax Number: 5138257500 (fax 7495)	Lab Number: 3304979396	Page 2 of 2
City: Cincinnati; State: OH; Zip Code: 45240	Site Contact: E Corbin	Lab Contact: M. Loeb	
Project Name and Location (State): RVAAP Ravenna Ohio	Carrier/Waybill Number: Lab Pickup		
Contract/Purchase Order/Quote No.: PO# 15060 Pn# 30240.0006			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Solid	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC 8260	SVOC 8270	PST 8081	PCB 8082	8016 8330	Propellants	Cyanide 9012	Metals 7470 6020	Perchlorates				Special Instructions/ Conditions of Receipt
FWGASYmw-002C-1404-GW	7-15-09	1520		X									X	X	X	X	X	X	X						ASD5
FWGASYmw-002C-1404-BF	1	1		X																X	X				ASD5

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other Per SOW

QC Requirements (Specify): Metals/Perchlorates were field filtered

1. Relinquished By	Date 7/15/09	Time 1800	1. Received By TC O'Brien	Date 7/15/09	Time 1800
2. Relinquished By TC O'Brien	Date 7/15/09	Time 1950	2. Received By	Date 7-16-09	Time 800
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments: Temps may not meet requirements if sample collection time is close to lab pick up time. ALL VOAs in cooler ASD5 See pg 1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

17

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client: EQM	Project Manager: JOAN MILLER	Date: 07/15/2009	Chain of Custody Number: 003187
Address: 1800 CARILLON BLVD	Telephone Number (Area Code)/Fax Number: (513) 825-7500 (FX 7495)	Lab Number: (330) 497-9396	Page 1 of 2
City: CINCINNATI; State: OH; Zip Code: 45240	Site Contact: E. CORBIN	Lab Contact: M. LOEB	
Project Name and Location (State): RVAAP (OH)	Carrier/Waybill Number: N/A - LAB PICKUP		
Contract/Purchase Order/Quote No.: PO 15640			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil		Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		VOC 8240	SVOC 8270	PEST 8081	PCB 8082	EXPLO 8330	PROPELLANTS	CYANIDE 9012	METALS 6010/6020 7470	PERCHLORATES				Special Instructions/ Conditions of Receipt
FWG TEAM 3 - TRIP	07/15/09	0745		X							2				X												COOLER 176
FWG LL11 MW - 005C - 1398 - GW	07/15/09	0845		X				9			3	1			X	X	X	X	X	X	X						COOLER 177
FWG LL11 MW - 005C - 1398 - GF	07/15/09	0845		X				1		1												X	X				" 177
FWG LL11 MW - 003C - 1396 - GW	07/15/09	1025		X				9			3	1			X	X	X	X	X	X	X						" LSASD
FWG LL11 MW - 003C - 1396 - GF	07/15/09	1025		X				1		1												X	X				" LSASD
FWG LL11 MW - 009C - 1401 - GW	07/15/09	1150		X				9			3	1			X	X	X	X	X	X	X						" 311
FWG LL11 MW - 009C - 1401 - GF	07/15/09	1150		X				1		1												X	X				" 311
FWG LL11 MW - 008C - 1400 - GW	07/15/09	1310		X				9			3	1			X	X	X	X	X	X	X						" 13
FWG LL11 MW - 008C - 1400 - GF	07/15/09	1310		X				1		1									PCA 7/15/09			X	X				" 13
FWG LL11 MW - 001C - 1395 - GW	07/15/09	1430		X				9			3	1			X	X	X	X	X	X	X						" 176
FWG LL11 MW - 001C - 1395 - GF	07/15/09	1430		X				1		1												X	X				" 176
CONTINUED ON CHAIN # 003168														PCA 07/15/09													

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other PER SOW

QC Requirements (Specify): METALS / PERCHLORATES WERE FIELD FILTERED

1. Relinquished By: [signature]	Date: 7/15/09	Time: 1800	1. Received By: RC Robison	Date: 7/15/09	Time: 1800
2. Relinquished By: RC Robison	Date: 7/15/09	Time: 1958	2. Received By: [signature]	Date: 7-16-09	Time: 8:00
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments: TEMPS MAY NOT MEET REQUIREMENTS IF SAMPLE COLLECTION IS CLOSE TO LAB PICKUP TIME

ALL VOCS IN COOLER 176

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client: EQM	Project Manager: JOHN MILLER	Date: 07/15/2009	Chain of Custody Number: 003168
Address: 1800 CARILLON BLVD	Telephone Number (Area Code)/Fax Number: (513) 825-7500 (FAX - 7495)	Lab Number: (330) 497-9396	Page 2 of 2
City: CINCINNATI; State: OH; Zip Code: 45240	Site Contact: E. CORBIN	Lab Contact: M. LOEB	
Project Name and Location (State): RVAAP (OH) 030240.0006	Carrier/Waybill Number: N/A - LAB PICKUP		
Contract/Purchase Order/Quote No.: PO 156060			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC 8240	SVOC 8270	PEST 8081	PCBs 8082	EXPLO 8330	PROPELLANTS	CYANIDE 9012	METALS 6010/6020 7470	PERCHLORATES				Special Instructions/ Conditions of Receipt
FWGASYMW-005C-1407-GW	07/15/09	1620		X			9			3	1		X	X	X	X	X	X	X						COOLER - BUG 69
FWGASYMW-005C-1407-GF	07/15/09	1620		X			1		1											X	X				" - BUG 69

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other PER SOW

QC Requirements (Specify): METALS/PERCHLORATES WERE FIELD FILTERED

1. Relinquished By: [signature]	Date: 7/15/09	Time: 1800	1. Received By: TC Robison	Date: 7/15/09	Time: 1808
2. Relinquished By: TC Robison	Date: 7/15/09	Time: 1950	2. Received By: [signature]	Date: 7-16-09	Time: 8:00
3. Relinquished By:	Date:	Time:	3. Received By:	Date:	Time:

Comments: PEMPS MAY NOT MEET REQUIREMENTS IF SAMPLE COLLECTION IS CLOSE TO LAB PICKUP TIME

ALL VOCS IN COOLER - #176

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

TestAmerica Cooler Receipt Form/Narrative **Lot Number:** A9G160107
North Canton Facility

Client EQM Project RVAAP By: [signature]
Cooler Received on 7/16/09 Opened on 7/16/09 (Signature)
FedEx ☐ UPS ☐ DHL ☐ FAS ☐ Stetson ☐ Client Drop Off ☐ TestAmerica Courier ☒ Other ____
TestAmerica Cooler # ____ Multiple Coolers ☒ Foam Box ☐ Client Cooler ☐ Other ____

1. Were custody seals on the outside of the cooler(s)? Yes ☒ No ☐ Intact? Yes ☒ No ☐ NA ☐
   If YES, Quantity 23 Quantity Unsalvageable ____
   Were custody seals on the outside of cooler(s) signed and dated? Yes ☒ No ☐ NA ☐
   Were custody seals on the bottle(s)? Yes ☐ No ☒
   If YES, are there any exceptions? ____
2. Shippers' packing slip attached to the cooler(s)? ~~Yes~~ ☒ No ☒ 7/16/09
3. Did custody papers accompany the sample(s)? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Were the custody papers signed in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☒ Foam ☐ None ☐ Other ____
6. Cooler temperature upon receipt See Attached °C See back of form for multiple coolers/temps ☒
   METHOD: IR ☒ Other ☐ ____
   COOLANT: Wet Ice ☒ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐
7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels be reconciled with the COC? Yes ☒ No ☐
9. Were sample(s) at the correct pH upon receipt? Yes ☒ No ☐ NA ☐
10. Were correct bottle(s) used for the test(s) indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☒ NA ☐
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a trip blank present in the cooler(s)? Yes ☒ No ☐ Were VOAs on the COC? Yes ☒ No ☐

Contacted PM MJL Date 7/16/09 by [initials] via Verbal ☒ Voice Mail ☐ Other ☐
Concerning #14

14. CHAIN OF CUSTODY

The following discrepancies occurred:
Sample FWGASYmw-004C-1406-GW & GF does not have a time listed on the COC. Will log time of 1645 per bottle labels.
COC ID = FWGEQUIPRINSE3-1425-GW Label ID on all bottles except 24L amber & 1L250 perchlorate has ID of FWGEQUIPRINSE3-1364-GW.
Will log ID per ~~labels of 1364.~~ COC of 1425. 7/16/09

15. SAMPLE CONDITION

Sample(s) ____ were received after the recommended holding time had expired.
Sample(s) ____ were received in a broken container.
Sample(s) ____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) ____ were further preserved in Sample Receiving to meet recommended pH level(s). *Nitric Acid Lot# 031909-HNO_3; Sulfuric Acid Lot# 100108-H_2SO_4; Sodium Hydroxide Lot# 073007 -NaOH; Hydrochloric Acid Lot# 092006-HCl; Sodium Hydroxide and Zinc Acetate Lot# 050205-$(CH_3COO)_2ZN$/NaOH.* What time was preservative added to sample(s)? ____

Client ID	pH	Date	Initials
	SEE Attached		

TestAmerica Multiple Cooler Receipt Form/Narrative Lot Number: A9G160107
North Canton Facility

Cooler #	Temp °C	Method	Coolant	Comments
185	3.2	IR	ICE	
15	2.7			
E-1	4.8			
MD88	3.6			
313	4.7			
316	4.1			
114	4.0			
EC1	3.8			
182	4.4			
C 99	0.6			
184	0.6			
M12	0.6			
757	1.2			
Clotus	2.7			
PH12	0.7			
ASD1	2.9			
ASD5	1.6			
177	2.4			
L SASD	3.0			
311	1.6			
13	1.0			
176	2.3			
BUG 69	2.4			

TestAmerica Multiple Cooler Receipt Form/Narrative
North Canton Facility

Lot Number: A9G160107

Client ID	pH	Date	Initials
1392	<2 <2 <2 >12 >12 >12	7/16/09	gm
1393	<2 >12		
1397	<2 <2 <2 >12 >12 >12		
1399	<2 >12		
1405	<2 >12		
1406	<2 >12		
1394	<2 >12		
1416	<2 >12		
1402	<2 >12		
1417	<2 >12		
1403	<2 >12		
1425	<2 >12		
1404	<2 >12		
1398	<2 >12		
1396	<2 >12		
1401	<2 >12		
1400	<2 >12		
1395	<2 >12		
1407	<2 >12		

North Canton

TestAmerica Laboratories, Inc.
SAMPLE ANALYSIS REQUISTION

Laboratory **TestAmerica West Sacramento**
880 Riverside Parkway

West Sacramento, CA 95605

Lab Request SR113611

Report Package: **Expanded Deliverables**

Need Analytical Report 2009-07-30

Client Code: 14091

Project Manager: MARK LOEB

Sample I.D.	Work Order Number	Client Sample ID	Sampling Date	Analysis Required
A9G160107-1	LGKD0	FWGLL10mw-004C-1392-GW	2009-07-15 8:35	WATER, 8330, Explosives (SAC)
A9G160107-1	LGKD0	FWGLL10mw-004C-1392-GW	2009-07-15 8:35	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G160107-1	LGKD0	FWGLL10mw-004C-1392-GW	2009-07-15 8:35	WATER, 353.2, Nitrocellulose as N (SAC)
A9G160107-1 S	LGKD0	FWGLL10mw-004C-1392-GW	2009-07-15 8:35	WATER, 8330, Explosives (SAC)
A9G160107-1 S	LGKD0	FWGLL10mw-004C-1392-GW	2009-07-15 8:35	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G160107-1 S	LGKD0	FWGLL10mw-004C-1392-GW	2009-07-15 8:35	WATER, 353.2, Nitrocellulose as N (SAC)
A9G160107-1 D	LGKD0	FWGLL10mw-004C-1392-GW	2009-07-15 8:35	WATER, 8330, Explosives (SAC)
A9G160107-1 D	LGKD0	FWGLL10mw-004C-1392-GW	2009-07-15 8:35	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G160107-1 D	LGKD0	FWGLL10mw-004C-1392-GW	2009-07-15 8:35	WATER, 353.2, Nitrocellulose as N (SAC)
A9G160107-2	LGKD5	FWGLL10mw-005C-1393-GW	2009-07-15 10:35	WATER, 8330, Explosives (SAC)
A9G160107-2	LGKD5	FWGLL10mw-005C-1393-GW	2009-07-15 10:35	WATER, UV/HPLC-SOP, Nitroguanidine (SA

MS/MSD

Please use Client Sample ID for report

Call MARK LOEB with questions at 330-497-9396

at the TAL North Canton Laboratory

Shipping Method: FED EX

Need detection limit and analysis date included in report

Please send a signed copy of this form with the report at completion of analysis

Relinquished by: [signature] Date/Time: 7/16/09 0910

Relinquished by _____ Date/Time. _____

Received for lab by: [signature] Date/Time. 7-17-09 1630

PLEASE RETURN ORIGINAL SAMPLE ANALYSIS REQUISITION

North Canton

TestAmerica Laboratories, Inc.

SAMPLE ANALYSIS REQUISTION

Laboratory: TestAmerica West Sacramento
880 Riverside Parkway
West Sacramento, CA 95605

Lab Request: SR113611

Report Package: Expanded Deliverables

Need Analytical Report: 2009-07-30

Client Code: 14091

Project Manager: MARK LOEB

Sample I.D.	Work Order Number	Client Sample ID	Sampling Date	Analysis Required
A9G160107-2	LGKD5	FWGLL10mw-005C-1393-GW	2009-07-15 10:35	WATER, 353.2, Nitrocellulose as N (SAC)
A9G160107-3	LGKD7	FWGLL11mw-004C-1397-GW	2009-07-15 11:55	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G160107-3	LGKD7	FWGLL11mw-004C-1397-GW	2009-07-15 11:55	WATER, 353.2, Nitrocellulose as N (SAC)
A9G160107-3	LGKD7	FWGLL11mw-004C-1397-GW	2009-07-15 11:55	WATER, 8330, Explosives (SAC)
A9G160107-3 S	LGKD7	FWGLL11mw-004C-1397-GW	2009-07-15 11:55	WATER, 8330, Explosives (SAC)
A9G160107-3 S	LGKD7	FWGLL11mw-004C-1397-GW	2009-07-15 11:55	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G160107-3 S	LGKD7	FWGLL11mw-004C-1397-GW	2009-07-15 11:55	WATER, 353.2, Nitrocellulose as N (SAC)
A9G160107-3 D	LGKD7	FWGLL11mw-004C-1397-GW	2009-07-15 11:55	WATER, 8330, Explosives (SAC)
A9G160107-3 D	LGKD7	FWGLL11mw-004C-1397-GW	2009-07-15 11:55	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G160107-3 D	LGKD7	FWGLL11mw-004C-1397-GW	2009-07-15 11:55	WATER, 353.2, Nitrocellulose as N (SAC)
A9G160107-4	LGKEA	FWGLL11mw-006C-1399-GW	2009-07-15 14:05	WATER, 8330, Explosives (SAC)

MS/MSD

Please use Client Sample ID for report

Call MARK LOEB with questions at 330-497-9396

at the TAL North Canton Laboratory

Shipping Method: FED EX

Need detection limit and analysis date included in report

Please send a signed copy of this form with the report at completion of analysis

Relinquished by: [signature] Date/Time: 7/16/09 0910

Relinquished by: Date/Time:

Received for lab by: [signature] Date/Time: 7-17-09 1630

PLEASE RETURN ORIGINAL SAMPLE ANALYSIS REQUISITION

617

North Canton

TestAmerica Laboratories, Inc.

Laboratory **TestAmerica West Sacramento**
880 Riverside Parkway

West Sacramento, CA 95605

SAMPLE ANALYSIS REQUISTION

Lab Request SR113611

Report Package: **Expanded Deliverables**

Need Analytical Report 2009-07-30

Client Code: 14091

Project Manager: MARK LOEB

Sample I.D.	Work Order Number	Client Sample ID	Sampling Date	Analysis Required
A9G160107-4	LGKEA	FWGLL11mw-006C-1399-GW	2009-07-15 14:05	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G160107-4	LGKEA	FWGLL11mw-006C-1399-GW	2009-07-15 14:05	WATER, 353.2, Nitrocellulose as N (SAC)
A9G160107-5	LGKEC	FWGASYmw-003C-1405-GW	2009-07-15 15:30	WATER, 8330, Explosives (SAC)
A9G160107-5	LGKEC	FWGASYmw-003C-1405-GW	2009-07-15 15:30	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G160107-5	LGKEC	FWGASYmw-003C-1405-GW	2009-07-15 15:30	WATER, 353.2, Nitrocellulose as N (SAC)
A9G160107-6	LGKEG	FWGASYmw-004C-1406-GW	2009-07-15 16:45	WATER, 8330, Explosives (SAC)
A9G160107-6	LGKEG	FWGASYmw-004C-1406-GW	2009-07-15 16:45	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G160107-6	LGKEG	FWGASYmw-004C-1406-GW	2009-07-15 16:45	WATER, 353.2, Nitrocellulose as N (SAC)
A9G160107-7	LGKEH	FWGLL10mw-006C-1394-GW	2009-07-15 8:50	WATER, 8330, Explosives (SAC)
A9G160107-7	LGKEH	FWGLL10mw-006C-1394-GW	2009-07-15 8:50	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G160107-7	LGKEH	FWGLL10mw-006C-1394-GW	2009-07-15 8:50	WATER, 353.2, Nitrocellulose as N (SAC)

Please use Client Sample ID for report

Call MARK LOEB with questions at 330-497-9396

at the TAL North Canton Laboratory

Shipping Method: FED EX

Need detection limit and analysis date included in report

Please send a signed copy of this form with the report at completion of analysis

Relinquished by: [signature] Date/Time: 7/16/09 0910

Relinquished by: Date/Time:

Received for lab by: [signature] Date/Time: 7/17/09 1630

PLEASE RETURN ORIGINAL SAMPLE ANALYSIS REQUISITION

618

North Canton

TestAmerica Laboratories, Inc.
SAMPLE ANALYSIS REQUISTION

Laboratory **TestAmerica West Sacramento**
880 Riverside Parkway
West Sacramento, CA 95605

Lab Request SR113611

Report Package: **Expanded Deliverables**
Need Analytical Report 2009-07-30

Client Code: 14091

Project Manager: MARK LOEB

Sample I.D.	Work Order Number	Client Sample ID	Sampling Date	Analysis Required
A9G160107-8	LGKEL	FWGLL10mw-DUP4-1416-GW	2009-07-15 10:00	WATER, 8330, Explosives (SAC)
A9G160107-8	LGKEL	FWGLL10mw-DUP4-1416-GW	2009-07-15 10:00	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G160107-8	LGKEL	FWGLL10mw-DUP4-1416-GW	2009-07-15 10:00	WATER, 353.2, Nitrocellulose as N (SAC)
A9G160107-9	LGKEN	FWGLL11mw-010C-1402-GW	2009-07-15 11:00	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G160107-9	LGKEN	FWGLL11mw-010C-1402-GW	2009-07-15 11:00	WATER, 353.2, Nitrocellulose as N (SAC)
A9G160107-9	LGKEN	FWGLL11mw-010C-1402-GW	2009-07-15 11:00	WATER, 8330, Explosives (SAC)
A9G160107-10	LGKEQ	FWGLL11mw-DUP5-1417-GW	2009-07-15 12:00	WATER, 8330, Explosives (SAC)
A9G160107-10	LGKEQ	FWGLL11mw-DUP5-1417-GW	2009-07-15 12:00	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G160107-10	LGKEQ	FWGLL11mw-DUP5-1417-GW	2009-07-15 12:00	WATER, 353.2, Nitrocellulose as N (SAC)
A9G160107-11	LGKET	FWGASYmw-001C-1403-GW	2009-07-15 14:10	WATER, 8330, Explosives (SAC)
A9G160107-11	LGKET	FWGASYmw-001C-1403-GW	2009-07-15 14:10	WATER, UV/HPLC-SOP, Nitroguanidine (SA

Please use Client Sample ID for report
Call MARK LOEB with questions at 330-497-9396
at the TAL North Canton Laboratory

Shipping Method: FED EX

Need detection limit and analysis date included in report.

Please send a signed copy of this form with the report at completion of analysis

Relinquished by: [signature] Date/Time: 7/16/09 0910

Relinquished by: _____ Date/Time: _____

Received for lab by: [signature] Date/Time 7-17-09 1630

PLEASE RETURN ORIGINAL SAMPLE ANALYSIS REQUISITION

North Canton

TestAmerica Laboratories, Inc.
SAMPLE ANALYSIS REQUISTION

Laboratory: TestAmerica West Sacramento
880 Riverside Parkway
West Sacramento, CA 95605

Lab Request: SR113611

Report Package: Expanded Deliverables
Need Analytical Report: 2009-07-30

Client Code: 14091

Project Manager: MARK LOEB

Sample I.D.	Work Order Number	Client Sample ID	Sampling Date	Analysis Required
A9G160107-11	LGKET	FWGASYmw-001C-1403-GW	2009-07-15 14:10	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G160107-12	LGKE0	FWGEQUIPRINSE3-1425-GW	2009-07-15 14:50	WATER, 8330, Explosives (SAC)
A9G160107-12	LGKE0	FWGEQUIPRINSE3-1425-GW	2009-07-15 14:50	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G160107-12	LGKE0	FWGEQUIPRINSE3-1425-GW	2009-07-15 14:50	WATER, 353.2, Nitrocellulose as N (SAC)
A9G160107-13	LGKE5	FWGASYmw-002C-1404-GW	2009-07-15 15:20	WATER, 8330, Explosives (SAC)
A9G160107-13	LGKE5	FWGASYmw-002C-1404-GW	2009-07-15 15:20	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G160107-13	LGKE5	FWGASYmw-002C-1404-GW	2009-07-15 15:20	WATER, 353.2, Nitrocellulose as N (SAC)
A9G160107-14	LGKE7	FWGLL11mw-005C-1398-GW	2009-07-15 8:45	WATER, 8330, Explosives (SAC)
A9G160107-14	LGKE7	FWGLL11mw-005C-1398-GW	2009-07-15 8:45	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G160107-14	LGKE7	FWGLL11mw-005C-1398-GW	2009-07-15 8:45	WATER, 353.2, Nitrocellulose as N (SAC)
A9G160107-15	LGKFA	FWGLL11mw-003C-1396-GW	2009-07-15 10:25	WATER, 8330, Explosives (SAC)

Please use Client Sample ID for report

Call MARK LOEB with questions at 330-497-9396

at the TAL North Canton Laboratory

Shipping Method: FED EX

Need detection limit and analysis date included in report.

Please send a signed copy of this form with the report at completion of analysis.

Relinquished by: [signature] Date/Time: 7/16/09 0910

Relinquished by: Date/Time

Received for lab by: [signature] Date/Time: 7-17-09 1630

PLEASE RETURN ORIGINAL SAMPLE ANALYSIS REQUISITION

620

North Canton

TestAmerica Laboratories, Inc.

SAMPLE ANALYSIS REQUISTION

Laboratory: **TestAmerica West Sacramento**
880 Riverside Parkway

West Sacramento, CA 95605

Lab Request: SR113611

Report Package: **Expanded Deliverables**

Need Analytical Report: 2009-07-30

Client Code: 14091

Project Manager: MARK LOEB

Sample I.D.	Work Order Number	Client Sample ID	Sampling Date	Analysis Required
A9G160107-15	LGKFA	FWGLL11mw-003C-1396-GW	2009-07-15 10:25	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G160107-15	LGKFA	FWGLL11mw-003C-1396-GW	2009-07-15 10:25	WATER, 353.2, Nitrocellulose as N (SAC)
A9G160107-16	LGKFE	FWGLL11mw-009C-1401-GW	2009-07-15 11:50	WATER, 8330, Explosives (SAC)
A9G160107-16	LGKFE	FWGLL11mw-009C-1401-GW	2009-07-15 11:50	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G160107-16	LGKFE	FWGLL11mw-009C-1401-GW	2009-07-15 11:50	WATER, 353.2, Nitrocellulose as N (SAC)
A9G160107-17	LGKFF	FWGLL11mw-008C-1400-GW	2009-07-15 13:10	WATER, 8330, Explosives (SAC)
A9G160107-17	LGKFF	FWGLL11mw-008C-1400-GW	2009-07-15 13:10	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G160107-17	LGKFF	FWGLL11mw-008C-1400-GW	2009-07-15 13:10	WATER, 353.2, Nitrocellulose as N (SAC)
A9G160107-18	LGKFH	FWGLL11mw-001C-1395-GW	2009-07-15 14:30	WATER, 8330, Explosives (SAC)
A9G160107-18	LGKFH	FWGLL11mw-001C-1395-GW	2009-07-15 14:30	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G160107-18	LGKFH	FWGLL11mw-001C-1395-GW	2009-07-15 14:30	WATER, 353.2, Nitrocellulose as N (SAC)

Please use **Client Sample ID** for report

Call MARK LOEB with questions at 330-497-9396

at the TAL North Canton Laboratory

Shipping Method: FED EX

Need detection limit and analysis date included in report

Please send a signed copy of this form with the report at completion of analysis.

Relinquished by: [signature] Date/Time: 7/16/09 0910

Relinquished by: _____ Date/Time _____

Received for lab by: [signature] Date/Time: 7-16-09 1630

PLEASE RETURN ORIGINAL SAMPLE ANALYSIS REQUISITION

621

North Canton

TestAmerica Laboratories, Inc.

SAMPLE ANALYSIS REQUISTION

Laboratory **TestAmerica West Sacramento**
880 Riverside Parkway

West Sacramento, CA 95605

Lab Request SR113611

Report Package: **Expanded Deliverables**

Need Analytical Report 2009-07-30

Client Code: 14091

Project Manager: MARK LOEB

Sample I.D.	Work Order Number	Client Sample ID	Sampling Date	Analysis Required
A9G160107-19	LGKFJ	FWGASYmw-005C-1407-GW	2009-07-15 16:20	WATER, 8330, Explosives (SAC)
A9G160107-19	LGKFJ	FWGASYmw-005C-1407-GW	2009-07-15 16:20	WATER, UV/HPLC-SOP, Nitroguanidine (SA
A9G160107-19	LGKFJ	FWGASYmw-005C-1407-GW	2009-07-15 16:20	WATER, 353.2, Nitrocellulose as N (SAC)

Please use Client Sample ID for report

Call MARK LOEB with questions at 330-497-9396

at the TAL North Canton Laboratory

Shipping Method: FED EX

Need detection limit and analysis date included in report

Please send a signed copy of this form with the report at completion of analysis.

Relinquished by [signature] Date/Time 7/16/09 0910

Relinquished by: Date/Time

Received for lab by: [signature] Date/Time: 7-17-09 1630

PLEASE RETURN ORIGINAL SAMPLE ANALYSIS REQUISITION

622

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

LOT RECEIPT CHECKLIST
TestAmerica West Sacramento

CLIENT JAL - N Canton PM KD LOG # 59577

LOT# (QUANTIMS ID) AQ6160107 QUOTE# NA LOCATION W 11D

		Initials	Date
DATE RECEIVED 7-17-09 TIME RECEIVED 850		QA	7-17-09
DELIVERED BY	☑ FEDEX ☐ CA OVERNIGHT ☐ CLIENT ☐ AIRBORNE ☐ GOLDENSTATE ☐ DHL ☐ UPS ☐ BAX GLOBAL ☐ GO-GETTERS ☐ TAL COURIER ☐ VALLEY LOGISTICS ☐ MORGAN HILL COURIER ☐ OTHER		
CUSTODY SEAL STATUS	☑ INTACT ☐ BROKEN ☐ N/A		
CUSTODY SEAL #(S)	Seal		
SHIPPPING CONTAINER(S)	☑ TAL ☐ CLIENT ☐ N/A		
TEMPERTURE RECORD (IN °C)	IR 4 ☐ 5 ☑ ☐ OTHER		
COC #(S)	NA		
TEMPERATURE BLANK	Observed: — Corrected: —		
SAMPLE TEMPERATURE Observed: See temp. sheets Average: Corrected Average:			
COLLECTOR'S NAME:	☐ Verified from COC ☑ Not on COC		
pH MEASURED	☐ YES ☐ ANOMALY ☑ N/A		
LABELED BY			
LABELS CHECKED BY			
PEER REVIEW	☑ NA		
SHORT HOLD TEST NOTIFICATION	SAMPLE RECEIVING		
	WETCHEM ☑ N/A		
	VOA-ENCORES ☑ N/A		
☐ METALS NOTIFIED OF FILTER/PRESERVE VIA VERBAL & EMAIL	☑ N/A		
☑ COMPLETE SHIPMENT RECEIVED IN GOOD CONDITION WITH APPROPRIATE TEMPERATURES, CONTAINERS, PRESERVATIVES	☐ N/A		
☐ CLOUSEAU	☐ TEMPERATURE EXCEEDED (2 °C – 6 °C)*1 ☑ N/A		

☐ WET ICE ☐ BLUE ICE ☐ GEL PACK ☐ NO COOLING AGENTS USED ☐ PM NOTIFIED

Notes:

*1 Acceptable temperature range for State of Wisconsin samples is ≤4°C

North Canton

LEAVE NO SPACES BLANK. USE "N/A" IF NOT APPLICABLE.

QA-185 4/09 RKE

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

MULTI COOLER RECEIPT CHECKLIST
TestAmerica West Sacramento

CLIENT: TAL - N Canton LOT# (QUANTIMS ID): AQG160107

	INITIALS	DATE
TEMPERTURE RECORD (IN °C) IR 4 ☐ 5 ☒ ☐ OTHER	CH	7-17-09

COOLER ID 1
CUSTODY SEAL STATUS ☒ INTACT ☐ BROKEN ☐ N/A
CUSTODY SEAL #(S) Seal
COC #(S) NA
TEMPERATURE BLANK. OBSERVED: 2 CORRECTED: 2
SAMPLE TEMPERATURE:
OBSERVED: 1 2 2 AVERAGE: 2 CORRECTED: 2
SAMPLES / TESTS (IF NCM REQUIRED):

COOLER ID 2
CUSTODY SEAL STATUS ☒ INTACT ☐ BROKEN ☐ N/A
CUSTODY SEAL #(S) seal
COC #(S)
TEMPERATURE BLANK: OBSERVED: NA CORRECTED:
SAMPLE TEMPERATURE:
OBSERVED: 2 2 3 AVERAGE: 2 CORRECTED: 2
SAMPLES / TESTS (IF NCM REQUIRED):

COOLER ID 3
CUSTODY SEAL STATUS ☒ INTACT ☐ BROKEN ☐ N/A
CUSTODY SEAL #(S) Seal
COC #(S) NA
TEMPERATURE BLANK: OBSERVED: 4 CORRECTED: 4
SAMPLE TEMPERATURE:
OBSERVED: 2 3 4 AVERAGE: 3 CORRECTED: 3
SAMPLES / TESTS (IF NCM REQUIRED):

LEAVE NO SPACES BLANK. USE "N/A" IF NOT APPLICABLE.

QA-185 4/09 RKE

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

MULTI COOLER RECEIPT CHECKLIST
TestAmerica West Sacramento

CLIENT: TAL-North Canton LOT# (QUANTIMS ID): A9G160107

	INITIALS	DATE
TEMPERTURE RECORD (IN °C) IR 4 ☐ 5 ☑ ☐ OTHER _____	QA	7-17-09

COOLER ID 4
CUSTODY SEAL STATUS ☑ INTACT ☐ BROKEN ☐ N/A
CUSTODY SEAL #(S) Seal
COC #(S) NA
TEMPERATURE BLANK. OBSERVED: 2 CORRECTED: 2
SAMPLE TEMPERATURE:
OBSERVED: 2 2 3 AVERAGE: 2 CORRECTED: 2
SAMPLES / TESTS (IF NCM REQUIRED):

COOLER ID 5
CUSTODY SEAL STATUS ☑ INTACT ☐ BROKEN ☐ N/A
CUSTODY SEAL #(S) Seal
COC #(S) NA
TEMPERATURE BLANK: OBSERVED: ↓ CORRECTED:
SAMPLE TEMPERATURE:
OBSERVED: 3 3 4 AVERAGE: 3 CORRECTED: 3
SAMPLES / TESTS (IF NCM REQUIRED):

COOLER ID 6
CUSTODY SEAL STATUS ☑ INTACT ☐ BROKEN ☐ N/A
CUSTODY SEAL #(S) Seal
COC #(S) NA
TEMPERATURE BLANK: OBSERVED: 3 CORRECTED: 3
SAMPLE TEMPERATURE:
OBSERVED: 2 3 4 AVERAGE: 3 CORRECTED: 3
SAMPLES / TESTS (IF NCM REQUIRED):

LEAVE NO SPACES BLANK. USE "N/A" IF NOT APPLICABLE

QA-185 4/09 RKE

8330 EXPLOSIVES DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ September 15, 2009

SDG: A9G160107 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.6 – 4.8 °C. Upon receipt, it was documented by the laboratory, that the samples were not frozen and in good condition. Therefore, no qualifications were made to sample results based on temperatures less than 2°C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Tale 3-7
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-7
7. Was a MDL Level Verification analyzed once per quarter with all target analytes detected?	✓			LC10 7/22/09 @1826 , LC9 7/24/09 @ 1556	LCG Table 5 R
8. Was a MRL Level verification run at the beginning and end of every daily sequence or every 12 hours? Was the %D < 30%?	✓				LCG Table 5 >30%=J
9. Does the initial calibration curve consist of 5 concentration levels? (6 stds for quadratic curves)	✓			ICAL: LC10 6/11/09, LC9 6/10/2009	STL SOP Section 10.2, LCG R
10. Were all target analytes %RSD ≤ 20%? OR was the average RSD ≤ 20%?	✓				LCG Table 5 >20% RSD=J/R
11. If a linear regression curve was used, was the correlation coefficient r≥0.995? (0.990 for Quadratic curve).			✓		STL SOP Section 10.4, LCG R<0.99=-J/R
12. Was a second source verification (ICV) analyzed after the ICAL and all analytes 85-115%?	✓			LC10 6/10/09 @ 2309- LC9 6/10/09 @ 0629- 4-Nitrotoluene appears to not have been spiked and/or recover; however the compound is co-eluting with 2-nitrotoluene. No qualifications made as LC9 was used as confirmation.	STL SOP Section 9.9 >115%=J; 80-85%=J/UJ; <80%=J/R
13. Was a CCV run at least every 10 samples and at the end of the analytical run?	✓				STL SOP Section 10.9

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ September 15, 2009

SDG: A9G160107 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
14. Was the average %D (difference or drift) for all target analytes < 15%?	✓			LC9- 4-Nitrotoluene appears to not have been spiked and/or recover; however the compound is co-eluting with 2-nitrotoluene. No qualifications made as LC9 was used as confirmation.	LCG Table 5 D>15% (neg) = J/R D>15% (pos) = J
15. Was a method blank prepared and analyzed with each batch?	✓				LCG Attachment A Section 5.6
16. Were target analytes in the method blank <1/2 the MRL?	✓			Checked by ADR. 1,3,5-Trinitrobenzene was detected in the method blank at 0.036ug/L. Detected 1,3,5-trinitrobenzene results <5x contamination were qualified, "B".	LCG Table 5 <5x = B
17. Was a field blank collected and analyzed?	✓			FWGEQUIPRinse3-1425-GW	
18. Were target analytes in the field blank analyses < ½ the MRL?	✓			Checked by ADR.	<5x=B
19. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓			Only detected results above the RL were evaluated. Sample FWGLL11mw-DUP5-1417-GW was the field duplicate for sample FWGLL11mw-010c-1402-GW and FWGLL10mw-DUP4-1416-GW was the field duplicate for sample FWGLL10mw-006c-1394-GW.	QAPP Table 3-2 RPD >30=J
20. Were all positive results confirmed with a second column confirmation? Was the RPD ≤ 40%?		✓			LCG Table 5 RPD>40%=J
21. Was an LCS prepared and analyzed with each batch?	✓				STL SOP Section 9.6
22. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR.	LCG Appendix C <UL=J; 30-LL=J/UJ; <30%=J/R
23. Was a MS/MSD pair prepared with each batch?	✓				STL SOP Section 9.7
24. Was the MS/MSD parent a Ravenna sample?	✓			Sample FWGLL10mw-004c-1392-GW and FWGLL11mw-004c-1397-GW were the parent MS/MSD samples from this SDG.	
25. Were MS/MSD recoveries 40-140% and RPD ≤20%?	✓			Checked by ADR. The MSD for FWGLL11-004c-1397-GW recovered above control limits at 181% with an RPD of 38%. No qualifications were made as the LCS recovered within limits.	QAPP Table 3-2 Pj
27. Were reported sample concentrations within calibration range?	✓				

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ September 15, 2009

SDG: A9G160107 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
29. Were lab comments included in report? If yes, summarize contents.	✓			See narrative regarding MSD outlier and calibration.	

References: Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 5 and Attachment A "Data Validation Guidelines.

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

STL SOP SAC-LC-0009 Rev. 2.0- Determination of Nitroaromatic, Nitramines, and Specialty Explosives Based on Method 8330, SW-846.

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-004C-1392-GW

HPLC

Lot-Sample #...:	A9G160107-001	**Work Order #...:**	LGKD02AA	**Matrix.....:**	WG
Date Sampled...:	07/15/09 08:35	**Date Received..:**	07/16/09		
Prep Date.....:	07/22/09	**Analysis Date..:**	07/27/09		
Prep Batch #...:	9203242				
Dilution Factor:	0.99	**Initial Wgt/Vol:**	1000.5 m	**Final Wgt/Vol..:**	20 mL
		Method.....:	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.099	ug/L	0.030
1,3-Dinitrobenzene	ND	0.099	ug/L	0.050
2-Amino-4,6-dinitrotoluene	ND	0.099	ug/L	0.099
2,4,6-Trinitrotoluene	ND	0.099	ug/L	0.050
2,4-Dinitrotoluene	ND	0.099	ug/L	0.050
2,6-Dinitrotoluene	ND	0.099	ug/L	0.050
2-Nitrotoluene	ND	0.50	ug/L	0.087
3-Nitrotoluene	ND	0.50	ug/L	0.056
4-Amino-2,6-dinitrotoluene	ND	0.099	ug/L	0.050
4-Nitrotoluene	ND	0.50	ug/L	0.087
HMX	ND	0.099	ug/L	0.036
Nitrobenzene	ND	0.099	ug/L	0.050
Nitroglycerin	ND	0.64	ug/L	0.33
RDX	ND	0.099	ug/L	0.036
PETN	ND	0.64	ug/L	0.30
Tetryl	ND	0.099	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	92	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-005C-1393-GW

HPLC

Lot-Sample #...: A9G160107-002 **Work Order #...:** LGKD52AA **Matrix.....:** WG
Date Sampled...: 07/15/09 10:35 **Date Received..:** 07/16/09
Prep Date.....: 07/22/09 **Analysis Date..:** 07/28/09
Prep Batch #...: 9203242
Dilution Factor: 0.99 **Initial Wgt/Vol:** 1001.23 **Final Wgt/Vol..:** 20 mL
Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.099	ug/L	0.030
1,3-Dinitrobenzene	ND	0.099	ug/L	0.050
2-Amino-4,6-dinitrotoluene	ND	0.099	ug/L	0.099
2,4,6-Trinitrotoluene	ND	0.099	ug/L	0.050
2,4-Dinitrotoluene	ND	0.099	ug/L	0.050
2,6-Dinitrotoluene	ND	0.099	ug/L	0.050
2-Nitrotoluene	ND	0.50	ug/L	0.087
3-Nitrotoluene	ND	0.50	ug/L	0.056
4-Amino-2,6-dinitrotoluene	ND	0.099	ug/L	0.050
4-Nitrotoluene	ND	0.50	ug/L	0.087
HMX	ND	0.099	ug/L	0.036
Nitrobenzene	ND	0.099	ug/L	0.050
Nitroglycerin	ND	0.64	ug/L	0.33
RDX	ND	0.099	ug/L	0.036
PETN	ND	0.64	ug/L	0.30
Tetryl	ND	0.099	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	90	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-004C-1397-GW

HPLC

Lot-Sample #...:	A9G160107-003	**Work Order #...:**	LGKD72AA	**Matrix.....:**	WG
Date Sampled...:	07/15/09 11:55	**Date Received..:**	07/16/09		
Prep Date.....:	07/22/09	**Analysis Date..:**	07/28/09		
Prep Batch #...:	9203242				
Dilution Factor:	1	**Initial Wgt/Vol:**	996.62 m	**Final Wgt/Vol..:**	20 mL
		Method.....:	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.10	ug/L	0.030
1,3-Dinitrobenzene	ND	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	0.10
2,4,6-Trinitrotoluene	ND	0.10	ug/L	0.050
2,4-Dinitrotoluene	ND	0.10	ug/L	0.050
2,6-Dinitrotoluene	ND	0.10	ug/L	0.050
2-Nitrotoluene	ND	0.50	ug/L	0.088
3-Nitrotoluene	ND	0.50	ug/L	0.057
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	0.050
4-Nitrotoluene	ND	0.50	ug/L	0.088
HMX	ND	0.10	ug/L	0.036
Nitrobenzene	ND	0.10	ug/L	0.050
Nitroglycerin	ND	0.65	ug/L	0.33
RDX	ND	0.10	ug/L	0.036
PETN	ND	0.65	ug/L	0.30
Tetryl	ND	0.10	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	91	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-006C-1399-GW

HPLC

Lot-Sample #...: A9G160107-004 **Work Order #...:** LGKEA2AA **Matrix.....:** WG
Date Sampled...: 07/15/09 14:05 **Date Received..:** 07/16/09
Prep Date.....: 07/22/09 **Analysis Date..:** 07/28/09
Prep Batch #...: 9203242
Dilution Factor: 0.96 **Initial Wgt/Vol:** 1038.91 **Final Wgt/Vol..:** 20 mL
Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.096	ug/L	0.029
1,3-Dinitrobenzene	ND	0.096	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.096	ug/L	0.096
2,4,6-Trinitrotoluene	ND	0.096	ug/L	0.048
2,4-Dinitrotoluene	ND	0.096	ug/L	0.048
2,6-Dinitrotoluene	ND	0.096	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.084
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.096	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.084
HMX	ND	0.096	ug/L	0.035
Nitrobenzene	ND	0.096	ug/L	0.048
Nitroglycerin	ND	0.62	ug/L	0.32
RDX	ND	0.096	ug/L	0.035
PETN	ND	0.62	ug/L	0.29
Tetryl	ND	0.096	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	91	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-003C-1405-GW

HPLC

Lot-Sample #...:	A9G160107-005	**Work Order #...:**	LGKEC2AA	**Matrix.....:**	WG
Date Sampled...:	07/15/09 15:30	**Date Received..:**	07/16/09		
Prep Date.....:	07/22/09	**Analysis Date..:**	07/28/09		
Prep Batch #...:	9203242				
Dilution Factor:	0.96	**Initial Wgt/Vol:**	1035.08	**Final Wgt/Vol..:**	20 mL
		Method.....:	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.096	ug/L	0.029
1,3-Dinitrobenzene	ND	0.096	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.096	ug/L	0.096
2,4,6-Trinitrotoluene	ND	0.096	ug/L	0.048
2,4-Dinitrotoluene	ND	0.096	ug/L	0.048
2,6-Dinitrotoluene	ND	0.096	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.084
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.096	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.084
HMX	ND	0.096	ug/L	0.035
Nitrobenzene	ND	0.096	ug/L	0.048
Nitroglycerin	ND	0.62	ug/L	0.32
RDX	ND	0.096	ug/L	0.035
PETN	ND	0.62	ug/L	0.29
Tetryl	ND	0.096	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	91	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-004C-1406-GW

HPLC

Lot-Sample #...: A9G160107-006 **Work Order #...:** LGKEG2AA **Matrix.....:** WG
Date Sampled...: 07/15/09 16:45 **Date Received..:** 07/16/09
Prep Date.....: 07/22/09 **Analysis Date..:** 07/28/09
Prep Batch #...: 9203242
Dilution Factor: 0.96 **Initial Wgt/Vol:** 1035 mL **Final Wgt/Vol..:** 20 mL
Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.096	ug/L	0.029
1,3-Dinitrobenzene	ND	0.096	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.096	ug/L	0.096
2,4,6-Trinitrotoluene	ND	0.096	ug/L	0.048
2,4-Dinitrotoluene	ND	0.096	ug/L	0.048
2,6-Dinitrotoluene	ND	0.096	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.084
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.096	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.084
HMX	ND	0.096	ug/L	0.035
Nitrobenzene	ND	0.096	ug/L	0.048
Nitroglycerin	ND	0.62	ug/L	0.32
RDX	ND	0.096	ug/L	0.035
PETN	ND	0.62	ug/L	0.29
Tetryl	ND	0.096	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	90	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-006C-1394-GW

HPLC

Lot-Sample #...:	A9G160107-007	**Work Order #...:**	LGKEH2AA	**Matrix.....:**	WG
Date Sampled...:	07/15/09 08:50	**Date Received..:**	07/16/09		
Prep Date.....:	07/22/09	**Analysis Date..:**	07/28/09		
Prep Batch #...:	9203242				
Dilution Factor:	1.05	**Initial Wgt/Vol:**	946.6 mL	**Final Wgt/Vol..:**	20 mL
		Method.....:	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	**0.035 J,B**	**0.10**	**ug/L**	**0.032**
1,3-Dinitrobenzene	ND	0.10	ug/L	0.052
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	0.10
2,4,6-Trinitrotoluene	ND	0.10	ug/L	0.052
2,4-Dinitrotoluene	ND	0.10	ug/L	0.052
2,6-Dinitrotoluene	ND	0.10	ug/L	0.052
2-Nitrotoluene	ND	0.52	ug/L	0.092
3-Nitrotoluene	ND	0.52	ug/L	0.060
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	0.052
4-Nitrotoluene	ND	0.52	ug/L	0.092
HMX	ND	0.10	ug/L	0.038
Nitrobenzene	ND	0.10	ug/L	0.052
Nitroglycerin	ND	0.68	ug/L	0.35
RDX	ND	0.10	ug/L	0.038
PETN	ND	0.68	ug/L	0.32
Tetryl	ND	0.10	ug/L	0.052

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	91	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-DUP4-1416-GW

HPLC

Lot-Sample #...:	A9G160107-008	**Work Order #...:**	LGKEL2AA	**Matrix.....:**	WG
Date Sampled...:	07/15/09 10:00	**Date Received..:**	07/16/09		
Prep Date.....:	07/22/09	**Analysis Date..:**	07/28/09		
Prep Batch #...:	9203242				
Dilution Factor:	0.97	**Initial Wgt/Vol:**	1030.81	**Final Wgt/Vol..:**	20 mL
		Method.....:	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.097	ug/L	0.029
1,3-Dinitrobenzene	ND	0.097	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.097	ug/L	0.097
2,4,6-Trinitrotoluene	ND	0.097	ug/L	0.048
2,4-Dinitrotoluene	ND	0.097	ug/L	0.048
2,6-Dinitrotoluene	ND	0.097	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.085
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.097	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.085
HMX	ND	0.097	ug/L	0.035
Nitrobenzene	ND	0.097	ug/L	0.048
Nitroglycerin	ND	0.63	ug/L	0.32
RDX	ND	0.097	ug/L	0.035
PETN	ND	0.63	ug/L	0.29
Tetryl	ND	0.097	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	91	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-010C-1402-GW

HPLC

Lot-Sample #...:	A9G160107-009	**Work Order #...:**	LGKEN2AA	**Matrix.....:**	WG
Date Sampled...:	07/15/09 11:00	**Date Received..:**	07/16/09		
Prep Date.....:	07/22/09	**Analysis Date..:**	07/28/09		
Prep Batch #...:	9203242				
Dilution Factor:	1.17	**Initial Wgt/Vol:**	852.85 m	**Final Wgt/Vol..:**	20 mL
		Method.....:	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	**0.040 J,B**	**0.12**	**ug/L**	**0.035**
1,3-Dinitrobenzene	ND	0.12	ug/L	0.058
2-Amino-4,6-dinitrotoluene	ND	0.12	ug/L	0.12
2,4,6-Trinitrotoluene	ND	0.12	ug/L	0.058
2,4-Dinitrotoluene	ND	0.12	ug/L	0.058
2,6-Dinitrotoluene	ND	0.12	ug/L	0.058
2-Nitrotoluene	ND	0.58	ug/L	0.10
3-Nitrotoluene	ND	0.58	ug/L	0.067
4-Amino-2,6-dinitrotoluene	ND	0.12	ug/L	0.058
4-Nitrotoluene	ND	0.58	ug/L	0.10
HMX	ND	0.12	ug/L	0.042
Nitrobenzene	**0.077 J**	**0.12**	**ug/L**	**0.058**
Nitroglycerin	ND	0.76	ug/L	0.39
RDX	ND	0.12	ug/L	0.042
PETN	ND	0.76	ug/L	0.35
Tetryl	ND	0.12	ug/L	0.058

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	93	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-DUP5-1417-GW

HPLC

Lot-Sample #...:	A9G160107-010	**Work Order #...:**	LGKEQ2AA	**Matrix.....:**	WG
Date Sampled...:	07/15/09 12:00	**Date Received..:**	07/16/09		
Prep Date.....:	07/22/09	**Analysis Date..:**	07/28/09		
Prep Batch #...:	9203242				
Dilution Factor:	0.98	**Initial Wgt/Vol:**	1017.16	**Final Wgt/Vol..:**	20 mL
		Method.....:	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	**0.031 J,B**	**0.098**	**ug/L**	**0.029**
1,3-Dinitrobenzene	ND	0.098	ug/L	0.049
2-Amino-4,6-dinitrotoluene	ND	0.098	ug/L	0.098
2,4,6-Trinitrotoluene	ND	0.098	ug/L	0.049
2,4-Dinitrotoluene	ND	0.098	ug/L	0.049
2,6-Dinitrotoluene	ND	0.098	ug/L	0.049
2-Nitrotoluene	ND	0.49	ug/L	0.086
3-Nitrotoluene	ND	0.49	ug/L	0.056
4-Amino-2,6-dinitrotoluene	ND	0.098	ug/L	0.049
4-Nitrotoluene	ND	0.49	ug/L	0.086
HMX	ND	0.098	ug/L	0.035
Nitrobenzene	ND	0.098	ug/L	0.049
Nitroglycerin	ND	0.64	ug/L	0.32
RDX	ND	0.098	ug/L	0.035
PETN	ND	0.64	ug/L	0.29
Tetryl	ND	0.098	ug/L	0.049

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	91	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-001C-1403-GW

HPLC

Lot-Sample #...:	A9G160107-011	**Work Order #...:**	LGKET2AA	**Matrix.....:**	WG
Date Sampled...:	07/15/09 14:10	**Date Received..:**	07/16/09		
Prep Date.....:	07/22/09	**Analysis Date..:**	07/28/09		
Prep Batch #...:	9203242				
Dilution Factor:	0.97	**Initial Wgt/Vol:**	1025.65	**Final Wgt/Vol..:**	20 mL
		Method.....:	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.097	ug/L	0.029
1,3-Dinitrobenzene	ND	0.097	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.097	ug/L	0.097
2,4,6-Trinitrotoluene	ND	0.097	ug/L	0.048
2,4-Dinitrotoluene	ND	0.097	ug/L	0.048
2,6-Dinitrotoluene	ND	0.097	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.085
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.097	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.085
HMX	ND	0.097	ug/L	0.035
Nitrobenzene	ND	0.097	ug/L	0.048
Nitroglycerin	ND	0.63	ug/L	0.32
RDX	ND	0.097	ug/L	0.035
PETN	ND	0.63	ug/L	0.29
Tetryl	ND	0.097	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	90	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1425-GW

HPLC

Lot-Sample #...: A9G160107-012 **Work Order #...:** LGKE02AA **Matrix.....:** WQ
Date Sampled...: 07/15/09 14:50 **Date Received..:** 07/16/09
Prep Date.....: 07/22/09 **Analysis Date..:** 07/28/09
Prep Batch #...: 9203242
Dilution Factor: 0.99 **Initial Wgt/Vol:** 1004.96 **Final Wgt/Vol..:** 20 mL
Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.099	ug/L	0.030
1,3-Dinitrobenzene	ND	0.099	ug/L	0.050
2-Amino-4,6-dinitrotoluene	ND	0.099	ug/L	0.099
2,4,6-Trinitrotoluene	ND	0.099	ug/L	0.050
2,4-Dinitrotoluene	ND	0.099	ug/L	0.050
2,6-Dinitrotoluene	ND	0.099	ug/L	0.050
2-Nitrotoluene	ND	0.50	ug/L	0.087
3-Nitrotoluene	ND	0.50	ug/L	0.056
4-Amino-2,6-dinitrotoluene	ND	0.099	ug/L	0.050
4-Nitrotoluene	ND	0.50	ug/L	0.087
HMX	ND	0.099	ug/L	0.036
Nitrobenzene	ND	0.099	ug/L	0.050
Nitroglycerin	ND	0.64	ug/L	0.33
RDX	ND	0.099	ug/L	0.036
PETN	ND	0.64	ug/L	0.30
Tetryl	ND	0.099	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	91	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-002C-1404-GW

HPLC

Lot-Sample #...: A9G160107-013 **Work Order #...:** LGKE52AA **Matrix.....:** WG
Date Sampled...: 07/15/09 15:20 **Date Received..:** 07/16/09
Prep Date.....: 07/22/09 **Analysis Date..:** 07/28/09
Prep Batch #...: 9203242
Dilution Factor: 0.96 **Initial Wgt/Vol:** 1031.86 **Final Wgt/Vol..:** 20 mL
Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.096	ug/L	0.029
1,3-Dinitrobenzene	ND	0.096	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.096	ug/L	0.096
2,4,6-Trinitrotoluene	ND	0.096	ug/L	0.048
2,4-Dinitrotoluene	ND	0.096	ug/L	0.048
2,6-Dinitrotoluene	ND	0.096	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.084
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.096	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.084
HMX	ND	0.096	ug/L	0.035
Nitrobenzene	ND	0.096	ug/L	0.048
Nitroglycerin	ND	0.62	ug/L	0.32
RDX	ND	0.096	ug/L	0.035
PETN	ND	0.62	ug/L	0.29
Tetryl	ND	0.096	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	92	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-005C-1398-GW

HPLC

Lot-Sample #...:	A9G160107-014	**Work Order #...:**	LGKE72AA	**Matrix.....:**	WG
Date Sampled...:	07/15/09 08:45	**Date Received..:**	07/16/09		
Prep Date.....:	07/22/09	**Analysis Date..:**	07/28/09		
Prep Batch #...:	9203242				
Dilution Factor:	0.97	**Initial Wgt/Vol:**	1028.34	**Final Wgt/Vol..:**	20 mL
		Method.....:	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.097	ug/L	0.029
1,3-Dinitrobenzene	ND	0.097	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.097	ug/L	0.097
2,4,6-Trinitrotoluene	ND	0.097	ug/L	0.048
2,4-Dinitrotoluene	ND	0.097	ug/L	0.048
2,6-Dinitrotoluene	ND	0.097	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.085
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.097	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.085
HMX	ND	0.097	ug/L	0.035
Nitrobenzene	ND	0.097	ug/L	0.048
Nitroglycerin	ND	0.63	ug/L	0.32
RDX	ND	0.097	ug/L	0.035
PETN	ND	0.63	ug/L	0.29
Tetryl	ND	0.097	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	92	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-003C-1396-GW

HPLC

Lot-Sample #...: A9G160107-015 **Work Order #...:** LGKFA2AA **Matrix.....:** WG
Date Sampled...: 07/15/09 10:25 **Date Received..:** 07/16/09
Prep Date.....: 07/22/09 **Analysis Date..:** 07/28/09
Prep Batch #...: 9203242
Dilution Factor: 0.96 **Initial Wgt/Vol:** 1034.84 **Final Wgt/Vol..:** 20 mL
Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.096	ug/L	0.029
1,3-Dinitrobenzene	ND	0.096	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.096	ug/L	0.096
2,4,6-Trinitrotoluene	ND	0.096	ug/L	0.048
2,4-Dinitrotoluene	ND	0.096	ug/L	0.048
2,6-Dinitrotoluene	ND	0.096	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.084
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.096	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.084
HMX	ND	0.096	ug/L	0.035
Nitrobenzene	ND	0.096	ug/L	0.048
Nitroglycerin	ND	0.62	ug/L	0.32
RDX	ND	0.096	ug/L	0.035
PETN	ND	0.62	ug/L	0.29
Tetryl	ND	0.096	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	92	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-009C-1401-GW

HPLC

Lot-Sample #...: A9G160107-016 **Work Order #...:** LGKFE2AA **Matrix.....:** WG
Date Sampled...: 07/15/09 11:50 **Date Received..:** 07/16/09
Prep Date.....: 07/22/09 **Analysis Date..:** 07/28/09
Prep Batch #...: 9203242
Dilution Factor: 0.96 **Initial Wgt/Vol:** 1031.72 **Final Wgt/Vol..:** 20 mL
Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.096	ug/L	0.029
1,3-Dinitrobenzene	ND	0.096	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.096	ug/L	0.096
2,4,6-Trinitrotoluene	ND	0.096	ug/L	0.048
2,4-Dinitrotoluene	ND	0.096	ug/L	0.048
2,6-Dinitrotoluene	ND	0.096	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.084
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.096	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.084
HMX	ND	0.096	ug/L	0.035
Nitrobenzene	ND	0.096	ug/L	0.048
Nitroglycerin	ND	0.62	ug/L	0.32
RDX	ND	0.096	ug/L	0.035
PETN	ND	0.62	ug/L	0.29
Tetryl	ND	0.096	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	91	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-008C-1400-GW

HPLC

Lot-Sample #...:	A9G160107-017	**Work Order #...:**	LGKFF2AA	**Matrix.....:**	WG
Date Sampled...:	07/15/09 13:10	**Date Received..:**	07/16/09		
Prep Date.....:	07/22/09	**Analysis Date..:**	07/28/09		
Prep Batch #...:	9203242				
Dilution Factor:	1.02	**Initial Wgt/Vol:**	974.89 m	**Final Wgt/Vol..:**	20 mL
		Method.....:	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.10	ug/L	0.031
1,3-Dinitrobenzene	ND	0.10	ug/L	0.051
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	0.10
2,4,6-Trinitrotoluene	ND	0.10	ug/L	0.051
2,4-Dinitrotoluene	ND	0.10	ug/L	0.051
2,6-Dinitrotoluene	ND	0.10	ug/L	0.051
2-Nitrotoluene	ND	0.51	ug/L	0.090
3-Nitrotoluene	ND	0.51	ug/L	0.058
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	0.051
4-Nitrotoluene	ND	0.51	ug/L	0.090
HMX	ND	0.10	ug/L	0.037
Nitrobenzene	ND	0.10	ug/L	0.051
Nitroglycerin	ND	0.66	ug/L	0.34
RDX	ND	0.10	ug/L	0.037
PETN	ND	0.66	ug/L	0.31
Tetryl	ND	0.10	ug/L	0.051

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	88	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-001C-1395-GW

HPLC

Lot-Sample #...: A9G160107-018 **Work Order #...:** LGKFH2AA **Matrix.....:** WG
Date Sampled...: 07/15/09 14:30 **Date Received..:** 07/16/09
Prep Date.....: 07/22/09 **Analysis Date..:** 07/28/09
Prep Batch #...: 9203242
Dilution Factor: 0.97 **Initial Wgt/Vol:** 1025.65 **Final Wgt/Vol..:** 28 mL
Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.097	ug/L	0.029
1,3-Dinitrobenzene	ND	0.097	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.097	ug/L	0.097
2,4,6-Trinitrotoluene	ND	0.097	ug/L	0.048
2,4-Dinitrotoluene	ND	0.097	ug/L	0.048
2,6-Dinitrotoluene	ND	0.097	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.085
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.097	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.085
HMX	ND	0.097	ug/L	0.035
Nitrobenzene	ND	0.097	ug/L	0.048
Nitroglycerin	ND	0.63	ug/L	0.32
RDX	ND	0.097	ug/L	0.035
PETN	ND	0.63	ug/L	0.29
Tetryl	ND	0.097	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	92	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-005C-1407-GW

HPLC

Lot-Sample #...:	A9G160107-019	**Work Order #...:**	LGKFJ2AA	**Matrix.....:**	WG
Date Sampled...:	07/15/09 16:20	**Date Received..:**	07/16/09		
Prep Date.....:	07/22/09	**Analysis Date..:**	07/28/09		
Prep Batch #...:	9203242				
Dilution Factor:	0.97	**Initial Wgt/Vol:**	1028.12	**Final Wgt/Vol..:**	20 mL
		Method.....:	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.097	ug/L	0.029
1,3-Dinitrobenzene	ND	0.097	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.097	ug/L	0.097
2,4,6-Trinitrotoluene	ND	0.097	ug/L	0.048
2,4-Dinitrotoluene	ND	0.097	ug/L	0.048
2,6-Dinitrotoluene	ND	0.097	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.085
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.097	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.085
HMX	ND	0.097	ug/L	0.035
Nitrobenzene	**0.053 J**	**0.097**	**ug/L**	**0.048**
Nitroglycerin	ND	0.63	ug/L	0.32
RDX	ND	0.097	ug/L	0.035
PETN	ND	0.63	ug/L	0.29
Tetryl	ND	0.097	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	90	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

HPLC

Client Lot #...: A9G160107 **Work Order #...:** LGVTN1AD **Matrix.....:** WATER
MB Lot-Sample #: G9G220000-242

Prep Date.....: 07/22/09 **Final Wgt/Vol..:** 20 mL
Analysis Date..: 07/27/09 **Prep Batch #...:** 9203242
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
1,3,5-Trinitrobenzene	**0.036 J**	**0.10**	**ug/L**	**SW846 8330**
1,3-Dinitrobenzene	ND	0.10	ug/L	SW846 8330
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	SW846 8330
2,4,6-Trinitrotoluene	ND	0.10	ug/L	SW846 8330
2,4-Dinitrotoluene	ND	0.10	ug/L	SW846 8330
2,6-Dinitrotoluene	ND	0.10	ug/L	SW846 8330
2-Nitrotoluene	ND	0.50	ug/L	SW846 8330
3-Nitrotoluene	ND	0.50	ug/L	SW846 8330
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	SW846 8330
4-Nitrotoluene	ND	0.50	ug/L	SW846 8330
HMX	ND	0.10	ug/L	SW846 8330
Nitrobenzene	ND	0.10	ug/L	SW846 8330
Nitroglycerin	ND	0.65	ug/L	SW846 8330
RDX	ND	0.10	ug/L	SW846 8330
PETN	ND	0.65	ug/L	SW846 8330
Tetryl	ND	0.10	ug/L	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	91	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A9G160107 **Work Order #...:** LGVTN1AE **Matrix.....:** WATER
LCS Lot-Sample#: G9G220000-242
Prep Date.....: 07/22/09 **Analysis Date..:** 07/27/09
Prep Batch #...: 9203242
Dilution Factor: 1 **Final Wgt/Vol..:** 20 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,3,5-Trinitrobenzene	**84**	**(53 - 135)**	**SW846 8330**
1,3-Dinitrobenzene	**86**	**(54 - 120)**	**SW846 8330**
2-Amino-4,6-dinitrotoluene	**88**	**(53 - 120)**	**SW846 8330**
2,4,6-Trinitrotoluene	**81**	**(37 - 120)**	**SW846 8330**
2,4-Dinitrotoluene	**82**	**(58 - 136)**	**SW846 8330**
2,6-Dinitrotoluene	**85**	**(52 - 144)**	**SW846 8330**
2-Nitrotoluene	**82**	**(52 - 120)**	**SW846 8330**
3-Nitrotoluene	**82**	**(48 - 136)**	**SW846 8330**
4-Amino-2,6-dinitrotoluene	**82**	**(58 - 159)**	**SW846 8330**
4-Nitrotoluene	**82**	**(46 - 136)**	**SW846 8330**
HMX	**82**	**(45 - 140)**	**SW846 8330**
Nitrobenzene	**87**	**(49 - 120)**	**SW846 8330**
Nitroglycerin	**93**	**(60 - 120)**	**SW846 8330**
RDX	**86**	**(39 - 120)**	**SW846 8330**
PETN	**98**	**(60 - 120)**	**SW846 8330**
Tetryl	**76**	**(30 - 120)**	**SW846 8330**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	90	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A9G160107 **Work Order #...:** LGKD01AL-MS **Matrix.....:** WG
MS Lot-Sample #: A9G160107-001 LGKD01AM-MSD
Date Sampled...: 07/15/09 08:35 **Date Received..:** 07/16/09
Prep Date.....: 07/22/09 **Analysis Date..:** 07/28/09
Prep Batch #...: 9203242
Dilution Factor: 1 **Initial Wgt/Vol:** 944.44 mL **Final Wgt/Vol..:** 20 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3,5-Trinitrobenzene	81	(50 - 150)			SW846 8330
	82	(50 - 150)	1.8	(0-50)	SW846 8330
1,3-Dinitrobenzene	85	(50 - 150)			SW846 8330
	86	(50 - 150)	2.6	(0-50)	SW846 8330
2-Amino-4,6-dinitrotoluene	88	(50 - 150)			SW846 8330
	89	(50 - 150)	2.7	(0-50)	SW846 8330
2,4,6-Trinitrotoluene	81	(50 - 150)			SW846 8330
	81	(50 - 150)	2.8	(0-50)	SW846 8330
2,4-Dinitrotoluene	82	(50 - 150)			SW846 8330
	83	(50 - 150)	2.2	(0-50)	SW846 8330
2,6-Dinitrotoluene	85	(50 - 150)			SW846 8330
	86	(50 - 150)	1.6	(0-50)	SW846 8330
2-Nitrotoluene	82	(50 - 150)			SW846 8330
	83	(50 - 150)	3.1	(0-50)	SW846 8330
3-Nitrotoluene	84	(50 - 150)			SW846 8330
	84	(50 - 150)	3.0	(0-50)	SW846 8330
4-Amino-2,6-dinitrotoluene	84	(50 - 150)			SW846 8330
	84	(50 - 150)	3.4	(0-50)	SW846 8330
4-Nitrotoluene	82	(50 - 150)			SW846 8330
	83	(50 - 150)	2.4	(0-50)	SW846 8330
HMX	80	(50 - 150)			SW846 8330
	81	(50 - 150)	3.1	(0-50)	SW846 8330
Nitrobenzene	86	(50 - 150)			SW846 8330
	86	(50 - 150)	3.2	(0-50)	SW846 8330
Nitroglycerin	91	(50 - 150)			SW846 8330
	92	(50 - 150)	2.2	(0-50)	SW846 8330
RDX	82	(50 - 150)			SW846 8330
	86	(50 - 150)	0.25	(0-50)	SW846 8330
PETN	95	(50 - 150)			SW846 8330
	100	(50 - 150)	1.4	(0-50)	SW846 8330
Tetryl	74	(50 - 150)			SW846 8330
	75	(50 - 150)	1.6	(0-50)	SW846 8330

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A9G160107 **Work Order #...:** LGKD01AL-MS **Matrix.....:** WG
MS Lot-Sample #: A9G160107-001 LGKD01AM-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	91	(50 - 150)
	92	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A9G160107 **Work Order #...:** LGKD71AL-MS **Matrix.....:** WG
MS Lot-Sample #: A9G160107-003 LGKD71AM-MSD
Date Sampled...: 07/15/09 11:55 **Date Received..:** 07/16/09
Prep Date.....: 07/22/09 **Analysis Date..:** 07/28/09
Prep Batch #...: 9203242
Dilution Factor: 1.01 **Initial Wgt/Vol:** 980.97 mL **Final Wgt/Vol..:** 20 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3,5-Trinitrobenzene	89	(50 - 150)			SW846 8330
	104	(50 - 150)	12	(0-50)	SW846 8330
1,3-Dinitrobenzene	86	(50 - 150)			SW846 8330
	91	(50 - 150)	2.5	(0-50)	SW846 8330
2-Amino-4,6-dinitrotoluene	89	(50 - 150)			SW846 8330
	94	(50 - 150)	2.9	(0-50)	SW846 8330
2,4,6-Trinitrotoluene	83	(50 - 150)			SW846 8330
	87	(50 - 150)	2.5	(0-50)	SW846 8330
2,4-Dinitrotoluene	84	(50 - 150)			SW846 8330
	89	(50 - 150)	3.5	(0-50)	SW846 8330
2,6-Dinitrotoluene	88	(50 - 150)			SW846 8330
	95	(50 - 150)	4.4	(0-50)	SW846 8330
2-Nitrotoluene	86	(50 - 150)			SW846 8330
	91	(50 - 150)	1.6	(0-50)	SW846 8330
3-Nitrotoluene	85	(50 - 150)			SW846 8330
	90	(50 - 150)	2.4	(0-50)	SW846 8330
4-Amino-2,6-dinitrotoluene	103	(50 - 150)			SW846 8330
	125	(50 - 150)	16	(0-50)	SW846 8330
4-Nitrotoluene	85	(50 - 150)			SW846 8330
	90	(50 - 150)	2.4	(0-50)	SW846 8330
HMX	88	(50 - 150)			SW846 8330
	94	(50 - 150)	3.0	(0-50)	SW846 8330
Nitrobenzene	120	(50 - 150)			SW846 8330
	181 a	(50 - 150)	38	(0-50)	SW846 8330
Nitroglycerin	93	(50 - 150)			SW846 8330
	95	(50 - 150)	1.8	(0-50)	SW846 8330
RDX	86	(50 - 150)			SW846 8330
	92	(50 - 150)	4.5	(0-50)	SW846 8330
PETN	102	(50 - 150)			SW846 8330
	103	(50 - 150)	2.6	(0-50)	SW846 8330
Tetryl	77	(50 - 150)			SW846 8330
	81	(50 - 150)	2.8	(0-50)	SW846 8330

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A9G160107 **Work Order #...:** LGKD71AL-MS **Matrix.....:** WG
MS Lot-Sample #: A9G160107-003 LGKD71AM-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	92	(50 - 150)
	91	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

8330MOD NITROGUANIDINE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ September 3, 2009

SDG: A9G160107 R0
Analysis: SW846 8330M Nitroguanadine

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.6 – 4.8 °C. Upon receipt, it was documented by the laboratory, that the samples were not frozen and in good condition. Therefore, no qualifications were made to sample results based on temperatures less than 2°C.	QAPP Table 4-2
3. Were holding times met?	✓			Checked by ADR.	QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Tale 3-7
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-7
7. Was a MDL Level Verification analyzed once per quarter with all target analytes detected?	✓			7/21/09	LCG Table 5 R
8. Was a MRL Level verification run at the beginning and end of every daily sequence or every 12 hours? Was the %D < 30%?	✓				LCG Table 5 >30%=J
9. Does the initial calibration curve consist of 5 concentration levels? (6 stds for quadratic curves)	✓			Varian Star #1 ICAL: 1/29/09 primary column Stds: 20, 50, 100, 200, 500, 1000	STL SOP Section 10.2, LCG R
10. Were all target analytes %RSD ≤ 20%? OR was the average RSD ≤ 20%?	✓				LCG Table 5 >20% RSD=J/R
11. If a linear regression curve was used, was the correlation coefficient r≥0.995? (0.990 for Quadratic curve)	✓			Linear fit used. No qualifications were made as r>0.995.	STL SOP Section 10.4, LCG R<0.99=-J/R
12. Was a second source verification (ICV) analyzed after the ICAL and all analytes 85-115%?	✓			1/29/09 @ 2110	STL SOP Section 9.9 >115%=J; 80-85%=J/UJ; <80%=J/R
13. Was a CCV run at least every 10 samples and at the end of the analytical run?	✓				STL SOP Section 10.9

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ September 3, 2009

SDG: A9G160107 R0
Analysis: SW846 8330M Nitroguanadine

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
14. Was the average %D (difference or drift) for all target analytes < 15%?	✓				LCG Table 5 D>15% (neg) = J/R D>15% (pos) = J
15. Was a method blank prepared and analyzed with each batch?	✓				LCG Attachment A Section 5.6
16. Were target analytes reported in the method blank <1/2 the MRL?	✓				LCG Table 5 <5x = B
17. Was a field blank collected and analyzed?	✓			FWGEQUIPRinse3-1425-GW	
18. Were target analytes reported in the field blank analyses < ½ the MRL?	✓				<5x=B
19. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓			Sample FWGLL11mw-DUP5-1417-GW was the field duplicate for sample FWGLL11mw-010c-1402-GW and FWGLL10mw-DUP4-1416-GW was the field duplicate for sample FWGLL10mw-006c-1394-GW.	QAPP Table 3-2 RPD >30=J
20. Were all positive results confirmed with a second column confirmation? Was the RPD ≤ 40%?			✓		LCG Table 5 RPD>40%=J
21. Was an LCS prepared and analyzed with each batch?	✓				STL SOP Section 9.6
22. Were the LCS recoveries within limits specified in LCG Appendix C?	✓				LCG Appendix C <UL=J; 30-LL=J/UJ; <30%=J/R
23. Was a MS/MSD pair prepared with each batch?	✓				STL SOP Section 9.7
24. Was the MS/MSD parent a Ravenna sample?	✓			Sample FWGLL10mw-004c-1392-GW and FWGLL11mw-004c-1397-GW were the parent MS/MSD samples from this SDG.	
25. Were MS/MSD recoveries 40-140% and RPD ≤20%?	✓				QAPP Table 3-2 Pj
27. Were reported sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ September 3, 2009

SDG: A9G160107 R0
Analysis: SW846 8330M Nitroguanadine

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
29. Were lab comments included in report? If yes, summarize contents.		✓			

References: Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 5 and Attachment A "Data Validation Guidelines.

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

STL SOP SAC-LC-0010 "Determination of Nitroguanidine Based on Method 8330, SW-846" April 2007, revision 2.0

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-004C-1392-GW

Dissolved HPLC

Lot-Sample #...: A9G160107-001 **Work Order #...:** LGKD01AH **Matrix.....:** WG
Date Sampled...: 07/15/09 08:35 **Date Received..:** 07/16/09
Prep Date.....: 07/22/09 **Analysis Date..:** 07/23/09
Prep Batch #...: 9203289
Dilution Factor: 1 **Method.....:** SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-005C-1393-GW

Dissolved HPLC

Lot-Sample #...: A9G160107-002 **Work Order #...:** LGKD51AD **Matrix.....:** WG
Date Sampled...: 07/15/09 10:35 **Date Received..:** 07/16/09
Prep Date.....: 07/22/09 **Analysis Date..:** 07/23/09
Prep Batch #...: 9203289
Dilution Factor: 1 **Method.....:** SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-004C-1397-GW

Dissolved HPLC

Lot-Sample #...: A9G160107-003 **Work Order #...:** LGKD71AH **Matrix.....:** WG
Date Sampled...: 07/15/09 11:55 **Date Received..:** 07/16/09
Prep Date.....: 07/22/09 **Analysis Date..:** 07/23/09
Prep Batch #...: 9203289
Dilution Factor: 1 **Method.....:** SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-006C-1399-GW

Dissolved HPLC

Lot-Sample #...: A9G160107-004 **Work Order #...:** LGKEA1AD **Matrix.....:** WG
Date Sampled...: 07/15/09 14:05 **Date Received..:** 07/16/09
Prep Date.....: 07/22/09 **Analysis Date..:** 07/23/09
Prep Batch #...: 9203289
Dilution Factor: 1 **Method.....:** SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-003C-1405-GW

Dissolved HPLC

Lot-Sample #...: A9G160107-005 **Work Order #...:** LGKEC1AD **Matrix.....:** WG
Date Sampled...: 07/15/09 15:30 **Date Received..:** 07/16/09
Prep Date.....: 07/22/09 **Analysis Date..:** 07/23/09
Prep Batch #...: 9203289
Dilution Factor: 1 **Method.....:** SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-004C-1406-GW

Dissolved HPLC

Lot-Sample #...: A9G160107-006 **Work Order #...:** LGKEG1AD **Matrix.....:** WG
Date Sampled...: 07/15/09 16:45 **Date Received..:** 07/16/09
Prep Date.....: 07/22/09 **Analysis Date..:** 07/23/09
Prep Batch #...: 9203289
Dilution Factor: 1 **Method.....:** SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-006C-1394-GW

Dissolved HPLC

Lot-Sample #...:	A9G160107-007	**Work Order #...:**	LGKEH1AD	**Matrix.....:**	WG
Date Sampled...:	07/15/09 08:50	**Date Received..:**	07/16/09		
Prep Date.....:	07/22/09	**Analysis Date..:**	07/23/09		
Prep Batch #...:	9203289				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-DUP4-1416-GW

Dissolved HPLC

Lot-Sample #...: A9G160107-008 **Work Order #...:** LGKEL1AD **Matrix.....:** WG
Date Sampled...: 07/15/09 10:00 **Date Received..:** 07/16/09
Prep Date.....: 07/22/09 **Analysis Date..:** 07/23/09
Prep Batch #...: 9203289
Dilution Factor: 1 **Method.....:** SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-010C-1402-GW

Dissolved HPLC

Lot-Sample #...: A9G160107-009 **Work Order #...:** LGKEN1AD **Matrix.....:** WG
Date Sampled...: 07/15/09 11:00 **Date Received..:** 07/16/09
Prep Date.....: 07/22/09 **Analysis Date..:** 07/23/09
Prep Batch #...: 9203289
Dilution Factor: 1 **Method.....:** SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-DUP5-1417-GW

Dissolved HPLC

Lot-Sample #...:	A9G160107-010	**Work Order #...:**	LGKEQ1AD	**Matrix.....:**	WG
Date Sampled...:	07/15/09 12:00	**Date Received..:**	07/16/09		
Prep Date.....:	07/22/09	**Analysis Date..:**	07/23/09		
Prep Batch #...:	9203289				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-001C-1403-GW

Dissolved HPLC

Lot-Sample #...: A9G160107-011 **Work Order #...:** LGKET1AD **Matrix.....:** WG
Date Sampled...: 07/15/09 14:10 **Date Received..:** 07/16/09
Prep Date.....: 07/22/09 **Analysis Date..:** 07/23/09
Prep Batch #...: 9203289
Dilution Factor: 1 **Method.....:** SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1425-GW

Dissolved HPLC

Lot-Sample #...:	A9G160107-012	**Work Order #...:**	LGKE01AD	**Matrix.....:**	WQ
Date Sampled...:	07/15/09 14:50	**Date Received..:**	07/16/09		
Prep Date.....:	07/22/09	**Analysis Date..:**	07/23/09		
Prep Batch #...:	9203289				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-002C-1404-GW

Dissolved HPLC

Lot-Sample #...:	A9G160107-013	**Work Order #...:**	LGKE51AD	**Matrix.....:**	WG
Date Sampled...:	07/15/09 15:20	**Date Received..:**	07/16/09		
Prep Date.....:	07/22/09	**Analysis Date..:**	07/23/09		
Prep Batch #...:	9203289				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-005C-1398-GW

Dissolved HPLC

Lot-Sample #...: A9G160107-014 **Work Order #...:** LGKE71AD **Matrix.....:** WG
Date Sampled...: 07/15/09 08:45 **Date Received..:** 07/16/09
Prep Date.....: 07/22/09 **Analysis Date..:** 07/23/09
Prep Batch #...: 9203289
Dilution Factor: 1 **Method.....:** SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-003C-1396-GW

Dissolved HPLC

Lot-Sample #...:	A9G160107-015	**Work Order #...:**	LGKFA1AD	**Matrix.....:**	WG
Date Sampled...:	07/15/09 10:25	**Date Received..:**	07/16/09		
Prep Date.....:	07/22/09	**Analysis Date..:**	07/23/09		
Prep Batch #...:	9203289				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-009C-1401-GW

Dissolved HPLC

Lot-Sample #...:	A9G160107-016	**Work Order #...:**	LGKFE1AD	**Matrix.....:**	WG
Date Sampled...:	07/15/09 11:50	**Date Received..:**	07/16/09		
Prep Date.....:	07/22/09	**Analysis Date..:**	07/23/09		
Prep Batch #...:	9203289				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-008C-1400-GW

Dissolved HPLC

Lot-Sample #...: A9G160107-017 **Work Order #...:** LGKFF1AD **Matrix.....:** WG
Date Sampled...: 07/15/09 13:10 **Date Received..:** 07/16/09
Prep Date.....: 07/22/09 **Analysis Date..:** 07/23/09
Prep Batch #...: 9203289
Dilution Factor: 1 **Method.....:** SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-001C-1395-GW

Dissolved HPLC

Lot-Sample #...: A9G160107-018 **Work Order #...:** LGKFH1AD **Matrix.....:** WG
Date Sampled...: 07/15/09 14:30 **Date Received..:** 07/16/09
Prep Date.....: 07/22/09 **Analysis Date..:** 07/23/09
Prep Batch #...: 9203289
Dilution Factor: 1 **Method.....:** SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-005C-1407-GW

Dissolved HPLC

Lot-Sample #...:	A9G160107-019	**Work Order #...:**	LGKFJ1AD	**Matrix.....:**	WG
Date Sampled...:	07/15/09 16:20	**Date Received..:**	07/16/09		
Prep Date.....:	07/22/09	**Analysis Date..:**	07/23/09		
Prep Batch #...:	9203289				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

METHOD BLANK REPORT

HPLC

Client Lot #...: A9G160107 Work Order #...: LGV211AA Matrix.....: WATER
MB Lot-Sample #: G9G220000-289

Prep Date.....: 07/22/09
Analysis Date..: 07/23/09 Prep Batch #...: 9203289
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Nitroguanidine	ND	20	ug/L	SW846 8330 (Modif

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A9G160107 Work Order #...: LGV211AC Matrix.....: WATER
LCS Lot-Sample#: G9G220000-289
Prep Date.....: 07/22/09 Analysis Date..: 07/23/09
Prep Batch #...: 9203289
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Nitroguanidine	98	(73 - 117)	SW846 8330 (Modified

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A9G160107 **Work Order #...:** LGKD01AJ-MS **Matrix.....:** WG
MS Lot-Sample #: A9G160107-001 LGKD01AK-MSD
Date Sampled...: 07/15/09 08:35 **Date Received..:** 07/16/09
Prep Date.....: 07/22/09 **Analysis Date..:** 07/23/09
Prep Batch #...: 9203289
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Nitroguanidine	101	(73 - 117)			SW846 8330 (Modified
	105	(73 - 117)	3.2	(0-15)	SW846 8330 (Modified

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A9G160107 Work Order #...: LGKD71AJ-MS Matrix.....: WG
MS Lot-Sample #: A9G160107-003 LGKD71AK-MSD
Date Sampled...: 07/15/09 11:55 Date Received..: 07/16/09
Prep Date.....: 07/22/09 Analysis Date..: 07/23/09
Prep Batch #...: 9203289
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Nitroguanidine	106	(73 - 117)			SW846 8330 (Modified
	105	(73 - 117)	0.48	(0-15)	SW846 8330 (Modified

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

GENERAL CHEMISTRY DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ September 3, 2009

SDG: A9G160107 Rev 0
Analysis: EPA 353.2- Nitrocellulose

Review Questions:	Yes	No	N/A	Comments	Qualifier
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.6 – 4.8 °C. Upon receipt, it was documented by the laboratory, that the samples were not frozen and in good condition. Therefore, no qualifications were made to sample results based on temperatures less than 2°C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	✓				QAPP Table 3.7
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3.7
7. Was Acetone used to extract the samples? Was the Acetone evaporated using Nitrogen?	✓				STL SOP Sections 11.4
8. Does the initial calibration curve consist of 5 concentration levels with the low standard near but > MDL?	✓			Instrument FS4; ICAL 7/28/09 Stds- 0, 0.05, 0.2, 0.4, 1, 2	STL SOP Section 10.2 R
9. Was the correlation coefficient >0.995?	✓				STL SOP Section 10.2
10. Was a MRL Level Verification run at the beginning and end of every daily sequence or every 12 hours? Was the %D <30%?	✓				LCG Table 5 >30%=J
11. Was a second source verification (ICV) analyzed after the ICAL? Were all analytes 90-110%?	✓				STL SOP Section 9.8, 10.3, LCG >110%=J; 90-85%=J/UJ; <85%=J/R
12. Was the ICB analyzed after the ICV with results <1/2 the MRL?	✓				STL SOP Section 9.8, LCG < 5x = U
13. Was a CCV run every 10 samples and at the end of the analytical run?	✓				STL SOP Section 10.4
14. Was the ICV and CCV a mid-level standard from the initial calibration curve?	✓				STL SOP Section 10.3.1

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ September 3, 2009

SDG: A9G160107 Rev 0
Analysis: EPA 353.2- Nitrocellulose

Review Questions:	Yes	No	N/A	Comments	Qualifier
15. Were all CCV calibration analytes within 90-110%?	✓				STL SOP Section 10.4, LCG >110%=J; 85-90%=J/UJ; <85%=J/R
16. Was the ICB analyzed after the ICV with results <1/2 the MRL?	✓				STL SOP Section 10.4, LCG < 5x = U
17. Was the Nitrocellulose assay available and/or analyzed to be within 10%?	✓				STL SOP Section 7.14.1 R
18. Was a method blank prepared and analyzed with each batch?	✓				
19. Were target analytes reported in the method blank <1/2 the MRL?	✓			ADR checked section.	STL SOP Section 9.4, LCG <5x=B
20. Was a field blank collected and analyzed?	✓			FWGEQUIPRinse3-1425-GW	
21. Were target analytes reported in the field blank analyses <1/2 the MRL?	✓				<5x=B
22. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓			ADR checked section. Sample FWGLL11mw-DUP5-1417-GW was the field duplicate for sample FWGLL11mw-010c-1402-GW and FWGLL10mw-DUP4-1416-GW was the field duplicate for sample FWGLL10mw-006c-1394-GW.	QAPP Table 3-2 RPD > 30% = J
23. Was an LCS prepared and analyzed with each batch? Was the LCS recovery within lab's in-house limits% (26-144%)?	✓				>UL%=J; 50-LL%=J/UJ; <50%=J/R
24. Was a MS/MSD pair prepared with each batch?	✓				
25. Was the MS/MSD parent a Ravenna sample?	✓			Sample FWGLL10mw-004c-1392-GW and FWGLL11mw-004c-1397-GW were the parent MS/MSD samples from this SDG.	
26. Were MS/MSD recoveries 26-144% and RPD ≤20?	✓			ADR checked section.	Method EPA 353.2 Section 9.4.2 >UL%=J; <LL%=J/UJ; RPD>20%=J/UJ

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ September 3, 2009

SDG: A9G160107 Rev 0
Analysis: EPA 353.2- Nitrocellulose

Review Questions:	Yes	No	N/A	Comments	Qualifier
27. Were sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
30. Were lab comments included in report? If yes, summarize contents.		✓			

References: *STL SOP SAC-WC-0050 "Preparation and Analysis of Nitrocellulose in Aqueous and Soil/Sediment Samples by Colorimetric Autoanalyzer", Jan 2007, rev. 2.0*

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-004C-1392-GW

General Chemistry

Lot-Sample #...: A9G160107-001 **Work Order #...:** LGKD0 **Matrix.....:** WG
Date Sampled...: 07/15/09 08:35 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/24-07/28/09	9205303

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-005C-1393-GW

General Chemistry

Lot-Sample #...: A9G160107-002 **Work Order #...:** LGKD5 **Matrix.....:** WG
Date Sampled...: 07/15/09 10:35 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/24-07/28/09	9205303

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-004C-1397-GW

General Chemistry

Lot-Sample #...: A9G160107-003 **Work Order #...:** LGKD7 **Matrix.....:** WG
Date Sampled...: 07/15/09 11:55 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/24-07/28/09	9205303

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-006C-1399-GW

General Chemistry

Lot-Sample #...: A9G160107-004 **Work Order #...:** LGKEA **Matrix.....:** WG
Date Sampled...: 07/15/09 14:05 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/24-07/28/09	9205303

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-003C-1405-GW

General Chemistry

Lot-Sample #...: A9G160107-005 **Work Order #...:** LGKEC **Matrix.....:** WG
Date Sampled...: 07/15/09 15:30 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/24-07/28/09	9205303

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-004C-1406-GW

General Chemistry

Lot-Sample #...: A9G160107-006 **Work Order #...:** LGKEG **Matrix.....:** WG
Date Sampled...: 07/15/09 16:45 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/24-07/28/09	9205303

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-006C-1394-GW

General Chemistry

Lot-Sample #...: A9G160107-007 **Work Order #...:** LGKEH **Matrix.....:** WG
Date Sampled...: 07/15/09 08:50 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/24-07/28/09	9205303

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-DUP4-1416-GW

General Chemistry

Lot-Sample #...: A9G160107-008 **Work Order #...:** LGKEL **Matrix.....:** WG
Date Sampled...: 07/15/09 10:00 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/24-07/28/09	9205303

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-010C-1402-GW

General Chemistry

Lot-Sample #...: A9G160107-009 **Work Order #...:** LGKEN **Matrix.....:** WG
Date Sampled...: 07/15/09 11:00 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/24-07/28/09	9205303

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-DUP5-1417-GW

General Chemistry

Lot-Sample #...: A9G160107-010 **Work Order #...:** LGKEQ **Matrix.....:** WG
Date Sampled...: 07/15/09 12:00 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/24-07/28/09	9205303

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-001C-1403-GW

General Chemistry

Lot-Sample #...: A9G160107-011 **Work Order #...:** LGKET **Matrix.....:** WG
Date Sampled...: 07/15/09 14:10 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/24-07/28/09	9205303

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1425-GW

General Chemistry

Lot-Sample #...: A9G160107-012 **Work Order #...:** LGKE0 **Matrix.....:** WQ
Date Sampled...: 07/15/09 14:50 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/24-07/28/09	9205303

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-002C-1404-GW

General Chemistry

Lot-Sample #...: A9G160107-013 **Work Order #...:** LGKE5 **Matrix.....:** WG
Date Sampled...: 07/15/09 15:20 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/24-07/28/09	9205303

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-005C-1398-GW

General Chemistry

Lot-Sample #...: A9G160107-014 **Work Order #...:** LGKE7 **Matrix.....:** WG
Date Sampled...: 07/15/09 08:45 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/24-07/28/09	9205303

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-003C-1396-GW

General Chemistry

Lot-Sample #...: A9G160107-015 **Work Order #...:** LGKFA **Matrix.....:** WG
Date Sampled...: 07/15/09 10:25 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/24-07/28/09	9205303

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-009C-1401-GW

General Chemistry

Lot-Sample #...: A9G160107-016 **Work Order #...:** LGKFE **Matrix.....:** WG
Date Sampled...: 07/15/09 11:50 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/24-07/28/09	9205303

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-008C-1400-GW

General Chemistry

Lot-Sample #...: A9G160107-017 **Work Order #...:** LGKFF **Matrix.....:** WG
Date Sampled...: 07/15/09 13:10 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/24-07/28/09	9205303

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-001C-1395-GW

General Chemistry

Lot-Sample #...: A9G160107-018 **Work Order #...:** LGKFH **Matrix.....:** WG
Date Sampled...: 07/15/09 14:30 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/24-07/28/09	9205303

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-005C-1407-GW

General Chemistry

Lot-Sample #...: A9G160107-019 **Work Order #...:** LGKFJ **Matrix.....:** WG
Date Sampled...: 07/15/09 16:20 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/24-07/28/09	9205303

Dilution Factor: 1 MDL.....: 0.12

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A9G160107 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		Work Order #: LG12C1AA		MB Lot-Sample #:	G9G240000-303	
	ND	0.50	mg/L	MCAWW 353.2	07/24-07/28/09	9205303
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A9G160107 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		Work Order #: LG12C1AC	LCS Lot-Sample#: G9G240000-303		
	91	(26 - 144)	MCAWW 353.2	07/24-07/28/09	9205303
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A9G160107 **Matrix.....:** WG
Date Sampled...: 07/15/09 11:55 **Date Received..:** 07/16/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		WO#: LGKD01AF-MS/LGKD01AG-MSD				MS Lot-Sample #: A9G160107-001	
	89	(26 - 144)			MCAWW 353.2	07/24-07/28/09	9205303
	86	(26 - 144)	3.4	(0-45)	MCAWW 353.2	07/24-07/28/09	9205303
		Dilution Factor: 1					
Nitrocellulose		WO#: LGKD71AF-MS/LGKD71AG-MSD				MS Lot-Sample #: A9G160107-003	
	82	(26 - 144)			MCAWW 353.2	07/24-07/28/09	9205303
	90	(26 - 144)	9.1	(0-45)	MCAWW 353.2	07/24-07/28/09	9205303
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Appendix I

Reason Code Library: Example 1

Category	Code
Low Bias Indicator	-
High Bias Indicator	+
Temperature	A
Holding Times	
Sampling to Analysis	C
Sampling to Extraction	D
Extaction to Analysis	E
Method Blanks	F
Surrogate Recovery	G
MS/MSD	
MS/MSD Recovery	H
MS/MSD RPD	I
LCS	
LCS Recovery	J
LCS RPD	K
Reporting Limits	L
Field QC	
Field Blank	M
Equipment Blank	N
Trip Blank	O
Field Duplicate	P

Category	Code
Initial Calibration	
Initial Calibration RRF	Q
Initial Calibration RSD	R
Initial Calibration Cor. Coef	S
Initial Calibration Verification	
Initial Calibration Verificaton RRF	T
Initial CalibrationVerification %D	U
Continuing Calibration	
Continuing Calibraiton RRF	V
Continuing Calibration %D	W
GC/MS Tune	
GC/MS Tune for Initial Calibration	X
GC/MS Tune for Continuing Calibration	Y
Laboratory Duplicate	Z
Categories not Assessed by Automated Data Review*	
Internal Standards	Is
Calibration Blanks	Cb
Resolution Check Mixture	Rm
Performance Evaluation Mixture	Pm
Professional Judgement	Pj

* Qualifiers for data-review categories not assessed by automated data review are manually entered by the user. The application automaticallly adds reason codes listed here when the user manually adds qualifiers for these categories if the option for applying reason codes was selected during automated data review.

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G160107										
8330	FWGASYmw-005C-1407-GW	AQ	N							
				Nitrobenzene	0.097	0.053J		J	ug/L	L
8330	FWGLL10mw-006C-1394-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.10	0.035J B		JB	ug/L	L,P,F
8330	FWGLL11mw-010C-1402-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.12	0.040J B		JB	ug/L	L,F
				Nitrobenzene	0.12	0.077J		J	ug/L	L,P
8330	FWGLL11mw-DUP5-1417-GW	AQ	FD							
				1,3,5-Trinitrobenzene	0.098	0.031J B		JB	ug/L	L,F

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGASYmw-005C-1407-GW **Lab Report Batch :** A9G160107 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A9G160107019

Reviewed By / Date : Angye Dragotta 9/15/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 0.97**															
Nitrobenzene	0.053		ug/L	J	YES	J								J							L

Project Number and Name: 30240.0006 - RVAAP (OH) **Library Used:** Ravenna GW

ADR 8.1 Report Date: 9/15/2009 17:11 Page 1 of 4

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL10mw-006C-1394-GW **Lab Report Batch :** A9G160107 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A9G160107007

Reviewed By / Date : Angye Dragotta 9/15/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 1.05**															
1,3,5-Trinitrobenzene	0.035		ug/L	J B	YES	~~UJ~~ JB			~~U~~					J							L,P,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL11mw-010C-1402-GW **Lab Report Batch :** A9G160107 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A9G160107009

Reviewed By / Date : Angye Dragotta 9/15/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 1.17**															
1,3,5-Trinitrobenzene	0.040		ug/L	J B	YES	~~U~~ JB			~~U~~ JB					J							L,F
Nitrobenzene	0.077		ug/L	J	YES	J								J							L,P

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL11mw-DUP5-1417-GW **Lab Report Batch :** A9G160107 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A9G160107010

Reviewed By / Date : Angye Dragotta 9/15/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 0.98**															
1,3,5-Trinitrobenzene	0.031		ug/L	J B	YES	~~UJ~~ JB			~~U~~ JB					J							L,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

QC Outlier Report: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: A9G160107 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGASYmw-001C-1403-	A9G160107011	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGASYmw-002C-1404-	A9G160107013	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGASYmw-003C-1405-	A9G160107005	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGASYmw-004C-1406-	A9G160107006	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGASYmw-005C-1407-	A9G160107019	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGEQUIPRINSE3-1425	A9G160107012	8330	AQ	2-Nitrotoluene	U	0.50	0.20	ug/L
				3-Nitrotoluene	U	0.50	0.20	ug/L
				4-Nitrotoluene	U	0.50	0.20	ug/L
FWGLL10mw-004C-1392-	A9G160107001	8330	AQ	2-Nitrotoluene	U	0.50	0.20	ug/L
				3-Nitrotoluene	U	0.50	0.20	ug/L
				4-Nitrotoluene	U	0.50	0.20	ug/L
FWGLL10mw-005C-1393-	A9G160107002	8330	AQ	2-Nitrotoluene	U	0.50	0.20	ug/L
				3-Nitrotoluene	U	0.50	0.20	ug/L
				4-Nitrotoluene	U	0.50	0.20	ug/L
FWGLL10mw-006C-1394-	A9G160107007	8330	AQ	2-Nitrotoluene	U	0.52	0.21	ug/L
				3-Nitrotoluene	U	0.52	0.21	ug/L
				4-Nitrotoluene	U	0.52	0.21	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: **30240.0006 - RVAAP (OH)**

QC Outlier Report: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: A9G160107 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGLL10mw-DUP4-1416	A9G160107008	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGLL11mw-001C-1395-	A9G160107018	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGLL11mw-003C-1396-	A9G160107015	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGLL11mw-004C-1397-	A9G160107003	8330	AQ	2-Nitrotoluene	U	0.50	0.20	ug/L
				3-Nitrotoluene	U	0.50	0.20	ug/L
				4-Nitrotoluene	U	0.50	0.20	ug/L
FWGLL11mw-005C-1398-	A9G160107014	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGLL11mw-006C-1399-	A9G160107004	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGLL11mw-008C-1400-	A9G160107017	8330	AQ	2-Nitrotoluene	U	0.51	0.20	ug/L
				3-Nitrotoluene	U	0.51	0.20	ug/L
				4-Nitrotoluene	U	0.51	0.20	ug/L
FWGLL11mw-009C-1401-	A9G160107016	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGLL11mw-010C-1402-	A9G160107009	8330	AQ	2,4-Dinitrotoluene	U	0.12	0.12	ug/L
				2,6-Dinitrotoluene	U	0.12	0.12	ug/L
				2-Nitrotoluene	U	0.58	0.23	ug/L
				3-Nitrotoluene	U	0.58	0.23	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: **30240.0006 - RVAAP (OH)**

QC Outlier Report: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: A9G160107 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGLL11mw-010C-1402-	A9G160107009	8330	AQ	4-Nitrotoluene	U	0.58	0.23	ug/L
FWGLL11mw-DUP5-1417	A9G160107010	8330	AQ	2-Nitrotoluene	U	0.49	0.20	ug/L
				3-Nitrotoluene	U	0.49	0.20	ug/L
				4-Nitrotoluene	U	0.49	0.20	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: **30240.0006 - RVAAP (OH)**

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A9G160107 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGASYmw-005C-1407-	A9G160107019	8330	AQ	Nitrobenzene	J	0.053	0.097	ug/L
FWGLL10mw-006C-1394-	A9G160107007			1,3,5-Trinitrobenzene	J B	0.035	0.10	ug/L
FWGLL11mw-010C-1402-	A9G160107009			1,3,5-Trinitrobenzene	J B	0.040	0.12	ug/L
				Nitrobenzene	J	0.077	0.12	ug/L
FWGLL11mw-DUP5-1417	A9G160107010			1,3,5-Trinitrobenzene	J B	0.031	0.098	ug/L

Method Blank Outlier Report

Lab Reporting Batch : A9G160107
Analysis Method : 8330
Preparation Type : 3535
Method Blank Lab Sample ID : G9G220000242B

Lab ID: TALCAN
Analysis Date : 07/27/2009
Preparation Date : 07/22/2009
Preparation Batch : 9203242

1,3,5-Trinitrobenzene	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	0.036	0.10	ug/L	J	

1,3,5-Trinitrobenzene was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
FWGLL10mw-006C-1394-G	A9G160107007	1.05	0.035	J B	ug/L
FWGLL11mw-010C-1402-G	A9G160107009	1.17	0.040	J B	ug/L
FWGLL11mw-DUP5-1417-G	A9G160107010	0.98	0.031	J B	ug/L

QC Outlier Report: Field Duplicates (Non-qualified Outliers)

Lab Report Batch: A9G160107 **Lab ID:** TALCAN

			Field Sample				Field Sample Duplicate						
Analysis Method	Matrix	Analyte Name	Client Sample ID	Ana Type	Result	Lab Qualifier	Client Sample Duplicate ID	Ana Type	Result	Lab Qualifier	RPD Dup* (%)	RPD Criteria (%)	Result Units
8330	AQ	1,3,5-Trinitrobenzene	FWGLL10mw-006	RE	0.035	J B	FWGLL10mw-DU	RE	0.097	U	200.0	30	ug/L
8330	AQ	Nitrobenzene	FWGLL11mw-010	RE	0.077	J	FWGLL11mw-DU	RE	0.098	U	200.0	30	ug/L

**Note: Outlier report also includes analytes detected in one sample but not in the related sample, i.e., analyte was detected in the field sample but not in the field duplicate sample, or vice versa. In this case, RPD value assigned to the field duplicate sample is 200.*

Project Number and Name: ***30240.0006 - RVAAP (OH)***

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2009 **Date:** September 1, 2009
STL Sample Delivery Group: A9G160110 **Revision:** 0

Data Validator: Angye Dragotta/Environmental Quality Management, Inc. (EQM, Inc.)

QA/QC Summary

On July 15, 2009, the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A9G160110.

Field Sample ID	Analytes	Method
FWGLL10mw-004c-1392-GF	Perchlorate	SW846 6860
FWGLL10mw-005c-1393-GF		
FWGLL11mw-004c-1397-GF		
FWGLL11mw-006c-1399-GF		
FWGASYmw-003c-1405-GF		
FWGASYmw-004c-1406-GF		
FWGLL10mw-006c-1394-GF		
FWGLL10mw-DUP4-1416-GF		
FWGLL11mw-010c-1402-GF		
FWGLL11mw-DUP5-1417-GF		
FWGASYmw-001c-1403-GF		
FWGEQUIPRINSE3-1425-GW		
FWGASYmw-002c-1404-GF		
FWGLL11mw-005c-1398-GF		
FWGLL11mw-003c-1396-GF		
FWGLL11mw-009c-1401-GF		
FWGLL11mw-008c-1400-GF		
FWGLL11mw-001c-1395-GF		
FWGASYmw-005c-1407-GF		

The data presented in this report were evaluated according to the *Final Quality Assurance Project Plan Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant Ravenna, OH, Portage Environmental, September 2004.* The following documents will be used as needed to supplement the project documentation: *Louisville Chemistry Guidelines, USACE, June 2002 version 5, EPA National Functional Guidelines (NFG) for Organic Data Review, EPA-540/R-99-008, October 1999, NFG for Inorganic Data Review, EPA-540/R-04-004, October 2004,* Analytical Methods, and Laboratory Standard Operating Procedures. These objectives represent accuracy and precision performance goals for each analytical method.

The coolers were received between 0.6 - 4.8 °C. Upon receipt, it was documented by the laboratory, that the samples were not frozen and in good condition. Therefore, no qualifications were made to sample results based on temperatures less than 2°C.

The completeness objective for the project was 90%. The completeness objective was met for this SDG, 100%. Limitations, if any, on the data are indicated with qualifiers detailed below.

All analytical results have been verified against compliance requirements specified in the project QAP, LCG, associated analytical methods and/or SOPs, as appropriate. Checklists used in review of the data have been inserted in the SDGs by parameter. Outliers have been noted below and results requiring qualification, as a result of this verification process, have been summarized in Appendix 1.

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2009
STL Sample Delivery Group: A9G160110

Date: September 1, 2009
Revision: 0

Perchlorate - 6860

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Tuning criteria
- Initial Calibration Criteria
- Internal standard area and retention time criteria
- ICV and CCV criteria
- Limit of Detection Verification criteria
- Interference Check Sample criteria
- MRL verification criteria
- Method blank was free from contamination
- Equipment rinse was free from contamination
- Laboratory Reagent Blanks were free from contamination
- LCS recovery criteria
- MS/MSD recovery and RPD criteria
- Field duplicate RPD

No QC outliers were noted.

Data Reviewer: Angie Daggett
Date: 9/15/09

2nd Level Data Review: Erik Carlin
Date: 9/15/09

SAMPLE SUMMARY

A9G160110

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LGKF7	001	FWGLL10mw-004C-1392-GF	07/15/09	08:35
LGKGT	002	FWGLL10mw-005C-1393-GF	07/15/09	10:35
LGKGW	003	FWGLL11mw-004C-1397-GF	07/15/09	11:55
LGKGX	004	FWGLL11mw-006C-1399-GF	07/15/09	14:05
LGKG0	005	FWGASYmw-003C-1405-GF	07/15/09	15:30
LGKG3	006	FWGASYmw-004C-1406-GF	07/15/09	16:45
LGKG4	007	FWGLL10mw-006C-1394-GF	07/15/09	08:50
LGKG5	008	FWGLL10mw-DUP4-1416-GF	07/15/09	10:00
LGKG6	009	FWGLL11mw-010C-1402-GF	07/15/09	11:00
LGKG7	010	FWGLL11mw-DUP5-1417-GF	07/15/09	12:00
LGKG8	011	FWGASYmw-001C-1403-GF	07/15/09	14:10
LGKG9	012	FWGEQUIPRINSE3-1425-GW	07/15/09	14:50
LGKHA	013	FWGASYmw-002C-1404-GF	07/15/09	15:20
LGKHC	014	FWGLL11mw-005C-1398-GF	07/15/09	08:45
LGKHF	015	FWGLL11mw-003C-1396-GF	07/15/09	10:25
LGKHG	016	FWGLL11mw-009C-1401-GF	07/15/09	11:50
LGKHH	017	FWGLL11mw-008C-1400-GF	07/15/09	13:10
LGKHJ	018	FWGLL11mw-001C-1395-GF	07/15/09	14:30
LGKHN	019	FWGASYmw-005C-1407-GF	07/15/09	16:20

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

pg 2 COC #003183

TAL-4142 (0406)

Client: EQM	Project Manager: John Miller	Date: 7-15-09	Chain of Custody Number: 003182
Address: 1800 Carillon BLVD	Telephone Number (Area Code)/Fax Number: 513 825 7500 (fax 7495)	Lab Number: 330497 8396	Page 1 of 2
City: Cincinnati; State: OH; Zip Code: 45240	Site Contact: E Corbin	Lab Contact: M Loeb	
Project Name and Location (State): RVMAP (OH) PN: 30240.0006	Carrier/Waybill Number: NA Lab Pickup		
Contract/Purchase Order/Quote No.: PO # 156060			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Explo 8330	Propellants	Cyanide 9012	Metals 6020/7470	Perchlorate				Special Instructions/ Conditions of Receipt: Cooler ID
FWG Teaml - Trip	7/15/09	0800		X						2			X												ECI
FWGLL10mw-004C-1392GW	7/15/09	0835		X			27			9	3		X	X	X	X	X	X	X						MSMSD 185,15,E1
FWGLL10mw-004C-1392GF	7/15/09	0835		X			3		3											X	X				MSMSD 185,15,E1
FWGLL10mw-005C-1393GW	7/15/09	1035		X			9			3	1		X	X	X	X	X	X	X						MD88
FWGLL10mw-005C-1393GF	7/15/09	1035		X			1		1											X	X				MD88
FWGLL11mw-004C-1397GW	7/15/09	1155		X			27			9	3		X	X	X	X	X	X	X						MSMSD 313,316,114
FWGLL11mw-004C-1397GF	7/15/09	1155		X			3		3											X	X				MSMSD 313,316,114
FWGLL11mw-006C-1399GW	7/15/09	1405		X			9			3	1		X	X	X	X	X	X	X						ECI
FWGLL11mw-006C-1399GF	7/15/09	1405		X			1		1											X	X				ECI
FWGASYmw-003C-1405GW	7/15/09	1530		X			9			3	1		X	X	X	X	X	X	X						182
FWGASYmw-003C-1405GF	7/15/09	1530		X			1		1											X	X				182
FWGASYmw-004C-1406GW	7/15/09			X			9			3	1		X	X	X	X	X	X	X						C99

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other per SOW

QC Requirements (Specify): metals/Perchlorates were field filtered

1. Relinquished By: [signature]	Date: 7/15/09	Time: 1800	1. Received By: RC Robison	Date: 7/15/09	Time: 1800
2. Relinquished By: RC Robison	Date: 7/15/09	Time: 1950	2. Received By: Chris Lynch	Date: 7-16-09	Time: 8:00
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments: Temps may not meet requirements if sample collection is close to lab pickup time

All VOCs in cooler ECI

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

pg 1 COC #003182

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 7/15/09	Chain of Custody Number: 003183
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513 825 7500 (fax 7495)	Lab Number: 33049 79396	Page 2 of 2
City: Cincinnati; State: OH; Zip Code: 45240	Site Contact: E Corbin	Lab Contact: M Loeb	
Project Name and Location (State): RVAAP (OH) PN: 30240-0006	Carrier/Waybill Number: IVA Lab Pickup		
Contract/Purchase Order/Quote No.: PO # 15060			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Other	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Other	Analysis (Attach list if more space is needed): VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Explo 8330	Propellants	Cyanide 9012	Metals 6010B/6020/7470	Perchlorates				Special Instructions/ Conditions of Receipt
FWGASYmw-004C-1406GF	7/15/09			X				1		1												X	X				Cooler ID C99

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other per SOW

QC Requirements (Specify): Metals/Perchlorates were field filtered

1. Relinquished By: [signature]	Date: 7/15/09	Time: 1800	1. Received By: TC Robison	Date: 7/15/09	Time: 1800
2. Relinquished By: TC Robison	Date: 7/15/09	Time: 1950	2. Received By:	Date:	Time:
3. Relinquished By:	Date:	Time:	3. Received By: [signature]	Date: 7-16-09	Time: 8:00

Comments: Temps may not meet requirements if sample collection is close to lab pickup time
All VOCs in cooler EC1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

pg2 coc# = 003265

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 7-15-09	Chain of Custody Number: 003161
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513 825 7500 (fax 7495)	Lab Number: 3004979396	Page 1 of 2
City: Cincinnati; State: OH; Zip Code: 45240	Site Contact: E. Corbin	Lab Contact: M. Loeb	
Project Name and Location (State): RVAAP Ravenna Ohio	Carrier/Waybill Number: LAB PICK UP		
Contract/Purchase Order/Quote No.: PO# 156060 Pr# 30240.0006			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC 8260	SVOC 8270	PEST 8081	PCB 8082	8310 8330	Propellants	Cyanide 9012	Metals 6010/6020	Perchlorates				Special Instructions/ Conditions of Receipt: Cooler ID #
FWGTrip2-Trip	7-15-09	0800		X						2			X												
FWGL10mw-006C-1394-GW		0850		X			9			3	1		X	X	X	X	X	X	X						184
FWGL10mw-006C-1394-GF				X			1		1											X	X				184
FWGL10mw-DUP4-1416-GW		1000		X			9			3	1		X	X	X	X	X	X	X						M12
FWGL10mw-DUP4-1416-GF				X			1		1											X	X				M12
FWGL11mw-010C-1402-GW		1100		X			9			3	1		X	X	X	X	X	X	X						~~P25~~ 757
FWGL11mw-010C-1402-GF				X			1		1											X	X			partial vol	757
FWGL11mw-DUP5-1417-GW		1200		X			9			3	1		X	X	X	X	X	X	X						Cletus
FWGL11mw-DUP5-1417-GF				X			1		1											X	X			partial vol	Cletus
FWGASYmw-001C-1403-GW		1410		X			9			3	1		X	X	X	X	X	X	X						PH12
FWGASYmw-001C-1403-GF				X			1		1											X	X				PH12
FWGEQUIPRinse3-1425-GW	7-15-09	1450		X			10		1	3	1		X	X	X	X	X	X	X	X	X			*NOT FILTERED*	ASD1

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other Per SOW

QC Requirements (Specify): metals/Perchlorates were field filtered

	Date	Time		Date	Time
1. Relinquished By: [signature]	7/15/09	1800	1. Received By: RC Robison	7/15/09	1800
2. Relinquished By: RC Robison	7/15/09	1958	2. Received By: [signature]	7-16-09	8:00
3. Relinquished By			3. Received By		

Comments: Temps may not meet requirements if sample collection is close to lab pick up time. All VOAs in cooler ASD1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

[redacted]

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

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TAL-4142 (0408)

pg 1 COC # = 003161

Client: EQM	Project Manager: John Miller	Date: 7-15-09	Chain of Custody Number: 003265
Address: 1800 CARILLON BLVD	Telephone Number (Area Code)/Fax Number: 5138257500 (fax 7495)	Lab Number: 3304979396	Page 2 of 2
City: Cincinnati; State: OH; Zip Code: 45240	Site Contact: E Corbin	Lab Contact: M. Loeb	
Project Name and Location (State): RVAAP Ravenna Ohio	Carrier/Waybill Number: Lab Pickup		
Contract/Purchase Order/Quote No.: PO# 15660 Pn# 30240 0006			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		Analysis (Attach list if more space is needed): VOC 8260	SVOC 8270	PEST 8081	PCB 8082	Explosives 8330	Propellants	Cyanide 9012	Metals 7470/6010	Perchlorates				Special Instructions/ Conditions of Receipt
FWGASYmw-002C-1404-GN	7-15-09	1520		X											X	X	X	X	X	X	X						ASD5
FWGASYmw-002C-1404-GF	1	1		X																		X	X				ASD5

Cool

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other Per SOW

QC Requirements (Specify): Metals/Perchlorates were field filtered

	Date	Time		Date	Time
1. Relinquished By: [signature]	7/15/09	1800	1. Received By: TC Robison	7/15/09	1800
2. Relinquished By: TC Robison	7/15/09	1950	2. Received By: [signature]	7-16-09	800
3. Relinquished By			3. Received By		

Comments: Temps may not meet requirements if sample collection time is close to lab pick up time. ALL VOAs in cooler ASD1 See pg 1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client: EQM
Project Manager: JOHN MILLER
Date: 07/15/2009
Chain of Custody Number: 003187

Address: 1800 CARILLON BLVD
Telephone Number (Area Code)/Fax Number: (513) 825-7500 (FX 7495)
Lab Number: (330) 497-9396
Page 1 of 2

City: CINCINNATI
State: OH
Zip Code: 45240
Site Contact: E. CORBIN
Lab Contact: M. LOEB

Project Name and Location (State): RVAAP (OH)
Carrier/Waybill Number: N/A - LAB PICKUP

Contract/Purchase Order/Quote No.: PO 15660

Analysis (Attach list if more space is needed): VOC 8260, SVOC 8270, PEST 8081, PCB 8082, EXPLO 8330, PROPELLANTS, CYANIDE 9012, METALS 6010/6020/7470, PERCHLORATES

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Other	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Other	VOC 8260	SVOC 8270	PEST 8081	PCB 8082	EXPLO 8330	PROPELLANTS	CYANIDE 9012	METALS 6010/6020/7470	PERCHLORATES				Special Instructions/ Conditions of Receipt
FWG TEAM 3 - TRIP	07/15/09	0745		X							2				X												COOLER 176
FWG LL11 MW-005C-1398-GW	07/15/09	0845		X				9			3	1			X	X	X	X	X	X	X						COOLER 177
FWG LL11 MW-005C-1398-GF	07/15/09	0845		X				1		1												X	X				" 177
FWG LL11 MW-003C-1396-GW	07/15/09	1025		X				9			3	1			X	X	X	X	X	X	X						" LSASD
FWG LL11 MW-003C-1396-GF	07/15/09	1025		X				1		1												X	X				" LSASD
FWG LL11 MW-009C-1401-GW	07/15/09	1150		X				9			3	1			X	X	X	X	X	X	X						" 311
FWG LL11 MW-009C-1401-GF	07/15/09	1150		X				1		1												X	X				" 311
FWG LL11 MW-008C-1400-GW	07/15/09	1310		X				9			3	1			X	X	X	X	X	X	X						" 13
FWG LL11 MW-008C-1400-GF	07/15/09	1310		X				1		1									PCA 7/15/09			X	X				" 13
FWG LL11 MW-001C-1395-GW	07/15/09	1430		X				9			3	1			X	X	X	X	X	X	X						" 176
FWG LL11 MW-001C-1395-GF	07/15/09	1430		X				1		1												X	X				" 176
CONTINUED ON CHAIN # 003168														PCA 07/15/09													

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other PER SOW

QC Requirements (Specify): METALS / PERCHLORATES WERE FIELD FILTERED

	Date	Time		Date	Time
1. Relinquished By	7/15/09	1800	1. Received By: RC Robison	7/15/09	1800
2. Relinquished By: RC Robison	7/15/09	1958	2. Received By	7-16-09	8:00
3. Relinquished By			3. Received By		

Comments: TEMPS MAY NOT MEET REQUIREMENTS IF SAMPLE COLLECTION IS CLOSE TO LAB PICKUP TIME
ALL VOC'S IN COOLER 176

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client: EQM	Project Manager: JOHN MILLER	Date: 07/15/2009	Chain of Custody Number: 003168
Address: 1800 CARILLON BLVD	Telephone Number (Area Code)/Fax Number: (513) 825-7500 (FAX - 7495)	Lab Number: (330) 497-9396	Page 2 of 2
City: CINCINNATI; State: OH; Zip Code: 45240	Site Contact: E. CORBIN	Lab Contact: M. LOEB	
Project Name and Location (State): RVAAP (OH) 030240.0006	Carrier/Waybill Number: N/A - LAB PICKUP		
Contract/Purchase Order/Quote No.: PO 15660			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC 8260	SVOC 8270	PEST 8081	PCB 8082	EXPLO 8330	PROPELLANTS	CYANIDE 9012	METALS 6010/6020 7470	PERCHLORATES				Special Instructions/ Conditions of Receipt
FWG ASY MW-005C-1407-GW	07/15/09	1620		X			9			3	1		X	X	X	X	X	X	X						COOLER - BUG 69
FWG ASY MW-005C-1407-GF	07/15/09	1620		X			1		1											X	X				" - BUG 69

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other PER SOW

QC Requirements (Specify): METALS/PERCHLORATES WERE FIELD FILTERED

	Date	Time		Date	Time
1. Relinquished By	7/15/09	1800	1. Received By: RC Robison	7/15/09	1808
2. Relinquished By: RC Robison	7/15/09	1950	2. Received By	7-16-09	8:00
3. Relinquished By			3. Received By		

Comments: TEMPS MAY NOT MEET REQUIREMENTS IF SAMPLE COLLECTION IS CLOSE TO LAB PICKUP TIME

ALL VOC'S IN COOLER - #176

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

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TestAmerica Cooler Receipt Form/Narrative **Lot Number:** A9G160110
North Canton Facility

Client EQM Project RVAAP By: [signature]
Cooler Received on 7/16/09 Opened on 7/16/09 (Signature)
FedEx ☐ UPS ☐ DHL ☐ FAS ☐ Stetson ☐ Client Drop Off ☐ TestAmerica Courier ☒ Other
TestAmerica Cooler # Multiple Coolers ☒ Foam Box ☐ Client Cooler ☐ Other

1. Were custody seals on the outside of the cooler(s)? Yes ☒ No ☐ Intact? Yes ☒ No ☐ NA ☐
   If YES, Quantity 23 Quantity Unsalvageable
   Were custody seals on the outside of cooler(s) signed and dated? Yes ☒ No ☐ NA ☐
   Were custody seals on the bottle(s)? Yes ☐ No ☒
   If YES, are there any exceptions?
2. Shippers' packing slip attached to the cooler(s)? ~~Yes~~ ☒ No ☒ 9/16/09
3. Did custody papers accompany the sample(s)? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Were the custody papers signed in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☒ Foam ☐ None ☐ Other
6. Cooler temperature upon receipt See Attached °C See back of form for multiple coolers/temps ☒
   METHOD: IR ☒ Other ☐
   COOLANT: Wet Ice ☒ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐
7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels be reconciled with the COC? Yes ☒ No ☐
9. Were sample(s) at the correct pH upon receipt? Yes ☒ No ☐ NA ☐
10. Were correct bottle(s) used for the test(s) indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☒ NA ☐
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a trip blank present in the cooler(s)? Yes ☒ No ☐ Were VOAs on the COC? Yes ☒ No ☐

Contacted PM Date by via Verbal ☐ Voice Mail ☐ Other ☐
Concerning

14. CHAIN OF CUSTODY

The following discrepancies occurred:
Sample FWGAS4mw-004C-1406-GW&GF does not have a time listed on the COC. Will use time 1645 per bottle labels. COC ID: FWGEQUIPRINSE3-1425-GW Label IDs on all except 2xL amber + 1x250 perchlorate = FWGEQUIPRINSE3-1364-GW. Will log IDs per ~~labels of 1364~~ COC of 1425.
9/16/09

15. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.
Sample(s) were received in a broken container.
Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) were further preserved in Sample Receiving to meet recommended pH level(s). *Nitric Acid Lot# 031909-HNO_3; Sulfuric Acid Lot# 100108-H_2SO_4; Sodium Hydroxide Lot# 073007 -NaOH; Hydrochloric Acid Lot# 092006-HCl; Sodium Hydroxide and Zinc Acetete Lot# 050205-$(CH_3COO)_2ZN/NaOH$.* What time was preservative added to sample(s)?

Client ID	pH	Date	Initials
	SEE Attached		

TestAmerica Multiple Cooler Receipt Form/Narrative Lot Number: A9G160110
North Canton Facility

Cooler #	Temp °C	Method	Coolant	Comments
185	3.2	IR	Ice	
15	2.7			
E-1	4.8			
MD88	3.6			
313	4.7			
316	4.1			
114	4.0			
EC1	3.8			
182	4.4			
C99	0.6			
184	0.6			
M12	0.6			
757	1.2			
Clatus	2.7			
PH12	0.7			
ASD1	2.9			
ASD5	1.6			
177	2.4			
L.SASD	3.0			
311	1.6			
13	1.0			
176	2.3			
BUG 69	2.4			

TestAmerica Multiple Cooler Receipt Form/Narrative **Lot Number:** A96160110
North Canton Facility

Client ID	pH	Date	Initials
1392	<2 <2 <2 >12 >12 >12	7/16/09	gm
1393	<2 >12		
1397	<2 <2 <2 >12 >12 >12		
1399	<2 >12		
1405	<2 >12		
1406	<2 >12		
1394	<2 >12		
1416	<2 >12		
1402	<2 >12		
1417	<2 >12		
1403	<2 >12		
1425	<2 >12		
1404	<2 >12		
1398	<2 >12		
1396	<2 >12		
1401	<2 >12		
1400	<2 >12		
1395	<2 >12		
1407	<2 >12		

N:\QAQC\Lab_form\Receiving Forms\TestAmerica N.Canton Multiple Cooler Receipt_Narrative.doc
Revision 1, 06/18/07 JSE

1.700
7/17/09

TestAmerica Laboratories, Inc.
SAMPLE ANALYSIS REQUISTION

Laboratory **TestAmerica AASG - Denver**
4955 YARROW

ARVADA, CO 80002

Lab Request SR113614

Report Package: **Expanded Deliverables**
Need Analytical Report 2009-07-30

Client Code: 14091

Project Manager: MARK LOEB

Sample I.D.	Work Order Number	Client Sample ID		Sampling Date	Analysis Required
A9G160110-1	LGKF7	FWGLL10mw-004C-1392-GF	MS/MSD	2009-07-15 8:35	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G160110-1 S	LGKF7	FWGLL10mw-004C-1392-GF		2009-07-15 8:35	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G160110-1 D	LGKF7	FWGLL10mw-004C-1392-GF		2009-07-15 8:35	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G160110-2	LGKGT	FWGLL10mw-005C-1393-GF		2009-07-15 10:35	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G160110-3	LGKGW	FWGLL11mw-004C-1397-GF	MS/MSD	2009-07-15 11:55	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G160110-3 S	LGKGW	FWGLL11mw-004C-1397-GF		2009-07-15 11:55	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G160110-3 D	LGKGW	FWGLL11mw-004C-1397-GF		2009-07-15 11:55	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G160110-4	LGKGX	FWGLL11mw-006C-1399-GF		2009-07-15 14:05	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G160110-5	LGKG0	FWGASYmw-003C-1405-GF		2009-07-15 15:30	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G160110-6	LGKG3	FWGASYmw-004C-1406-GF		2009-07-15 16:45	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G160110-7	LGKG4	FWGLL10mw-006C-1394-GF		2009-07-15 8:50	WATER, 6860, SW846 6860 Perchlorate, Spe

Please use Client Sample ID for report
Call MARK LOEB with questions at 330-497-9396
at the TAL North Canton Laboratory

Shipping Method: FED EX

Need detection limit and analysis date included in report.

Please send a signed copy of this form with the report at completion of analysis.

Relinquished by: [signature] Date/Time: 7/16/09 0940

Relinquished by: _____ Date/Time: _____

Received for lab by: Corinne Brin Date/Time: 7-17-09/0045

PLEASE RETURN ORIGINAL SAMPLE ANALYSIS REQUISITION

TestAmerica Laboratories, Inc.

SAMPLE ANALYSIS REQUISTION

Laboratory **TestAmerica AASG - Denver**
4955 YARROW

ARVADA, CO 80002

Lab Request SR113614

Report Package: **Expanded Deliverables**

Need Analytical Report 2009-07-30

Client Code: 14091

Project Manager: MARK LOEB

Sample I.D.	Work Order Number	Client Sample ID	Sampling Date	Analysis Required
A9G160110-8	LGKG5	FWGLL10mw-DUP4-1416-GF	2009-07-15 10:00	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G160110-9	LGKG6	FWGLL11mw-010C-1402-GF	2009-07-15 11:00	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G160110-10	LGKG7	FWGLL11mw-DUP5-1417-GF	2009-07-15 12:00	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G160110-11	LGKG8	FWGASYmw-001C-1403-GF	2009-07-15 14:10	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G160110-12	LGKG9	FWGEQUIPRINSE3-1425-GW	2009-07-15 14:50	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G160110-13	LGKHA	FWGASYmw-002C-1404-GF	2009-07-15 15:20	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G160110-14	LGKHC	FWGLL11mw-005C-1398-GF	2009-07-15 8:45	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G160110-15	LGKHF	FWGLL11mw-003C-1396-GF	2009-07-15 10:25	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G160110-16	LGKHG	FWGLL11mw-009C-1401-GF	2009-07-15 11:50	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G160110-17	LGKHH	FWGLL11mw-008C-1400-GF	2009-07-15 13:10	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G160110-18	LGKHJ	FWGLL11mw-001C-1395-GF	2009-07-15 14:30	WATER, 6860, SW846 6860 Perchlorate, Spe

Please use **Client Sample ID** for report

Call MARK LOEB with questions at 330-497-9396

at the TAL North Canton Laboratory

Shipping Method: FED EX

Need detection limit and analysis date included in report.

Please send a signed copy of this form with the report at completion of analysis.

Relinquished by: [signature] Date/Time: 7/16/09 0940

Relinquished by: _____ Date/Time: _____

Received for lab by: Corine Brin Date/Time: 7-17-09/0945

PLEASE RETURN ORIGINAL SAMPLE ANALYSIS REQUISITION

TestAmerica Laboratories, Inc.

SAMPLE ANALYSIS REQUISTION

Laboratory TestAmerica AASG - Denver
4955 YARROW

ARVADA, CO 80002

Lab Request SR113614

Report Package: Expanded Deliverables

Need Analytical Report 2009-07-30

Client Code: 14091

Project Manager: MARK LOEB

Sample I.D.	Work Order Number	Client Sample ID	Sampling Date	Analysis Required
A9G160110-19	LGKHN	FWGASYmw-005C-1407-GF	2009-07-15 16:20	WATER, 6860, SW846 6860 Perchlorate, Spe

Please use Client Sample ID for report

Call MARK LOEB with questions at 330-497-9396

at the TAL North Canton Laboratory

Shipping Method: FED EX

Need detection limit and analysis date included in report.

Please send a signed copy of this form with the report at completion of analysis.

Relinquished by: [illegible] Date/Time: 2/16/05 0940

Relinquished by: Date/Time:

Received for lab by: Corine Brin Date/Time: 7-17-05/0845

PLEASE RETURN ORIGINAL SAMPLE ANALYSIS REQUISITION

TestAmerica Denver

Sample Receiving Checklist

Lot #: A9G160110 Date/Time Received: 7-17-09 / 0845

Company Name & Sampling Site: TA North Canton

PM to Complete This Section:	*Yes*	*No*		*Yes*	*No*
Residual chlorine check required:	☐	☐	Quarantined :	☐	☐

Quote #:

Special Instructions:

Time Zone:
• EDT/EST • CDT/CST • MDT/MST • PDT/PST • OTHER

Unpacking Checks:

Cooler #(s): _____ _____ _____ _____ _____ _____ _____ _____

Temperatures (°C): 1.7 _____ _____ _____ _____ _____ _____ _____

N/A	*Yes*	*No*		*Initials*
☐	☑	☐	1. Cooler seals intact? (N/A if hand delivered) If no, document on CUR.	CHK
	☑	☐	2. Coolers scanned for radiation. Is the reading ≤ to background levels? Yes: ✓ No:____	
	☑	☐	3. Chain of custody present? If no, document on CUR.	
	☐	☑	4. Bottles broken and/or are leaking? If yes, document on CUR.	
	☐	☑	5. Multiphasic samples obvious? If yes, document on CUR.	
	☑	☐	6. Proper container & preservatives used? (ref. Attachment D of SOP# DV-QA-0003) If no, document on CUR.	
☑	☐	☐	7. pH of all samples checked and meet requirements? If no, document on CUR.	
	☑	☐	8. Sufficient volume provided for all analysis requested? (ref. Attachment D of SOP# DV-QA-0003) If no, document on CUR, and contact PM before proceeding.	
	☑	☐	9. Did chain of custody agree with labels ID and samples received? If no, document on CUR.	
☑	☐	☐	10. Were VOA samples without headspace? If no, document on CUR.	
☑	☐	☐	11. Were VOA vials preserved? Preservative ☐HCl ☐4±2°C ☐Sodium Thiosulfate ☐ Ascorbic Acid	
	☐	☑	12. Did samples require preservation with sodium thiosulfate?	
☑	☐	☐	13. If yes to #11, did the samples contain residual chlorine? If yes, document on CUR.	
☑	☐	☐	14. Sediment present in dissolved/filtered bottles? If yes, document on CUR.	
☑	☐	☐	15. Is sufficient volume provided for client requested MS, MSD or matrix duplicates? If no, document on CUR, and contact PM before proceeding.	
	☐	☑	16. Receipt date(s) > 48 hours past the collection date(s)? If yes, notify PA/PM.	
	☐	☑	17. Are analyses with short holding times requested?	
	☐	☑	18. Was a quick Turn Around (TAT) requested?	

CASE NARRATIVE

A9G160110

The following report contains the analytical results for nineteen water samples submitted to TestAmerica North Canton by Environmental Quality Mgt., Inc. from the RVAAP (OH) Site, project number 30240.0006. The samples were received July 16, 2009, according to documented sample acceptance procedures.

The SW846 6860 Perchlorate analysis was performed at the TestAmerica Denver laboratory.

TestAmerica utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Angye Dragotta, Erik Corbin, and Jackie Doan on August 11, 2009. A summary of QC data for these analyses is included at the back of the report.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Please refer to the Quality Control Elements Narrative following this case narrative for additional quality control information.

If you have any questions, please call the Project Manager, Mark J. Loeb, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT."

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The coolers were received at temperatures ranging from 0.6 to 4.8°C.

See TestAmerica's Cooler Receipt Form for additional information.

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

QUALITY CONTROL ELEMENTS NARRATIVE (continued)

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

TestAmerica Certifications and Approvals:

The laboratory is certified for the analytes listed on the documents below. These are available upon request.

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225),
Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Nevada (#OH-000482008A), OhioVAP (#CL0024), Pennsylvania (#008), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit

N:\QAQC\Customer Service\Narrative - Combined RCRA _CWA 032609.doc

6860 PERCHLORATE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.12 **SDG**: A9G160110 R0
Sample Event: July 2009 **Analysis**: SW846 6860
Data Reviewer/Date: Angye Dragotta/September 1, 2009 Perchlorate

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.6 - 4.8 °C. Upon receipt, it was documented by the laboratory, that the samples were not frozen and in good condition. Therefore, no qualifications were made to sample results based on temperatures less than 2°C.	
3. Were holding times met (28 days)?	✓			Samples collected 7/15/09, extracted 8/7/09, and analyzed on 8/10/09.	UJ/J/R
4. Were sample storage requirements met?	✓				
5. Was the DOD specified PQLs of 0.5ug/L achieved?	✓				
6. Were all QAPP-specified target analytes reported?	✓				
7. Was the LC/MS/MS system mass calibration checked?	✓				R
8. Were the masses within 0.3 amu of ions 99, 101, and 107?	✓				R
9. Was the instrument tuned daily?	✓				
10. Was the tune within criteria? (per laboratory SOP)	✓				R
11. Did the initial calibration curve consist of 5 concentration levels?	✓			LCMS1 8/6/2009 Standards(ng/L): 20, 50, 100, 200, 500, 1000	R
12. Was the correlation coefficient r≥0.995?	✓				R<0.995 =-J/R
13. Was a second source verification (SSCV) analyzed after the ICAL? Were results 90-110%?	✓				LCG Table 1 >120%=J; 60-80%=J/UJ; <60%=J/R
14. Was an ICV analyzed after the ICAL and daily before sample analysis?	✓			8/6/2009 @1747	R
15. Was the %Difference ≤ 15%?	✓				R
16. Was a CCV analyzed after every 10 samples?	✓				
17. Was the %Difference ≤ 15%?	✓				%D > 15% = UJ/J
18. Was a Limit of Detection Verification LODV) analyzed before and after every batch?	✓				

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.12 **SDG**: A9G160110 R0
Sample Event: July 2009 **Analysis**: SW846 6860
Data Reviewer/Date: Angye Dragotta/September 1, 2009 Perchlorate

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
19. Was the LODV recovery within 70-130%?	✓				>130%=J; 70-60%=J/UJ; <60%=J/R
20. Was an Interference Check Sample extracted and analyzed with every batch?	✓				
21.Was the ICS recovery within 70 to 130%?	✓				>120%=J; 50-79%=J/UJ; <50%=Pj/R
22. Was a method blank prepared and analyzed with each batch?	✓				
23. Were target analytes detected in the method blank at >1/2 the MRL?		✓		Checked by ADR.	<5X =B
24. Was a field blank (equipment) collected and analyzed?	✓			FWGEQUIPRINSE3-1425-GW	
25. Were target analytes detected in the field blank analyses >1/2 the MRL?		✓		Checked by ADR.	<5X =B
26. Was a LCS prepared and analyzed with each batch?	✓				
27. Were the LCS recoveries within 85-115%?	✓			Checked by ADR.	>115%=J; 50%-85%=J/UJ; <50%=J/R
28. Was a MS/MSD prepared with each batch?	✓				
29. Was the MS/MSD parent sample a Ravenna sample?	✓			Samples FWGLL10mw-004c-1392-GF and FWGLL11mw-004c-1397-GF were the parent MS/MSD samples from this SDG.	
30. Were MS/MSD recoveries 75-125% and RPD values ≤20%?	✓			Checked by ADR.	>125% = J 30% - 75% = J/UJ <30% = J/R
31. Was a Laboratory Reagent Blank (LRB) analyzed prior to calibration and after high concentration samples?	✓				
32. Were target analytes detected in the LRB at >1/2 the MRL?		✓			<5X =B
33. Was a MRL Verification run with every ICAL?	✓				
34. Were the MRL recoveries 70-130%?	✓				R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.12 **SDG**: A9G160110 R0
Sample Event: July 2009 **Analysis**: SW846 6860
Data Reviewer/Date: Angye Dragotta/September 1, 2009 Perchlorate

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
35. Were the internal standards added to every sample?	✓				
36. Were the retention times for all IS compounds within 0.98 and 1.02 seconds from the RT of the mid-point standard in the ICAL?	✓				R
37. Did the IS recover within 50% to150% of the ICAL mid-point standard?	✓				R
38. Was a field duplicate analyzed? Were the RPDs within ±30%?	✓			Sample FWGLL11mw-DUP5-1417-GF was the field duplicate for sample FWGLL11mw-010c-1402-GF and FWGLL10mw-DUP4-1416-GF was the field duplicate for sample FWGLL10mw-006c-1394-GF. Only detected results above RL were evaluated.	RPD >30=J
39. Was the Isotope ratio between 99/101 and 83/85 monitored and fell between 2.3 and 3.08?	✓				J/UJ
40. Were reported sample concentrations within calibration range?	✓				
41. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
42. Were lab comments included in report? If yes, summarize contents.		✓			

References:

DOD Perchlorate Handbook, March 2006; Section G "Selecting Analytical Methods and Services"

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-004C-1392-GF

HPLC

Lot-Sample #...: A9G160110-001 **Work Order #...:** LGKF71AA **Matrix.....:** WG
Date Sampled...: 07/15/09 08:35 **Date Received..:** 07/16/09
Prep Date.....: 08/07/09 **Analysis Date..:** 08/07/09
Prep Batch #...: 9219560
Dilution Factor: 1 **Method.....:** SW846 6860

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	ND	0.050	ug/L	0.0088

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-005C-1393-GF

HPLC

Lot-Sample #...:	A9G160110-002	Work Order #...:	LGKGT1AA	Matrix.....:	WG
Date Sampled...:	07/15/09 10:35	Date Received..:	07/16/09		
Prep Date.....:	08/07/09	Analysis Date..:	08/07/09		
Prep Batch #...:	9219560				
Dilution Factor:	1	Method.....:	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	0.052	0.050	ug/L	0.0088

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-004C-1397-GF

HPLC

Lot-Sample #...: A9G160110-003 **Work Order #...:** LGKGW1AA **Matrix.....:** WG
Date Sampled...: 07/15/09 11:55 **Date Received..:** 07/16/09
Prep Date.....: 08/07/09 **Analysis Date..:** 08/07/09
Prep Batch #...: 9219560
Dilution Factor: 1 **Method.....:** SW846 6860

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	ND	0.050	ug/L	0.0088

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-006C-1399-GF

HPLC

Lot-Sample #...:	A9G160110-004	**Work Order #...:**	LGKGX1AA	**Matrix.....:**	WG
Date Sampled...:	07/15/09 14:05	**Date Received..:**	07/16/09		
Prep Date.....:	08/07/09	**Analysis Date..:**	08/08/09		
Prep Batch #...:	9219560				
Dilution Factor:	1	**Method.....:**	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	**0.17**	**0.050**	**ug/L**	**0.0088**

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-003C-1405-GF

HPLC

Lot-Sample #...:	A9G160110-005	**Work Order #...:**	LGKG01AA	**Matrix.....:**	WG
Date Sampled...:	07/15/09 15:30	**Date Received..:**	07/16/09		
Prep Date.....:	08/07/09	**Analysis Date..:**	08/08/09		
Prep Batch #...:	9219560				
Dilution Factor:	1	**Method.....:**	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	**0.024 J**	**0.050**	**ug/L**	**0.0088**

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-004C-1406-GF

HPLC

Lot-Sample #...:	A9G160110-006	**Work Order #...:**	LGKG31AA	**Matrix.....:**	WG
Date Sampled...:	07/15/09 16:45	**Date Received..:**	07/16/09		
Prep Date.....:	08/07/09	**Analysis Date..:**	08/08/09		
Prep Batch #...:	9219560				
Dilution Factor:	1	**Method.....:**	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	**0.021 J**	**0.050**	**ug/L**	**0.0088**

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-006C-1394-GF

HPLC

Lot-Sample #...:	A9G160110-007	**Work Order #...:**	LGKG41AA	**Matrix.....:**	WG
Date Sampled...:	07/15/09 08:50	**Date Received..:**	07/16/09		
Prep Date.....:	08/07/09	**Analysis Date..:**	08/08/09		
Prep Batch #...:	9219560				
Dilution Factor:	1	**Method.....:**	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	**0.054**	**0.050**	**ug/L**	**0.0088**

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL10mw-DUP4-1416-GF

HPLC

Lot-Sample #...:	A9G160110-008	**Work Order #...:**	LGKG51AA	**Matrix.....:**	WG
Date Sampled...:	07/15/09 10:00	**Date Received..:**	07/16/09		
Prep Date.....:	08/07/09	**Analysis Date..:**	08/08/09		
Prep Batch #...:	9219560				
Dilution Factor:	1	**Method.....:**	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	**0.046 J**	**0.050**	**ug/L**	**0.0088**

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-010C-1402-GF

HPLC

Lot-Sample #...:	A9G160110-009	**Work Order #...:**	LGKG61AA	**Matrix.....:**	WG
Date Sampled...:	07/15/09 11:00	**Date Received..:**	07/16/09		
Prep Date.....:	08/07/09	**Analysis Date..:**	08/08/09		
Prep Batch #...:	9219560				
Dilution Factor:	1	**Method.....:**	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	ND	0.050	ug/L	0.0088

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-DUP5-1417-GF

HPLC

Lot-Sample #...: A9G160110-010 Work Order #...: LGKG71AA Matrix.....: WG
Date Sampled...: 07/15/09 12:00 Date Received..: 07/16/09
Prep Date.....: 08/07/09 Analysis Date..: 08/08/09
Prep Batch #...: 9219560
Dilution Factor: 1 Method.....: SW846 6860

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	0.031 J	0.050	ug/L	0.0088

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-001C-1403-GF

HPLC

Lot-Sample #...:	A9G160110-011	**Work Order #...:**	LGKG81AA	**Matrix.....:**	WG
Date Sampled...:	07/15/09 14:10	**Date Received..:**	07/16/09		
Prep Date.....:	08/07/09	**Analysis Date..:**	08/08/09		
Prep Batch #...:	9219560				
Dilution Factor:	1	**Method.....:**	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	0.022 J	0.050	ug/L	0.0088

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1425-GW

HPLC

Lot-Sample #...:	A9G160110-012	**Work Order #...:**	LGKG91AA	**Matrix.....:**	WQ
Date Sampled...:	07/15/09 14:50	**Date Received..:**	07/16/09		
Prep Date.....:	08/07/09	**Analysis Date..:**	08/08/09		
Prep Batch #...:	9219560				
Dilution Factor:	1	**Method.....:**	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	ND	0.050	ug/L	0.0088

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-002C-1404-GF

HPLC

Lot-Sample #...:	A9G160110-013	**Work Order #...:**	LGKHA1AA	**Matrix.....:**	WG
Date Sampled...:	07/15/09 15:20	**Date Received..:**	07/16/09		
Prep Date.....:	08/07/09	**Analysis Date..:**	08/08/09		
Prep Batch #...:	9219560				
Dilution Factor:	1	**Method.....:**	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	**0.064**	**0.050**	**ug/L**	**0.0088**

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-005C-1398-GF

HPLC

Lot-Sample #...:	A9G160110-014	**Work Order #...:**	LGKHC1AA	**Matrix.....:**	WG
Date Sampled...:	07/15/09 08:45	**Date Received..:**	07/16/09		
Prep Date.....:	08/07/09	**Analysis Date..:**	08/10/09		
Prep Batch #...:	9219560				
Dilution Factor:	1	**Method.....:**	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	0.045 J	0.050	ug/L	0.0088

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-003C-1396-GF

HPLC

Lot-Sample #...:	A9G160110-015	**Work Order #...:**	LGKHF1AA	**Matrix.....:**	WG
Date Sampled...:	07/15/09 10:25	**Date Received..:**	07/16/09		
Prep Date.....:	08/07/09	**Analysis Date..:**	08/10/09		
Prep Batch #...:	9219560				
Dilution Factor:	1	**Method.....:**	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	**0.019 J**	**0.050**	**ug/L**	**0.0088**

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-009C-1401-GF

HPLC

Lot-Sample #...: A9G160110-016 Work Order #...: LGKHG1AA Matrix.....: WG
Date Sampled...: 07/15/09 11:50 Date Received..: 07/16/09
Prep Date.....: 08/07/09 Analysis Date..: 08/10/09
Prep Batch #...: 9219560
Dilution Factor: 1 Method.....: SW846 6860

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	0.0089 J	0.050	ug/L	0.0088

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-008C-1400-GF

HPLC

Lot-Sample #...:	A9G160110-017	Work Order #...:	LGKHH1AA	Matrix.....:	WG
Date Sampled...:	07/15/09 13:10	Date Received..:	07/16/09		
Prep Date.....:	08/07/09	Analysis Date..:	08/10/09		
Prep Batch #...:	9219560				
Dilution Factor:	1	Method.....:	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	0.035 J	0.050	ug/L	0.0088

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-001C-1395-GF

HPLC

Lot-Sample #...:	A9G160110-018	**Work Order #...:**	LGKHJ1AA	**Matrix.....:**	WG
Date Sampled...:	07/15/09 14:30	**Date Received..:**	07/16/09		
Prep Date.....:	08/07/09	**Analysis Date..:**	08/10/09		
Prep Batch #...:	9219560				
Dilution Factor:	1	**Method.....:**	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	**0.019 J**	**0.050**	**ug/L**	**0.0088**

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-005C-1407-GF

HPLC

Lot-Sample #...:	A9G160110-019	**Work Order #...:**	LGKHN1AA	**Matrix.....:**	WG
Date Sampled...:	07/15/09 16:20	**Date Received..:**	07/16/09		
Prep Date.....:	08/07/09	**Analysis Date..:**	08/10/09		
Prep Batch #...:	9219560				
Dilution Factor:	1	**Method.....:**	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	**0.060**	**0.050**	**ug/L**	**0.0088**

METHOD BLANK REPORT

HPLC

Client Lot #...: A9G160110 **Work Order #...:** LHTHF1AA **Matrix.....:** WATER
MB Lot-Sample #: R9H070000-560

Prep Date.....: 08/07/09
Analysis Date..: 08/07/09 **Prep Batch #...:** 9219560
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Perchlorate	ND	0.050	ug/L	SW846 6860

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A9G160110 **Work Order #...:** LHTHF1AC **Matrix.....:** WATER
LCS Lot-Sample#: R9H070000-560
Prep Date.....: 08/07/09 **Analysis Date..:** 08/07/09
Prep Batch #...: 9219560
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Perchlorate	**105**	**(80 - 120)**	**SW846 6860**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A9G160110 **Work Order #...:** LGKF71AC-MS **Matrix.....:** WG
MS Lot-Sample #: A9G160110-001 LGKF71AD-MSD
Date Sampled...: 07/15/09 08:35 **Date Received..:** 07/16/09
Prep Date.....: 08/07/09 **Analysis Date..:** 08/07/09
Prep Batch #...: 9219560
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Perchlorate	**112**	**(80 - 120)**			**SW846 6860**
	114	**(80 - 120)**	**1.8**	**(0-15)**	**SW846 6860**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A9G160110 **Work Order #...:** LGKGW1AC-MS **Matrix.....:** WG
MS Lot-Sample #: A9G160110-003 LGKGW1AD-MSD
Date Sampled...: 07/15/09 11:55 **Date Received..:** 07/16/09
Prep Date.....: 08/07/09 **Analysis Date..:** 08/07/09
Prep Batch #...: 9219560
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Perchlorate	**103**	**(80 - 120)**			**SW846 6860**
	106	**(80 - 120)**	**2.4**	**(0-15)**	**SW846 6860**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Appendix I

Reason Code Library: Example 1

Category	Code
Low Bias Indicator	-
High Bias Indicator	+
Temperature	A
Holding Times	
Sampling to Analysis	C
Sampling to Extraction	D
Extaction to Analysis	E
Method Blanks	F
Surrogate Recovery	G
MS/MSD	
MS/MSD Recovery	H
MS/MSD RPD	I
LCS	
LCS Recovery	J
LCS RPD	K
Reporting Limits	L
Field QC	
Field Blank	M
Equipment Blank	N
Trip Blank	O
Field Duplicate	P

Category	Code
Initial Calibration	
Initial Calibration RRF	Q
Initial Calibration RSD	R
Initial Calibration Cor. Coef	S
Initial Calibration Verification	
Initial Calibration Verificaton RRF	T
Initial CalibrationVerification %D	U
Continuing Calibration	
Continuing Calibraiton RRF	V
Continuing Calibration %D	W
GC/MS Tune	
GC/MS Tune for Initial Calibration	X
GC/MS Tune for Continuing Calibration	Y
Laboratory Duplicate	Z
Categories not Assessed by Automated Data Review*	
Internal Standards	Is
Calibration Blanks	Cb
Resolution Check Mixture	Rm
Performance Evaluation Mixture	Pm
Professional Judgement	Pj

* Qualifiers for data-review categories not assessed by automated data review are manually entered by the user. The application automaticallly adds reason codes listed here when the user manually adds qualifiers for these categories if the option for applying reason codes was selected during automated data review.

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G160110										
6860	FWGASYmw-001C-1403-GF	AQ	N							
				Perchlorate	0.050	0.022J		J	ug/L	L
6860	FWGASYmw-003C-1405-GF	AQ	N							
				Perchlorate	0.050	0.024J		J	ug/L	L
6860	FWGASYmw-004C-1406-GF	AQ	N							
				Perchlorate	0.050	0.021J		J	ug/L	L
6860	FWGLL10mw-DUP4-1416-GF	AQ	FD							
				Perchlorate	0.050	0.046J		J	ug/L	L
6860	FWGLL11mw-001C-1395-GF	AQ	N							
				Perchlorate	0.050	0.019J		J	ug/L	L
6860	FWGLL11mw-003C-1396-GF	AQ	N							
				Perchlorate	0.050	0.019J		J	ug/L	L
6860	FWGLL11mw-005C-1398-GF	AQ	N							
				Perchlorate	0.050	0.045J		J	ug/L	L
6860	FWGLL11mw-008C-1400-GF	AQ	N							
				Perchlorate	0.050	0.035J		J	ug/L	L
6860	FWGLL11mw-009C-1401-GF	AQ	N							
				Perchlorate	0.050	0.0089J		J	ug/L	L
6860	FWGLL11mw-DUP5-1417-GF	AQ	FD							
				Perchlorate	0.050	0.031J		J	ug/L	L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGASYmw-001C-1403-GF **Lab Report Batch :** A9G160110 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160110011

Reviewed By / Date : Angye Dragotta 9/1/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6860						**Dilution: 1**															
Perchlorate	0.022		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGASYmw-003C-1405-GF **Lab Report Batch :** A9G160110 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160110005

Reviewed By / Date : Angye Dragotta 9/1/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6860						**Dilution: 1**															
Perchlorate	0.024		ug/L	J	YES	**J**								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGASYmw-004C-1406-GF **Lab Report Batch :** A9G160110 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160110006

Reviewed By / Date : Angye Dragotta 9/1/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6860						**Dilution: 1**															
Perchlorate	0.021		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL11mw-001C-1395-GF **Lab Report Batch :** A9G160110 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160110018

Reviewed By / Date : Angye Dragotta 9/1/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6860						**Dilution: 1**															
Perchlorate	0.019		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL11mw-003C-1396-GF **Lab Report Batch :** A9G160110 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160110015

Reviewed By / Date : Angye Dragotta 9/1/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6860						**Dilution: 1**															
Perchlorate	0.019		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL11mw-005C-1398-GF **Lab Report Batch :** A9G160110 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160110014

Reviewed By / Date : Angye Dragotta 9/1/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6860						**Dilution: 1**															
Perchlorate	0.045		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL11mw-008C-1400-GF **Lab Report Batch :** A9G160110 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160110017

Reviewed By / Date : Angye Dragotta 9/1/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6860						**Dilution: 1**															
Perchlorate	0.035		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL11mw-009C-1401-GF **Lab Report Batch :** A9G160110 **Lab ID :** TALCAN

Sample Date : 07/15/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160110016

Reviewed By / Date : Angye Dragotta 9/1/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6860						**Dilution: 1**															
Perchlorate	0.0089		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A9G160110 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGASYmw-001C-1403-	A9G160110011	6860	AQ	Perchlorate	J	0.022	0.050	ug/L
FWGASYmw-003C-1405-	A9G160110005			Perchlorate	J	0.024	0.050	ug/L
FWGASYmw-004C-1406-	A9G160110006			Perchlorate	J	0.021	0.050	ug/L
FWGLL10mw-DUP4-1416	A9G160110008			Perchlorate	J	0.046	0.050	ug/L
FWGLL11mw-001C-1395-	A9G160110018			Perchlorate	J	0.019	0.050	ug/L
FWGLL11mw-003C-1396-	A9G160110015			Perchlorate	J	0.019	0.050	ug/L
FWGLL11mw-005C-1398-	A9G160110014			Perchlorate	J	0.045	0.050	ug/L
FWGLL11mw-008C-1400-	A9G160110017			Perchlorate	J	0.035	0.050	ug/L
FWGLL11mw-009C-1401-	A9G160110016			Perchlorate	J	0.0089	0.050	ug/L
FWGLL11mw-DUP5-1417	A9G160110010			Perchlorate	J	0.031	0.050	ug/L

QC Outlier Report: Field Duplicates (Non-qualified Outliers)

Lab Report Batch: A9G160110 **Lab ID:** TALCAN

			Field Sample				Field Sample Duplicate						
Analysis Method	Matrix	Analyte Name	Client Sample ID	Ana Type	Result	Lab Qualifier	Client Sample Duplicate ID	Ana Type	Result	Lab Qualifier	RPD Dup* (%)	RPD Criteria (%)	Result Units
6860	AQ	Perchlorate	FWGLL11mw-010	RES	0.050	U	FWGLL11mw-DU	RES	0.031	J	200.0	30	ug/L

**Note: Outlier report also includes analytes detected in one sample but not in the related sample, i.e., analyte was detected in the field sample but not in the field duplicate sample, or vice versa. In this case, RPD value assigned to the field duplicate sample is 200.*

Project Number and Name: ***30240.0006 - RVAAP (OH)***

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2009 **Date:** August 31, 2009
STL Sample Delivery Group: A9G160256 **Revision:** 0

Data Validator: Angye Dragotta/Environmental Quality Management, Inc. (EQM, Inc.)

QA/QC Summary

On July 16, 2009 the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A9G160256.

Field Sample ID	Analytes	Method
FWGASYmw-007c-1409-GW	VOCs	SW846 8260B
FWGEQUIPRINSE4-1426-GW	SVOCs	SW846 8270C
FWGASYmw-006c-1408-GW	Pesticides	SW846 8081A
FWGASYmw-009c-1411-GW	PCBs	SW846 8082
FWGASYmw-010c-1412-GW	Cyanide	SW846 9012A
FWGASYmw-008c-1410-GW		
FWGASYmw-007c-1409-GF	TAL23 Metals	SW846 6010B/6020/7470A
FWGEQUIPRINSE4-1426-GW		
FWGASYmw-006c-1408-GF		
FWGASYmw-009c-1411-GF		
FWGASYmw-010c-1412-GF		
FWGASYmw-008c-1410-GF		
FWGTEAM1-Trip	VOCs	SW846 8260B
FWGTEAM2-Trip		
FWGTEAM3-Trip		

The data presented in this report were evaluated according to the *Final Quality Assurance Project Plan Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant Ravenna, OH, Portage Environmental, September 2004.* The following documents will be used as needed to supplement the project documentation: *Louisville Chemistry Guidelines, USACE, June 2002 version 5, EPA National Functional Guidelines (NFG) for Organic Data Review, EPA-540/R-99-008, October 1999, NFG for Inorganic Data Review, EPA-540/R-04-004, October 2004,* Analytical Methods, and Laboratory Standard Operating Procedures. These objectives represent accuracy and precision performance goals for each analytical method.

The completeness objective for the project was 90%. The completeness objective was met for this SDG, 100%. Limitations, if any, on the data are indicated with qualifiers detailed below.

All analytical results have been verified against compliance requirements specified in the project QAP, LCG, associated analytical methods and/or SOPs, as appropriate. Checklists used in review of the data have been inserted in the SDGs by parameter. Outliers have been noted below and results requiring qualification, as a result of this verification process, have been summarized in Appendix 1.

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2009 **Date:** August 31, 2009
STL Sample Delivery Group: A9G160256 **Revision:** 0

VOAs - 8260B

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Tuning criteria
- CCV criteria
- Initial Calibration Criteria including SPCC and CCC compounds
- Internal standard area counts and retention times
- MDL verification criteria
- Surrogate recoveries

QC/MRL

- The opening MRL check analyzed at 1100 had carbon disulfide recover below control limits at 68.4% and methylene chloride at 66%. Dibromochloromethane recovered above control limits at 155%, trans-1,3-dichloropropene at 151% and bromoform at 201%.
- The closing MRL check analyzed 7/21/09 at 1656 had carbon disulfide recover below control limits at 62.2% and 2-hexanone at 64%. Dibromochloromethane recovered above control limits at 146%, trans-1,3-dichloropropene at 132% and bromoform at 183%.

The methylene chloride, carbon disulfide and 2-hexanone results for were qualified as estimated, "J/UJ". No qualifications were made for dibromochloromethane, trans-1,3-dichloropropene or bromoform as there were no detected concentrations of these targets.

ICV

Chloromethane recovered below control limits at 71.5% in the ICV. All chloromethane results were qualified as estimated, "UJ".

LCS Recovery

The LCD percent recovery was below control limits for chloromethane at 55%. The LCS/LCD percent recovery for chloroethane was below control limits at 65% and 64% and the carbon disulfide recovered below limits at 73% and 71%. Associated chloromethane, chloroethane and carbon disulfide results were qualified as estimated, "UJ".

Blanks

- FWGEQUIPRinse4-1426-GW had acetone detected at 7.3ug/L, 2-butanone at 1.1ug/L and methylene chloride at 2.1ug/L. No qualifications were made as there were no detected concentrations of these contaminants in the associated field samples.
- Acetone was detected in all three trip blanks from 2.4ug/L to 3.2ug/L. The acetone result for FWGEQUIPRinse4-1426-GW were qualified, "B", as the detected acetone concentration in the rinse blank was less than 10x trip blank contamination.

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2009 **Date:** August 31, 2009
STL Sample Delivery Group: A9G160256 **Revision:** 0

SVOCs- 8270C

The following QC criteria were reviewed with acceptable results:

- Holding time, preservation and sample handling
- Tuning criteria
- Initial Calibration criteria including CCC and SPCC compounds
- ICV/ CCV criteria
- MDL Level Verification
- Internal standard area counts and retention times
- LCS Recovery
- Surrogate recovery criteria
- MRL recovery criteria

Blanks

- Bis (2-Ethylhexyl) phthalate was detected in the method blank at 1.3ug/L. bis (2-Ethylhexyl) phthalate results <10x contamination were qualified, "B".
- Bis (2-Ethylhexyl) phthalate was detected in the rinse blank at 0.85ug/L. bis (2-Ethylhexyl) phthalate results <10x contamination were qualified, "B".

Pesticides- 8081A

The following QC criteria were reviewed with acceptable results:

- Preservation, holding time and sample handling
- Initial Calibration criteria
- DDT and Endrin breakdown criteria
- Retention time criteria
- ICV criteria
- The method blank was free from contamination
- Equipment Rinse was free from contamination
- LCS Recoveries
- MDL verification criteria
- MRL Verification criteria
- Second Column Confirmation Criteria

Surrogate Recoveries

The surrogate, DCB, recovered below control limits in all the field samples. The associated results were qualified as estimated, "J/UJ".

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2009 **Date:** August 31, 2009
STL Sample Delivery Group: A9G160256 **Revision:** 0

PCBs- 8082

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- Retention time criteria
- MDL verification criteria
- ICV/ CCV criteria
- The method blank was free from contamination
- Equipment Rinse was free from contamination
- LCS/ LCSD percent recoveries and RPD value criteria
- Second Column confirmation criteria
- MRL Verification Criteria

Surrogate Recovery

The surrogate, DCB, recovered below control limits in samples FWGASYmw-006c-1408-GW, FWGASYmw-008c-1410-GW and FWGASYmw-010c-1412-GW. The associated results were qualified as estimated, "UJ".

Metals - 6010B

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- ICV criteria
- CCV criteria
- Interference Check Sample (ICSAB) criteria
- LCS recovery criteria
- MS recovery criteria
- MDL Verification criteria
- MRL verification criteria
- Lab Duplicate RPD criteria

Blanks

No qualifications were made for results due to negative blanks, since the LCG doesn't specifically address negative blank values.

- The ICB analyzed 7/20/09 had detected potassium at 147ug/L. The potassium results for, FWGEQUIPRinse4-1426-GW, was qualified, "U", as the detected potassium concentration was <5x blank contamination.
- The CCBs analyzed 7/20/09 had detected potassium from 146 ug/L to 147ug/L. The potassium result FWGEQUIPRinse4-1426-GW was qualified, "U", as the detected concentration was <5x blank contamination.

- Potassium was detected in the method blank at 144ug/L. All detected potassium results <5x contamination were qualified, "B".
- FWGEQUIPRinse4-1426-GW had potassium detected at 141ug/L. All detected potassium results <5x contamination were qualified, "B".

Metals - 6020

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Internal standard and tune criteria
- Initial Calibration criteria
- ICV/CCV criteria
- MDL Verification Data
- Interference Check Sample (ICSAB) criteria
- LCS Recovery Criteria
- MS recovery criteria
- Lab Duplicate RPD Criteria
- Equipment blank free from contamination

MRL Verification

The MRL analyzed 7/27/09 @ 1111 had zinc recover above limits at 142%. Detected concentrations of zinc were qualified as estimated, "J".

Blanks

The CCBs analyzed 7/27/09 had detected aluminum at 8.6ug/L, antimony from 0.059ug/L to 0.071ug/L, beryllium from 0.052ug/L to 0.055ug/L, cadmium from 0.034ug/L to 0.089ug/L, iron from 22ug/L to 24.3ug/L and thallium from 0.12ug/L to 0.15ug/L.

- The antimony result for sample FWGASYmw-008c-1410-GF was qualified, "U" as the result was <5x CCB contamination.
- No other qualifications were made as the all other contaminants were either nondetect or >5x contamination.

No qualifications were made for due to negative blanks, since the LCG doesn't specifically address negative blank values.

Zinc was detected in the method blank at at 5.0ug/L. All detected zinc results <5x contamination were qualified, "B".

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2009 **Date:** August 31, 2009
STL Sample Delivery Group: A9G160256 **Revision:** 0

Mercury - 7470A

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- ICV and CCV criteria
- ICB /CCBs were free from contamination
- The method blank was free from contamination
- The equipment blank was free from contamination
- MRL and MDL verification criteria
- LCS percent recovery criteria
- MS percent recovery
- Matrix Duplicate RPD criteria

No QC outliers were noted.

Cyanide- 9012

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- ICV and CCV criteria
- MRL Verification Check criteria
- Method and Equipment Blank were free from contamination
- LCS/LCSD percent recoveries and RPD value criteria
- Matrix Spike Recovery Criteria

No QC outliers were noted.

Data Validator: Angie Drake
Date: 9/14/09

2nd Level Data Reviewer: Erik Corbin
Date: 9/14/09

SAMPLE SUMMARY

A9G160256

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LGLJ5	001	FWGTEAM1-TRIP	07/16/09	08:00
LGLKE	002	FWGASYmw-007C-1409-GW	07/16/09	08:50
LGLKL	003	FWGASYmw-007C-1409-GF	07/16/09	08:50
LGLKM	004	FWGEQUIPRINSE4-1426-GW	07/16/09	09:30
LGLKN	005	FWGASYmw-006C-1408-GW	07/16/09	10:15
LGLKP	006	FWGASYmw-006C-1408-GF	07/16/09	10:15
LGLKQ	007	FWGTEAM2-TRIP	07/16/09	08:00
LGLKT	008	FWGASYmw-009C-1411-GW	07/16/09	08:50
LGLKX	009	FWGASYmw-009C-1411-GF	07/16/09	08:50
LGLK0	010	FWGASYmw-010C-1412-GW	07/16/09	09:50
LGLK2	011	FWGASYmw-010C-1412-GF	07/16/09	09:50
LGLK3	012	FWGTEAM3-TRIP	07/16/09	08:00
LGLK4	013	FWGASYmw-008C-1410-GW	07/16/09	08:45
LGLK5	014	FWGASYmw-008C-1410-GF	07/16/09	08:45

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 7/16/09	Chain of Custody Number: 003184
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513 825 7500 (fax 7495)	Lab Number: 3304979396	Page 1 of 1
City: Cincinnati; State: OH; Zip Code: 45240	Site Contact: E Corbin; Lab Contact: M Loeb		
Project Name and Location (State): RVAAP (OH) PN: 30240.0006	Carrier/Waybill Number: NA Lab Pickup		
Contract/Purchase Order/Quote No.: PO # 15660			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Explo 8330	Propellants	Cyanide 9012	Metals 6010/6020 7470	Perchlorates	Special Instructions/ Conditions of Receipt: Cooler ID
FWG Team 1 - Trip	7/16/09	0800		X						2			X									C8
FWGASYmw-007C-1409GW	7/16/09	0850		X			9			3	1		X	X	X	X	X	X	X			M23
FWGASYmw-007C-1409-GF	7/16/09	0850		X			1		1											X	X	M23
FWGEQUIPRinse4-1426-GW	7/16/09	0930		X			10		1	3	1		X	X	X	X	X	X	X	X	X	183
FWGASYmw-006C-1408-GW	7/16/09	1015		X			9			3	1		X	X	X	X	X	X	X			C8
FWGASYmw-006C-1408-GF	7/16/09	1015		X			1		1											X	X	C8

AH

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other per SOW

QC Requirements (Specify): Metals/Perchlorates were field filtered

	Date	Time		Date	Time
1. Relinquished By: [signature]	7-16-09	1250	1. Received By: RC Robison	7/16/09	1258
2. Relinquished By: RC Robison	7/16/09	1348	2. Received By: [signature]	7/16/09	1348
3. Relinquished By:			3. Received By:		

Comments: Temps may not meet requirements if sample collection is close to lab pickup time

All VOCs in Cooler C8

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client: EQM
Address: 1800 CARLSON BLVD
City: Cincinnati | State: OH | Zip Code: 45240
Project Name and Location (State): RVAAP Ravenna Oh
Contract/Purchase Order/Quote No.: PO 155560 PN30240.0006

Project Manager: John Miller
Telephone Number (Area Code)/Fax Number: 513 825 7500 (fax 7495)
Site Contact: E CORBIN | Lab Contact: M LOEB
Carrier/Waybill Number: LAB PICKUP

Date: 7-16-09
Chain of Custody Number: 003266
Lab Number: 330497 9396
Page 1 of 1

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Explo 8330	Propellants	Cyanide 9012	Metals 6010/7470/7196	Perchlorates	Special Instructions/ Conditions of Receipt
FWG Team2-Trip	7-16-09	0800		X			2						X									Cooler ID #
FWGAS4mw-009C-1411-GW		0850		X			9			3	1		X	X	X	X	X	X	X			H112
FWGAS4mw-009C-1411-GF				X			1		1											X	X	H112
FWGAS4mw-010C-1412-GW		0950		X			9			3	1		X	X	X	X	X	X	X			H112
FWGAS4mw-010C-1412-GF		0950		X			1		1											X	X	H113
					GeO																	H113

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other Per SOW

QC Requirements (Specify): Metals + Perchlorates were field filtered.

		Date	Time
1. Relinquished By	[signature]	7-16-09	1250
2. Relinquished By	[signature]	7/16/09	1348
3. Relinquished By			

		Date	Time
1. Received By	[signature]	7/16/09	1250
2. Received By	[signature]	7/16/09	1348
3. Received By			

Comments: Temps may not meet requirements if sample collection is close to lab pick up time. All VOAs in #112

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

19

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	EQM
Address	1800 CARILLON BLVD
City	CINCINNATI
State	OH
Zip Code	45240
Project Manager	JOHN MILLER
Telephone Number (Area Code)/Fax Number	(513) 825-7500 (FX 7495)
Site Contact	E. COBBIN
Lab Contact	M. LOEB
Project Name and Location (State)	RVAAP (OH) 030240.0006
Carrier/Waybill Number	N/A - LAB PICKUP
Contract/Purchase Order/Quote No.	PO 15660
Date	07/16/2009
Chain of Custody Number	003169
Lab Number	(330) 497-9396
Page	1 of 1

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOCs 8260	SVOC 8270	PCBs 8081	PCBs 8082	EXPLO 8330	PROPELLANTS	CYANIDE 9012	METALS 6010/6020 7470	PERCHLORATES				Special Instructions/ Conditions of Receipt
FWG TEMP 3 - TRIP	07/16/09	0800		X						2			X												
FWG ASY MW-008C-1410-GW	07/16/09	0845		X			9			3	1		X	X	X	X	X	X	X						COOLER - 12009
FWG ASY MW-008C-1410-GF	07/16/09	0845		X			1		1											X	X				COOLER - 12009
																									COOLER - 12009

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other PER SOW

QC Requirements (Specify)
METALS/PERCHLORATES WERE FIELD FILTERED

1. Relinquished By	Date 7-16-09	Time 1250	1. Received By	Date 7/16/09	Time 1250
2. Relinquished By	Date 7/16/09	Time 1348	2. Received By	Date 7/16/09	Time 1348
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments
TEMPS MAY NOT MEET REQUIREMENTS IF SAMPLE COLLECTION IS CLOSE TO LAB PICKUP TIME
ALL VOCS IN COOLER 12009

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

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TestAmerica Cooler Receipt Form/Narrative **Lot Number:** A9G160256
North Canton Facility

Client E&M Project PVAAP By: [signature] (Signature)
Cooler Received on 7/16/09 Opened on 7/16/09
FedEx ☐ UPS ☐ DHL ☐ FAS ☐ Stetson ☐ Client Drop Off ☐ TestAmerica Courier ☒ Other ____
TestAmerica Cooler # ____ Multiple Coolers ☒ Foam Box ☐ Client Cooler ☐ Other ____

1. Were custody seals on the outside of the cooler(s)? Yes ☒ No ☐ Intact? Yes ☒ No ☐ NA ☐
   If YES, Quantity 6 Quantity Unsalvageable ____
   Were custody seals on the outside of cooler(s) signed and dated? Yes ☒ No ☐ NA ☐
   Were custody seals on the bottle(s)? Yes ☐ No ☒
   If YES, are there any exceptions? ____
2. Shippers' packing slip attached to the cooler(s)? 9/16/09 ~~Yes~~ ☒ No ☒
3. Did custody papers accompany the sample(s)? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Were the custody papers signed in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☒ Foam ☐ None ☐ Other ____
6. Cooler temperature upon receipt ____ °C See back of form for multiple coolers/temps ☒
   METHOD: IR ☒ Other ☐ ____
   COOLANT: Wet Ice ☒ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐
7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels be reconciled with the COC? Yes ☒ No ☐
9. Were sample(s) at the correct pH upon receipt? Yes ☒ No ☐ NA ☐
10. Were correct bottle(s) used for the test(s) indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☒ NA ☐
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a trip blank present in the cooler(s)? Yes ☒ No ☐ Were VOAs on the COC? Yes ☒ No ☐

Contacted PM ____ Date ____ by ____ via Verbal ☐ Voice Mail ☐ Other ☐
Concerning ____

14. CHAIN OF CUSTODY

The following discrepancies occurred:

15. SAMPLE CONDITION

Sample(s) ____ were received after the recommended holding time had expired.
Sample(s) ____ were received in a broken container.
Sample(s) ____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) ____ were further preserved in Sample Receiving to meet recommended pH level(s). *Nitric Acid Lot# 031909-HNO_3; Sulfuric Acid Lot# 100108-H_2SO_4; Sodium Hydroxide Lot# 073007 -NaOH; Hydrochloric Acid Lot# 092006-HCl; Sodium Hydroxide and Zinc Acetate Lot# 050205-$(CH_3COO)_2ZN/NaOH$.* What time was preservative added to sample(s)? ____

Client ID	pH	Date	Initials
1409	<2 >12	7/16/09	[illegible]
1426	<2 >12		
1408	<2 >12		
1411	<2 >12		
1412	<2 >12		
1410	<2 >12		

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials

Cooler #	Temp. °C	Method	Coolant
M23	2.2	IR	Ice
183	4.1		
C8	3.3		
H112	2.9		
H113	4.6		
12009	3.8		

Discrepancies Cont'd:

CASE NARRATIVE

A9G160256

The following report contains the analytical results for eleven water samples and three quality control samples submitted to TestAmerica North Canton by Environmental Quality Mgt., Inc. from the RVAAP (OH) Site, project number 30240.0006. The samples were received July 16, 2009, according to documented sample acceptance procedures.

TestAmerica utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Angye Dragotta, Erik Corbin, and Jackie Doan on July 31, 2009. A summary of QC data for these analyses is included at the back of the report.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Please refer to the Quality Control Elements Narrative following this case narrative for additional quality control information.

If you have any questions, please call the Project Manager, Mark J. Loeb, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT."

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The coolers were received at temperatures ranging from 2.2 to 4.6°C.

CASE NARRATIVE (continued)

GC/MS VOLATILES

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

GC/MS SEMIVOLATILES

The sample(s) that contained concentrations of target analyte(s) at a reportable level in the associated Method Blank(s) were flagged with "B". All target analytes in the Method Blank must be below the reporting limit (RL) or the associated sample(s) must be ND with the exception of common laboratory contaminants.

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

PESTICIDES-8081

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

For sample(s) FWGASYmw-007C-1409-GW, FWGASYmw-007C-1409-GF, FWGASYmw-006C-1408-GW, FWGASYmw-009C-1411-GW, and FWGASYmw-010C-1412-GW, the recovery for one surrogate compound is outside acceptance criteria. Since LCG criterion is that one of two surrogate compounds must meet acceptance criteria, no corrective action was required. (Surrogate was below acceptance limits, but above 10%.)

CASE NARRATIVE (continued)

POLYCHLORINATED BIPHENYLS-8082

For sample(s) FWGASYmw-006C-1408-GW, FWGASYmw-010C-1412-GW, and FWGASYmw-008C-1410-GW, the recovery for one surrogate compound is outside acceptance criteria. Since LCG criterion is that one of two surrogate compounds must meet acceptance criteria, no corrective action was required. (Surrogate was below acceptance limit, but above 10%.)

METALS

The sample(s) that contain results between the MDL and the RL were flagged with "B". There is the possibility of false positive or mis-identification at these quantitation levels. The acceptance criteria for the ICB, CCB, and Method Blank are +/- the standard reporting limit (SRL).

The sample(s) that contained concentrations of target analyte(s) at a reportable level in the associated Method Blank(s) were flagged with "J". Refer to the sample report pages for the affected analyte(s).

No ICP Trace or ICP MS Form IX was provided for batch(es) 9198015. The serial dilutions were performed on a different sample from the same QC batch(es).

The sample duplicate RPD was outside the acceptance limits for some analytes. The result is less than five times the reporting limit; therefore, no corrective action is required. Refer to the sample duplicate report for RPDS that exceed 20%.

GENERAL CHEMISTRY

The analytical results met the requirements of the laboratory's QA/QC program.

MANUAL INTEGRATION SUMMARY

Manual integrations were performed on samples(s) reported herein. A list of samples and analytes for which manual integration was necessary is provided following this Case Narrative.

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

QUALITY CONTROL ELEMENTS NARRATIVE (continued)

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

TestAmerica Certifications and Approvals:

The laboratory is certified for the analytes listed on the documents below. These are available upon request.

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225),
Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Nevada (#OH-000482008A), OhioVAP (#CL0024), Pennsylvania (#008), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit

N:\QAQC\Customer Service\Narrative - Combined RCRA _CWA 032609.doc

MANUAL INTEGRATION SUMMARY

Lot A9G160256

Client ID: FWGASYmw-008C-1410-
Compound Name: Methoxychlor
Instrument ID: a2hp3.i
File Name: 038F3801.D
Inj. Date and Time: 24-JUL-2009 04:58
Manual Integration Reason: Baseline Event

Client ID: FWGASYmw-008C-1410-
Compound Name: Endrin ketone
Instrument ID: a2hp3.i
File Name: 038F3801.D
Inj. Date and Time: 24-JUL-2009 04:58
Manual Integration Reason: Baseline Event

GCMS VOLATILE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/August 31, 2009

SDG: A9G160256 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.2- 4.6 °C.	QAPP Table 4-2, NELAC
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3.3
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-3
7. Was the GC/MS system tuned with bromofluorobenzene (BFB)?	✓				LCG Table 1
8. Was the criteria met during each 12 hour shift (prior to ICAL and Cal Ver.)?	✓				SW846 8260B 7.3.1
9. Did the initial calibration curve consist of 5 concentration levels?	✓			A3UX11 – 6/22/09 stds – 5, 10, 25, 50, 100, 200 ng on column	LCG Table 1 R
10. Did the Calibration Check Compounds (CCCs) (see Table 1 below) relative standard deviations (%RSD) ≤ 30%?	✓				LCG Table 1 R
11. Were the minimum response factors (RFs) for the System Performance Check Compounds (SPCCs) (see Table 2 below) met?	✓				LCG Table 1
12. Were all other target analytes ≤ 15% RSD? OR Was the average RSD ≤ 15%? Was a different calibration option used?	✓			6/22/09-Acetone, methylene chloride, cis-1,3-dichloropropene, trans-1,3-dichloropropene, dibromochloromethane and bromoform used weighted linear curves.	LCG Table 1 15% <RSD< 20% = J/UJ
13. If a linear regression curve was used, was the correlation coefficient r≥0.99?	✓			All correlation coefficients were ≥0.99. No qualifications were made since the correlation coefficients were acceptable.	LCG Table 1 R<0.99=-J/R
14. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓			A3UX11 – 7/21/09 @1719	LCG Table 1 R
15. Was a MRL Level Verification run at the beginning and end of every daily sequence or every 12 hours?	✓				LCG Table 1

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/August 31, 2009

SDG: A9G160256 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
16. Were the QC/MRL recoveries 70-130%?		✓		A3UX11 • The opening MRL check analyzed at 1100 had carbon disulfide recover below control limits at 68.4% and methylene chloride at 66%. Dibromochloromethane recovered above control limits at 155%, trans-1,3-dichloropropene at 151% and bromoform at 201%. • The closing MRL check analyzed 7/21/09 at 1656 had carbon disulfide recover below control limits at 62.2% and 2-hexanone at 64%. Dibromochloromethane recovered above control limits at 146%, trans-1,3-dichloropropene at 132% and bromoform at 183%. The methylene chloride, carbon disulfide and 2-hexanone results for were qualified as estimated, "J/UJ". No qualifications were made for dibromochloromethane, trans-1,3-dichloropropene or bromoform as there were no detected concentrations of these targets.	LCG Table 1 >130%=J; 70-60%=J/UJ; <60%=J/R
17. Was a second source verification (ICV) analyzed after the ICAL? Were results 80-120%?	✓			A3UX11 –6/22/09 @ 1345 Chloromethane recovered below control limits at 71.5%. All Chloromethane results were qualified as estimated, "UJ".	LCG Table 1 >120%=J; 60-80%=J/UJ; <60%=J/R
18. Was a CCV run every 12 hours?	✓				LCG Table 1
19. Did the CCCs have a %Difference < 20%?	✓				LCG Table 1
20. Were the minimum RFs for the SPCCs within limits?	✓				LCG Table 1
21. Was the average of all target analytes ≤ 20%D with a maximum D for each target analyte ≤30%?	✓				LCG Table 1 Avg D>20% and D>30% =R; Avg %D<20% and D>30% =J D>20% (neg) = J/R D>30% (pos) = J
22. Were the internal standards added to every sample?	✓				LCG Table 1
23. Were the retention times for all IS compounds within ±30 seconds from the RT of the mid-point standard in the ICAL?	✓				LCG Table 1 R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/August 31, 2009

SDG: A9G160256 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
24. Was the EICP area between -50% and +100% of the ICAL mid-point standard?	✓				LCG Table 1 R
25. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 1
26. Were target analytes detected in the method blank >1/2 the MRL?	✓			Checked by ADR.	LCG Table 1 <5/10X =B
27. Was a field blank (equipment and/or trip) collected and analyzed?	✓			FWGEQUIPRinse4-1426-GW	
28. Were target analytes detected in the field blank analyses >1/2 the MRL?	✓			FWGEQUIPRinse4-1426-GW had acetone detected at 7.3ug/L, 2-butanone at 1.1ug/L and methylene chloride at 2.1ug/L. No qualifications were made as there were no detected concentrations of these contaminants in the associated field samples. Acetone was detected in all three trip blanks from 2.4ug/L to 3.2ug/L. The acetone result for FWGEQUIPRinse4-1426-GW were qualified, "B", as the detected acetone concentration in the rinse blank was less than 10x trip blank contamination.	<5/10X =B
29. Was a field duplicate analyzed?		✓		No field duplicates were submitted with this work order.	
30. Were the Field duplicates RPDs within ±30%?			✓		QAPP Table 3-2 RPD >30=J
31. Was a LCS prepared and analyzed with each batch?	✓				LCG Table 1
32. Were the LCS recoveries within limits specified in Appendix C of the LCG?	✓			ADR checked section; Batch 9202112- The LCD percent recovery was below control limits for chloromethane at 55%. The LCS/LCD percent recovery for chloroethane was below control limits at 65% and 64% and the carbon disulfide recovered below limits at 73% and 71%. Associated chloromethane, chloroethane and carbon disulfide results were qualified as estimated, "UJ".	LCG Appendix C >UL=J; 30%-LL=J/UJ; <30%=J/R
33. Was a MS/MSD prepared with each batch?		✓		An LCS/LCD was analyzed.	LCG Table 1
34. Was the MS/MSD parent a Ravenna sample?			✓		
35. Were MS/MSD recoveries 70-130% and RPD values ≤20%?			✓		LCG Table 1 Pj
36. Were surrogate recoveries 50-150%?	✓				LCG Table 1 >150%=J; 10% -50%=J/UJ; <10%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/August 31, 2009

SDG: A9G160256 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
37. Were reported sample concentrations within calibration range?	✓				
38. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
39. Were lab comments included in report? If yes, summarize contents.		✓			

References:

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 1 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Table1- CCCs

Analyte
1,1-Dichloroethene
Chloroform
1,2-Dichloropropane
Toluene
Ethylbenzene
Vinyl chloride

Table 2- SPCCs

Analyte	Minimum RF
Chloromethane	0.10
1,1-Dichlorethane	0.10
Bromoform	0.10
Chlorobenzene	0.30
1,1,2,2-Tetrachloroethane	0.30

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM1-TRIP

GC/MS Volatiles

Lot-Sample #...: A9G160256-001 **Work Order #...:** LGLJ51AA **Matrix.....:** WQ
Date Sampled...: 07/16/09 08:00 **Date Received..:** 07/16/09
Prep Date.....: 07/21/09 **Analysis Date..:** 07/21/09
Prep Batch #...: 9202112
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	**2.4 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM1-TRIP

GC/MS Volatiles

Lot-Sample #...: A9G160256-001 **Work Order #...:** LGLJ51AA **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	92	(50 - 150)
1,2-Dichloroethane-d4	92	(50 - 150)
Toluene-d8	93	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-007C-1409-GW

GC/MS Volatiles

Lot-Sample #...: A9G160256-002 Work Order #...: LGLKE1AA Matrix.....: WG
Date Sampled...: 07/16/09 08:50 Date Received..: 07/16/09
Prep Date.....: 07/21/09 Analysis Date..: 07/21/09
Prep Batch #...: 9202112
Dilution Factor: 1 Initial Wgt/Vol: 5 mL Final Wgt/Vol..: 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-007C-1409-GW

GC/MS Volatiles

Lot-Sample #...: A9G160256-002 **Work Order #...:** LGLKE1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	95	(50 - 150)
1,2-Dichloroethane-d4	93	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1426-GW

GC/MS Volatiles

Lot-Sample #...: A9G160256-004 **Work Order #...:** LGLKM1AA **Matrix.....:** WQ
Date Sampled...: 07/16/09 09:30 **Date Received..:** 07/16/09
Prep Date.....: 07/21/09 **Analysis Date..:** 07/21/09
Prep Batch #...: 9202112
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	**2.1**	**2.0**	**ug/L**	**0.33**
Acetone	**7.3 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	**1.1 J**	**10**	**ug/L**	**0.57**
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1426-GW

GC/MS Volatiles

Lot-Sample #...: A9G160256-004 **Work Order #...:** LGLKM1AA **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	96	(50 - 150)
1,2-Dichloroethane-d4	92	(50 - 150)
Toluene-d8	91	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-006C-1408-GW

GC/MS Volatiles

Lot-Sample #...: A9G160256-005 **Work Order #...:** LGLKN1AA **Matrix.....:** WG
Date Sampled...: 07/16/09 10:15 **Date Received..:** 07/16/09
Prep Date.....: 07/21/09 **Analysis Date..:** 07/21/09
Prep Batch #...: 9202112
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-006C-1408-GW

GC/MS Volatiles

Lot-Sample #...: A9G160256-005 **Work Order #...:** LGLKN1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	96	(50 - 150)
1,2-Dichloroethane-d4	94	(50 - 150)
Toluene-d8	93	(50 - 150)
4-Bromofluorobenzene	86	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM2-TRIP

GC/MS Volatiles

Lot-Sample #...: A9G160256-007 **Work Order #...:** LGLKQ1AA **Matrix.....:** WQ
Date Sampled...: 07/16/09 08:00 **Date Received..:** 07/16/09
Prep Date.....: 07/21/09 **Analysis Date..:** 07/21/09
Prep Batch #...: 9202112
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	**3.2 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM2-TRIP

GC/MS Volatiles

Lot-Sample #...: A9G160256-007 **Work Order #...:** LGLKQ1AA **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	98	(50 - 150)
1,2-Dichloroethane-d4	96	(50 - 150)
Toluene-d8	91	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-009C-1411-GW

GC/MS Volatiles

Lot-Sample #...: A9G160256-008 **Work Order #...:** LGLKT1AA **Matrix.....:** WG
Date Sampled...: 07/16/09 08:50 **Date Received..:** 07/16/09
Prep Date.....: 07/21/09 **Analysis Date..:** 07/21/09
Prep Batch #...: 9202112
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-009C-1411-GW

GC/MS Volatiles

Lot-Sample #...: A9G160256-008 **Work Order #...:** LGLKT1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	97	(50 - 150)
1,2-Dichloroethane-d4	96	(50 - 150)
Toluene-d8	92	(50 - 150)
4-Bromofluorobenzene	82	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-010C-1412-GW

GC/MS Volatiles

Lot-Sample #...: A9G160256-010 **Work Order #...:** LGLK01AA **Matrix.....:** WG
Date Sampled...: 07/16/09 09:50 **Date Received..:** 07/16/09
Prep Date.....: 07/21/09 **Analysis Date..:** 07/21/09
Prep Batch #...: 9202112
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-010C-1412-GW

GC/MS Volatiles

Lot-Sample #...: A9G160256-010 **Work Order #...:** LGLK01AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	97	(50 - 150)
1,2-Dichloroethane-d4	98	(50 - 150)
Toluene-d8	92	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM3-TRIP

GC/MS Volatiles

Lot-Sample #...: A9G160256-012 **Work Order #...:** LGLK31AA **Matrix.....:** WQ
Date Sampled...: 07/16/09 08:00 **Date Received..:** 07/16/09
Prep Date.....: 07/21/09 **Analysis Date..:** 07/21/09
Prep Batch #...: 9202112
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	**2.8 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM3-TRIP

GC/MS Volatiles

Lot-Sample #...: A9G160256-012 **Work Order #...:** LGLK31AA **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	99	(50 - 150)
1,2-Dichloroethane-d4	97	(50 - 150)
Toluene-d8	91	(50 - 150)
4-Bromofluorobenzene	87	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-008C-1410-GW

GC/MS Volatiles

Lot-Sample #...: A9G160256-013 **Work Order #...:** LGLK41AA **Matrix.....:** WG
Date Sampled...: 07/16/09 08:45 **Date Received..:** 07/16/09
Prep Date.....: 07/21/09 **Analysis Date..:** 07/21/09
Prep Batch #...: 9202112
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-008C-1410-GW

GC/MS Volatiles

Lot-Sample #...: A9G160256-013 **Work Order #...:** LGLK41AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	100	(50 - 150)
1,2-Dichloroethane-d4	94	(50 - 150)
Toluene-d8	93	(50 - 150)
4-Bromofluorobenzene	82	(50 - 150)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A9G160256 **Work Order #...:** LGRAC1AA **Matrix.....:** WATER
MB Lot-Sample #: A9G210000-112

Prep Date.....: 07/21/09 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 07/21/09 **Prep Batch #...:** 9202112
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
1,2-Dibromoethane	ND	1.0	ug/L	SW846 8260B
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
o-Xylene	ND	1.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	ND	2.0	ug/L	SW846 8260B
Chloromethane	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	2.0	ug/L	SW846 8260B
Acetone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	10	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B
2-Hexanone	ND	10	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	2.0	ug/L	SW846 8260B

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A9G160256 **Work Order #...:** LGRAC1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	96	(50 - 150)
1,2-Dichloroethane-d4	93	(50 - 150)
Toluene-d8	91	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G160256 Work Order #...: LGRAC1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A9G210000-112 LGRAC1AD-LCSD
Prep Date.....: 07/21/09 Analysis Date..: 07/21/09
Prep Batch #...: 9202112
Dilution Factor: 1 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
cis-1,2-Dichloroethene	93	(73 - 133)			SW846 8260B
	90	(73 - 133)	3.3	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	87	(75 - 134)			SW846 8260B
	89	(75 - 134)	2.1	(0-30)	SW846 8260B
1,2-Dibromoethane	90	(75 - 127)			SW846 8260B
	95	(75 - 127)	5.4	(0-30)	SW846 8260B
Bromochloromethane	92	(75 - 127)			SW846 8260B
	92	(75 - 127)	0.24	(0-30)	SW846 8260B
m-Xylene & p-Xylene	97	(75 - 122)			SW846 8260B
	94	(75 - 122)	3.1	(0-30)	SW846 8260B
o-Xylene	95	(75 - 118)			SW846 8260B
	93	(75 - 118)	2.0	(0-30)	SW846 8260B
Chloromethane	68	(58 - 135)			SW846 8260B
	55 a	(58 - 135)	21	(0-30)	SW846 8260B
Bromomethane	66	(35 - 153)			SW846 8260B
	63	(35 - 153)	5.4	(0-30)	SW846 8260B
Vinyl chloride	73	(73 - 134)			SW846 8260B
	73	(73 - 134)	0.0	(0-30)	SW846 8260B
Chloroethane	65 a	(72 - 129)			SW846 8260B
	64 a	(72 - 129)	1.2	(0-30)	SW846 8260B
Methylene chloride	82	(69 - 118)			SW846 8260B
	79	(69 - 118)	4.6	(0-30)	SW846 8260B
Acetone	93	(51 - 157)			SW846 8260B
	97	(51 - 157)	4.2	(0-30)	SW846 8260B
Carbon disulfide	73 a	(74 - 123)			SW846 8260B
	71 a	(74 - 123)	2.0	(0-30)	SW846 8260B
1,1-Dichloroethene	84	(75 - 125)			SW846 8260B
	81	(75 - 125)	3.4	(0-30)	SW846 8260B
1,1-Dichloroethane	88	(75 - 133)			SW846 8260B
	90	(75 - 133)	1.4	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	90	(85 - 111)			SW846 8260B
	90	(85 - 111)	0.67	(0-30)	SW846 8260B
Chloroform	91	(74 - 127)			SW846 8260B
	90	(74 - 127)	0.41	(0-30)	SW846 8260B
1,2-Dichloroethane	94	(67 - 132)			SW846 8260B
	90	(67 - 132)	4.7	(0-30)	SW846 8260B

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G160256 Work Order #...: LGRAC1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A9G210000-112 LGRAC1AD-LCSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Butanone	90	(45 - 150)			SW846 8260B
	88	(45 - 150)	1.8	(0-30)	SW846 8260B
1,1,1-Trichloroethane	95	(70 - 127)			SW846 8260B
	96	(70 - 127)	1.3	(0-30)	SW846 8260B
Carbon tetrachloride	100	(71 - 132)			SW846 8260B
	100	(71 - 132)	0.080	(0-30)	SW846 8260B
Bromodichloromethane	98	(70 - 130)			SW846 8260B
	96	(70 - 130)	2.4	(0-30)	SW846 8260B
1,2-Dichloropropane	90	(75 - 127)			SW846 8260B
	89	(75 - 127)	1.0	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	80	(73 - 132)			SW846 8260B
	80	(73 - 132)	0.54	(0-30)	SW846 8260B
Trichloroethene	91	(67 - 128)			SW846 8260B
	93	(67 - 128)	2.2	(0-30)	SW846 8260B
Dibromochloromethane	97	(74 - 145)			SW846 8260B
	95	(74 - 145)	1.6	(0-30)	SW846 8260B
1,1,2-Trichloroethane	91	(75 - 136)			SW846 8260B
	90	(75 - 136)	1.2	(0-30)	SW846 8260B
Benzene	90	(75 - 126)			SW846 8260B
	90	(75 - 126)	0.33	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	84	(74 - 131)			SW846 8260B
	83	(74 - 131)	0.92	(0-30)	SW846 8260B
Bromoform	109	(72 - 136)			SW846 8260B
	105	(72 - 136)	3.4	(0-30)	SW846 8260B
4-Methyl-2-pentanone	87	(59 - 150)			SW846 8260B
	86	(59 - 150)	1.2	(0-30)	SW846 8260B
2-Hexanone	83	(53 - 139)			SW846 8260B
	82	(53 - 139)	1.1	(0-30)	SW846 8260B
Tetrachloroethene	95	(75 - 129)			SW846 8260B
	94	(75 - 129)	0.45	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	81	(68 - 129)			SW846 8260B
	83	(68 - 129)	2.5	(0-30)	SW846 8260B
Toluene	89	(75 - 125)			SW846 8260B
	88	(75 - 125)	1.4	(0-30)	SW846 8260B
Chlorobenzene	91	(75 - 127)			SW846 8260B
	90	(75 - 127)	1.3	(0-30)	SW846 8260B
Ethylbenzene	90	(75 - 120)			SW846 8260B
	92	(75 - 120)	2.8	(0-30)	SW846 8260B
Styrene	96	(75 - 130)			SW846 8260B
	94	(75 - 130)	1.4	(0-30)	SW846 8260B
Xylenes (total)	96	(90 - 114)			SW846 8260B
	94	(90 - 114)	2.8	(0-30)	SW846 8260B

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G160256 **Work Order #...:** LGRAC1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A9G210000-112 LGRAC1AD-LCSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	93	(50 - 150)
	94	(50 - 150)
1,2-Dichloroethane-d4	90	(50 - 150)
	98	(50 - 150)
Toluene-d8	91	(50 - 150)
	92	(50 - 150)
4-Bromofluorobenzene	100	(50 - 150)
	98	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J90721A.b\UXJ3226.D
Report Date: 21-Jul-2009 11:32

TestAmerica North Canton

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: QCMRL
Level: LOW
Data Type: MS DATA
SpikeList File: MRL.spk
Sublist File: 4-8260+IX.sub
Method File: \\cansvr11\dd\chem\MSV\a3ux11.i\J90721A.b\8260LLUX11.m
Misc Info: J90721A,8260LLUX11,,43582,3

Client SDG: SDGa01304
Fraction: VOA

Operator: 43582
SampleType: METHSPIKE
Quant Type: ISTD

QCMRL
Opened
7/21/09
@ 1100

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	17 1,1-Dichloroethene	1.000	1.042	104.19	70-130
	42 Trichloroethene	1.000	1.021	102.07	70-130
	59 Chlorobenzene	1.000	0.9414	94.14	70-130
	50 Toluene	1.000	0.9667	96.67	70-130
	41 Benzene	1.000	1.040	104.00	70-130
	16 Acetone	2.000	2.531	126.56	70-130
	20 Carbon Disulfide	1.000	0.6842	68.42*	70-130
	9 Chloromethane	1.000	0.9704	97.04	70-130
	11 Bromomethane	1.000	1.002	100.22	70-130
	10 Vinyl Chloride	1.000	1.027	102.70	70-130
	12 Chloroethane	1.000	1.013	101.31	70-130
	21 Methylene Chloride	1.000	0.6603	66.03*	70-130
	28 1,1-Dichloroethane	1.000	0.9311	93.11	70-130
M	31 1,2-Dichloroethene	2.000	1.982	99.09	70-130
	35 Chloroform	1.000	1.051	105.13	70-130
	40 1,2-Dichloroethane	1.000	1.114	111.41	70-130
	30 2-Butanone	2.000	2.204	110.21	70-130
	37 1,1,1-Trichloroeth	1.000	1.054	105.43	70-130
	39 Carbon Tetrachlori	1.000	0.9207	92.07	70-130
	46 Bromodichlorometha	1.000	0.8857	88.57	70-130
	43 1,2-Dichloropropan	1.000	1.030	102.99	70-130
	48 cis-1,3-Dichloropr	1.000	1.265	126.53	70-130
	54 1,3-Dichloropropan	1.000	0.9815	98.15	70-130
	57 Dibromochlorometha	1.000	1.553	155.33*	70-130
	53 1,1,2-Trichloroeth	1.000	0.9734	97.34	70-130
	51 trans-1,3-Dichloro	1.000	1.515	151.48*	70-130
	49 4-Methyl-2-pentano	2.000	1.696	84.82	70-130
	56 2-Hexanone	2.000	1.690	84.48	70-130
	55 Tetrachloroethene	1.000	1.072	107.16	70-130
	68 1,1,2,2-Tetrachlor	1.000	0.8526	85.26	70-130
	66 Bromoform	1.000	2.011	201.08*	70-130
	61 Ethylbenzene	1.000	0.8847	88.47	70-130
	65 Styrene	1.000	0.8675	86.75	70-130
M	63 Xylenes (total)	3.000	2.612	87.06	70-130
	32 cis-1,2-dichloroet	1.000	0.9887	98.87	70-130
	25 trans-1,2-Dichloro	1.000	0.9932	99.32	70-130
	8 Dichlorodifluorome	1.000	1.281	128.08	70-130
	13 Trichlorofluoromet	1.000	1.020	102.00	70-130
	70 1,2,3-Trichloropro	1.000	0.9564	95.64	70-130
	18 Freon-113	1.000	1.007	100.71	70-130

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J90721A.b\UXJ3226.D
Report Date: 21-Jul-2009 11:32

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
24 Methyl tert-butyl	1.000	0.8720	87.20	70-130
58 1,2-Dibromoethane	1.000	1.034	103.39	70-130
67 Isopropylbenzene	1.000	0.8409	84.09	70-130
80 1,3-Dichlorobenzen	1.000	1.021	102.15	70-130
81 1,4-Dichlorobenzen	1.000	1.013	101.28	70-130
83 1,2-Dichlorobenzen	1.000	1.151	115.11	70-130
84 1,2-Dibromo-3-chlo	1.000	1.415	141.48*	70-130
85 1,2,4-Trichloroben	1.000	1.078	107.77	70-130
98 Cyclohexane	1.000	0.8494	84.94	70-130
143 Methyl Acetate	2.000	1.941	97.07	70-130
144 Methylcyclohexane	1.000	0.8358	83.58	70-130
71 Bromobenzene	1.000	0.0000	*	70-130
34 Bromochloromethane	1.000	1.086	108.57	70-130
82 n-Butylbenzene	1.000	0.8739	87.39	70-130
78 sec-Butylbenzene	1.000	0.8668	86.68	70-130
76 tert-Butylbenzene	1.000	0.9657	96.57	70-130
73 2-Chlorotoluene	1.000	0.8632	86.32	70-130
75 4-Chlorotoluene	1.000	0.8429	84.29	70-130
45 Dibromomethane	1.000	1.005	100.48	70-130
33 2,2-Dichloropropan	1.000	0.8757	87.57	70-130
38 1,1-Dichloropropen	1.000	0.9048	90.48	70-130
86 Hexachlorobutadien	1.000	1.205	120.53	70-130
19 Iodomethane	1.000	0.8377	83.77	70-130
79 4-Isopropyltoluene	1.000	0.8158	81.58	70-130
87 Naphthalene	1.000	0.7795	77.95	70-130
72 n-Propylbenzene	1.000	1.054	105.41	70-130
60 1,1,1,2-Tetrachlor	1.000	1.010	101.00	70-130
88 1,2,3-Trichloroben	1.000	1.056	105.56	70-130
77 1,2,4-Trimethylben	1.000	0.8303	83.03	70-130
74 1,3,5-Trimethylben	1.000	0.8368	83.68	70-130
150 Vinyl Acetate-86	1.000	0.7995	79.95	70-130
62 m + p-Xylene	2.000	1.758	87.92	70-130
64 Xylene-o	1.000	0.8534	85.34	70-130
49 4-Methyl-2-pentano	2.000	1.696	84.82	70-130
27 Vinyl acetate	1.000	1.034	103.45	70-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Dibromofluorometha	10.000	9.520	95.20	73-122
$ 5 1,2-Dichloroethane	10.000	8.878	88.78	61-128
$ 6 Toluene-d8	10.000	9.242	92.42	76-110
$ 7 Bromofluorobenzene	10.000	8.882	88.82	74-116

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J90721A.b\UXJ3241.D
Report Date: 22-Jul-2009 07:59

TestAmerica North Canton

RECOVERY REPORT

QCMRL
Closer
7/21/09
@
1105Z

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: QCMRL
Level: LOW
Data Type: MS DATA
SpikeList File: MRL.spk
Sublist File: 4-8260+IX.sub
Method File: \\cansvr11\dd\chem\MSV\a3ux11.i\J90721A.b\8260LLUX11.m
Misc Info: J90721A,8260LLUX11,,43582,3

Client SDG: SDGa01304
Fraction: VOA

Operator: 43582
SampleType: METHSPIKE
Quant Type: ISTD

	SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	17	1,1-Dichloroethene	1.000	0.8609	86.09	70-130
	42	Trichloroethene	1.000	0.8847	88.47	70-130
	59	Chlorobenzene	1.000	0.9781	97.81	70-130
	50	Toluene	1.000	0.9282	92.82	70-130
	41	Benzene	1.000	0.9370	93.70	70-130
	16	Acetone	2.000	1.887	94.34	70-130
	20	Carbon Disulfide	1.000	0.6218	62.18*	70-130
	9	Chloromethane	1.000	0.8863	88.63	70-130
	11	Bromomethane	1.000	0.7387	73.87	70-130
	10	Vinyl Chloride	1.000	0.9994	99.94	70-130
	12	Chloroethane	1.000	0.7566	75.66	70-130
	21	Methylene Chloride	1.000	0.7362	73.62	70-130
	28	1,1-Dichloroethane	1.000	0.9148	91.48	70-130
M	31	1,2-Dichloroethene	2.000	1.753	87.65	70-130
	35	Chloroform	1.000	0.9775	97.75	70-130
	40	1,2-Dichloroethane	1.000	1.007	100.72	70-130
	30	2-Butanone	2.000	1.521	76.04	70-130
	37	1,1,1-Trichloroeth	1.000	0.9360	93.61	70-130
	39	Carbon Tetrachlori	1.000	0.8242	82.42	70-130
	46	Bromodichlorometha	1.000	0.8225	82.25	70-130
	43	1,2-Dichloropropan	1.000	0.9359	93.59	70-130
	48	cis-1,3-Dichloropr	1.000	1.183	118.34	70-130
	54	1,3-Dichloropropan	1.000	0.9868	98.68	70-130
	57	Dibromochlorometha	1.000	1.461	146.08*	70-130
	53	1,1,2-Trichloroeth	1.000	1.001	100.11	70-130
	51	trans-1,3-Dichloro	1.000	1.316	131.64*	70-130
	49	4-Methyl-2-pentano	2.000	1.509	75.47	70-130
	56	2-Hexanone	2.000	1.280	63.98*	70-130
	55	Tetrachloroethene	1.000	0.8969	89.69	70-130
	68	1,1,2,2-Tetrachlor	1.000	0.8253	82.53	70-130
	66	Bromoform	1.000	1.831	183.13*	70-130
	61	Ethylbenzene	1.000	0.8581	85.81	70-130
	65	Styrene	1.000	0.7105	71.05	70-130
M	63	Xylenes (total)	3.000	2.235	74.51	70-130
	32	cis-1,2-dichloroet	1.000	0.8550	85.50	70-130
	25	trans-1,2-Dichloro	1.000	0.8980	89.80	70-130
	8	Dichlorodifluorome	1.000	1.069	106.88	70-130
	13	Trichlorofluoromet	1.000	0.8653	86.53	70-130
	70	1,2,3-Trichloropro	1.000	0.8891	88.91	70-130
	18	Freon-113	1.000	0.9561	95.61	70-130

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J90721A.b\UXJ3241.D
Report Date: 22-Jul-2009 07:59

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
24 Methyl tert-butyl	1.000	0.7983	79.83	70-130
58 1,2-Dibromoethane	1.000	0.8740	87.40	70-130
67 Isopropylbenzene	1.000	0.6915	69.15*	70-130
80 1,3-Dichlorobenzen	1.000	0.8835	88.35	70-130
81 1,4-Dichlorobenzen	1.000	0.9457	94.57	70-130
83 1,2-Dichlorobenzen	1.000	1.106	110.58	70-130
84 1,2-Dibromo-3-chl	1.000	0.0000	*	70-130
85 1,2,4-Trichloroben	1.000	0.6754	67.54*	70-130
98 Cyclohexane	1.000	0.6250	62.50*	70-130
143 Methyl Acetate	2.000	1.816	90.81	70-130
144 Methylcyclohexane	1.000	0.6883	68.83*	70-130
71 Bromobenzene	1.000	1.058	105.83	70-130
34 Bromochloromethane	1.000	1.074	107.38	70-130
82 n-Butylbenzene	1.000	0.6794	67.94*	70-130
78 sec-Butylbenzene	1.000	0.7169	71.69	70-130
76 tert-Butylbenzene	1.000	0.6651	66.51*	70-130
73 2-Chlorotoluene	1.000	0.8018	80.18	70-130
75 4-Chlorotoluene	1.000	0.8209	82.09	70-130
45 Dibromomethane	1.000	0.8966	89.66	70-130
33 2,2-Dichloropropan	1.000	0.8263	82.63	70-130
38 1,1-Dichloropropen	1.000	0.8215	82.15	70-130
86 Hexachlorobutadien	1.000	0.9072	90.73	70-130
19 Iodomethane	1.000	0.7610	76.10	70-130
79 4-Isopropyltoluene	1.000	0.7012	70.12	70-130
87 Naphthalene	1.000	0.5232	52.32*	70-130
72 n-Propylbenzene	1.000	0.5918	59.18*	70-130
60 1,1,1,2-Tetrachlor	1.000	0.8841	88.41	70-130
88 1,2,3-Trichloroben	1.000	0.6699	66.99*	70-130
77 1,2,4-Trimethylben	1.000	0.7021	70.21	70-130
74 1,3,5-Trimethylben	1.000	0.7163	71.63	70-130
150 Vinyl Acetate-86	1.000	0.7164	71.64	70-130
62 m + p-Xylene	2.000	1.527	76.33	70-130
64 Xylene-o	1.000	0.7086	70.87	70-130
49 4-Methyl-2-pentano	2.000	1.509	75.47	70-130
27 Vinyl acetate	1.000	0.7610	76.10	70-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Dibromofluorometha	10.000	9.573	95.73	73-122
$ 5 1,2-Dichloroethane	10.000	9.452	94.52	61-128
$ 6 Toluene-d8	10.000	9.264	92.64	76-110
$ 7 Bromofluorobenzene	10.000	9.064	90.64	74-116

GCMS SEMIVOLATILE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 31, 2009

SDG: A9G160256 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.2- 4.6 °C.	QAPP Table 4-2
3. Were samples extracted using the correct preparation, clean-up methods?	✓				QAPP Table 4-2
4. Were samples extracted within required holding times (7 days - water)?	✓				QAPP Table 4-2 J/UJ/R
5. Were samples analyzed within required holding times (40 days after extraction)?	✓				QAPP Table 4-2 J/UJ/R
6. Were sample storage requirements met?	✓				QAPP Table 4-2
7. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-4 and 3-6
8. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-4 and 3-6
9. Was the GC/MS system tuned with decafluorotriphenylphosphine (DFTPP)?	✓				LCG Table 2
10. Were the criteria met during each 12 hour shift?	✓				LCG Table 2
11. Did the initial calibration curve consist of 5 concentration levels, with the low standard near but above the MDL?	✓			A4HP10-7/29/09 stds = 0.05, 0.25, 0.50, 1.0, 2.5, 5.0, 7.5, 10.0, 12.5 ng on column	LCG Table 2 R
12. Did the Calibration Check Compounds (CCCs) (see Table 1 below) relative standard deviation (%RSD) ≤ 30%?	✓				LCG Table 2 R
13. Were the minimum response factors (RFs) for the System Performance Check Compounds (SPCCs) (see Table 2 below) met?	✓				LCG Table 2 R
14. Was each target analyte <15 % RSD, or was the average RSD <15%?	✓				LCG Table 2 15% <RSD< 30% = J/UJ

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 31, 2009

SDG: A9G160256 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
15. If a different calibration option was used, was the correlation coefficient (r^2) or the coefficient of determination ≥0.99?	✓			7/29/09- Benzoic acid, acenaphthylene, 2,4-dinitrophenol, 4,6-dinitro-2-methylphenol, benzo(b)fluoranthene, indeno(1,2,3-cd)pyrene, dibenz(a,h)anthracene and benzo(g,h,i)perylene used a quadratic fit. No qualifications were made as coefficients of determination (COD) (r) were≥0.99.	LCG Table 2 r<0.99=-J/R
16. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓			7/29/09	LCG Table 2 R
17. Was a MRL Level Verification run at the beginning and end of the sequence or every 12 hours?	✓				LCG Table 2
18. Were the QC/MRL recoveries 70-130%?	✓				LCG Table 2 >130%=J; 50-70%=J/UJ; <50%=J/R
19. Was a second source (ICV) verification analyzed after the ICAL? Were results 70-130%?	✓			7/29/09@1733	LCG Table 2 >130%=J; 50-70%=J/UJ; <50%=J/R
20. Was a CCV analyzed every 12 hours?			✓		LCG Table 2
21. Was the percent difference (% D) for the CCCs ≤ 20%? (see Table 1) (% drift if regression fit model used)			✓		LCG Table 2
22. Were the minimum RFs for the SPCCs met? (see Table 2)			✓		LCG Table 2
23. Was the %Difference or %Drift ≤20% for all target analytes? OR was the average %D ≤20% with no individual analyte ≥30%D?			✓		LCG Table 2 Avg D>20% and D>30% =R; Avg %D<20% and D>30% =J D>30% (neg) = J/R D>30% (pos) = J
24. Were the internal standards added to every sample?	✓				LCG Table 2

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 31, 2009

SDG: A9G160256 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
25. Were the retention times for all IS compounds within ±30 seconds from the RT of the mid-point ICAL std?	✓				LCG Table 2 R
26. Did the areas of all IS compounds vary by no more than -50% to +100% from the ICAL EICP area?	✓				LCG Table 2 R
27. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 2
28. Were all target analytes in the method blank <1/2 the MRL?		✓		Checked by ADR. Bis (2-Ethylhexyl) phthalate was detected in the method blank at 1.3ug/L. bis (2-Ethylhexyl) phthalate results <10x contamination were qualified, "B".	LCG Table 2 <5/10x blank = B
29. Was a field blank collected and analyzed?	✓			FWGEQUIPRinse4-1426-GW	
30. Were all target analytes in the field blank analysis <1/2 the MRL?		✓		Checked by ADR. Bis (2-Ethylhexyl) phthalate was detected in the rinse blank at 0.85ug/L. bis (2-Ethylhexyl) phthalate results <10x contamination were qualified, "B".	<5/10x blank = B
31. Was a field duplicate analyzed?		✓		No field duplicates were submitted with this work order.	
32. Were the field duplicate RPDs ≤30%?			✓	Checked by ADR.	QAPP Table 3-2 RPD >30=J
33. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 2
34. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR.	LCG Appendix C >UL=J; 30%-LL=J/UJ; <30%=J/R
35. Was a MS/MSD pair prepared with each batch?		✓		An LCS/LCD was analyzed.	LCG Table 2
36. Was the MS/MSD parent a Ravenna sample?			✓		
37. Were MS/MSD recoveries 45-135% and RPD value ≤40%?			✓		LCG Table 2 Pj
38. Were surrogate recoveries within 50-150%?	✓				LCG Table 2 >150%=J; 10% -50%=J/UJ; <10%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 31, 2009

SDG: A9G160256 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
39. Were reported sample concentrations within calibration range?	✓				
40. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
41. Were lab comments included in report? If yes, summarize contents.	✓			See narrative.	

References:
Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 2 and Attachment A "Data Validation Guidelines:
Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Table 1: CCCs

Base / Neutral Compunds	Acid Compounds
Acenaphthalene	4-Chloro-3-methylphenol
1,4-Dichlorobenzene	2,4-Dichlorophenol
Hexachlorobutadiene	2-Nitrophenol
N-Nitrosodiphehylamine	Phenol
Di-n-octylphthalate	Pentachlorophenol
Fluoroanthene	2,4,6-Trichlorophenol
Benzo(a)pyrene	

(All analytes if CCCs not included in standard)

Table 2: SPCCs

N-Nitroso-di-n-propylamine	0.050
Hexachlorocyclopentadiene	0.050
2,4-Dinitrophenol	0.050
4-Nitrophenol	0.050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-007C-1409-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160256-002 **Work Order #...:** LGLKE1AC **Matrix.....:** WG
Date Sampled...: 07/16/09 08:50 **Date Received..:** 07/16/09
Prep Date.....: 07/17/09 **Analysis Date..:** 07/29/09
Prep Batch #...: 9198139
Dilution Factor: 1 **Initial Wgt/Vol:** 960 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.1 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-007C-1409-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160256-002 **Work Order #...:** LGLKE1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propylamine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-007C-1409-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160256-002 **Work Order #...:** LGLKE1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	70	(50 - 150)
2-Fluorobiphenyl	67	(50 - 150)
Terphenyl-d14	85	(50 - 150)
Phenol-d5	64	(50 - 150)
2-Fluorophenol	65	(50 - 150)
2,4,6-Tribromophenol	71	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1426-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160256-004 **Work Order #...:** LGLKM1AC **Matrix.....:** WQ
Date Sampled...: 07/16/09 09:30 **Date Received..:** 07/16/09
Prep Date.....: 07/17/09 **Analysis Date..:** 07/29/09
Prep Batch #...: 9198139
Dilution Factor: 1 **Initial Wgt/Vol:** 1030 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1426-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160256-004 **Work Order #...:** LGLKM1AC **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**0.85 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1426-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160256-004 **Work Order #...:** LGLKM1AC **Matrix.....:** WQ

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	65	(50 - 150)
2-Fluorobiphenyl	62	(50 - 150)
Terphenyl-d14	81	(50 - 150)
Phenol-d5	61	(50 - 150)
2-Fluorophenol	62	(50 - 150)
2,4,6-Tribromophenol	50	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-006C-1408-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160256-005 **Work Order #...:** LGLKN1AC **Matrix.....:** WG
Date Sampled...: 07/16/09 10:15 **Date Received..:** 07/16/09
Prep Date.....: 07/17/09 **Analysis Date..:** 07/29/09
Prep Batch #...: 9198139
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.7 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-006C-1408-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160256-005 Work Order #...: LGLKN1AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-006C-1408-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160256-005 **Work Order #...:** LGLKN1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	69	(50 - 150)
2-Fluorobiphenyl	64	(50 - 150)
Terphenyl-d14	76	(50 - 150)
Phenol-d5	62	(50 - 150)
2-Fluorophenol	63	(50 - 150)
2,4,6-Tribromophenol	66	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-009C-1411-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160256-008 **Work Order #...:** LGLKT1AC **Matrix.....:** WG
Date Sampled...: 07/16/09 08:50 **Date Received..:** 07/16/09
Prep Date.....: 07/17/09 **Analysis Date..:** 07/29/09
Prep Batch #...: 9198139
Dilution Factor: 1 **Initial Wgt/Vol:** 950 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**2.2 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-009C-1411-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160256-008 Work Order #...: LGLKT1AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-009C-1411-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160256-008 **Work Order #...:** LGLKT1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	57	(50 - 150)
2-Fluorobiphenyl	55	(50 - 150)
Terphenyl-d14	68	(50 - 150)
Phenol-d5	52	(50 - 150)
2-Fluorophenol	50	(50 - 150)
2,4,6-Tribromophenol	56	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-010C-1412-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160256-010 **Work Order #...:** LGLK01AC **Matrix.....:** WG
Date Sampled...: 07/16/09 09:50 **Date Received..:** 07/16/09
Prep Date.....: 07/17/09 **Analysis Date..:** 07/29/09
Prep Batch #...: 9198139
Dilution Factor: 1 **Initial Wgt/Vol:** 1040 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-010C-1412-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160256-010 **Work Order #...:** LGLK01AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**2.8 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-010C-1412-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160256-010 **Work Order #...:** LGLK01AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	70	(50 - 150)
2-Fluorobiphenyl	64	(50 - 150)
Terphenyl-d14	80	(50 - 150)
Phenol-d5	65	(50 - 150)
2-Fluorophenol	66	(50 - 150)
2,4,6-Tribromophenol	61	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-008C-1410-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160256-013 **Work Order #...:** LGLK41AC **Matrix.....:** WG
Date Sampled...: 07/16/09 08:45 **Date Received..:** 07/16/09
Prep Date.....: 07/17/09 **Analysis Date..:** 07/29/09
Prep Batch #...: 9198139
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.1 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-008C-1410-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160256-013 Work Order #...: LGLK41AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-008C-1410-GW

GC/MS Semivolatiles

Lot-Sample #...: A9G160256-013 **Work Order #...:** LGLK41AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	67	(50 - 150)
2-Fluorobiphenyl	62	(50 - 150)
Terphenyl-d14	52	(50 - 150)
Phenol-d5	65	(50 - 150)
2-Fluorophenol	67	(50 - 150)
2,4,6-Tribromophenol	72	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A9G160256 **Work Order #...:** LGMGQ1AA **Matrix.....:** WATER
MB Lot-Sample #: A9G170000-139

Prep Date.....: 07/17/09 **Final Wgt/Vol..:** 2 mL
Analysis Date..: 07/29/09 **Prep Batch #...:** 9198139
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Dibenz(a,h)anthracene	ND	0.20	ug/L	SW846 8270C
Dibenzofuran	ND	1.0	ug/L	SW846 8270C
Di-n-butyl phthalate	ND	1.0	ug/L	SW846 8270C
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8270C
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8270C
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8270C
3,3'-Dichlorobenzidine	ND	5.0	ug/L	SW846 8270C
2,4-Dichlorophenol	ND	2.0	ug/L	SW846 8270C
Diethyl phthalate	ND	1.0	ug/L	SW846 8270C
2,4-Dimethylphenol	ND	2.0	ug/L	SW846 8270C
Dimethyl phthalate	ND	1.0	ug/L	SW846 8270C
Di-n-octyl phthalate	ND	1.0	ug/L	SW846 8270C
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	SW846 8270C
2,4-Dinitrophenol	ND	5.0	ug/L	SW846 8270C
2,4-Dinitrotoluene	ND	5.0	ug/L	SW846 8270C
2,6-Dinitrotoluene	ND	5.0	ug/L	SW846 8270C
Fluoranthene	ND	0.20	ug/L	SW846 8270C
Fluorene	ND	0.20	ug/L	SW846 8270C
Hexachlorobenzene	ND	0.20	ug/L	SW846 8270C
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8270C
Hexachlorocyclopentadiene	ND	10	ug/L	SW846 8270C
Hexachloroethane	ND	1.0	ug/L	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	SW846 8270C
Isophorone	ND	1.0	ug/L	SW846 8270C
2-Methylnaphthalene	ND	0.20	ug/L	SW846 8270C
2-Methylphenol	ND	1.0	ug/L	SW846 8270C
4-Methylphenol	ND	1.0	ug/L	SW846 8270C
Naphthalene	ND	0.20	ug/L	SW846 8270C
2-Nitroaniline	ND	2.0	ug/L	SW846 8270C
3-Nitroaniline	ND	2.0	ug/L	SW846 8270C
4-Nitroaniline	ND	2.0	ug/L	SW846 8270C
Nitrobenzene	ND	1.0	ug/L	SW846 8270C
2-Nitrophenol	ND	2.0	ug/L	SW846 8270C
4-Nitrophenol	ND	5.0	ug/L	SW846 8270C
N-Nitrosodi-n-propylamine	ND	1.0	ug/L	SW846 8270C
N-Nitrosodiphenylamine	ND	1.0	ug/L	SW846 8270C
Pentachlorophenol	ND	5.0	ug/L	SW846 8270C
Phenanthrene	ND	0.20	ug/L	SW846 8270C

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A9G160256 **Work Order #...:** LGMGQ1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Phenol	ND	1.0	ug/L	SW846 8270C
Pyrene	ND	0.20	ug/L	SW846 8270C
1,2,4-Trichloro-benzene	ND	1.0	ug/L	SW846 8270C
2,4,5-Trichloro-phenol	ND	5.0	ug/L	SW846 8270C
2,4,6-Trichloro-phenol	ND	5.0	ug/L	SW846 8270C
Carbazole	ND	1.0	ug/L	SW846 8270C
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	SW846 8270C
Acenaphthene	ND	0.20	ug/L	SW846 8270C
Acenaphthylene	ND	0.20	ug/L	SW846 8270C
Anthracene	ND	0.20	ug/L	SW846 8270C
Benzo(a)anthracene	ND	0.20	ug/L	SW846 8270C
Benzo(b)fluoranthene	ND	0.20	ug/L	SW846 8270C
Benzo(k)fluoranthene	ND	0.20	ug/L	SW846 8270C
Benzoic acid	ND	10	ug/L	SW846 8270C
Benzo(ghi)perylene	ND	0.20	ug/L	SW846 8270C
Benzo(a)pyrene	ND	0.20	ug/L	SW846 8270C
Benzyl alcohol	ND	5.0	ug/L	SW846 8270C
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	SW846 8270C
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	SW846 8270C
bis(2-Ethylhexyl) phthalate	**1.3 J**	**10**	**ug/L**	**SW846 8270C**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	SW846 8270C
Butyl benzyl phthalate	ND	1.0	ug/L	SW846 8270C
4-Chloroaniline	ND	2.0	ug/L	SW846 8270C
4-Chloro-3-methylphenol	ND	2.0	ug/L	SW846 8270C
2-Chloronaphthalene	ND	1.0	ug/L	SW846 8270C
2-Chlorophenol	ND	1.0	ug/L	SW846 8270C
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	SW846 8270C
Chrysene	ND	0.20	ug/L	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	73	(50 - 150)
2-Fluorobiphenyl	65	(50 - 150)
Terphenyl-d14	90	(50 - 150)
Phenol-d5	70	(50 - 150)
2-Fluorophenol	70	(50 - 150)

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A9G160256 **Work Order #...:** LGMGQ1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,4,6-Tribromophenol	60	(50 - 150)		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G160256 Work Order #...: LGMGQ1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A9G170000-139 LGMGQ1AD-LCSD
Prep Date.....: 07/17/09 Analysis Date..: 07/29/09
Prep Batch #...: 9198139
Dilution Factor: 1 Final Wgt/Vol..: 2 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2,4,6-Trichloro-phenol	75	(39 - 115)			SW846 8270C
	79	(39 - 115)	5.5	(0-30)	SW846 8270C
2,4-Dichlorophenol	73	(34 - 115)			SW846 8270C
	75	(34 - 115)	3.1	(0-30)	SW846 8270C
2,4-Dimethylphenol	65	(31 - 120)			SW846 8270C
	70	(31 - 120)	6.8	(0-30)	SW846 8270C
2,4-Dinitrophenol	54	(29 - 146)			SW846 8270C
	59	(29 - 146)	9.7	(0-30)	SW846 8270C
2,6-Dinitrotoluene	84	(43 - 122)			SW846 8270C
	90	(43 - 122)	7.7	(0-30)	SW846 8270C
2-Chloronaphthalene	75	(35 - 115)			SW846 8270C
	81	(35 - 115)	8.2	(0-30)	SW846 8270C
2-Methylnaphthalene	77	(32 - 115)			SW846 8270C
	78	(32 - 115)	1.7	(0-30)	SW846 8270C
2-Methylphenol	72	(30 - 116)			SW846 8270C
	71	(30 - 116)	1.8	(0-30)	SW846 8270C
2-Nitroaniline	83	(36 - 140)			SW846 8270C
	86	(36 - 140)	3.2	(0-30)	SW846 8270C
2-Nitrophenol	75	(33 - 115)			SW846 8270C
	79	(33 - 115)	4.4	(0-30)	SW846 8270C
3,3'-Dichlorobenzidine	63	(30 - 160)			SW846 8270C
	66	(30 - 160)	5.6	(0-30)	SW846 8270C
3-Nitroaniline	81	(30 - 138)			SW846 8270C
	87	(30 - 138)	6.9	(0-30)	SW846 8270C
4,6-Dinitro-2-methylphenol	64	(42 - 144)			SW846 8270C
	70	(42 - 144)	8.4	(0-30)	SW846 8270C
4-Bromophenyl phenyl ether	80	(43 - 118)			SW846 8270C
	86	(43 - 118)	7.0	(0-30)	SW846 8270C
4-Chloroaniline	75	(30 - 133)			SW846 8270C
	74	(30 - 133)	1.5	(0-30)	SW846 8270C
4-Chlorophenyl phenyl ether	81	(40 - 115)			SW846 8270C
	85	(40 - 115)	4.8	(0-30)	SW846 8270C

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G160256 Work Order #...: LGMGQ1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A9G170000-139 LGMGQ1AD-LCSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Butyl benzyl phthalate	84	(37 - 136)			SW846 8270C
	86	(37 - 136)	2.4	(0-30)	SW846 8270C
Carbazole	81	(49 - 126)			SW846 8270C
	85	(49 - 126)	5.1	(0-30)	SW846 8270C
Chrysene	81	(42 - 142)			SW846 8270C
	88	(42 - 142)	8.4	(0-30)	SW846 8270C
Dibenz(a,h)anthracene	79	(38 - 130)			SW846 8270C
	83	(38 - 130)	4.6	(0-30)	SW846 8270C
Dibenzofuran	81	(40 - 115)			SW846 8270C
	87	(40 - 115)	6.8	(0-30)	SW846 8270C
Diethyl phthalate	84	(43 - 132)			SW846 8270C
	89	(43 - 132)	6.1	(0-30)	SW846 8270C
Dimethyl phthalate	82	(42 - 116)			SW846 8270C
	86	(42 - 116)	4.7	(0-30)	SW846 8270C
Di-n-octyl phthalate	83	(36 - 151)			SW846 8270C
	87	(36 - 151)	5.0	(0-30)	SW846 8270C
Fluoranthene	82	(47 - 132)			SW846 8270C
	86	(47 - 132)	5.7	(0-30)	SW846 8270C
Fluorene	82	(41 - 115)			SW846 8270C
	88	(41 - 115)	7.3	(0-30)	SW846 8270C
Hexachlorobenzene	78	(42 - 123)			SW846 8270C
	81	(42 - 123)	4.0	(0-30)	SW846 8270C
Hexachlorobutadiene	49	(30 - 120)			SW846 8270C
	46	(30 - 120)	7.9	(0-30)	SW846 8270C
Hexachloroethane	46	(30 - 120)			SW846 8270C
	44	(30 - 120)	4.6	(0-30)	SW846 8270C
Isophorone	80	(33 - 115)			SW846 8270C
	83	(33 - 115)	4.0	(0-30)	SW846 8270C
Naphthalene	69	(30 - 119)			SW846 8270C
	71	(30 - 119)	3.3	(0-30)	SW846 8270C
Nitrobenzene	81	(31 - 115)			SW846 8270C
	83	(31 - 115)	3.1	(0-30)	SW846 8270C
N-Nitrosodiphenylamine	76	(35 - 124)			SW846 8270C
	79	(35 - 124)	3.4	(0-30)	SW846 8270C
Phenanthrene	82	(45 - 117)			SW846 8270C
	88	(45 - 117)	6.3	(0-30)	SW846 8270C
Indeno(1,2,3-cd)pyrene	78	(37 - 130)			SW846 8270C
	81	(37 - 130)	3.6	(0-30)	SW846 8270C
Di-n-butyl phthalate	89	(46 - 123)			SW846 8270C
	92	(46 - 123)	3.0	(0-30)	SW846 8270C
Hexachlorocyclopenta-diene	48	(30 - 115)			SW846 8270C
	52	(30 - 115)	8.5	(0-30)	SW846 8270C

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G160256 Work Order #...: LGMGQ1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A9G170000-139 LGMGQ1AD-LCSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzoic acid	61	(30 - 136)			SW846 8270C
	67	(30 - 136)	9.7	(0-30)	SW846 8270C
Benzyl alcohol	79	(29 - 115)			SW846 8270C
	81	(29 - 115)	2.2	(0-30)	SW846 8270C
1,2,4-Trichloro-benzene	57	(30 - 120)			SW846 8270C
	58	(30 - 120)	2.0	(0-30)	SW846 8270C
Acenaphthene	79	(31 - 120)			SW846 8270C
	85	(31 - 120)	6.9	(0-30)	SW846 8270C
2,4-Dinitrotoluene	85	(34 - 151)			SW846 8270C
	90	(34 - 151)	4.8	(0-30)	SW846 8270C
Pyrene	82	(35 - 139)			SW846 8270C
	85	(35 - 139)	3.9	(0-30)	SW846 8270C
N-Nitrosodi-n-propyl-amine	81	(30 - 132)			SW846 8270C
	81	(30 - 132)	0.62	(0-30)	SW846 8270C
1,4-Dichlorobenzene	58	(30 - 115)			SW846 8270C
	57	(30 - 115)	2.4	(0-30)	SW846 8270C
Pentachlorophenol	46	(30 - 150)			SW846 8270C
	53	(30 - 150)	15	(0-30)	SW846 8270C
Phenol	73	(30 - 115)			SW846 8270C
	76	(30 - 115)	3.4	(0-30)	SW846 8270C
2-Chlorophenol	73	(30 - 120)			SW846 8270C
	74	(30 - 120)	1.8	(0-30)	SW846 8270C
4-Chloro-3-methylphenol	77	(31 - 121)			SW846 8270C
	78	(31 - 121)	1.6	(0-30)	SW846 8270C
4-Nitrophenol	72	(30 - 138)			SW846 8270C
	74	(30 - 138)	2.8	(0-30)	SW846 8270C
1,2-Dichlorobenzene	59	(30 - 120)			SW846 8270C
	59	(30 - 120)	0.72	(0-30)	SW846 8270C
1,3-Dichlorobenzene	54	(30 - 120)			SW846 8270C
	52	(30 - 120)	4.2	(0-30)	SW846 8270C
2,4,5-Trichloro-phenol	78	(36 - 135)			SW846 8270C
	80	(36 - 135)	2.4	(0-30)	SW846 8270C
4-Methylphenol	74	(31 - 115)			SW846 8270C
	76	(31 - 115)	2.5	(0-30)	SW846 8270C
4-Nitroaniline	82	(30 - 140)			SW846 8270C
	87	(30 - 140)	5.8	(0-30)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G160256 Work Order #...: LGMGQ1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A9G170000-139 LGMGQ1AD-LCSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acenaphthylene	73	(37 - 115)			SW846 8270C
	78	(37 - 115)	6.8	(0-30)	SW846 8270C
Anthracene	85	(45 - 118)			SW846 8270C
	88	(45 - 118)	3.7	(0-30)	SW846 8270C
Benzo(a)anthracene	81	(43 - 138)			SW846 8270C
	86	(43 - 138)	5.2	(0-30)	SW846 8270C
Benzo(a)pyrene	75	(38 - 144)			SW846 8270C
	77	(38 - 144)	3.8	(0-30)	SW846 8270C
Benzo(b)fluoranthene	82	(31 - 146)			SW846 8270C
	84	(31 - 146)	2.8	(0-30)	SW846 8270C
Benzo(ghi)perylene	81	(35 - 129)			SW846 8270C
	84	(35 - 129)	3.3	(0-30)	SW846 8270C
Benzo(k)fluoranthene	83	(40 - 127)			SW846 8270C
	85	(40 - 127)	2.7	(0-30)	SW846 8270C
bis(2-Chloroethoxy) methane	79	(30 - 115)			SW846 8270C
	82	(30 - 115)	2.9	(0-30)	SW846 8270C
bis(2-Chloroethyl)-ether	75	(30 - 115)			SW846 8270C
	82	(30 - 115)	8.3	(0-30)	SW846 8270C
bis(2-Chloroisopropyl) ether	80	(50 - 150)			SW846 8270C
	80	(50 - 150)	0.0	(0-30)	SW846 8270C
bis(2-Ethylhexyl) phthalate	87	(30 - 154)			SW846 8270C
	93	(30 - 154)	7.2	(0-30)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	78	(50 - 150)
	79	(50 - 150)
2-Fluorobiphenyl	70	(50 - 150)
	74	(50 - 150)
Terphenyl-d14	85	(50 - 150)
	89	(50 - 150)
Phenol-d5	72	(50 - 150)
	73	(50 - 150)
2-Fluorophenol	74	(50 - 150)
	73	(50 - 150)

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G160256 **Work Order #...:** LGMGQ1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A9G170000-139 LGMGQ1AD-LCSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	76	(50 - 150)
	84	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

PESTICIDE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 31, 2009

SDG: A9G160256 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.2- 4.6 °C.	QAPP Table 4-2, NELAC
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-5
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-5
7. Was a DDT standard analyzed every 12 hours? Was the DDT %breakdown < 15%?	✓				LCG Table 4 >15%=J/R
8. Was an endrin standard analyzed every 12 hours? Was endrin %breakdown <15%?	✓				LCG Table 4 >15%=J/R
9. Does the initial calibration curve consist of 5 concentration levels?	✓			Instrument A2HP3 7/07/09, 7/17/09 stds = 0.05, 0.25, 0.50, 1.0, 2.5, 5.0, 7.5, 10.0, 12.5 ng on column	LCG Table 4 R
10. Were the %RSDs for each analyte ≤ 20%? OR was the average %RSD ≤ 20% with the r^2 >0.990?	✓				LCG Table 4 RSD>20% or r<0.99=J/R
11. Was a blank run prior to the initial calibration?			✓	No data provided to evaluate.	
12. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓			7/18/09	LCG Table 4 R
13. Was a MRL Verification performed at the beginning and end of the sequence or every 12 hours with results 70-130%?	✓				LCG Table 4 >130%=J; 65-70%%=J/UJ; <65%=J/R
14. Was a second source (ICV) verification analyzed after the ICAL? Were results 85-115%?	✓			7/20/09@1308	LCG Table 4 >115%=J; 80-85%=J/UJ; <80%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 31, 2009

SDG: A9G160256 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
15. Was a CCV run every 12 hours?	✓				LCG Table 4
16. Was the %D for all target analytes ≤15%? OR was the average %D ≤ 15% with no individual analyte >30%?	✓				LCG Table 4 D>30% (neg) =J/R D>30% (pos) = J
17. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 4
18. Were target analytes < ½ the MRL?	✓				LCG Table 4 <5x=B
20. Was a field blank collected and analyzed?	✓			FWGEQUIPRinse4-1426-GW	
20. Were target analytes in the field blank analyses (equipment) <1/2 the MRL?	✓			Checked by ADR.	<5x =B
21. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 4
22. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR.	LCG Appendix C >UL=J; 30%-LL=J/UJ; <30%=J/R
23. Was a MS/MSD pair prepared with each batch?		✓		An LCS/LCD was analyzed.	LCG Table 4
24. Was the MS/MSD parent a Ravenna sample?			✓		
25. Were MS/MSD recoveries 40-140% and RPD ≤20%?			✓		*QAPP Table 3-2*, Pj
26. Were surrogate recoveries 50-150%?		✓		The surrogate, DCB, recovered below control limits in all the field samples. The associated results were qualified as estimated, "J/UJ".	LCG Table 4 >150%=J; 10% -50%=J/UJ; <10%=J/R
27. Was a field duplicate analyzed? Were the RPDs ≤30%?		✓		No field duplicates were submitted with this work order.	QAPP Table 3-2 RPD >30=J
28. Were all positive results verified by a second column confirmation? Were the RPDs ≤ 40?	✓			Only detected concentrations above the RL were evaluated.	LCG Table 4 >40 RPD=J

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 31, 2009

SDG: A9G160256 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
29. Were reported sample concentrations within calibration range?	✓				
30. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
31. Were lab comments included in report? If yes, summarize contents.	✓			See narrative.	

References:

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 4 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-007C-1409-GW

GC Semivolatiles

Lot-Sample #...: A9G160256-002 **Work Order #...:** LGLKE1AD **Matrix.....:** WG
Date Sampled...: 07/16/09 08:50 **Date Received..:** 07/16/09
Prep Date.....: 07/17/09 **Analysis Date..:** 07/24/09
Prep Batch #...: 9198133
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	88	(50 - 150)
Decachlorobiphenyl	44 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1426-GW

GC Semivolatiles

Lot-Sample #...: A9G160256-004 **Work Order #...:** LGLKM1AD **Matrix.....:** WQ
Date Sampled...: 07/16/09 09:30 **Date Received..:** 07/16/09
Prep Date.....: 07/17/09 **Analysis Date..:** 07/24/09
Prep Batch #...: 9198133
Dilution Factor: 1 **Initial Wgt/Vol:** 990 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	84	(50 - 150)
Decachlorobiphenyl	67	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-006C-1408-GW

GC Semivolatiles

Lot-Sample #...: A9G160256-005 **Work Order #...:** LGLKN1AD **Matrix.....:** WG
Date Sampled...: 07/16/09 10:15 **Date Received..:** 07/16/09
Prep Date.....: 07/17/09 **Analysis Date..:** 07/24/09
Prep Batch #...: 9198133
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	80	(50 - 150)
Decachlorobiphenyl	29 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-009C-1411-GW

GC Semivolatiles

Lot-Sample #...:	A9G160256-008	**Work Order #...:**	LGLKT1AD	**Matrix.....:**	WG
Date Sampled...:	07/16/09 08:50	**Date Received..:**	07/16/09		
Prep Date.....:	07/17/09	**Analysis Date..:**	07/24/09		
Prep Batch #...:	9198133				
Dilution Factor:	1	**Initial Wgt/Vol:**	1040 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8081A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	**0.016 J**	**0.030**	**ug/L**	**0.0084**
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	88	(50 - 150)
Decachlorobiphenyl	46 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-010C-1412-GW

GC Semivolatiles

Lot-Sample #...:	A9G160256-010	**Work Order #...:**	LGLK01AD	**Matrix.....:**	WG
Date Sampled...:	07/16/09 09:50	**Date Received..:**	07/16/09		
Prep Date.....:	07/17/09	**Analysis Date..:**	07/24/09		
Prep Batch #...:	9198133				
Dilution Factor:	1	**Initial Wgt/Vol:**	1050 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8081A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	88	(50 - 150)
Decachlorobiphenyl	25 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-008C-1410-GW

GC Semivolatiles

Lot-Sample #...: A9G160256-013 **Work Order #...:** LGLK41AD **Matrix.....:** WG
Date Sampled...: 07/16/09 08:45 **Date Received..:** 07/16/09
Prep Date.....: 07/17/09 **Analysis Date..:** 07/24/09
Prep Batch #...: 9198133
Dilution Factor: 1 **Initial Wgt/Vol:** 1030 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	**0.019 J**	**0.030**	**ug/L**	**0.0084**
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	76	(50 - 150)
Decachlorobiphenyl	25 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A9G160256 **Work Order #...:** LGMGK1AA **Matrix.....:** WATER
MB Lot-Sample #: A9G170000-133

Prep Date.....: 07/17/09 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 07/24/09 **Prep Batch #...:** 9198133
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
alpha-BHC	ND	0.030	ug/L	SW846 8081A
beta-BHC	ND	0.030	ug/L	SW846 8081A
delta-BHC	ND	0.030	ug/L	SW846 8081A
gamma-BHC (Lindane)	ND	0.030	ug/L	SW846 8081A
Heptachlor	ND	0.030	ug/L	SW846 8081A
Aldrin	ND	0.030	ug/L	SW846 8081A
Heptachlor epoxide	ND	0.030	ug/L	SW846 8081A
Endosulfan I	ND	0.025	ug/L	SW846 8081A
Dieldrin	ND	0.030	ug/L	SW846 8081A
4,4'-DDE	ND	0.030	ug/L	SW846 8081A
Endrin	ND	0.030	ug/L	SW846 8081A
Endosulfan II	ND	0.025	ug/L	SW846 8081A
4,4'-DDD	ND	0.030	ug/L	SW846 8081A
Endosulfan sulfate	ND	0.030	ug/L	SW846 8081A
4,4'-DDT	ND	0.030	ug/L	SW846 8081A
Methoxychlor	ND	0.10	ug/L	SW846 8081A
Endrin ketone	ND	0.030	ug/L	SW846 8081A
Endrin aldehyde	ND	0.030	ug/L	SW846 8081A
alpha-Chlordane	ND	0.030	ug/L	SW846 8081A
gamma-Chlordane	ND	0.030	ug/L	SW846 8081A
Toxaphene	ND	2.0	ug/L	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	82	(50 - 150)
Decachlorobiphenyl	73	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A9G160256 Work Order #...: LGMGK1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A9G170000-133 LGMGK1AD-LCSD
Prep Date.....: 07/17/09 Analysis Date..: 07/24/09
Prep Batch #...: 9198133
Dilution Factor: 2 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
alpha-BHC	96	(44 - 137)			SW846 8081A
	101	(44 - 137)	4.6	(0-30)	SW846 8081A
beta-BHC	93	(50 - 135)			SW846 8081A
	97	(50 - 135)	4.5	(0-30)	SW846 8081A
delta-BHC	97	(58 - 160)			SW846 8081A
	101	(58 - 160)	4.8	(0-30)	SW846 8081A
gamma-BHC (Lindane)	89	(58 - 127)			SW846 8081A
	96	(58 - 127)	8.4	(0-30)	SW846 8081A
Heptachlor	87	(48 - 150)			SW846 8081A
	93	(48 - 150)	7.2	(0-30)	SW846 8081A
Aldrin	97	(53 - 128)			SW846 8081A
	97	(53 - 128)	0.080	(0-30)	SW846 8081A
Heptachlor epoxide	94	(50 - 127)			SW846 8081A
	96	(50 - 127)	2.2	(0-30)	SW846 8081A
Endosulfan I	62	(50 - 160)			SW846 8081A
	64	(50 - 160)	3.2	(0-30)	SW846 8081A
Dieldrin	87	(50 - 124)			SW846 8081A
	89	(50 - 124)	2.6	(0-30)	SW846 8081A
4,4'-DDE	98	(50 - 130)			SW846 8081A
	96	(50 - 130)	2.0	(0-30)	SW846 8081A
Endrin	92	(50 - 137)			SW846 8081A
	95	(50 - 137)	2.2	(0-30)	SW846 8081A
Endosulfan II	66	(50 - 144)			SW846 8081A
	68	(50 - 144)	3.1	(0-30)	SW846 8081A
4,4'-DDD	93	(50 - 137)			SW846 8081A
	93	(50 - 137)	0.35	(0-30)	SW846 8081A
Endosulfan sulfate	85	(50 - 160)			SW846 8081A
	86	(50 - 160)	1.5	(0-30)	SW846 8081A
4,4'-DDT	85	(50 - 145)			SW846 8081A
	85	(50 - 145)	0.21	(0-30)	SW846 8081A
Methoxychlor	83	(50 - 160)			SW846 8081A
	85	(50 - 160)	2.9	(0-30)	SW846 8081A
Endrin ketone	79	(50 - 150)			SW846 8081A
	79	(50 - 150)	0.38	(0-30)	SW846 8081A
Endrin aldehyde	71	(30 - 160)			SW846 8081A
	73	(30 - 160)	2.4	(0-30)	SW846 8081A
alpha-Chlordane	92	(50 - 122)			SW846 8081A
	94	(50 - 122)	1.8	(0-30)	SW846 8081A

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A9G160256 **Work Order #...:** LGMGK1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A9G170000-133 LGMGK1AD-LCSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
gamma-Chlordane	**91**	**(50 - 130)**			**SW846 8081A**
	94	**(50 - 130)**	**3.8**	**(0-30)**	**SW846 8081A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	88	(50 - 150)
	84	(50 - 150)
Decachlorobiphenyl	55	(50 - 150)
	60	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

POLYCHLORINATED BIPHENYLS DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/August 31, 2009

SDG: A9G160256 R0
Analysis: SW846 8082

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.2- 4.6 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-5
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-5
7. Does the initial calibration curve consist of 5 concentration levels of Aroclors 1016 and 1260?	✓			Instrument A2HP2; ICAL on 7/02/09 Stds = 0.05, 0.1, 0.2, 0.5, 1.0, 2.0	LCG Table 3 R
8. Was the % RSD ≤ 20%? Were the r^2s >0.990?	✓				LCG Table 3 RSD>20% or r<0.99= J/R
9. Was a MDL Level Verification performed once per quarter? Were all target analytes detected?	✓			7/18/09	LCG Table 3 R
10. Was a MRL Level Verification performed at the beginning and end of the sequence or every 12 hours? Were the results 70-130%	✓				LCG Table 3 >130%=J; 65-70%=J/UJ; <65%=J/R
11. Was a second source (ICV) verification performed after the ICAL? Were results 85-115%?	✓			7/2/09 @ 0350	LCG Table 3 >115%=J; 80-85%=J/UJ; <80%=J/R
12. Were single standards of the other five Aroclors run to aid in pattern recognition and to determine a single point calibration factor?	✓				Method 8082 Section 5.6.2
13. Was a CCV run every 12 hours?	✓				LCG Table 3

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/August 31, 2009

SDG: A9G160256 R0
Analysis: SW846 8082

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
14. Was the % D ≤ 15 % for each analyte or the average %D across all analytes ≤ 15% with a maximum %D for each target analyte ≤30%?	✓				LCG Table 3 D>30% (neg) =J/R D>30% (pos) =J
15. Was a method blank prepared and analyzed with each batch?	✓			Section checked by ADR	LCG Table 5
16. Were target analytes <1/2 the MRL?	✓				LCG Table 5 <5x = B
17. Was an equipment blank collected and analyzed?	✓			FWGEQUIPRinse4-1426-GW	
18. Were target analytes in the field blank analyses (equipment) <1/2 the MRL?	✓			Section checked by ADR	<5x = B
19. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 3
20. Were the LCS recoveries within limits specified in LCG Appendix C?	✓				LCG Appendix C >UL=J; LL-30%=J/UJ; <30%=J/R
21. Was a MS/MSD pair prepared with each batch?		✓		An LCS/LCD was analyzed.	LCG Table 3
22. Was the MS/MSD parent a Ravenna sample?			✓		
23. Were MS/MSD recoveries 50-150% and RPD ≤20%?			✓		QAPP Table 3-2 Pj
24. Was the surrogate spiked into all samples?	✓				
25. Were surrogate recoveries 50-150%?		✓		The surrogate, DCB, recovered below control limits in samples FWGASYmw-006c-1408-GW, FWGASYmw-008c-1410-GW and FWGASYmw-010c-1412-GW. The associated results were qualified as estimated, "UJ".	LCG Table 3 >150%=J; 10-50%=J/UJ; <10%=R
26. Was a field duplicate analyzed? Were the RPDs <30%?		✓		No field duplicates were submitted with this work order.	QAPP Table 3-2 RPD >30=J

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/August 31, 2009

SDG: A9G160256 R0
Analysis: SW846 8082

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
27. Were all positive results verified by a second dissimilar column confirmation? Was the RPD ≤ 40?	✓				LCG Table 3 RPD>40=J
28. Were reported sample concentrations within calibration range?	✓				
29. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
30. Were lab comments included in report? If yes, summarize contents.	✓			See narrative for surrogate outliers.	

References:

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 3 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments: As the second column is used only for confirmation and there were no detected aroclors in the samples, only the front column was evaluated.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-007C-1409-GW

GC Semivolatiles

Lot-Sample #...:	A9G160256-002	**Work Order #...:**	LGLKE1AF	**Matrix.....:**	WG
Date Sampled...:	07/16/09 08:50	**Date Received..:**	07/16/09		
Prep Date.....:	07/17/09	**Analysis Date..:**	07/21/09		
Prep Batch #...:	9198134				
Dilution Factor:	1	**Initial Wgt/Vol:**	1000 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	88	(50 - 150)
Decachlorobiphenyl	55	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1426-GW

GC Semivolatiles

Lot-Sample #...:	A9G160256-004	**Work Order #...:**	LGLKM1AF	**Matrix.....:**	WQ
Date Sampled...:	07/16/09 09:30	**Date Received..:**	07/16/09		
Prep Date.....:	07/17/09	**Analysis Date..:**	07/21/09		
Prep Batch #...:	9198134				
Dilution Factor:	1	**Initial Wgt/Vol:**	990 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	85	(50 - 150)
Decachlorobiphenyl	80	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-006C-1408-GW

GC Semivolatiles

Lot-Sample #...:	A9G160256-005	**Work Order #...:**	LGLKN1AF	**Matrix.....:**	WG
Date Sampled...:	07/16/09 10:15	**Date Received..:**	07/16/09		
Prep Date.....:	07/17/09	**Analysis Date..:**	07/21/09		
Prep Batch #...:	9198134				
Dilution Factor:	1	**Initial Wgt/Vol:**	1050 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	83	(50 - 150)
Decachlorobiphenyl	35 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-009C-1411-GW

GC Semivolatiles

Lot-Sample #...:	A9G160256-008	**Work Order #...:**	LGLKT1AF	**Matrix.....:**	WG
Date Sampled...:	07/16/09 08:50	**Date Received..:**	07/16/09		
Prep Date.....:	07/17/09	**Analysis Date..:**	07/21/09		
Prep Batch #...:	9198134				
Dilution Factor:	1	**Initial Wgt/Vol:**	1040 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	86	(50 - 150)
Decachlorobiphenyl	57	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-010C-1412-GW

GC Semivolatiles

Lot-Sample #...: A9G160256-010 **Work Order #...:** LGLK01AF **Matrix.....:** WG
Date Sampled...: 07/16/09 09:50 **Date Received..:** 07/16/09
Prep Date.....: 07/17/09 **Analysis Date..:** 07/21/09
Prep Batch #...: 9198134
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	56	(50 - 150)
Decachlorobiphenyl	31 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-008C-1410-GW

GC Semivolatiles

Lot-Sample #...:	A9G160256-013	**Work Order #...:**	LGLK41AF	**Matrix.....:**	WG
Date Sampled...:	07/16/09 08:45	**Date Received..:**	07/16/09		
Prep Date.....:	07/17/09	**Analysis Date..:**	07/21/09		
Prep Batch #...:	9198134				
Dilution Factor:	1	**Initial Wgt/Vol:**	1030 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	82	(50 - 150)
Decachlorobiphenyl	33 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A9G160256 **Work Order #...:** LGMGM1AA **Matrix.....:** WATER
MB Lot-Sample #: A9G170000-134

Prep Date.....: 07/17/09 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 07/21/09 **Prep Batch #...:** 9198134
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	0.50	ug/L	SW846 8082
Aroclor 1221	ND	0.50	ug/L	SW846 8082
Aroclor 1232	ND	0.50	ug/L	SW846 8082
Aroclor 1242	ND	0.50	ug/L	SW846 8082
Aroclor 1248	ND	0.50	ug/L	SW846 8082
Aroclor 1254	ND	0.50	ug/L	SW846 8082
Aroclor 1260	ND	0.50	ug/L	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	82	(50 - 150)
Decachlorobiphenyl	84	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A9G160256 **Work Order #...:** LGMGM1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A9G170000-134 LGMGM1AD-LCSD
Prep Date.....: 07/17/09 **Analysis Date..:** 07/21/09
Prep Batch #...: 9198134
Dilution Factor: 2 **Final Wgt/Vol..:** 5 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**74**	**(58 - 141)**			**SW846 8082**
	79	**(58 - 141)**	**7.4**	**(0-50)**	**SW846 8082**
Aroclor 1260	**84**	**(71 - 143)**			**SW846 8082**
	93	**(71 - 143)**	**10**	**(0-50)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	82	(50 - 150)
	81	(50 - 150)
Decachlorobiphenyl	52	(50 - 150)
	50	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METALS DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 31, 2009

SDG: A9G160256 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.2- 4.6 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	✓				QAPP Table 3-8
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-8
7. Did the initial calibration curve range include 3 standards and a blank?	✓				LCG Table 7 R
8. Was the ICAL performed daily?	✓				LCG Table 7 R
9. Was the correlation coefficient r≥0.995 for each analyte?	✓				LCG Table 7 R<0.995=J/R
10. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓				LCG Table 7 R
11. Was a MRL Level Verification performed at the beginning of the daily sequence? Were results 70-130%?		✓		The MRL analyzed 7/27/09 @ 1111 had zinc recover above limits at 142%. Detected concentrations of zinc were qualified as estimated, "J".	LCG Table 7 >130%=J; 65-70%=J/UJ; <65%=J/R
12. Was the ICV (second source verification) analyzed after the ICAL?	✓				LCG Table 7
13. Were all analytes within 90-110% in the ICV?	✓				LCG Table 7 J>110%=J; 90-85%=J/UJ; <85%=J/R
14. Was the ICB analyzed after the ICV with results <1/2 the MRL?		✓		The ICB analyzed 7/20/09 had detected potassium at 147ug/L. The potassium results for, FWGEQUIPRinse4-1426-GW, was qualified, "U", as the detected potassium concentration was <5x blank contamination. No qualifications were made for due to negative blanks, since the LCG doesn't specifically address negative blank values.	LCG Table 7 < 5x = U
15. Were CCVs analyzed every 10 samples and at the end of the analytical sequence?	✓				LCG Table 7
16. Were CCV results within 90 to 110%?	✓				LCG Table 7 >110%=J 90-85%=J/UJ; <85%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 31, 2009

SDG: A9G160256 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
17. Were the CCBs run every 10 samples and at the end of the analytical sequence? Were results <1/2 the MRL?		✓		ICP The CCBs analyzed 7/20/09 had detected potassium from 146ug/L to 147ug/L. The potassium result FWGEQUIPRinse4-1426-GW was qualified, "U", as the detected concentration was <5x blank contamination. ICPMS The CCBs analyzed 7/27/09 had detected aluminum at 8.6ug/L, antimony from 0.059ug/L to 0.071ug/L, beryllium from 0.052ug/L to 0.055ug/L, cadmium from 0.034ug/L to 0.089ug/L, iron from 22ug/L to 24.3ug/L and thallium from 0.12ug/L to 0.15ug/L. • The antimony result for sample FWGASYmw-008c-1410-GF was qualified, "U" as the result was <5x CCB contamination. • No other qualifications were made as the all other contaminants were either nondetect or >5x contamination. No qualifications were made for due to negative blanks, since the LCG doesn't specifically address negative blank values.	LCG Table 7 <5x = U
18. Was an Interelement Check Standard run at the beginning of the analytical sequence?	✓				LCG Table 7
19. Was the ICS recovery within 80 to 120% of true value for each element of interest?	✓				LCG Table 7 >120%=J; 50-79%=J/UJ; <50%=Pj/R
21. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 7
22. Were target analytes <1/2 the MRL in the method blank?		✓		ADR checked section; Potassium was detected in the method blank at 144ug/L and zinc at 5.0ug/L. All detected potassium and zinc results <5x contamination were qualified, "B".	LCG Table 7 <5x = B
23. Was a field blank collected and analyzed?	✓			FWGEQUIPRinse4-1426-GW	
24. Were target analytes reported in the field blank analyses >1/2 the MRL?	✓			ADR checked section; FWGEQUIPRinse4-1426-GW had potassium detected at 141ug/L. All detected potassium results <5x contamination were qualified, "B".	<5x=B
25. Was a LCS prepared and analyzed with each batch?	✓				LCG Table 7
26. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR.	LCG Appendix C >UL=J; 60%-LL= J/UJ; <60%=J/R
27. Was a MS prepared with each batch?	✓				LCG Table 7

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 31, 2009

SDG: A9G160256 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
28. Was the MS and Lab Duplicate parent a Ravenna sample?	✓			Sample FWGASYmw-007c-1409-GF was the parent MS/MSD sample from this SDG.	
29. Were the MS recoveries within 75-125%?	✓			Checked by ADR.	LCG Table 7 >125% = J 30% - 75% = J/UJ <30% = J/R
30. Was the lab sample duplicate RPD ≤ 20%?		✓		Only detected results above RL were evaluated.	LCG Table 7 >20% = J
31. Was a Post Digestion Spike analyzed as needed? Were results within 75-125%?			✓		LCG Table 7 >125%=J; 30-75%=J/UJ; <30%=R
32. Was a serial dilution performed as needed?			✓		
33. Was the 4 fold dilution within ± 10% of the original result?			✓		LCG Table 7 >10%=J
34. Was a field duplicate analyzed? Were the RPDs ± 30%?		✓		No field duplicates were submitted with this work order.	QAPP Table 3-2 >30% = J
35. Were sample concentrations within calibration range?	✓				
36. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
37. Were lab comments included in report? If yes, summarize contents.	✓			See narrative.	

References:
Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 9 and Attachment A "Data Validation Guidelines:
Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 31, 2009

SDG: A9G160256 R0
Analysis: SW846 7470A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.2- 4.6 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	✓				QAPP Table 3.8
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-8
7. Did the initial calibration curve range include 5 standards and a blank?	✓				LCG Table 9 R
8. Was the correlation coefficient ≥ 0.995 for Hg?	✓				LCG Table 9 R<0.995=J/R
9. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓				LCG Table 9 R
10. Was a MRL Level Verification performed at the beginning of every daily analytical sequence with 70-130%?	✓				LCG Table 9 >130%=J; 70-65%=J/UJ; <65%=J/R
11. Was the ICV analyzed after the ICAL but before samples with recoveries between 80-120%?	✓				LCG Table 9 >120%=J; 80-75%=J/UJ; <75%=J/R
12. Was the ICB analyzed after the ICAL with results <1/2 the MRL?	✓			No qualifications were made due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.	LCG Table 9 <5x = U
13. Were the CCVs analyzed every 10 samples and at the end of the analytical sequence?	✓				LCG Table 9
14. Were CCV results within 80 to 120%?	✓				LCG Table 9 >120%=J; 80-75%=J/UJ; <75%=J/R
15. Were the CCBs analyzed every 10 samples and at the end of the analytical sequence? Were results <1/2 the MRL?	✓			No qualifications were made for due to negative blanks since the LCG doesn't specifically address negative blank values.	LCG Table 9 <5x = U

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 31, 2009

SDG: A9G160256 R0
Analysis: SW846 7470A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
16. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 9
17. Were target analytes detected in the method blank <1/2 the MRL?	✓				LCG Table 9 <5x = B
18. Was a field blank collected and analyzed?	✓			FWGEQUIPRinse4-1426-GW	
19. Were target analytes reported in the field blank analyses at <1/2 the MRL?		✓			<5x=B
20. Was a LCS prepared and analyzed with each batch?	✓				LCG Table 9
21. Were the LCS recoveries within 80-120%?	✓			Checked by ADR.	LCG Table 9 J>120%=J; 50-79%=J/UJ; <50%=R
22. Was a MS prepared with each batch?	✓				LCG Table 9
23. Was the MS and Lab Duplicate parent sample a Ravenna sample?	✓			Sample FWGASYmw-007c-1409-GF was the parent MS/MSD sample from this SDG.	
24. Were the MS recoveries within 80-120%?	✓			Checked by ADR.	LCG Table 9 >125% = J 30% - 75% = J/UJ <30% = J/R
25. Was the Matrix Duplicate RPD ± 20%?	✓				LCG Table 9 >20% = J
26. Was a field duplicate analyzed? Were the RPDs ± 30%?	✓			Checked by ADR. No field duplicates were submitted with this work order.	QAPP Table 3-2
27. Were sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
29. Were lab comments included in report? If yes, summarize contents.		✓			

References:
Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 9 and Attachment A "Data Validation Guidelines:
Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-007C-1409-GF

TOTAL Metals

Lot-Sample #...: A9G160256-003 **Matrix.....:** WG
Date Sampled...: 07/16/09 08:50 **Date Received..:** 07/16/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9198015						
Silver	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGLKL1AM
		Dilution Factor: 1		Analysis Time..: 14:12	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/17-07/27/09	LGLKL1AA
		Dilution Factor: 1		Analysis Time..: 19:09	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGLKL1AJ
		Dilution Factor: 1		Analysis Time..: 14:12	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**20.4**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGLKL1AN**
		Dilution Factor: 1		Analysis Time..: 14:12	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/17-07/27/09	LGLKL1AC
		Dilution Factor: 1		Analysis Time..: 19:09	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**134000**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGLKL1AP**
		Dilution Factor: 1		Analysis Time..: 14:12	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/17-07/27/09	LGLKL1AD
		Dilution Factor: 1		Analysis Time..: 19:09	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGLKL1AQ
		Dilution Factor: 1		Analysis Time..: 14:12	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGLKL1AR
		Dilution Factor: 1		Analysis Time..: 14:12	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGLKL1AT
		Dilution Factor: 1		Analysis Time..: 14:12	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-007C-1409-GF

TOTAL Metals

Lot-Sample #...: A9G160256-003 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**160**	**50.0**	**ug/L**	**SW846 6020**	**07/17-07/27/09**	**LGLKL1AE**
		Dilution Factor: 1		Analysis Time..: 19:09	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/17-07/21/09	LGLKL1A2
		Dilution Factor: 1		Analysis Time..: 17:00	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.12		
Potassium	**1290 J**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGLKL1AU**
		Dilution Factor: 1		Analysis Time..: 14:12	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**52900**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGLKL1AV**
		Dilution Factor: 1		Analysis Time..: 14:12	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**186**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGLKL1AW**
		Dilution Factor: 1		Analysis Time..: 14:12	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**37100**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGLKL1AX**
		Dilution Factor: 1		Analysis Time..: 14:12	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGLKL1A0
		Dilution Factor: 1		Analysis Time..: 14:12	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/17-07/20/09	LGLKL1AK
		Dilution Factor: 1		Analysis Time..: 14:12	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/17-07/27/09	LGLKL1AF
		Dilution Factor: 1		Analysis Time..: 19:09	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGLKL1AL
		Dilution Factor: 1		Analysis Time..: 14:12	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-007C-1409-GF

TOTAL Metals

Lot-Sample #...: A9G160256-003 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/17-07/27/09	LGLKL1AH
		Dilution Factor: 1		Analysis Time..: 19:09	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGLKL1A1
		Dilution Factor: 1		Analysis Time..: 14:12	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**6.2 B,J**	**10.0**	**ug/L**	**SW846 6020**	**07/17-07/27/09**	**LGLKL1AG**
		Dilution Factor: 1		Analysis Time..: 19:09	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1426-GW

TOTAL Metals

Lot-Sample #...: A9G160256-004 **Matrix.....:** WQ
Date Sampled...: 07/16/09 09:30 **Date Received..:** 07/16/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9198015						
Silver	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGLKM1AT
		Dilution Factor: 1		Analysis Time..: 14:17	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/17-07/27/09	LGLKM1AG
		Dilution Factor: 1		Analysis Time..: 19:13	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGLKM1AP
		Dilution Factor: 1		Analysis Time..: 14:17	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGLKM1AU
		Dilution Factor: 1		Analysis Time..: 14:17	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/17-07/27/09	LGLKM1AH
		Dilution Factor: 1		Analysis Time..: 19:13	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	ND	1000	ug/L	SW846 6010B	07/17-07/20/09	LGLKM1AV
		Dilution Factor: 1		Analysis Time..: 14:17	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/17-07/27/09	LGLKM1AJ
		Dilution Factor: 1		Analysis Time..: 19:13	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGLKM1AW
		Dilution Factor: 1		Analysis Time..: 14:17	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGLKM1AX
		Dilution Factor: 1		Analysis Time..: 14:17	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGLKM1A0
		Dilution Factor: 1		Analysis Time..: 14:17	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1426-GW

TOTAL Metals

Lot-Sample #...: A9G160256-004 **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/17-07/27/09	LGLKM1AK
		Dilution Factor: 1		Analysis Time..: 19:13	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/17-07/21/09	LGLKM1A7
		Dilution Factor: 1		Analysis Time..: 16:55	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.12		
Potassium	**141 B,J**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGLKM1A1**
		Dilution Factor: 1		Analysis Time..: 14:17	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	ND	1000	ug/L	SW846 6010B	07/17-07/20/09	LGLKM1A2
		Dilution Factor: 1		Analysis Time..: 14:17	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGLKM1A3
		Dilution Factor: 1		Analysis Time..: 14:17	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	ND	1000	ug/L	SW846 6010B	07/17-07/20/09	LGLKM1A4
		Dilution Factor: 1		Analysis Time..: 14:17	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGLKM1A5
		Dilution Factor: 1		Analysis Time..: 14:17	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/17-07/20/09	LGLKM1AQ
		Dilution Factor: 1		Analysis Time..: 14:17	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/17-07/27/09	LGLKM1AL
		Dilution Factor: 1		Analysis Time..: 19:13	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGLKM1AR
		Dilution Factor: 1		Analysis Time..: 14:17	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1426-GW

TOTAL Metals

Lot-Sample #...: A9G160256-004 **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/17-07/27/09	LGLKM1AN
		Dilution Factor: 1		Analysis Time..: 19:13	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGLKM1A6
		Dilution Factor: 1		Analysis Time..: 14:17	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	ND	10.0	ug/L	SW846 6020	07/17-07/27/09	LGLKM1AM
		Dilution Factor: 1		Analysis Time..: 19:13	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-006C-1408-GF

TOTAL Metals

Lot-Sample #...: A9G160256-006 **Matrix.....:** WG
Date Sampled...: 07/16/09 10:15 **Date Received..:** 07/16/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9198015						
Silver	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGLKP1AQ
		Dilution Factor: 1		Analysis Time..: 14:21	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/17-07/27/09	LGLKP1AE
		Dilution Factor: 1		Analysis Time..: 19:17	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**15.2**	**5.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGLKP1AM**
		Dilution Factor: 1		Analysis Time..: 14:21	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**13.5**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGLKP1AR**
		Dilution Factor: 1		Analysis Time..: 14:21	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/17-07/27/09	LGLKP1AF
		Dilution Factor: 1		Analysis Time..: 19:17	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**113000**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGLKP1AT**
		Dilution Factor: 1		Analysis Time..: 14:21	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/17-07/27/09	LGLKP1AG
		Dilution Factor: 1		Analysis Time..: 19:17	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGLKP1AU
		Dilution Factor: 1		Analysis Time..: 14:21	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGLKP1AV
		Dilution Factor: 1		Analysis Time..: 14:21	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGLKP1AW
		Dilution Factor: 1		Analysis Time..: 14:21	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-006C-1408-GF

TOTAL Metals

Lot-Sample #...: A9G160256-006 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	1250	50.0	ug/L	SW846 6020	07/17-07/27/09	LGLKP1AH
		Dilution Factor: 1		Analysis Time..: 19:17	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/17-07/21/09	LGLKP1AD
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.12		
Potassium	2930 J	1000	ug/L	SW846 6010B	07/17-07/20/09	LGLKP1AX
		Dilution Factor: 1		Analysis Time..: 14:21	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	70700	1000	ug/L	SW846 6010B	07/17-07/20/09	LGLKP1A0
		Dilution Factor: 1		Analysis Time..: 14:21	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	167	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGLKP1A1
		Dilution Factor: 1		Analysis Time..: 14:21	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	38200	1000	ug/L	SW846 6010B	07/17-07/20/09	LGLKP1A2
		Dilution Factor: 1		Analysis Time..: 14:21	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGLKP1AA
		Dilution Factor: 1		Analysis Time..: 14:21	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/17-07/20/09	LGLKP1AN
		Dilution Factor: 1		Analysis Time..: 14:21	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/17-07/27/09	LGLKP1AJ
		Dilution Factor: 1		Analysis Time..: 19:17	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGLKP1AP
		Dilution Factor: 1		Analysis Time..: 14:21	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-006C-1408-GF

TOTAL Metals

Lot-Sample #...: A9G160256-006 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/17-07/27/09	LGLKP1AL
		Dilution Factor: 1		Analysis Time..: 19:17	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGLKP1AC
		Dilution Factor: 1		Analysis Time..: 14:21	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**4.3 B,J**	**10.0**	**ug/L**	**SW846 6020**	**07/17-07/27/09**	**LGLKP1AK**
		Dilution Factor: 1		Analysis Time..: 19:17	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-009C-1411-GF

TOTAL Metals

Lot-Sample #...: A9G160256-009 **Matrix.....:** WG
Date Sampled...: 07/16/09 08:50 **Date Received..:** 07/16/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9198015						
Silver	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGLKX1AQ
		Dilution Factor: 1		Analysis Time..: 14:26	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/17-07/27/09	LGLKX1AE
		Dilution Factor: 1		Analysis Time..: 19:21	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGLKX1AM
		Dilution Factor: 1		Analysis Time..: 14:26	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**24.1**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGLKX1AR**
		Dilution Factor: 1		Analysis Time..: 14:26	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/17-07/27/09	LGLKX1AF
		Dilution Factor: 1		Analysis Time..: 19:21	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**196000**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGLKX1AT**
		Dilution Factor: 1		Analysis Time..: 14:26	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/17-07/27/09	LGLKX1AG
		Dilution Factor: 1		Analysis Time..: 19:21	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGLKX1AU
		Dilution Factor: 1		Analysis Time..: 14:26	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGLKX1AV
		Dilution Factor: 1		Analysis Time..: 14:26	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGLKX1AW
		Dilution Factor: 1		Analysis Time..: 14:26	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-009C-1411-GF

TOTAL Metals

Lot-Sample #...: A9G160256-009 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/17-07/27/09	LGLKX1AH
		Dilution Factor: 1		Analysis Time..: 19:21	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/17-07/21/09	LGLKX1AD
		Dilution Factor: 1		Analysis Time..: 16:56	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.12		
Potassium	**1760 J**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGLKX1AX**
		Dilution Factor: 1		Analysis Time..: 14:26	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**72600**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGLKX1A0**
		Dilution Factor: 1		Analysis Time..: 14:26	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**596**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGLKX1A1**
		Dilution Factor: 1		Analysis Time..: 14:26	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**23600**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGLKX1A2**
		Dilution Factor: 1		Analysis Time..: 14:26	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGLKX1AA
		Dilution Factor: 1		Analysis Time..: 14:26	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/17-07/20/09	LGLKX1AN
		Dilution Factor: 1		Analysis Time..: 14:26	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/17-07/27/09	LGLKX1AJ
		Dilution Factor: 1		Analysis Time..: 19:21	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGLKX1AP
		Dilution Factor: 1		Analysis Time..: 14:26	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-009C-1411-GF

TOTAL Metals

Lot-Sample #...: A9G160256-009 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/17-07/27/09	LGLKX1AL
		Dilution Factor: 1		Analysis Time..: 19:21	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGLKX1AC
		Dilution Factor: 1		Analysis Time..: 14:26	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**3.5 B,J**	**10.0**	**ug/L**	**SW846 6020**	**07/17-07/27/09**	**LGLKX1AK**
		Dilution Factor: 1		Analysis Time..: 19:21	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-010C-1412-GF

TOTAL Metals

Lot-Sample #...: A9G160256-011 **Matrix.....:** WG
Date Sampled...: 07/16/09 09:50 **Date Received..:** 07/16/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9198015						
Silver	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGLK21AQ
		Dilution Factor: 1		Analysis Time..: 14:30	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/17-07/27/09	LGLK21AE
		Dilution Factor: 1		Analysis Time..: 19:26	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**43.0**	**5.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGLK21AM**
		Dilution Factor: 1		Analysis Time..: 14:30	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**52.9**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGLK21AR**
		Dilution Factor: 1		Analysis Time..: 14:30	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/17-07/27/09	LGLK21AF
		Dilution Factor: 1		Analysis Time..: 19:26	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**112000**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGLK21AT**
		Dilution Factor: 1		Analysis Time..: 14:30	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/17-07/27/09	LGLK21AG
		Dilution Factor: 1		Analysis Time..: 19:26	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGLK21AU
		Dilution Factor: 1		Analysis Time..: 14:30	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGLK21AV
		Dilution Factor: 1		Analysis Time..: 14:30	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGLK21AW
		Dilution Factor: 1		Analysis Time..: 14:30	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-010C-1412-GF

TOTAL Metals

Lot-Sample #...: A9G160256-011 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**2250**	**50.0**	**ug/L**	**SW846 6020**	**07/17-07/27/09**	**LGLK21AH**
		Dilution Factor: 1		Analysis Time..: 19:26	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/17-07/23/09	LGLK21AD
		Dilution Factor: 1		Analysis Time..: 17:38	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.12		
Potassium	**2720 J**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGLK21AX**
		Dilution Factor: 1		Analysis Time..: 14:30	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**90600**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGLK21A0**
		Dilution Factor: 1		Analysis Time..: 14:30	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**96.8**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGLK21A1**
		Dilution Factor: 1		Analysis Time..: 14:30	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**48300**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGLK21A2**
		Dilution Factor: 1		Analysis Time..: 14:30	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGLK21AA
		Dilution Factor: 1		Analysis Time..: 14:30	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/17-07/20/09	LGLK21AN
		Dilution Factor: 1		Analysis Time..: 14:30	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	ND	2.0	ug/L	SW846 6020	07/17-07/27/09	LGLK21AJ
		Dilution Factor: 1		Analysis Time..: 19:26	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGLK21AP
		Dilution Factor: 1		Analysis Time..: 14:30	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-010C-1412-GF

TOTAL Metals

Lot-Sample #...: A9G160256-011 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/17-07/27/09	LGLK21AL
		Dilution Factor: 1		Analysis Time..: 19:26	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGLK21AC
		Dilution Factor: 1		Analysis Time..: 14:30	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	**5.5 B,J**	**10.0**	**ug/L**	**SW846 6020**	**07/17-07/27/09**	**LGLK21AK**
		Dilution Factor: 1		Analysis Time..: 19:26	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-008C-1410-GF

TOTAL Metals

Lot-Sample #...: A9G160256-014 **Matrix.....:** WG
Date Sampled...: 07/16/09 08:45 **Date Received..:** 07/16/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9198015						
Silver	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGLK51AQ
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Aluminum	ND	50.0	ug/L	SW846 6020	07/17-07/27/09	LGLK51AE
		Dilution Factor: 1		Analysis Time..: 19:30	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**15.5**	**5.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGLK51AM**
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Barium	**17.7**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGLK51AR**
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.67		
Beryllium	ND	1.0	ug/L	SW846 6020	07/17-07/27/09	LGLK51AF
		Dilution Factor: 1		Analysis Time..: 19:30	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**201000**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGLK51AT**
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 130		
Cadmium	ND	0.50	ug/L	SW846 6020	07/17-07/27/09	LGLK51AG
		Dilution Factor: 1		Analysis Time..: 19:30	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGLK51AU
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.7		
Chromium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGLK51AV
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 2.2		
Copper	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGLK51AW
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.5		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-008C-1410-GF

TOTAL Metals

Lot-Sample #...: A9G160256-014 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**357**	**50.0**	**ug/L**	**SW846 6020**	**07/17-07/27/09**	**LGLK51AH**
		Dilution Factor: 1		Analysis Time..: 19:30	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/17-07/21/09	LGLK51AD
		Dilution Factor: 1		Analysis Time..: 17:01	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.12		
Potassium	**4290 J**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGLK51AX**
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 72.0		
Magnesium	**94200**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGLK51A0**
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 34.0		
Manganese	**136**	**10.0**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGLK51A1**
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.41		
Sodium	**37400**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGLK51A2**
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 590		
Nickel	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGLK51AA
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 3.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/17-07/20/09	LGLK51AN
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 1.9		
Antimony	**0.32 B**	**2.0**	**ug/L**	**SW846 6020**	**07/17-07/27/09**	**LGLK51AJ**
		Dilution Factor: 1		Analysis Time..: 19:30	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGLK51AP
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 4.1		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-008C-1410-GF

TOTAL Metals

Lot-Sample #...: A9G160256-014 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/17-07/27/09	LGLK51AL
		Dilution Factor: 1		Analysis Time..: 19:30	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGLK51AC
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I5		MDL.....: 0.64		
Zinc	3.8 B,J	10.0	ug/L	SW846 6020	07/17-07/27/09	LGLK51AK
		Dilution Factor: 1		Analysis Time..: 19:30	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A9G160256 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A9G170000-015 **Prep Batch #...:** 9198015						
Aluminum	ND	50.0	ug/L	SW846 6020	07/17-07/27/09	LGL721AA
		Dilution Factor: 1				
		Analysis Time..: 18:59		Analyst ID.....: 001637	Instrument ID..: I8	
Antimony	ND	2.0	ug/L	SW846 6020	07/17-07/27/09	LGL721AC
		Dilution Factor: 1				
		Analysis Time..: 18:59		Analyst ID.....: 001637	Instrument ID..: I8	
Arsenic	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGL721AJ
		Dilution Factor: 1				
		Analysis Time..: 14:02		Analyst ID.....: 000079	Instrument ID..: I5	
Barium	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGL721AN
		Dilution Factor: 1				
		Analysis Time..: 14:02		Analyst ID.....: 000079	Instrument ID..: I5	
Beryllium	ND	1.0	ug/L	SW846 6020	07/17-07/27/09	LGL721AD
		Dilution Factor: 1				
		Analysis Time..: 18:59		Analyst ID.....: 001637	Instrument ID..: I8	
Cadmium	ND	0.50	ug/L	SW846 6020	07/17-07/27/09	LGL721AE
		Dilution Factor: 1				
		Analysis Time..: 18:59		Analyst ID.....: 001637	Instrument ID..: I8	
Calcium	ND	1000	ug/L	SW846 6010B	07/17-07/20/09	LGL721AP
		Dilution Factor: 1				
		Analysis Time..: 14:02		Analyst ID.....: 000079	Instrument ID..: I5	
Chromium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGL721AR
		Dilution Factor: 1				
		Analysis Time..: 14:02		Analyst ID.....: 000079	Instrument ID..: I5	
Cobalt	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGL721AQ
		Dilution Factor: 1				
		Analysis Time..: 14:02		Analyst ID.....: 000079	Instrument ID..: I5	
Copper	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGL721AT
		Dilution Factor: 1				
		Analysis Time..: 14:02		Analyst ID.....: 000079	Instrument ID..: I5	
Iron	ND	50.0	ug/L	SW846 6020	07/17-07/27/09	LGL721AF
		Dilution Factor: 1				
		Analysis Time..: 18:59		Analyst ID.....: 001637	Instrument ID..: I8	

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A9G160256 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Lead	ND	3.0	ug/L	SW846 6010B	07/17-07/20/09	LGL721AK
		Dilution Factor: 1				
		Analysis Time..: 14:02		Analyst ID.....: 000079	Instrument ID..: I5	
Magnesium	ND	1000	ug/L	SW846 6010B	07/17-07/20/09	LGL721AV
		Dilution Factor: 1				
		Analysis Time..: 14:02		Analyst ID.....: 000079	Instrument ID..: I5	
Manganese	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGL721AW
		Dilution Factor: 1				
		Analysis Time..: 14:02		Analyst ID.....: 000079	Instrument ID..: I5	
Mercury	ND	0.20	ug/L	SW846 7470A	07/17-07/23/09	LGL721A2
		Dilution Factor: 1				
		Analysis Time..: 17:37		Analyst ID.....: 001576	Instrument ID..: H4	
Nickel	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGL721A0
		Dilution Factor: 1				
		Analysis Time..: 14:02		Analyst ID.....: 000079	Instrument ID..: I5	
Potassium	**144 B**	**1000**	**ug/L**	**SW846 6010B**	**07/17-07/20/09**	**LGL721AU**
		Dilution Factor: 1				
		Analysis Time..: 14:02		Analyst ID.....: 000079	Instrument ID..: I5	
Selenium	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGL721AL
		Dilution Factor: 1				
		Analysis Time..: 14:02		Analyst ID.....: 000079	Instrument ID..: I5	
Silver	ND	5.0	ug/L	SW846 6010B	07/17-07/20/09	LGL721AM
		Dilution Factor: 1				
		Analysis Time..: 14:02		Analyst ID.....: 000079	Instrument ID..: I5	
Sodium	ND	1000	ug/L	SW846 6010B	07/17-07/20/09	LGL721AX
		Dilution Factor: 1				
		Analysis Time..: 14:02		Analyst ID.....: 000079	Instrument ID..: I5	
Thallium	ND	1.0	ug/L	SW846 6020	07/17-07/27/09	LGL721AG
		Dilution Factor: 1				
		Analysis Time..: 18:59		Analyst ID.....: 001637	Instrument ID..: I8	
Vanadium	ND	10.0	ug/L	SW846 6010B	07/17-07/20/09	LGL721A1
		Dilution Factor: 1				
		Analysis Time..: 14:02		Analyst ID.....: 000079	Instrument ID..: I5	
Zinc	**5.0 B**	**10.0**	**ug/L**	**SW846 6020**	**07/17-07/27/09**	**LGL721AH**
		Dilution Factor: 1				
		Analysis Time..: 18:59		Analyst ID.....: 001637	Instrument ID..: I8	

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A9G160256 **Matrix.....:** WATER

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A9G160256 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A9G170000-015 **Prep Batch #...:** 9198015					
Aluminum	109	(80 - 120)	SW846 6020	07/17-07/27/09	LGL721A3
		Dilution Factor: 1	Analysis Time..: 19:03	Analyst ID.....: 001637	
		Instrument ID..: I8			
Antimony	102	(80 - 120)	SW846 6020	07/17-07/27/09	LGL721A4
		Dilution Factor: 1	Analysis Time..: 19:03	Analyst ID.....: 001637	
		Instrument ID..: I8			
Beryllium	101	(80 - 120)	SW846 6020	07/17-07/27/09	LGL721A5
		Dilution Factor: 1	Analysis Time..: 19:03	Analyst ID.....: 001637	
		Instrument ID..: I8			
Cadmium	108	(80 - 120)	SW846 6020	07/17-07/27/09	LGL721A6
		Dilution Factor: 1	Analysis Time..: 19:03	Analyst ID.....: 001637	
		Instrument ID..: I8			
Iron	109	(80 - 120)	SW846 6020	07/17-07/27/09	LGL721A7
		Dilution Factor: 1	Analysis Time..: 19:03	Analyst ID.....: 001637	
		Instrument ID..: I8			
Thallium	96	(80 - 120)	SW846 6020	07/17-07/27/09	LGL721A8
		Dilution Factor: 1	Analysis Time..: 19:03	Analyst ID.....: 001637	
		Instrument ID..: I8			
Zinc	114	(80 - 120)	SW846 6020	07/17-07/27/09	LGL721A9
		Dilution Factor: 1	Analysis Time..: 19:03	Analyst ID.....: 001637	
		Instrument ID..: I8			
Arsenic	99	(80 - 120)	SW846 6010B	07/17-07/20/09	LGL721CA
		Dilution Factor: 1	Analysis Time..: 14:07	Analyst ID.....: 000079	
		Instrument ID..: I5			
Lead	103	(80 - 120)	SW846 6010B	07/17-07/20/09	LGL721CC
		Dilution Factor: 1	Analysis Time..: 14:07	Analyst ID.....: 000079	
		Instrument ID..: I5			
Selenium	103	(80 - 120)	SW846 6010B	07/17-07/20/09	LGL721CD
		Dilution Factor: 1	Analysis Time..: 14:07	Analyst ID.....: 000079	
		Instrument ID..: I5			

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A9G160256 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Silver	114	(80 - 120)	SW846 6010B	07/17-07/20/09	LGL721CE
		Dilution Factor: 1	Analysis Time..: 14:07	Analyst ID.....: 000079	
		Instrument ID..: I5			
Barium	103	(80 - 120)	SW846 6010B	07/17-07/20/09	LGL721CF
		Dilution Factor: 1	Analysis Time..: 14:07	Analyst ID.....: 000079	
		Instrument ID..: I5			
Calcium	104	(80 - 120)	SW846 6010B	07/17-07/20/09	LGL721CG
		Dilution Factor: 1	Analysis Time..: 14:07	Analyst ID.....: 000079	
		Instrument ID..: I5			
Cobalt	103	(80 - 120)	SW846 6010B	07/17-07/20/09	LGL721CH
		Dilution Factor: 1	Analysis Time..: 14:07	Analyst ID.....: 000079	
		Instrument ID..: I5			
Chromium	101	(80 - 120)	SW846 6010B	07/17-07/20/09	LGL721CJ
		Dilution Factor: 1	Analysis Time..: 14:07	Analyst ID.....: 000079	
		Instrument ID..: I5			
Copper	103	(80 - 120)	SW846 6010B	07/17-07/20/09	LGL721CK
		Dilution Factor: 1	Analysis Time..: 14:07	Analyst ID.....: 000079	
		Instrument ID..: I5			
Potassium	103	(80 - 120)	SW846 6010B	07/17-07/20/09	LGL721CL
		Dilution Factor: 1	Analysis Time..: 14:07	Analyst ID.....: 000079	
		Instrument ID..: I5			
Magnesium	105	(80 - 120)	SW846 6010B	07/17-07/20/09	LGL721CM
		Dilution Factor: 1	Analysis Time..: 14:07	Analyst ID.....: 000079	
		Instrument ID..: I5			
Manganese	105	(80 - 120)	SW846 6010B	07/17-07/20/09	LGL721CN
		Dilution Factor: 1	Analysis Time..: 14:07	Analyst ID.....: 000079	
		Instrument ID..: I5			
Sodium	105	(80 - 120)	SW846 6010B	07/17-07/20/09	LGL721CP
		Dilution Factor: 1	Analysis Time..: 14:07	Analyst ID.....: 000079	
		Instrument ID..: I5			
Nickel	106	(80 - 120)	SW846 6010B	07/17-07/20/09	LGL721CQ
		Dilution Factor: 1	Analysis Time..: 14:07	Analyst ID.....: 000079	
		Instrument ID..: I5			

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A9G160256 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	101	(80 - 120)	SW846 6010B	07/17-07/20/09	LGL721CR
		Dilution Factor: 1	Analysis Time..: 14:07	Analyst ID.....: 000079	
		Instrument ID..: I5			
Mercury	93	(80 - 120)	SW846 7470A	07/17-07/21/09	LGL721CT
		Dilution Factor: 1	Analysis Time..: 16:44	Analyst ID.....: 001576	
		Instrument ID..: H1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A9G160256 **Matrix.....:** WATER
Date Sampled...: 07/15/09 15:45 **Date Received..:** 07/16/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A9G160109-002 **Prep Batch #...:** 9198015					
Aluminum	107	(75 - 125)	SW846 6020	07/17-07/27/09	LGKFW1AC
		Dilution Factor: 1	Analysis Time..: 19:34	Instrument ID..: I8	
		Analyst ID.....: 001637			
Antimony	104	(75 - 125)	SW846 6020	07/17-07/27/09	LGKFW1AF
		Dilution Factor: 1	Analysis Time..: 19:34	Instrument ID..: I8	
		Analyst ID.....: 001637			
Arsenic	101	(75 - 125)	SW846 6010B	07/17-07/20/09	LGKFW1A2
		Dilution Factor: 1	Analysis Time..: 14:41	Instrument ID..: I5	
		Analyst ID.....: 000079			
Barium	104	(75 - 125)	SW846 6010B	07/17-07/20/09	LGKFW1CF
		Dilution Factor: 1	Analysis Time..: 14:41	Instrument ID..: I5	
		Analyst ID.....: 000079			
Beryllium	97	(75 - 125)	SW846 6020	07/17-07/27/09	LGKFW1AJ
		Dilution Factor: 1	Analysis Time..: 19:34	Instrument ID..: I8	
		Analyst ID.....: 001637			
Cadmium	104	(75 - 125)	SW846 6020	07/17-07/27/09	LGKFW1AM
		Dilution Factor: 1	Analysis Time..: 19:34	Instrument ID..: I8	
		Analyst ID.....: 001637			
Calcium	94	(75 - 125)	SW846 6010B	07/17-07/20/09	LGKFW1CJ
		Dilution Factor: 1	Analysis Time..: 14:41	Instrument ID..: I5	
		Analyst ID.....: 000079			
Chromium	102	(75 - 125)	SW846 6010B	07/17-07/20/09	LGKFW1CQ
		Dilution Factor: 1	Analysis Time..: 14:41	Instrument ID..: I5	
		Analyst ID.....: 000079			
Cobalt	104	(75 - 125)	SW846 6010B	07/17-07/20/09	LGKFW1CM
		Dilution Factor: 1	Analysis Time..: 14:41	Instrument ID..: I5	
		Analyst ID.....: 000079			
Copper	104	(75 - 125)	SW846 6010B	07/17-07/20/09	LGKFW1CU
		Dilution Factor: 1	Analysis Time..: 14:41	Instrument ID..: I5	
		Analyst ID.....: 000079			

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A9G160256 **Matrix.....:** WATER
Date Sampled...: 07/15/09 15:45 **Date Received..:** 07/16/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	106	(75 - 125)	SW846 6020	07/17-07/27/09	LGKFW1AQ
		Dilution Factor: 1	Analysis Time..: 19:34	Instrument ID..: I8	
		Analyst ID.....: 001637			
Lead	103	(75 - 125)	SW846 6010B	07/17-07/20/09	LGKFW1A5
		Dilution Factor: 1	Analysis Time..: 14:41	Instrument ID..: I5	
		Analyst ID.....: 000079			
Magnesium	104	(75 - 125)	SW846 6010B	07/17-07/20/09	LGKFW1C2
		Dilution Factor: 1	Analysis Time..: 14:41	Instrument ID..: I5	
		Analyst ID.....: 000079			
Manganese	103	(75 - 125)	SW846 6010B	07/17-07/20/09	LGKFW1C5
		Dilution Factor: 1	Analysis Time..: 14:41	Instrument ID..: I5	
		Analyst ID.....: 000079			
Mercury	90	(80 - 120)	SW846 7470A	07/17-07/21/09	LGKFW1DJ
		Dilution Factor: 1	Analysis Time..: 16:45	Instrument ID..: H1	
		Analyst ID.....: 001576			
Nickel	107	(75 - 125)	SW846 6010B	07/17-07/20/09	LGKFW1DC
		Dilution Factor: 1	Analysis Time..: 14:41	Instrument ID..: I5	
		Analyst ID.....: 000079			
Potassium	106	(75 - 125)	SW846 6010B	07/17-07/20/09	LGKFW1CX
		Dilution Factor: 1	Analysis Time..: 14:41	Instrument ID..: I5	
		Analyst ID.....: 000079			
Selenium	104	(75 - 125)	SW846 6010B	07/17-07/20/09	LGKFW1A8
		Dilution Factor: 1	Analysis Time..: 14:41	Instrument ID..: I5	
		Analyst ID.....: 000079			
Silver	117	(75 - 125)	SW846 6010B	07/17-07/20/09	LGKFW1CC
		Dilution Factor: 1	Analysis Time..: 14:41	Instrument ID..: I5	
		Analyst ID.....: 000079			
Sodium	105	(75 - 125)	SW846 6010B	07/17-07/20/09	LGKFW1C8
		Dilution Factor: 1	Analysis Time..: 14:41	Instrument ID..: I5	
		Analyst ID.....: 000079			
Thallium	100	(75 - 125)	SW846 6020	07/17-07/27/09	LGKFW1AU
		Dilution Factor: 1	Analysis Time..: 19:34	Instrument ID..: I8	
		Analyst ID.....: 001637			

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A9G160256 **Matrix.....:** WATER
Date Sampled...: 07/15/09 15:45 **Date Received..:** 07/16/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	101	(75 - 125)	SW846 6010B	07/17-07/20/09	LGKFW1DF
		Dilution Factor: 1	Analysis Time..: 14:41		Instrument ID..: I5
		Analyst ID.....: 000079			
Zinc	106	(75 - 125)	SW846 6020	07/17-07/27/09	LGKFW1AX
		Dilution Factor: 1	Analysis Time..: 19:34		Instrument ID..: I8
		Analyst ID.....: 001637			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Client Lot #...: A9G160256 **Work Order #...:** LGKFW-SMP LGKFW-DUP **Matrix.....:** WATER

Date Sampled...: 07/15/09 15:45 **Date Received..:** 07/16/09

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Selenium						SD Lot-Sample #:	A9G160109-002	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/17-07/20/09	9198015
			Dilution Factor: 1			Analysis Time..: 14:41	Analyst ID.....: 000079	
			Instrument ID..: I5					
Aluminum						SD Lot-Sample #:	A9G160109-002	
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/17-07/27/09	9198015
			Dilution Factor: 1			Analysis Time..: 19:34	Analyst ID.....: 001637	
			Instrument ID..: I8					
Potassium						SD Lot-Sample #:	A9G160109-002	
	2340 J,E	2420	ug/L	3.5	(0-20)	SW846 6010B	07/17-07/20/09	9198015
			Dilution Factor: 1			Analysis Time..: 14:41	Analyst ID.....: 000079	
			Instrument ID..: I5					
Nickel						SD Lot-Sample #:	A9G160109-002	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/17-07/20/09	9198015
			Dilution Factor: 1			Analysis Time..: 14:41	Analyst ID.....: 000079	
			Instrument ID..: I5					
Vanadium						SD Lot-Sample #:	A9G160109-002	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/17-07/20/09	9198015
			Dilution Factor: 1			Analysis Time..: 14:41	Analyst ID.....: 000079	
			Instrument ID..: I5					
Mercury						SD Lot-Sample #:	A9G160109-002	
	ND	ND	ug/L	0	(0-20)	SW846 7470A	07/17-07/21/09	9198015
			Dilution Factor: 1			Analysis Time..: 16:45	Analyst ID.....: 001576	
			Instrument ID..: H1					
Antimony						SD Lot-Sample #:	A9G160109-002	
	0.13 B	0.14 B	ug/L	1.5	(0-20)	SW846 6020	07/17-07/27/09	9198015
			Dilution Factor: 1			Analysis Time..: 19:34	Analyst ID.....: 001637	
			Instrument ID..: I8					
Beryllium						SD Lot-Sample #:	A9G160109-002	
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/17-07/27/09	9198015
			Dilution Factor: 1			Analysis Time..: 19:34	Analyst ID.....: 001637	
			Instrument ID..: I8					
Cadmium						SD Lot-Sample #:	A9G160109-002	
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/17-07/27/09	9198015
			Dilution Factor: 1			Analysis Time..: 19:34	Analyst ID.....: 001637	
			Instrument ID..: I8					

(Continued on next page)

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A9G160256-000 **Work Order #...:** LGKFW-SMP LGKFW-DUP **Matrix.....:** WATER

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Iron						SD Lot-Sample #:	A9G160109-002	
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/17-07/27/09	9198015
			Dilution Factor: 1			Analysis Time..: 19:34	Analyst ID.....: 001637	
			Instrument ID..: I8					
Thallium						SD Lot-Sample #:	A9G160109-002	
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/17-07/27/09	9198015
			Dilution Factor: 1			Analysis Time..: 19:34	Analyst ID.....: 001637	
			Instrument ID..: I8					
Zinc						SD Lot-Sample #:	A9G160109-002	
	ND	2.4 B	ug/L	200	(0-20)	SW846 6020	07/17-07/27/09	9198015
			Dilution Factor: 1			Analysis Time..: 19:34	Analyst ID.....: 001637	
			Instrument ID..: I8					
Magnesium						SD Lot-Sample #:	A9G160109-002	
	55600	56900	ug/L	2.3	(0-20)	SW846 6010B	07/17-07/20/09	9198015
			Dilution Factor: 1			Analysis Time..: 14:41	Analyst ID.....: 000079	
			Instrument ID..: I5					
Manganese						SD Lot-Sample #:	A9G160109-002	
	626	645	ug/L	3.0	(0-20)	SW846 6010B	07/17-07/20/09	9198015
			Dilution Factor: 1			Analysis Time..: 14:41	Analyst ID.....: 000079	
			Instrument ID..: I5					
Sodium						SD Lot-Sample #:	A9G160109-002	
	12900	13300	ug/L	3.3	(0-20)	SW846 6010B	07/17-07/20/09	9198015
			Dilution Factor: 1			Analysis Time..: 14:41	Analyst ID.....: 000079	
			Instrument ID..: I5					
Silver						SD Lot-Sample #:	A9G160109-002	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/17-07/20/09	9198015
			Dilution Factor: 1			Analysis Time..: 14:41	Analyst ID.....: 000079	
			Instrument ID..: I5					
Barium						SD Lot-Sample #:	A9G160109-002	
	119	123	ug/L	2.9	(0-20)	SW846 6010B	07/17-07/20/09	9198015
			Dilution Factor: 1			Analysis Time..: 14:41	Analyst ID.....: 000079	
			Instrument ID..: I5					
Calcium						SD Lot-Sample #:	A9G160109-002	
	139000	143000	ug/L	2.6	(0-20)	SW846 6010B	07/17-07/20/09	9198015
			Dilution Factor: 1			Analysis Time..: 14:41	Analyst ID.....: 000079	
			Instrument ID..: I5					

(Continued on next page)

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A9G160256-000 **Work Order #...:** LGKFW-SMP LGKFW-DUP **Matrix.....:** WATER

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cobalt						SD Lot-Sample #:	A9G160109-002	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/17-07/20/09	9198015
			Dilution Factor: 1			Analysis Time..: 14:41	Analyst ID.....: 000079	
			Instrument ID..: I5					
Chromium						SD Lot-Sample #:	A9G160109-002	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/17-07/20/09	9198015
			Dilution Factor: 1			Analysis Time..: 14:41	Analyst ID.....: 000079	
			Instrument ID..: I5					
Copper						SD Lot-Sample #:	A9G160109-002	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/17-07/20/09	9198015
			Dilution Factor: 1			Analysis Time..: 14:41	Analyst ID.....: 000079	
			Instrument ID..: I5					
Arsenic						SD Lot-Sample #:	A9G160109-002	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/17-07/20/09	9198015
			Dilution Factor: 1			Analysis Time..: 14:41	Analyst ID.....: 000079	
			Instrument ID..: I5					
Lead						SD Lot-Sample #:	A9G160109-002	
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/17-07/20/09	9198015
			Dilution Factor: 1			Analysis Time..: 14:41	Analyst ID.....: 000079	
			Instrument ID..: I5					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

E Matrix interference.

B Estimated result. Result is less than RL.

TestAmerica North Canton

Metals Data Reporting Form

Contract Required Detection Limit Standard

Instrument: ICPMS **Units:** ug/L

Chart Number: I80727B.csv **Acceptable Range:** 70% - 130%

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	True Conc	CRI 07/27/09 11:11 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Aluminum	27	50.0	64.48	**129.0**								
Antimony	121	2.0	2.10	**104.9**								
Beryllium	9	1.0	1.02	**101.5**								
Cadmium	111	0.5	0.51	**102.2**								
Iron	56	50.0	50.16	**100.3**								
Thallium	205	1.0	0.92	**92.3**								
Zinc	66	10.0	14.18	**141.8**								

TestAmerica North Canton

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: I50720B.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 07/20/09 12:46 PM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	189.042	5	2.9	U								
Barium	493.409	10	0.2	U								
Calcium	317.933	1000	**-49.0**	**B**								
Chromium	267.716	5	1.1	U								
Cobalt	228.616	5	0.5	U								
Copper	324.753	5	1.0	U								
Lead	220.353	3	1.1	U								
Magnesium	279.078	1000	3.9	U								
Manganese	257.61	10	0.1	U								
Nickel	231.604	10	1.2	U								
Potassium	766.491	1000	**147.0**	**B**								
Selenium	196.026	5	3.6	U								
Silver	328.068	5	1.1	U								
Sodium	330.232	1000	**-570.0**	**B**								
Vanadium	292.402	10	0.8	U								

U results for K < 735 ug/L

5.21.0

U Result is less than the IDL
B Result is between IDL and RL

Form 3 Equivalent

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: I50720B.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 07/20/09 1:18 PM Found	Q	CCB 07/20/09 2:57 PM Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	189.042	5	2.9	U	2.9	U						
Barium	493.409	10	0.2	U	0.2	U						
Calcium	317.933	1000	**-57.0**	**B**	**-58.0**	**B**						
Chromium	267.716	5	1.1	U	1.1	U						
Cobalt	228.616	5	0.5	U	0.5	U						
Copper	324.753	5	1.0	U	1.0	U						
Lead	220.353	3	1.1	U	**-1.2**	**B**						
Magnesium	279.078	1000	3.9	U	3.9	U						
Manganese	257.61	10	0.1	U	0.1	U						
Nickel	231.604	10	1.2	U	**-1.2**	**B**						
Potassium	766.491	1000	~~**147.0**~~	~~**B**~~	~~**146.0**~~	**B**						
Selenium	196.026	5	**-3.9**	**B**	3.6	U						
Silver	328.068	5	1.1	U	1.1	U						
Sodium	330.232	1000	**-620.0**	**B**	**-540.0**	**B**						
Vanadium	292.402	10	0.8	U	0.8	U						

U Result is less than the IDL
B Result is between IDL and RL

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: I80727B.csv

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 07/27/09 11:31 AM Found	Q	CCB 8 07/27/09 6:51 PM Found	Q	CCB 9 07/27/09 7:44 PM Found	Q	Found	Q	Found	Q
Aluminum	27	50	8.2	U	8.2	U	~~8.6~~	B				
Antimony	121	2	0.055	U	~~0.059~~	~~B~~	~~0.071~~	~~B~~				
Beryllium	9	1	0.037	U	~~0.052~~	~~B~~	~~0.055~~	~~B~~				
Cadmium	111	0.5	0.027	U	~~0.034~~	~~B~~	~~0.089~~	~~B~~				
Iron	56	50	11	U	~~22~~	~~B~~	~~24.3~~	~~B~~				
Thallium	205	1	~~0.12~~	~~B~~	~~0.13~~	~~B~~	~~0.15~~	~~B~~				
Zinc	66	10	0.85	U	0.85	U	0.85	U				

U results for

Al < 43 ug/L NQ -014
Sb < 0.355 ug/L NQ
Be < 0.275 ug/L NQ
Cd < 0.445 ug/L NQ
Fe < 121.5 ug/L NQ
Tl < 0.75 ug/L

U Result is less than the IDL
B Result is between IDL and RL

EXECUTIVE SUMMARY - Detection Highlights

A9G160256

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGTEAM1-TRIP 07/16/09 08:00 001				
Acetone	2.4 J	10	ug/L	SW846 8260B
FWGASYmw-007C-1409-GW 07/16/09 08:50 002				
bis(2-Ethylhexyl) phthalate	1.1 J,B	10	ug/L	SW846 8270C
FWGASYmw-007C-1409-GF 07/16/09 08:50 003				
Iron	160	50.0	ug/L	SW846 6020
Zinc	6.2 B,J	10.0	ug/L	SW846 6020
Barium	20.4	10.0	ug/L	SW846 6010B
Calcium	134000	1000	ug/L	SW846 6010B
Potassium	1290 J	1000	ug/L	SW846 6010B
Magnesium	52900	1000	ug/L	SW846 6010B
Manganese	186	10.0	ug/L	SW846 6010B
Sodium	37100	1000	ug/L	SW846 6010B
FWGEQUIPRINSE4-1426-GW 07/16/09 09:30 004				
Potassium U	141 B,J	1000	ug/L	SW846 6010B
bis(2-Ethylhexyl) phthalate	0.85 J,B	10	ug/L	SW846 8270C
Methylene chloride	2.1	2.0	ug/L	SW846 8260B
Acetone	7.3 J	10	ug/L	SW846 8260B
2-Butanone	1.1 J	10	ug/L	SW846 8260B
FWGASYmw-006C-1408-GW 07/16/09 10:15 005				
bis(2-Ethylhexyl) phthalate	1.7 J,B	10	ug/L	SW846 8270C
FWGASYmw-006C-1408-GF 07/16/09 10:15 006				
Iron	1250	50.0	ug/L	SW846 6020
Zinc	4.3 B,J	10.0	ug/L	SW846 6020
Arsenic	15.2	5.0	ug/L	SW846 6010B
Barium	13.5	10.0	ug/L	SW846 6010B
Calcium	113000	1000	ug/L	SW846 6010B
Potassium	2930 J	1000	ug/L	SW846 6010B
Magnesium	70700	1000	ug/L	SW846 6010B
Manganese	167	10.0	ug/L	SW846 6010B
Sodium	38200	1000	ug/L	SW846 6010B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A9G160256

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGTEAM2-TRIP 07/16/09 08:00 007				
Acetone	3.2 J	10	ug/L	SW846 8260B
FWGASYmw-009C-1411-GW 07/16/09 08:50 008				
beta-BHC	0.016 J	0.030	ug/L	SW846 8081A
bis(2-Ethylhexyl) phthalate	2.2 J,B	10	ug/L	SW846 8270C
FWGASYmw-009C-1411-GF 07/16/09 08:50 009				
Zinc	3.5 B,J	10.0	ug/L	SW846 6020
Barium	24.1	10.0	ug/L	SW846 6010B
Calcium	196000	1000	ug/L	SW846 6010B
Potassium	1760 J	1000	ug/L	SW846 6010B
Magnesium	72600	1000	ug/L	SW846 6010B
Manganese	596	10.0	ug/L	SW846 6010B
Sodium	23600	1000	ug/L	SW846 6010B
FWGASYmw-010C-1412-GW 07/16/09 09:50 010				
bis(2-Ethylhexyl) phthalate	2.8 J,B	10	ug/L	SW846 8270C
FWGASYmw-010C-1412-GF 07/16/09 09:50 011				
Iron	2250	50.0	ug/L	SW846 6020
Zinc	5.5 B,J	10.0	ug/L	SW846 6020
Arsenic	43.0	5.0	ug/L	SW846 6010B
Barium	52.9	10.0	ug/L	SW846 6010B
Calcium	112000	1000	ug/L	SW846 6010B
Potassium	2720 J	1000	ug/L	SW846 6010B
Magnesium	90600	1000	ug/L	SW846 6010B
Manganese	96.8	10.0	ug/L	SW846 6010B
Sodium	48300	1000	ug/L	SW846 6010B
FWGTEAM3-TRIP 07/16/09 08:00 012				
Acetone	2.8 J	10	ug/L	SW846 8260B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A9G160256

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGASYmw-008C-1410-GW 07/16/09 08:45	013			
beta-BHC	0.019 J	0.030	ug/L	SW846 8081A
bis(2-Ethylhexyl) phthalate	1.1 J,B	10	ug/L	SW846 8270C
FWGASYmw-008C-1410-GF 07/16/09 08:45	014			
Iron	357	50.0	ug/L	SW846 6020
Antimony U	0.32 B	2.0	ug/L	SW846 6020
Zinc	3.8 B,J	10.0	ug/L	SW846 6020
Arsenic	15.5	5.0	ug/L	SW846 6010B
Barium	17.7	10.0	ug/L	SW846 6010B
Calcium	201000	1000	ug/L	SW846 6010B
Potassium	4290 J	1000	ug/L	SW846 6010B
Magnesium	94200	1000	ug/L	SW846 6010B
Manganese	136	10.0	ug/L	SW846 6010B
Sodium	37400	1000	ug/L	SW846 6010B

GENERAL CHEMISTRY DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 31, 2009

SDG: A9G160256 R0
Analysis: SW846 9012

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.2- 4.6 °C.	QAPP Table 4-2
3. Were holding times met?		✓			QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-9
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-9
7. Does the initial calibration curve consist of at least 6 standards and one blank?	✓				LCG Table 10 R
8. Was the correlation coefficient R ≥ 0.995?	✓				LCG Table 10 R<0.995=-J/R
9. Were % RSDs ≤ 10% in all standards and ICV/CCVs?	✓				LCG Table 10 RSD%>10=J
10. Were a high and low standard distilled and compared to the undistilled standard? Were the results within ± 10%?			✓		LCG Table 10 R
11. Was an MDL Level Verification performed at least once per quarter with all target analytes detected?	✓				LCG Table 10 R
12. Was a MRL Level Verification performed at the beginning of every daily sequence? Were results within 70-130%?	✓				LCG Table 10 >130%=J; 65-70%=J/UJ; <65%=J/R
13. Was a second source verification (ICV) analyzed after the ICAL and all analytes 85-115%?	✓				LCG Table 10 >115%=J; 80-85%=J/UJ; <80%=J/R
14. Was the ICB analyzed after the ICV with results <1/2 the MRL?	✓				LCG Table 7 < 5x = U
15. Was a CCV run at the beginning and end of the analytical sequence?	✓				LCG Table 10

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 31, 2009

SDG: A9G160256 R0
Analysis: SW846 9012

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
16. Were the CCV results 80-120%?	✓				LCG Table 10 >120%=J; 75-80%=J/UJ; <75%=J/R
17. Was a method blank prepared and analyzed with each batch?	✓				
18. Were target analytes detected in the method blank >1/2 the MRL?	✓			Checked by ADR.	LCG Table 10 <5x=B
19. Was a field blank collected and analyzed?	✓			FWGEQUIPRinse4-1426-GW	
20. Were target analytes in the field blank analyses <1/2 the MRL?	✓				<5x=B
21. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓			Checked by ADR. No field duplicates were submitted with this work order.	QAPP Table 3-2 >30% = J
22. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 10
23. Were the LCS recoveries 80-120%?	✓			Checked by ADR.	LCG Table 10 >120%=J; 50-79%=J/UJ; <50%=R
24. Was a MS prepared once per every 10 samples?	✓				LCG Table 10
25. Was the MS parent a Ravenna sample?		✓			
26. Were MS recoveries 80-120%?			✓	Checked by ADR. No evaluation was made as the parent was from another SDG.	QAPP Table 3-2 >120%=J; 30-79%=J/UJ; <30%=J/R
27. Were reported sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
29. Were lab comments included in report? If yes, summarize contents.		✓			

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ August 31, 2009

SDG: A9G160256 R0
Analysis: SW846 9012

References: Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 10 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-007C-1409-GW

General Chemistry

Lot-Sample #...: A9G160256-002 **Work Order #...:** LGLKE **Matrix.....:** WG
Date Sampled...: 07/16/09 08:50 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/20/09	9201357

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1426-GW

General Chemistry

Lot-Sample #...: A9G160256-004 **Work Order #...:** LGLKM **Matrix.....:** WQ
Date Sampled...: 07/16/09 09:30 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/20/09	9201357

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-006C-1408-GW

General Chemistry

Lot-Sample #...: A9G160256-005 **Work Order #...:** LGLKN **Matrix.....:** WG
Date Sampled...: 07/16/09 10:15 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/20/09	9201357

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-009C-1411-GW

General Chemistry

Lot-Sample #...: A9G160256-008 **Work Order #...:** LGLKT **Matrix.....:** WG
Date Sampled...: 07/16/09 08:50 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/20/09	9201357

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-010C-1412-GW

General Chemistry

Lot-Sample #...: A9G160256-010 **Work Order #...:** LGLK0 **Matrix.....:** WG
Date Sampled...: 07/16/09 09:50 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/20/09	9201357

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-008C-1410-GW

General Chemistry

Lot-Sample #...: A9G160256-013 **Work Order #...:** LGLK4 **Matrix.....:** WG
Date Sampled...: 07/16/09 08:45 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/20/09	9201357

Dilution Factor: 1 MDL.....: 0.0050

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A9G160256 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: LGQGX1AA		MB Lot-Sample #:	A9G200000-357	
	ND	0.010	mg/L	SW846 9012A	07/20/09	9201357
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A9G160256 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: LGQGX1AC	LCS Lot-Sample#: A9G200000-357		
	83	(80 - 120)	SW846 9012A	07/20/09	9201357
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A9G160256 **Matrix.....:** WATER
Date Sampled...: 07/15/09 15:45 **Date Received..:** 07/16/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#: LGKD91AU-MS/LGKD91AV-MSD				MS Lot-Sample #: A9G160109-001	
	80	(80 - 120)			SW846 9012A	07/20/09	9201357
	88	(80 - 120)	9.5	(0-20)	SW846 9012A	07/20/09	9201357
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Appendix I

Reason Code Library: Example 1

Category	Code
Low Bias Indicator	-
High Bias Indicator	+
Temperature	A
Holding Times	
Sampling to Analysis	C
Sampling to Extraction	D
Extaction to Analysis	E
Method Blanks	F
Surrogate Recovery	G
MS/MSD	
MS/MSD Recovery	H
MS/MSD RPD	I
LCS	
LCS Recovery	J
LCS RPD	K
Reporting Limits	L
Field QC	
Field Blank	M
Equipment Blank	N
Trip Blank	O
Field Duplicate	P

Category	Code
Initial Calibration	
Initial Calibration RRF	Q
Initial Calibration RSD	R
Initial Calibration Cor. Coef	S
Initial Calibration Verification	
Initial Calibration Verificaton RRF	T
Initial CalibrationVerification %D	U
Continuing Calibration	
Continuing Calibraiton RRF	V
Continuing Calibration %D	W
GC/MS Tune	
GC/MS Tune for Initial Calibration	X
GC/MS Tune for Continuing Calibration	Y
Laboratory Duplicate	Z
Categories not Assessed by Automated Data Review*	
Internal Standards	Is
Calibration Blanks	Cb
Resolution Check Mixture	Rm
Performance Evaluation Mixture	Pm
Professional Judgement	Pj

* Qualifiers for data-review categories not assessed by automated data review are manually entered by the user. The application automaticallly adds reason codes listed here when the user manually adds qualifiers for these categories if the option for applying reason codes was selected during automated data review.

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G160256										
6010B	FWGEQUIPRINSE4-1426-GW	AQ	EB							
				Potassium	1000	141B J		UJB	ug/L	Cb,F,L
6020	FWGASYmw-006C-1408-GF	AQ	N							
				Zinc	10.0	4.3B J		JB	ug/L	Pj,F,L
6020	FWGASYmw-007C-1409-GF	AQ	N							
				Zinc	10.0	6.2B J		JB	ug/L	Pj,F,L
6020	FWGASYmw-008C-1410-GF	AQ	N							
				Antimony	2.0	0.32B		UJ	ug/L	Cb,L
				Zinc	10.0	3.8B J		JB	ug/L	Pj,F,L
6020	FWGASYmw-009C-1411-GF	AQ	N							
				Zinc	10.0	3.5B J		JB	ug/L	Pj,F,L
6020	FWGASYmw-010C-1412-GF	AQ	N							
				Zinc	10.0	5.5B J		JB	ug/L	Pj,F,L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G160256										
8081A	FWGASYmw-006C-1408-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G160256										
8081A	FWGASYmw-007C-1409-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G160256										
8081A	FWGASYmw-008C-1410-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.019J		J	ug/L	G,L
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G160256										
8081A	FWGASYmw-009C-1411-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.016J		J	ug/L	G,L
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G160256										
8081A	FWGASYmw-010C-1412-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G
8082	FWGASYmw-006C-1408-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G160256										
8082	FWGASYmw-008C-1410-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G
8082	FWGASYmw-010C-1412-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G
8260B	FWGASYmw-006C-1408-GW	AQ	N							
				2-Hexanone	10	10U		UJ	ug/L	Pj
				~~Acetone~~	~~10~~	~~10U~~		~~UJ~~	~~ug/L~~	~~Pj~~
				Carbon disulfide	1.0	1.0U		UJ	ug/L	Pj, J
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	J,U
				Methylene chloride	2.0	2.0U		UJ	ug/L	Pj

100 9/24/09

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G160256										
8260B	FWGASYmw-007C-1409-GW	AQ	N							
				2-Hexanone	10	10U		UJ	ug/L	Pj
				~~Acetone~~	~~10~~	~~10U~~		~~UJ~~	~~ug/L~~	~~Pj~~
				Carbon disulfide	1.0	1.0U		UJ	ug/L	Pj, J
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	J,U
				Methylene chloride	2.0	2.0U		UJ	ug/L	Pj
8260B	FWGASYmw-008C-1410-GW	AQ	N							
				2-Hexanone	10	10U		UJ	ug/L	Pj
				~~Acetone~~	~~10~~	~~10U~~		~~UJ~~	~~ug/L~~	~~Pj~~
				Carbon disulfide	1.0	1.0U		UJ	ug/L	Pj, J
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	J,U
				Methylene chloride	2.0	2.0U		UJ	ug/L	Pj
8260B	FWGASYmw-009C-1411-GW	AQ	N							
				2-Hexanone	10	10U		UJ	ug/L	Pj
				~~Acetone~~	~~10~~	~~10U~~		~~UJ~~	~~ug/L~~	~~Pj~~
				Carbon disulfide	1.0	1.0U		UJ	ug/L	Pj, J
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	J,U
				Methylene chloride	2.0	2.0U		UJ	ug/L	Pj
8260B	FWGASYmw-010C-1412-GW	AQ	N							
				2-Hexanone	10	10U		UJ	ug/L	Pj
				~~Acetone~~	~~10~~	~~10U~~		~~UJ~~	~~ug/L~~	~~Pj~~
				Carbon disulfide	1.0	1.0U		UJ	ug/L	Pj, J
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	J,U
				Methylene chloride	2.0	2.0U		UJ	ug/L	Pj

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G160256										
8260B	FWGEQUIPRINSE4-1426-GW	AQ	EB							
				2-Butanone	10	1.1J		J	ug/L	L
				2-Hexanone	10	10U		UJ	ug/L	Pj ~~A~~ 9/14/09
				Acetone	10	7.3J		JB	ug/L	~~P~~j,L,O
				Carbon disulfide	1.0	1.0U		UJ	ug/L	Pj, J
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	J,U
				Methylene chloride	2.0	2.1		J	ug/L	Pj
8260B	FWGTEAM1-TRIP	AQ	TB							
				2-Hexanone	10	10U		UJ	ug/L	Pj
				Acetone	10	2.4J		J	ug/L	~~P~~j,L ~~A~~ 9/14/09
				Carbon disulfide	1.0	1.0U		UJ	ug/L	Pj, J
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	J
				Methylene chloride	2.0	2.0U		UJ	ug/L	Pj
8260B	FWGTEAM2-TRIP	AQ	TB							
				2-Hexanone	10	10U		UJ	ug/L	Pj
				Acetone	10	3.2J		J	ug/L	~~P~~j,L ~~A~~ 9/14/09
				Carbon disulfide	1.0	1.0U		UJ	ug/L	Pj, J
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	J
				Methylene chloride	2.0	2.0U		UJ	ug/L	Pj
8260B	FWGTEAM3-TRIP	AQ	TB							
				2-Hexanone	10	10U		UJ	ug/L	Pj
				Acetone	10	2.8J		J	ug/L	~~P~~j,L ~~A~~ 9/14/09
				Carbon disulfide	1.0	1.0U		UJ	ug/L	Pj, J
				Chloroethane	1.0	1.0U		UJ	ug/L	J
				Chloromethane	1.0	1.0U		UJ	ug/L	J
				Methylene chloride	2.0	2.0U		UJ	ug/L	Pj

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G160256										
8270C	FWGASYmw-006C-1408-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	1.7J B		JB	ug/L	L,N,F
8270C	FWGASYmw-007C-1409-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	1.1J B		JB	ug/L	L,N,F
8270C	FWGASYmw-008C-1410-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	1.1J B		JB	ug/L	L,N,F
8270C	FWGASYmw-009C-1411-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	2.2J B		JB	ug/L	L,N,F
8270C	FWGASYmw-010C-1412-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	2.8J B		JB	ug/L	L,N,F
8270C	FWGEQUIPRINSE4-1426-GW	AQ	EB							
				bis(2-Ethylhexyl) phthalate	10	0.85J B		JB	ug/L	L,F

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGASYmw-006C-1408-GF **Lab Report Batch :** A9G160256 **Lab ID :** TALCAN

Sample Date : 07/16/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G160256006

Reviewed By / Date : Angye Dragotta 8/31/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6020						**Dilution: 1**															
Zinc	4.3		ug/L	B J	YES	~~U~~ JB			~~U~~ B					J							Pj,F,L

Project Number and Name: 30240.0006 - RVAAP (OH) **Library Used:** Ravenna GW

ADR 8.1 Report Date: 8/31/2009 12:41

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGASYmw-006C-1408-GW **Lab Report Batch :** A9G160256 **Lab ID :** TALCAN

Sample Date : 07/16/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160256005

Reviewed By / Date : Angye Dragotta 8/31/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	UJ							UJ								G
Aldrin	0.030		ug/L	U	YES	UJ							UJ								G
alpha-BHC	0.030		ug/L	U	YES	UJ							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	UJ							UJ								G
beta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
delta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
Dieldrin	0.030		ug/L	U	YES	UJ							UJ								G
Endosulfan I	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	UJ							UJ								G
Endrin	0.030		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.030		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	UJ							UJ								G
Methoxychlor	0.10		ug/L	U	YES	UJ							UJ								G
Toxaphene	2.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1260	0.50		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8260B						**Dilution: 1**															
2-Hexanone	10		ug/L	U	YES	UJ															Pj
Acetone	10		ug/L	U	YES	~~UJ~~															~~Pj~~

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Project Number and Name: 30240.0006 - RVAAP (OH) **Library Used:** Ravenna GW

ADR 8.1 Report Date: 8/31/2009 12:41

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGASYmw-006C-1408-GW **Lab Report Batch :** A9G160256 **Lab ID :** TALCAN

Sample Date : 07/16/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160256005

Reviewed By / Date : Angye Dragotta 8/31/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Carbon disulfide	1.0		ug/L	U	YES	**UJ**				UJ											Pj, J
Chloroethane	1.0		ug/L	U	YES	**UJ**				UJ											J
Chloromethane	1.0		ug/L	U	YES	**UJ**				UJ									UJ		J,U
Methylene chloride	2.0		ug/L	U	YES	**UJ**															Pj
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	1.7		ug/L	J B	YES	~~U~~ JB			~~U~~ JB					J		~~U~~ JB					L,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGASYmw-007C-1409-GF **Lab Report Batch :** A9G160256 **Lab ID :** TALCAN

Sample Date : 07/16/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G160256003

Reviewed By / Date : Angye Dragotta 8/31/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6020						**Dilution: 1**															
Zinc	6.2		ug/L	B J	YES	~~U~~ JB			JB					J							Pj,F,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGASYmw-007C-1409-GW **Lab Report Batch :** A9G160256 **Lab ID :** TALCAN

Sample Date : 07/16/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160256002

Reviewed By / Date : Angye Dragotta 8/31/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	UJ							UJ								G
Aldrin	0.030		ug/L	U	YES	UJ							UJ								G
alpha-BHC	0.030		ug/L	U	YES	UJ							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	UJ							UJ								G
beta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
delta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
Dieldrin	0.030		ug/L	U	YES	UJ							UJ								G
Endosulfan I	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	UJ							UJ								G
Endrin	0.030		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.030		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	UJ							UJ								G
Methoxychlor	0.10		ug/L	U	YES	UJ							UJ								G
Toxaphene	2.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8260B						**Dilution: 1**															
2-Hexanone	10		ug/L	U	YES	UJ															Pj
Acetone	10		ug/L	U	YES	~~UJ~~	~~ASO~~ 9/14/09														~~Pj~~
Carbon disulfide	1.0		ug/L	U	YES	UJ				UJ											Pj, J
Chloroethane	1.0		ug/L	U	YES	UJ				UJ											J
Chloromethane	1.0		ug/L	U	YES	UJ				UJ									UJ		J,U
Methylene chloride	2.0		ug/L	U	YES	UJ															Pj
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	1.1		ug/L	J B	YES	~~UJ~~ JB			JB					J		JB					L,N,F

Project Number and Name: 30240.0006 - RVAAP (OH) **Library Used:** Ravenna GW

ADR 8.1 Report Date: 8/31/2009 12:41

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGASYmw-008C-1410-GF **Lab Report Batch :** A9G160256 **Lab ID :** TALCAN

Sample Date : 07/16/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G160256014

Reviewed By / Date : Angye Dragotta 8/31/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6020						**Dilution: 1**															
Antimony	0.32		ug/L	B	YES	UJ								J							Cb,L
Zinc	3.8		ug/L	B J	YES	~~UJ~~ JB			~~U~~					J							Pj,F,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGASYmw-008C-1410-GW **Lab Report Batch :** A9G160256 **Lab ID :** TALCAN

Sample Date : 07/16/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160256013

Reviewed By / Date : Angye Dragotta 8/31/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	**UJ**							UJ								G
Aldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	**UJ**							UJ								G
beta-BHC	0.019		ug/L	J	YES	**J**							J	J							G,L
delta-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
Dieldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endosulfan I	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan II	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	UJ							UJ								G
Endrin	0.030		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.030		ug/L	U	YES	**UJ**							UJ								G
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	UJ							UJ								G
Methoxychlor	0.10		ug/L	U	YES	UJ							UJ								G
Toxaphene	2.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1260	0.50		ug/L	U	YES	**UJ**							UJ								G
Analysis Method : 8260B						**Dilution: 1**															
2-Hexanone	10		ug/L	U	YES	UJ															Pj
Acetone	10		ug/L	U	YES	~~UJ~~															Pj

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* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGASYmw-008C-1410-GW **Lab Report Batch :** A9G160256 **Lab ID :** TALCAN

Sample Date : 07/16/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160256013

Reviewed By / Date : Angye Dragotta 8/31/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Carbon disulfide	1.0		ug/L	U	YES	UJ				UJ											Pj, J
Chloroethane	1.0		ug/L	U	YES	UJ				UJ											J
Chloromethane	1.0		ug/L	U	YES	UJ				UJ									UJ		J,U
Methylene chloride	2.0		ug/L	U	YES	UJ															Pj
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	1.1		ug/L	J B	YES	~~UJ~~ JB			~~U~~ B					J		~~U~~ B					L,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGASYmw-009C-1411-GF **Lab Report Batch :** A9G160256 **Lab ID :** TALCAN

Sample Date : 07/16/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G160256009

Reviewed By / Date : Angye Dragotta 8/31/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6020						**Dilution: 1**															
Zinc	3.5	-	ug/L	B J	YES	~~UJ~~ JB			~~U~~ B					J							Pj,F,L

Project Number and Name: **30240.0006 - RVAAP (OH)** **Library Used:** **Ravenna GW**

ADR 8.1 Report Date: 8/31/2009 12:41

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGASYmw-009C-1411-GW **Lab Report Batch :** A9G160256 **Lab ID :** TALCAN

Sample Date : 07/16/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160256008

Reviewed By / Date : Angye Dragotta 8/31/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	UJ							UJ								G
Aldrin	0.030		ug/L	U	YES	UJ							UJ								G
alpha-BHC	0.030		ug/L	U	YES	UJ							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	UJ							UJ								G
beta-BHC	0.016		ug/L	J	YES	J							J	J							G,L
delta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
Dieldrin	0.030		ug/L	U	YES	UJ							UJ								G
Endosulfan I	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	UJ							UJ								G
Endrin	0.030		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.030		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	UJ							UJ								G
Methoxychlor	0.10		ug/L	U	YES	UJ							UJ								G
Toxaphene	2.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8260B						**Dilution: 1**															
2-Hexanone	10		ug/L	U	YES	UJ															Pj
Acetone	10		ug/L	U	YES	~~UJ~~ ~~TOO~~ 9/14/09															Pj
Carbon disulfide	1.0		ug/L	U	YES	UJ				UJ											Pj, J
Chloroethane	1.0		ug/L	U	YES	UJ				UJ											J
Chloromethane	1.0		ug/L	U	YES	UJ				UJ									UJ		J,U
Methylene chloride	2.0		ug/L	U	YES	UJ															Pj
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	2.2		ug/L	J B	YES	~~UJ~~ JB			JB					J		JB					L,N,F

Project Number and Name: 30240.0006 - RVAAP (OH) **Library Used:** Ravenna GW

ADR 8.1 Report Date: 8/31/2009 12:41

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGASYmw-010C-1412-GF **Lab Report Batch :** A9G160256 **Lab ID :** TALCAN

Sample Date : 07/16/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G160256011

Reviewed By / Date : Angye Dragotta 8/31/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6020						**Dilution: 1**															
Zinc	5.5		ug/L	B J	YES	~~UJ~~ JB			~~J~~ JB					J							Pj,F,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGASYmw-010C-1412-GW **Lab Report Batch :** A9G160256 **Lab ID :** TALCAN

Sample Date : 07/16/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160256010

Reviewed By / Date : Angye Dragotta 8/31/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	UJ							UJ								G
Aldrin	0.030		ug/L	U	YES	UJ							UJ								G
alpha-BHC	0.030		ug/L	U	YES	UJ							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	UJ							UJ								G
beta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
delta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
Dieldrin	0.030		ug/L	U	YES	UJ							UJ								G
Endosulfan I	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	UJ							UJ								G
Endrin	0.030		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.030		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	UJ							UJ								G
Methoxychlor	0.10		ug/L	U	YES	UJ							UJ								G
Toxaphene	2.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1260	0.50		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8260B						**Dilution: 1**															
2-Hexanone	10		ug/L	U	YES	UJ															Pj
Acetone	10		ug/L	U	YES	~~UJ~~															~~Pj~~

ADO 9/14/09

Project Number and Name: 30240.0006 - RVAAP (OH) **Library Used:** Ravenna GW

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGASYmw-010C-1412-GW **Lab Report Batch :** A9G160256 **Lab ID :** TALCAN

Sample Date : 07/16/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160256010

Reviewed By / Date : Angye Dragotta 8/31/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Carbon disulfide	1.0		ug/L	U	YES	**UJ**				UJ											Pj J
Chloroethane	1.0		ug/L	U	YES	**UJ**				UJ											J
Chloromethane	1.0		ug/L	U	YES	**UJ**				UJ									UJ		J,U
Methylene chloride	2.0		ug/L	U	YES	**UJ**															Pj
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	2.8		ug/L	J B	YES	~~UJ~~ JB			~~J~~B					J		~~J~~ B					L,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGEQUIPRINSE4-1426-GW **Lab Report Batch :** A9G160256 **Lab ID :** TALCAN

Sample Date : 07/16/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160256004

Reviewed By / Date : Angye Dragotta 8/31/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
2-Butanone	1.1		ug/L	J	YES	J								J							L
2-Hexanone	10		ug/L	U	YES	UJ															Pj
Acetone	7.3		ug/L	J	YES	~~UJ~~ J B								J		~~J~~ B					~~P~~j,L,O
Carbon disulfide	1.0		ug/L	U	YES	UJ				UJ											Pj, J
Chloroethane	1.0		ug/L	U	YES	UJ				UJ											J
Chloromethane	1.0		ug/L	U	YES	UJ				UJ									UJ		J,U
Methylene chloride	2.1		ug/L		YES	J															Pj
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	0.85		ug/L	J B	YES	~~U~~ J B			~~U~~ B					J							L,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGEQUIPRINSE4-1426-GW **Lab Report Batch :** A9G160256 **Lab ID :** TALCAN

Sample Date : 07/16/2009 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A9G160256004

Reviewed By / Date : Angye Dragotta 8/31/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Potassium	141		ug/L	B J	YES	UJ B			~~J~~ B					J							Cb,F,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGTEAM1-TRIP **Lab Report Batch :** A9G160256 **Lab ID :** TALCAN

Sample Date : 07/16/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160256001

Reviewed By / Date : Angye Dragotta 8/31/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
2-Hexanone	10		ug/L	U	YES	**UJ**															Pj
Acetone	2.4		ug/L	J	YES	**J**								J							~~P~~j,L
Carbon disulfide	1.0		ug/L	U	YES	**UJ**				UJ											Pj, J
Chloroethane	1.0		ug/L	U	YES	**UJ**				UJ											J
Chloromethane	1.0		ug/L	U	YES	**UJ**				UJ											J
Methylene chloride	2.0		ug/L	U	YES	**UJ**															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGTEAM2-TRIP **Lab Report Batch :** A9G160256 **Lab ID :** TALCAN

Sample Date : 07/16/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160256007

Reviewed By / Date : Angye Dragotta 8/31/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
2-Hexanone	10		ug/L	U	YES	UJ															Pj
Acetone	3.2		ug/L	J	YES	J								J							~~P~~j,L
Carbon disulfide	1.0		ug/L	U	YES	UJ				UJ											Pj, J
Chloroethane	1.0		ug/L	U	YES	UJ				UJ											J
Chloromethane	1.0		ug/L	U	YES	UJ				UJ											J
Methylene chloride	2.0		ug/L	U	YES	UJ															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGTEAM3-TRIP **Lab Report Batch :** A9G160256 **Lab ID :** TALCAN

Sample Date : 07/16/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160256012

Reviewed By / Date : Angye Dragotta 8/31/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
2-Hexanone	10		ug/L	U	YES	**UJ**															Pj
Acetone	2.8		ug/L	J	YES	**J**								J							Pj,L
Carbon disulfide	1.0		ug/L	U	YES	**UJ**				UJ											Pj, J
Chloroethane	1.0		ug/L	U	YES	**UJ**				UJ											J
Chloromethane	1.0		ug/L	U	YES	**UJ**				UJ											J
Methylene chloride	2.0		ug/L	U	YES	**UJ**															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

QC Outlier Report: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: A9G160256 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGEQUIPRINSE4-1426	A9G160256004	6010B	AQ	Calcium	U	1000	100.00	ug/L
				Magnesium	U	1000	100.00	ug/L
				Sodium	U	1000	200.00	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: **30240.0006 - RVAAP (OH)**

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A9G160256 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGASYmw-006C-1408-	A9G160256006	6020	AQ	Zinc	B J	4.3	10.0	ug/L
FWGASYmw-006C-1408-	A9G160256005	8270C		bis(2-Ethylhexyl) phthalate	J B	1.7	10	ug/L
FWGASYmw-007C-1409-	A9G160256003	6020		Zinc	B J	6.2	10.0	ug/L
FWGASYmw-007C-1409-	A9G160256002	8270C		bis(2-Ethylhexyl) phthalate	J B	1.1	10	ug/L
FWGASYmw-008C-1410-	A9G160256014	6020		Antimony	B	0.32	2.0	ug/L
				Zinc	B J	3.8	10.0	ug/L
FWGASYmw-008C-1410-	A9G160256013	8081A		beta-BHC	J	0.019	0.030	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	1.1	10	ug/L
FWGASYmw-009C-1411-	A9G160256009	6020		Zinc	B J	3.5	10.0	ug/L
FWGASYmw-009C-1411-	A9G160256008	8081A		beta-BHC	J	0.016	0.030	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	2.2	10	ug/L
FWGASYmw-010C-1412-	A9G160256011	6020		Zinc	B J	5.5	10.0	ug/L
FWGASYmw-010C-1412-	A9G160256010	8270C		bis(2-Ethylhexyl) phthalate	J B	2.8	10	ug/L
FWGEQUIPRINSE4-1426	A9G160256004	6010B		Potassium	B J	141	1000	ug/L
		8260B		2-Butanone	J	1.1	10	ug/L
				Acetone	J	7.3	10	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	0.85	10	ug/L
FWGTEAM1-TRIP	A9G160256001	8260B		Acetone	J	2.4	10	ug/L
FWGTEAM2-TRIP	A9G160256007			Acetone	J	3.2	10	ug/L
FWGTEAM3-TRIP	A9G160256012			Acetone	J	2.8	10	ug/L

Laboratory Control Sample / Laboratory Control Sample Duplicate Outlier Report

Method Batch : 9202112 **Analysis Method :** 8260B **Analysis Date :** 07/21/2009

Preparation Batch : 9202112 **Preparation Type :** 5030B **Preparation Date :** 07/21/2009

Lab Reporting Batch : A9G160256 **Lab ID:** TALCAN

			Reported Values		Project Limits (Percent)			
LCS Lab Sample ID	**Matrix**	**Analyte Name**	**Percent Recovery**	**RPD**	**Rejection Point**	**Lower Limit**	**Upper Limit**	**RPD**
A9G210000112C	AQ	Carbon disulfide	73		30.00	74.00	123.00	30.00
		Chloroethane	65		30.00	72.00	129.00	30.00
A9G210000112L		Carbon disulfide	71	2.0	30.00	74.00	123.00	30.00
		Chloroethane	64	1.2	30.00	72.00	129.00	30.00
		Chloromethane	55	21	30.00	58.00	135.00	30.00

Associated Samples

Client Sample ID	**Lab Sample ID**
FWGASYmw-006C-1408-GW	A9G160256005
FWGASYmw-007C-1409-GW	A9G160256002
FWGASYmw-008C-1410-GW	A9G160256013
FWGASYmw-009C-1411-GW	A9G160256008
FWGASYmw-010C-1412-GW	A9G160256010
FWGEQUIPRINSE4-1426-GW	A9G160256004
FWGTEAM1-TRIP	A9G160256001
FWGTEAM2-TRIP	A9G160256007
FWGTEAM3-TRIP	A9G160256012

Scope of Data Qualification: The outlier in the LCS qualifies that analyte in all samples with the same Preparation Batch ID as the LCS

Project Number and Name: 30240.0006 - RVAAP (OH)

QC Outlier Report: Trip Blank

Lab Reporting Batch : A9G160256
Method/Preparation Batch : 9202112 / 9202112
Client Sample ID : FWGTEAM1-TRIP
Lab Sample ID : A9G160256001

Lab ID: TALCAN
Analysis Date : 07/21/2009
Preparation Date : 07/21/2009
Preparation Type : 5030B

Analysis Method : 8260B

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	2.4	10	ug/L	J	Common Contaminant

Acetone was qualified due to trip blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGEQUIPRINSE4-1426-G	A9G160256004	1	7.3	J	ug/L

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	3.2	10	ug/L	J	Common Contaminant

Acetone contamination found in the trip blank did not qualify any samples.

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	2.8	10	ug/L	J	Common Contaminant

Acetone contamination found in the trip blank did not qualify any samples.

Method Blank Outlier Report

Lab Reporting Batch : A9G160256
Analysis Method : 8270C
Preparation Type : 3520C
Method Blank Lab Sample ID : A9G170000139B

Lab ID: TALCAN
Analysis Date : 07/29/2009
Preparation Date : 07/17/2009
Preparation Batch : 9198139

bis(2-Ethylhexyl) phthalate	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	1.3	10	ug/L	J	Common Contaminant

bis(2-Ethylhexyl) phthalate was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
FWGASYmw-006C-1408-G	A9G160256005	1	1.7	J B	ug/L
FWGASYmw-007C-1409-G	A9G160256002	1	1.1	J B	ug/L
FWGASYmw-008C-1410-G	A9G160256013	1	1.1	J B	ug/L
FWGASYmw-009C-1411-G	A9G160256008	1	2.2	J B	ug/L
FWGASYmw-010C-1412-G	A9G160256010	1	2.8	J B	ug/L
FWGEQUIPRINSE4-1426-G	A9G160256004	1	0.85	J B	ug/L

Surrogate Recovery Outlier Report

Lab Report Batch: A9G160256 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Dilution	Matrix	Surrogate	Percent Recovery	Criteria (percent) Lower Limit	Upper Limit	Reject Point	Associated Target Analytes
FWGASYmw-006C-1408-GW	A9G160256005	8081A	1	AQ	Decachlorobiphenyl	29	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	35	50.0	150.0	10.0	All Target
FWGASYmw-007C-1409-GW	A9G160256002	8081A	1	AQ	Decachlorobiphenyl	44	50.0	150.0	10.0	All Target
FWGASYmw-008C-1410-GW	A9G160256013	8081A	1	AQ	Decachlorobiphenyl	25	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	33	50.0	150.0	10.0	All Target
FWGASYmw-009C-1411-GW	A9G160256008	8081A	1	AQ	Decachlorobiphenyl	46	50.0	150.0	10.0	All Target
FWGASYmw-010C-1412-GW	A9G160256010	8081A	1	AQ	Decachlorobiphenyl	25	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	31	50.0	150.0	10.0	All Target

QC Outlier Report: Equipment Blank

Lab Reporting Batch : A9G160256
Method/Preparation Batch : 9198015 / 9198015
Client Sample ID : FWGEQUIPRINSE4-1426-GW
Lab Sample ID : A9G160256004

Lab ID: TALCAN
Analysis Date : 07/20/2009
Preparation Date : 07/17/2009
Preparation Type : 3005A

Analysis Method : 6010B

Potassium	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	141	1000	ug/L	B J	

Potassium contamination found in the equipment blank did not qualify any samples.

2-Butanone	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	1.1	10	ug/L	J	Common Contaminant

2-Butanone contamination found in the equipment blank did not qualify any samples.

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	7.3	10	ug/L	J	Common Contaminant

Acetone contamination found in the equipment blank did not qualify any samples.

Methylene chloride	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	2.1	2.0	ug/L		Common Contaminant

Methylene chloride contamination found in the equipment blank did not qualify any samples.

bis(2-Ethylhexyl) phthalate	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	0.85	10	ug/L	J B	Common Contaminant

bis(2-Ethylhexyl) phthalate was qualified due to equipment blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGASYmw-006C-1408-G	A9G160256005	1	1.7	J B	ug/L
FWGASYmw-007C-1409-G	A9G160256002	1	1.1	J B	ug/L
FWGASYmw-008C-1410-G	A9G160256013	1	1.1	J B	ug/L
FWGASYmw-009C-1411-G	A9G160256008	1	2.2	J B	ug/L
FWGASYmw-010C-1412-G	A9G160256010	1	2.8	J B	ug/L

Method Blank Outlier Report

Lab Reporting Batch : A9G160256
Analysis Method : 6010B
Preparation Type : 3005A
Method Blank Lab Sample ID : A9G170000015B

Lab ID: TALCAN
Analysis Date : 07/20/2009
Preparation Date : 07/17/2009
Preparation Batch : 9198015

Potassium	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	144	1000	ug/L	B	

Potassium was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
[illegible]	[illegible]	1	541	B J	ug/L

Zinc	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	5.0	10.0	ug/L	B	

Zinc was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
FWGASYmw-006C-1408-GF	A9G160256006	1	4.3	B J	ug/L
FWGASYmw-007C-1409-GF	A9G160256003	1	6.2	B J	ug/L
FWGASYmw-008C-1410-GF	A9G160256014	1	3.8	B J	ug/L
FWGASYmw-009C-1411-GF	A9G160256009	1	3.5	B J	ug/L
FWGASYmw-010C-1412-GF	A9G160256011	1	5.5	B J	ug/L

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2009 **Date:** September 14, 2009
STL Sample Delivery Group: A9G160265 **Revision:** 0

Data Validator: Angye Dragotta/Environmental Quality Management, Inc. (EQM, Inc.)

QA/QC Summary

On July 16, 2009 the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A9G160265.

Field Sample ID	Analytes	Method
FWGASYmw-007c-1409-GW	Explosives	SW846 8330
FWGEQUIPRINSE4-1426-GW	Nitroguanidine	SW846 M8330
FWGASYmw-006c-1408-GW	Nitrocellulose	SW846 353.2
FWGASYmw-009c-1411-GW		
FWGASYmw-010c-1412-GW		
FWGASYmw-008c-1410-GW		

The data presented in this report were evaluated according to the *Final Quality Assurance Project Plan Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant Ravenna, OH, Portage Environmental, September 2004.* The following documents will be used as needed to supplement the project documentation: *Louisville Chemistry Guidelines, USACE, June 2002 version 5, EPA National Functional Guidelines (NFG) for Organic Data Review, EPA-540/R-99-008, October 1999, NFG for Inorganic Data Review, EPA-540/R-04-004, October 2004, Analytical Methods, and Laboratory Standard Operating Procedures.* These objectives represent accuracy and precision performance goals for each analytical method.

The completeness objective for the project was 90%. The completeness objective was met for this SDG, 100%. Limitations, if any, on the data are indicated with qualifiers detailed below.

All analytical results have been verified against compliance requirements specified in the project QAP, LCG, associated analytical methods and/or SOPs, as appropriate. Checklists used in review of the data have been inserted in the SDGs by parameter. Outliers have been noted below and results requiring qualification, as a result of this verification process, have been summarized in Appendix 1.

Explosives- 8330

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- ICV and CCV criteria
- Retention time criteria
- MDL/MRL Level Verification
- Surrogate recovery criteria
- Equipment and method blank free from contamination
- LCS Recovery Criteria
- Field Duplicate RPD Criteria

4-Nitrotoluene appears to not have been spiked and/or recover in the calibration verifications; however the compound is co-eluting with 2-nitrotoluene. No qualifications made as LC9 was used as confirmation and the %D for 2-nitrotoluene were within criteria.

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2009 **Date:** September 14, 2009
STL Sample Delivery Group: A9G160265 **Revision:** 0

Initial Calibration Criteria
The initial calibration on LC10, as presented by the laboratory, had incorporated a reanalyzed STD3. While the laboratory analyzed an ICV following the first analysis of all the calibration standards, it was noted by EQM that the curve did not have a valid ICV following the re-analysis of STD 3. Since the laboratory reinjected STD3 because of problems associated with a target not required by this project, it was requested by EQM that the calibration with the initial analysis of STD 3 be used in the quantitation of the samples. The laboratory reprocessed the samples and submitted a revised data package for the reprocessed samples. EQM also requested a corrective action and the laboratory's corrective action response has been provided as part of the verification package.

Nitroguanidine- 8330M
The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- Retention time criteria
- MRL level verification criteria
- MDL verification criteria
- ICV and CCV criteria
- The method blank and equipment blanks were free from contamination
- LCS/LCSD percent recoveries and RPD value criteria
- Matrix spike recovery criteria

No QC outliers were noted.

Nitrocellulose - 353.2
The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Sample preparation criteria
- Initial Calibration criteria
- ICV and CCV criteria
- The equipment rinse and method blanks were free from contamination
- MRL Level Verification criteria
- ICB and CCBs were free from contamination
- LCS/LCSD percent recoveries and RPD value criteria
- MS/MSD percent recoveries
- Nitrocellulose assay criteria

No QC outliers noted.

Data Validator: [signature]
Date: 9/15/09

2nd Level Data Review: [signature]
Date: 9/16/09

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

John Miller
Environmental Quality Management, Inc.
1800 Carillon Boulevard
Cincinnati, Ohio 45240

September 15, 2009

Subject: Method 8330 Calibration Corrective Action

Dear Mr. Miller:

During your company's data validation of one of our packages (TAL West Sacramento lot A9G140147) it was noted that one of our EPA Method 8330 initial calibrations had a problem. The analyst had set up the run with the calibration points followed by a blank and initial calibration verification (ICV). After those points had run the analyst found a problem with the injection of the third calibration standard. He marked this in the run log but only entered "bad standard" as the technical justification for a reinjection of the point. He then re-injected the third calibration standard and used the re-injected standard in the calibration curve. The analyst did not re-inject the ICV after the re-injected calibration point. This error was not caught during the second level review of the calibration curve.

An interview with the analyst and an examination of the raw data from this run brought out several points. The analyst had originally rejected the 3rd calibration injection because they had observed that the septum had been pushed into the vial by the needle. They observed that the picric acid response was disproportional to the other peaks and felt this might be due to the injection issue. This was the reasoning for the reinjection of the standard. Our re-examination of the data for the original injection showed that all the other peaks in that injection appeared to be satisfactory.

This series of events highlighted two problems with the process of calibration curve running. The first was that the analyst was not aware that the ICV needed to be re-run again if re-injections of calibration points occur after the original ICV injection. Secondly, the analyst had not sufficiently documented on the run list the technical justification for the re-injection of the calibration.

The root cause of the problem was that the analyst was unaware that an ICV is valid only if it is run after all the calibration points that are going to be used have been run. They were aware of the rule in general but had not thought through the situation where a calibration point had been re-injected. The fact that the second level review did not catch this indicated the issue may go beyond one analyst.

Our corrective action plan involved several items:

1) The initial calibration was re-calculated using the original injection of the 3rd calibration standard. This produced a curve that passed all criteria for all analytes except picric acid. Picric acid is not a target analyte for your samples. The ICV run after this recalculated curve was re-processed against it and passed all criteria. The data for your projects associated with the original curve were reprocessed against the new curve and were reported to you.

2) A completely new calibration curve will be in place before any new samples from your company are run for Method 8330. Neither version of the curve discussed above will be used.
3) During the lab's all staff meeting of September 10, 2009 I used part of the QA portion of the program to discuss with all staff the issues that this event brought out. The need to run ICVs after all calibration points was highlighted. I also re-iterated to the staff when initial calibration point re-injections are allowable and the necessity of documenting on the run list and raw data the exact technical justification for the reinjection.
4) In future internal area audits I will be paying particular attention to run lists and any deviations from acceptable calibration practice and documentation.

I apologize for any inconvenience that this issue has caused you and your colleagues. We believe our corrective actions will assure there will be no repeat of this data issue. TestAmerica is dedicated to supplying our clients with accurate and defensible data and we look forward to demonstrating this in our future work with you.

If you have any questions, please feel free to call me at (916) 374-4389.

Sincerely,

Douglas Weir
Quality Assurance Manager
TestAmerica Laboratories West Sacramento

Subject: RE: EQM
From: "Weir, Douglas" <Douglas.Weir@testamericainc.com>
Date: Tue, 15 Sep 2009 19:01:17 -0600
To: <ecorbin@eqm.com>
CC: "Herbert, David" <David.Herbert@testamericainc.com>, "Dahl, Karen" <Karen.Dahl@testamericainc.com>, "West Sacramento - QA" <WestSacramento-QA@testamericainc.com>, "Allameh, David" <David.Allameh@testamericainc.com>

Erik,

This was a reprocessing of data. The samples were reprocessed first. The analyst realized the CCVs had not been reprocessed and did so ~1 hour later. Since all samples and CCVs were reprocessed against the same curve, the order of the reprocessing should not have any impact on the data. I hope this answers your question. If I'm missing the thrust of your question please let me know.

Karen Dahl sent the corrective action letter out today.

Sincerely,

Doug Weir

DOUGLAS WEIR, Ph.D.
Quality Assurance Manager
TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
880 Riverside Parkway
West Sacramento, CA 95605
(916) 373-5600 main
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From: Dahl, Karen
Sent: Tuesday, September 15, 2009 12:44 PM
To: West Sacramento - QA; Allameh, David
Cc: Herbert, David
Subject: EQM
Importance: High

More followup questions. This needs a response today please.

Dave, have you had a chance to look at the corrective action letter?

From: Erik Corbin [mailto:ecorbin@eqm.com]
Sent: Tuesday, September 15, 2009 10:39 AM
To: Dahl, Karen
Cc: Angye Dragotta; Thurza, Michael; John Miller; Jackie Doan; Loeb, Mark
Subject: Re: A9G160265 Explosives

Karen,

Thanks for the response. We just have a few requests for clarification.

In previous packages we have received from this project, the Meth Date stamp has had exactly the same date and time for both sample and QC within a sequence (i.e., processed all at the same time). Why were samples reprocessed separately from QC in this instance? What is the reasoning for processing samples prior to processing QC?

Also, do you know when the corrective action for this issue is scheduled for completion? We would like to include a copy of the CA in our report.

Thanks,

Erik Corbin

Environmental Quality Management, Inc.
513-825-7500 (voice)
513-825-7495 (fax)
ecorbin@eqm.com

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Dahl, Karen wrote:

Hello everyone. I hope you are all having a good day. Please see the paragraph below from the laboratory. Please let me know if you have any questions or if you need any additional information. Thank you

The "Meth Date" line on the area percent report is a time stamp for when the method file was accessed. The method is accessed at the beginning of a run, when a CCV is processed and when the sample is reprocessed. So when the samples that were originally run on 7-26-09 where reprocessed on 9-4-09, the method date changes to 9-4-09 to reflect the new method access time stamp. Additionally the CCVs will also have a different time stamp since the method was accessed when the CCVs were

reprocessed on 9-4-09.

-----Original Message-----
From: Erik Corbin [mailto:ecorbin@eqm.com]
Sent: Monday, September 14, 2009 3:06 PM
To: Loeb, Mark
Cc: Angye Dragotta; Dahl, Karen; Thurza, Michael; John Miller; Jackie Doan
Subject: Re: A9G160265 Explosives

Mark,

Based on our conversation several hours ago, we understand that you are looking into this issue. We also understand that Sacramento is busy currently with an external audit. However, if EQ is to meet our commitment to our client, it is imperative we receive a response on this

issue - so that we may proceed with our evaluation of the data - at your

earliest possible convenience.

Please advise.

Regards,

Erik Corbin

Environmental Quality Management, Inc.
513-825-7500 (voice)
513-825-7495 (fax)
ecorbin@eqm.com

The information contained in this electronic message is intended only for the use of the individual or entity to which it is address and may contain information that is privileged, confidential and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient, you are informed that any dissemination, copying or disclosure of the material contained herein, to include any attachments, in whole or in part, is strictly prohibited. If you have received this transmission in error, please notify the sender and purge this message.

Angye Dragotta wrote:

I was looking at the explosives data sent Fri. (thanks by the way)

and had a question regarding the reprocessing of the data. You will find attached a runlog that has the samples from this SDG highlighted. I was wondering why the the samples and instrument QC have different method dates and times. Could you please check with West Sac and let me know as soon as possible?

Thanks

CASE NARRATIVE

A9G160265

The following report contains the analytical results for six water samples submitted to TestAmerica North Canton by Environmental Quality Mgt., Inc. from the RVAAP (OH) Site, project number 30240.0006. The samples were received July 16, 2009, according to documented sample acceptance procedures.

The 8330 Explosives, Nitroguanidine, and 353.2 Nitrocellulose as N analyses were performed at the TestAmerica West Sacramento laboratory. Refer to TestAmerica West Sacramento narrative included in their data package for additional information.

TestAmerica utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Angye Dragotta, Erik Corbin, and Jackie Doan on July 31, 2009. A summary of QC data for these analyses is included at the back of the report.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Please refer to the Quality Control Elements Narrative following this case narrative for additional quality control information.

If you have any questions, please call the Project Manager, Mark J. Loeb, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT."

CASE NARRATIVE (continued)

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The coolers were received at temperatures ranging from 2.2 to 4.6°C.

NITROAROMATICS AND NITRAMINES-8330

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

GENERAL CHEMISTRY

The analytical results met the requirements of the laboratory's QA/QC program.

Case Narrative

TestAmerica West Sacramento Project Number A9G160265R

General Comments

This report contains revised 8330 results. As discussed, the original 8330 calibration curve included a point for the third calibration standard that had been acquired after the initial calibration verification (ICV) standard had been analyzed. The third calibration standard was originally analyzed before the ICV but was re-prepared and re-analyzed since it did not meet acceptance for picric acid. Per the laboratory's standard operating procedure the analyst should have re-analyzed the ICV after the third calibration standard was re-analyzed. Since all target analytes for this program met acceptance criteria in the original third calibration standard, the curve was reprocessed to include the original third calibration standard. The reprocessed curve passed all method criteria for all target analytes for this program. The ICV has now been acquired after all points of the initial calibration have been analyzed. All samples results have been reprocessed under this curve. Note: The batch matrix spikes were removed from this report since they were not processed under the same curve and since they were performed on a different client's sample.

The samples were received at 1 degrees C.

Following US EPA Region V guidelines, manual integrations were performed only when necessary and are in compliance with the laboratory's standard operating procedure, Acceptable Manual Integration Practices, SOP No.: S-Q-004, including Addendum 1. The reason for manual integration has been documented on the affected chromatogram, which is provided in the raw data package. The raw data also includes the original chromatogram prior to any manual integration being performed. The following required a manual integration:

8330 MDL Check (analyzed on 7/24/09 @ 15:56) - 2,4,6-Trinitrotoluene

There were no other anomalies associated with this project.

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

TestAmerica Certifications and Approvals:

The laboratory is certified for the analytes listed on the documents below. These are available upon request.

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225),
Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Nevada (#OH-000482008A), OhioVAP (#CL0024), Pennsylvania (#008), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit

N:\QAQC\Customer Service\Narrative - Combined RCRA _CWA 032609.doc

SAMPLE SUMMARY

A9G160265

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LGLME	001	FWGASYmw-007C-1409-GW	07/16/09	08:50
LGLMH	002	FWGEQUIPRINSE4-1426-GW	07/16/09	09:30
LGLMJ	003	FWGASYmw-006C-1408-GW	07/16/09	10:15
LGLMK	004	FWGASYmw-009C-1411-GW	07/16/09	08:50
LGLML	005	FWGASYmw-010C-1412-GW	07/16/09	09:50
LGLMN	006	FWGASYmw-008C-1410-GW	07/16/09	08:45

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client: EQM
Project Manager: John Miller
Date: 7/16/09
Chain of Custody Number: 003184
Address: 1800 Carillon Blvd
Telephone Number (Area Code)/Fax Number: 513 825 7500 (fax 7495)
Lab Number: 3304979396
Page 1 of 1
City: Cincinnati
State: OH
Zip Code: 45240
Site Contact: E Corbin
Lab Contact: M Loeb
Project Name and Location (State): RVAAP (OH) PN: 30240.0006
Carrier/Waybill Number: NA Lab Pickup
Contract/Purchase Order/Quote No.: PO # 15660

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Explosives 8330	Propellants	Cyanide 9012	Metals 6010/6020/7470/7471	Perchlorate				Special Instructions/ Conditions of Receipt
FWG Team 1 - Trip	7/16/09	0800		X						2			X												Cooler ID
FWGASYmw-007C-1409-GW	7/16/09	0850		X			9			3	1		X	X	X	X	X	X	X						C8
FWGASYmw-007C-1409-GF	7/16/09	0850		X			1		1											X	X				M23
FWGEQUIPRinse4-1426-GW	7/16/09	0930		X			10		1	3	1		X	X	X	X	X	X	X	X	X				M23
FWGASYmw-006C-1408-GW	7/16/09	1015		X			9			3	1		X	X	X	X	X	X	X						I83
FWGASYmw-006C-1408-GF	7/16/09	1015		X			1		1											X	X				C8

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other per SOW

QC Requirements (Specify): Metals | Perchlorates were field filtered

1. Relinquished By: Heth Alinger	Date: 7-16-09	Time: 1250	1. Received By: RC Robison	Date: 7/16/09	Time: 1250
2. Relinquished By: RC Robison	Date: 7/16/09	Time: 1348	2. Received By: OL Mill	Date: 7/16/09	Time: 1348
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments: Temps may not meet requirements if sample collection is close to lab pickup time

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 7-16-09	Chain of Custody Number: 003266
Address: 1800 CARLSON BLVD	Telephone Number (Area Code)/Fax Number: 513 825 7500 (fax 7495)	Lab Number: 330497 9396	Page 1 of 1
City: Cincinnati; State: OH; Zip Code: 45240	Site Contact: E CORBIN	Lab Contact: M LOEB	
Project Name and Location (State): RVAAP Ravenna Oh	Carrier/Waybill Number: LAB PICKUP		
Contract/Purchase Order/Quote No.: PO 15560 PN30240.0006			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil		Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Explo 8330	Propellants	Cyanide 9012	Metals 6010/7470	Perchlorates				Special Instructions/ Conditions of Receipt: Cooler ID #
FWG Team2-Trip	7-16-09	0800		X				2							X												H112
FWGASYmw-009C-1411-GW	↓	0850		X				9			3	1			X	X	X	X	X	X	X						H112
FWGASYmw-009C-1411-GF	↓	↓		X				1		1												X	X				H112
FWGASYmw-010C-1412-GW	↓	0950		X				9			3	1			X	X	X	X	X	X	X						H113
FWGASYmw-010C-1412-GF	↓	0950		X				1		1												X	X				H113

COC

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other Per SOW

QC Requirements (Specify): Metals + Perchlorates were field filtered.

1. Relinquished By: Steve Altman	Date: 7-16-09	Time: 1250	1. Received By: R Robison	Date: 7/16/09	Time: 1250
2. Relinquished By: R Robison	Date: 7/16/09	Time: 1348	2. Received By: QL Miller	Date: 7/16/09	Time: 1348
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments: Temps may not meet requirements if sample collection is close to lab pick up time. All vorts in H112

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

15

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client: EQM	Project Manager: JOHN MILLER	Date: 07/16/2009	Chain of Custody Number: 003169
Address: 1800 CARILLON BLVD	Telephone Number (Area Code)/Fax Number: (513) 825-7500 (FX 7495)	Lab Number: (330) 497-9396	Page 1 of 1
City: CINCINNATI; State: OH; Zip Code: 45240	Site Contact: E. CORBIN	Lab Contact: M. LOEB	
Project Name and Location (State): RVAAP (OH) 030240.0006	Carrier/Waybill Number: N/A - LAB PICKUP		
Contract/Purchase Order/Quote No.: PO 15660			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		Analysis (Attach list if more space is needed): VOC 8260	SVOC 8270	PCBs 8081	PCB 8082	EXPLO 8330	PROPELLANTS	CYANIDE 9012	METALS 6010/6020 7470	PERCHLORATES				Special Instructions/ Conditions of Receipt
FWG TEMP 3 - TRIP	07/16/09	0800		X							2				X												COOLER - 12009
FWG ASY MW-008C-1410-GW	07/16/09	0845		X				9			3	1			X	X	X	X	X	X	X						COOLER - 12009
FWG ASY MW-008C-1410-GF	07/16/09	0845		X				1		1												X	X				COOLER - 12009

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other PER SOW

QC Requirements (Specify): METALS/PERCHLORATES WERE FIELD FILTERED

1. Relinquished By: [signature]	Date: 7-16-09	Time: 1250	1. Received By: [signature]	Date: 7/16/09	Time: 1250
2. Relinquished By: [signature]	Date: 7/16/09	Time: 1345	2. Received By: [signature]	Date: 7/16/09	Time: 1345
3. Relinquished By:	Date:	Time:	3. Received By:	Date:	Time:

Comments: TEMPS MAY NOT MEET REQUIREMENTS IF SAMPLE COLLECTION IS CLOSE TO LAB PICKUP TIME

ALL VOCS IN COOLER 12009

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

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TestAmerica Cooler Receipt Form/Narrative **Lot Number:** ~~A9G160256~~ A9G160265
North Canton Facility

Client FRM Project RVAAP By: (Signature)
Cooler Received on 7/16/09 Opened on 7/16/09
FedEx ☐ UPS ☐ DHL ☐ FAS ☐ Stetson ☐ Client Drop Off ☐ TestAmerica Courier ☒ Other
TestAmerica Cooler # Multiple Coolers ☒ Foam Box ☐ Client Cooler ☐ Other

1. Were custody seals on the outside of the cooler(s)? Yes ☒ No ☐ Intact? Yes ☒ No ☐ NA ☐
   If YES, Quantity 6 Quantity Unsalvageable
   Were custody seals on the outside of cooler(s) signed and dated? Yes ☒ No ☐ NA ☐
   Were custody seals on the bottle(s)? Yes ☐ No ☒
   If YES, are there any exceptions?
2. Shippers' packing slip attached to the cooler(s)? 9/11/09 ~~Yes~~ ☒ No ☒
3. Did custody papers accompany the sample(s)? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Were the custody papers signed in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☒ Foam ☐ None ☐ Other
6. Cooler temperature upon receipt °C See back of form for multiple coolers/temps ☒
   METHOD: IR ☒ Other ☐
   COOLANT: Wet Ice ☒ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐
7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels be reconciled with the COC? Yes ☒ No ☐
9. Were sample(s) at the correct pH upon receipt? Yes ☒ No ☐ NA ☐
10. Were correct bottle(s) used for the test(s) indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☒ NA ☐
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a trip blank present in the cooler(s)? Yes ☒ No ☐ Were VOAs on the COC? Yes ☒ No ☐

Contacted PM Date by via Verbal ☐ Voice Mail ☐ Other ☐
Concerning

14. CHAIN OF CUSTODY

The following discrepancies occurred:

15. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.
Sample(s) were received in a broken container.
Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) were further preserved in Sample Receiving to meet recommended pH level(s). *Nitric Acid Lot# 031909-HNO_3; Sulfuric Acid Lot# 100108-H_2SO_4; Sodium Hydroxide Lot# 073007 -NaOH; Hydrochloric Acid Lot# 092006-HCl; Sodium Hydroxide and Zinc Acetate Lot# 050205-$(CH_3COO)_2ZN/NaOH$.* What time was preservative added to sample(s)?

Client ID	pH		Date	Initials
1409	<2	>12	7/16/09	[illegible]
1426	<2	>12		
1408	<2	>12		
1411	<2	>12		
1412	<2	>12		
1410	<2	>12		

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials

Cooler #	Temp. °C	Method	Coolant
M23	2.2	IR	Ice
183	4.1		
C8	3.3		
H112	2.9		
H113	4.6		
12009	3.8		

Discrepancies Cont'd:

8330 EXPLOSIVES DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ September 14, 2009

SDG: A9G160265 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.2- 4.6 °C	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Tale 3-7
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-7
7. Was a MDL Level Verification analyzed once per quarter with all target analytes detected?	✓			LC10 7/22/09 @1826 , LC9 7/24/09 @ 1556	LCG Table 5 R
8. Was a MRL Level verification run at the beginning and end of every daily sequence or every 12 hours? Was the %D < 30%?	✓				LCG Table 5 >30%=J
9. Does the initial calibration curve consist of 5 concentration levels? (6 stds for quadratic curves)	✓			ICAL: LC10 6/11/09, LC9 6/10/2009	STL SOP Section 10.2, LCG R
10. Were all target analytes %RSD ≤ 20%? OR was the average RSD ≤ 20%?	✓				LCG Table 5 >20% RSD=J/R
11. If a linear regression curve was used, was the correlation coefficient r≥0.995? (0.990 for Quadratic curve).			✓		STL SOP Section 10.4, LCG R<0.99=-J/R
12. Was a second source verification (ICV) analyzed after the ICAL and all analytes 85-115%?	✓			LC10 6/10/09 @ 2309- LC9 6/10/09 @ 0629- 4-Nitrotoluene appears to not have been spiked and/or recover; however the compound is co-eluting with 2-nitrotoluene. No qualifications made as LC9 was used as confirmation.	STL SOP Section 9.9 >115%=J; 80-85%=J/UJ; <80%=J/R
13. Was a CCV run at least every 10 samples and at the end of the analytical run?	✓				STL SOP Section 10.9
14. Was the average %D (difference or drift) for all target analytes < 15%?	✓			LC9- 4-Nitrotoluene appears to not have been spiked and/or recover; however the compound is co-eluting with 2-nitrotoluene. No qualifications made as LC9 was used as confirmation.	LCG Table 5 D>15% (neg) = J/R D>15% (pos) = J

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ September 14, 2009

SDG: A9G160265 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
15. Was a method blank prepared and analyzed with each batch?	✓				LCG Attachment A Section 5.6
16. Were target analytes in the method blank <1/2 the MRL?	✓			Checked by ADR.	LCG Table 5 <5x = B
17. Was a field blank collected and analyzed?	✓			FWGEQUIPRinse4-1426-GW	
18. Were target analytes in the field blank analyses < ½ the MRL?	✓			Checked by ADR.	<5x=B
19. Was a field duplicate analyzed? Were the RPDs ≤30%?		✓		No field duplicates were submitted with this work order.	QAPP Table 3-2 RPD >30=J
20. Were all positive results confirmed with a second column confirmation? Was the RPD ≤ 40%?	✓				LCG Table 5 RPD>40%=J
21. Was an LCS prepared and analyzed with each batch?	✓				STL SOP Section 9.6
22. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR.	LCG Appendix C <UL=J; 30-LL=J/UJ; <30%=J/R
23. Was a MS/MSD pair prepared with each batch?	✓				STL SOP Section 9.7
24. Was the MS/MSD parent a Ravenna sample?		✓		The parent sample was a Ravenna sample, but from another SDG. No evaluation was made.	
25. Were MS/MSD recoveries 40-140% and RPD ≤20%?			✓		QAPP Table 3-2 Pj
27. Were reported sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
29. Were lab comments included in report? If yes, summarize contents.	✓			See narrative regarding calibration.	

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ September 14, 2009

SDG: A9G160265 R0
Analysis: SW846 8330 Explosives

References: Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 5 and Attachment A "Data Validation Guidelines.

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

STL SOP SAC-LC-0009 Rev. 2.0- Determination of Nitroaromatic, Nitramines, and Specialty Explosives Based on Method 8330, SW-846.

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-007C-1409-GW

HPLC

Lot-Sample #...: A9G160265-001 **Work Order #...:** LGLME2AA **Matrix.....:** WG
Date Sampled...: 07/16/09 08:50 **Date Received..:** 07/16/09
Prep Date.....: 07/21/09 **Analysis Date..:** 07/26/09
Prep Batch #...: 9202121
Dilution Factor: 1.02 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.10	ug/L	0.031
1,3-Dinitrobenzene	ND	0.10	ug/L	0.051
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	0.10
2,4,6-Trinitrotoluene	ND	0.10	ug/L	0.051
2,4-Dinitrotoluene	ND	0.10	ug/L	0.051
2,6-Dinitrotoluene	ND	0.10	ug/L	0.051
2-Nitrotoluene	ND	0.51	ug/L	0.090
3-Nitrotoluene	ND	0.51	ug/L	0.058
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	0.051
4-Nitrotoluene	ND	0.51	ug/L	0.090
HMX	ND	0.10	ug/L	0.037
Nitrobenzene	ND	0.10	ug/L	0.051
Nitroglycerin	ND	0.66	ug/L	0.34
RDX	ND	0.10	ug/L	0.037
PETN	ND	0.66	ug/L	0.31
Tetryl	ND	0.10	ug/L	0.051

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	91	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1426-GW

HPLC

Lot-Sample #...: A9G160265-002 **Work Order #...:** LGLMH2AA **Matrix.....:** WQ
Date Sampled...: 07/16/09 09:30 **Date Received..:** 07/16/09
Prep Date.....: 07/21/09 **Analysis Date..:** 07/26/09
Prep Batch #...: 9202121
Dilution Factor: 1.01 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.10	ug/L	0.030
1,3-Dinitrobenzene	ND	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	0.10
2,4,6-Trinitrotoluene	ND	0.10	ug/L	0.050
2,4-Dinitrotoluene	ND	0.10	ug/L	0.050
2,6-Dinitrotoluene	ND	0.10	ug/L	0.050
2-Nitrotoluene	ND	0.50	ug/L	0.089
3-Nitrotoluene	ND	0.50	ug/L	0.058
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	0.050
4-Nitrotoluene	ND	0.50	ug/L	0.089
HMX	ND	0.10	ug/L	0.036
Nitrobenzene	ND	0.10	ug/L	0.050
Nitroglycerin	ND	0.66	ug/L	0.33
RDX	ND	0.10	ug/L	0.036
PETN	ND	0.66	ug/L	0.30
Tetryl	ND	0.10	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	90	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-006C-1408-GW

HPLC

Lot-Sample #...: A9G160265-003 **Work Order #...:** LGLMJ2AA **Matrix.....:** WG
Date Sampled...: 07/16/09 10:15 **Date Received..:** 07/16/09
Prep Date.....: 07/21/09 **Analysis Date..:** 07/26/09
Prep Batch #...: 9202121
Dilution Factor: 0.97 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.097	ug/L	0.029
1,3-Dinitrobenzene	ND	0.097	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.097	ug/L	0.097
2,4,6-Trinitrotoluene	ND	0.097	ug/L	0.048
2,4-Dinitrotoluene	ND	0.097	ug/L	0.048
2,6-Dinitrotoluene	ND	0.097	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.085
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.097	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.085
HMX	ND	0.097	ug/L	0.035
Nitrobenzene	ND	0.097	ug/L	0.048
Nitroglycerin	ND	0.63	ug/L	0.32
RDX	ND	0.097	ug/L	0.035
PETN	ND	0.63	ug/L	0.29
Tetryl	ND	0.097	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	90	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-009C-1411-GW

HPLC

Lot-Sample #...: A9G160265-004 **Work Order #...:** LGLMK2AA **Matrix.....:** WG
Date Sampled...: 07/16/09 08:50 **Date Received..:** 07/16/09
Prep Date.....: 07/21/09 **Analysis Date..:** 07/26/09
Prep Batch #...: 9202121
Dilution Factor: 0.96 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.096	ug/L	0.029
1,3-Dinitrobenzene	ND	0.096	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.096	ug/L	0.096
2,4,6-Trinitrotoluene	ND	0.096	ug/L	0.048
2,4-Dinitrotoluene	ND	0.096	ug/L	0.048
2,6-Dinitrotoluene	ND	0.096	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.084
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.096	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.084
HMX	ND	0.096	ug/L	0.035
Nitrobenzene	ND	0.096	ug/L	0.048
Nitroglycerin	ND	0.62	ug/L	0.32
RDX	ND	0.096	ug/L	0.035
PETN	ND	0.62	ug/L	0.29
Tetryl	ND	0.096	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	90	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-010C-1412-GW

HPLC

Lot-Sample #...: A9G160265-005 **Work Order #...:** LGLML2AA **Matrix.....:** WG
Date Sampled...: 07/16/09 09:50 **Date Received..:** 07/16/09
Prep Date.....: 07/21/09 **Analysis Date..:** 07/26/09
Prep Batch #...: 9202121
Dilution Factor: 0.99 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.099	ug/L	0.030
1,3-Dinitrobenzene	ND	0.099	ug/L	0.050
2-Amino-4,6-dinitrotoluene	ND	0.099	ug/L	0.099
2,4,6-Trinitrotoluene	ND	0.099	ug/L	0.050
2,4-Dinitrotoluene	ND	0.099	ug/L	0.050
2,6-Dinitrotoluene	ND	0.099	ug/L	0.050
2-Nitrotoluene	ND	0.50	ug/L	0.087
3-Nitrotoluene	ND	0.50	ug/L	0.056
4-Amino-2,6-dinitrotoluene	ND	0.099	ug/L	0.050
4-Nitrotoluene	ND	0.50	ug/L	0.087
HMX	ND	0.099	ug/L	0.036
Nitrobenzene	ND	0.099	ug/L	0.050
Nitroglycerin	ND	0.64	ug/L	0.33
RDX	ND	0.099	ug/L	0.036
PETN	ND	0.64	ug/L	0.30
Tetryl	ND	0.099	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	90	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-008C-1410-GW

HPLC

Lot-Sample #...: A9G160265-006 **Work Order #...:** LGLMN2AA **Matrix.....:** WG
Date Sampled...: 07/16/09 08:45 **Date Received..:** 07/16/09
Prep Date.....: 07/21/09 **Analysis Date..:** 07/26/09
Prep Batch #...: 9202121
Dilution Factor: 0.97 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.097	ug/L	0.029
1,3-Dinitrobenzene	ND	0.097	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.097	ug/L	0.097
2,4,6-Trinitrotoluene	ND	0.097	ug/L	0.048
2,4-Dinitrotoluene	ND	0.097	ug/L	0.048
2,6-Dinitrotoluene	ND	0.097	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.085
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.097	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.085
HMX	ND	0.097	ug/L	0.035
Nitrobenzene	**0.084 J**	**0.097**	**ug/L**	**0.048**
Nitroglycerin	ND	0.63	ug/L	0.32
RDX	ND	0.097	ug/L	0.035
PETN	ND	0.63	ug/L	0.29
Tetryl	ND	0.097	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	90	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

HPLC

Client Lot #...: A9G160265 **Work Order #...:** LGRDM1AD **Matrix.....:** WATER
MB Lot-Sample #: G9G210000-121

Prep Date.....: 07/21/09
Analysis Date..: 07/26/09 **Prep Batch #...:** 9202121
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
1,3,5-Trinitrobenzene	ND	0.10	ug/L	SW846 8330
1,3-Dinitrobenzene	ND	0.10	ug/L	SW846 8330
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	SW846 8330
2,4,6-Trinitrotoluene	ND	0.10	ug/L	SW846 8330
2,4-Dinitrotoluene	ND	0.10	ug/L	SW846 8330
2,6-Dinitrotoluene	ND	0.10	ug/L	SW846 8330
2-Nitrotoluene	ND	0.50	ug/L	SW846 8330
3-Nitrotoluene	ND	0.50	ug/L	SW846 8330
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	SW846 8330
4-Nitrotoluene	ND	0.50	ug/L	SW846 8330
HMX	ND	0.10	ug/L	SW846 8330
Nitrobenzene	ND	0.10	ug/L	SW846 8330
Nitroglycerin	ND	0.65	ug/L	SW846 8330
RDX	ND	0.10	ug/L	SW846 8330
PETN	ND	0.65	ug/L	SW846 8330
Tetryl	ND	0.10	ug/L	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	91	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A9G160265 **Work Order #...:** LGRDM1AE **Matrix.....:** WATER
LCS Lot-Sample#: G9G210000-121
Prep Date.....: 07/21/09 **Analysis Date..:** 07/26/09
Prep Batch #...: 9202121
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,3,5-Trinitrobenzene	**92**	**(53 - 135)**	**SW846 8330**
1,3-Dinitrobenzene	**93**	**(54 - 120)**	**SW846 8330**
2-Amino-4,6-dinitrotoluene	**95**	**(53 - 120)**	**SW846 8330**
2,4,6-Trinitrotoluene	**89**	**(37 - 120)**	**SW846 8330**
2,4-Dinitrotoluene	**90**	**(58 - 136)**	**SW846 8330**
2,6-Dinitrotoluene	**91**	**(52 - 144)**	**SW846 8330**
2-Nitrotoluene	**90**	**(52 - 120)**	**SW846 8330**
3-Nitrotoluene	**89**	**(48 - 136)**	**SW846 8330**
4-Amino-2,6-dinitrotoluene	**91**	**(58 - 159)**	**SW846 8330**
4-Nitrotoluene	**90**	**(46 - 136)**	**SW846 8330**
HMX	**89**	**(45 - 140)**	**SW846 8330**
Nitrobenzene	**93**	**(49 - 120)**	**SW846 8330**
Nitroglycerin	**97**	**(60 - 120)**	**SW846 8330**
RDX	**93**	**(39 - 120)**	**SW846 8330**
PETN	**104**	**(60 - 120)**	**SW846 8330**
Tetryl	**84**	**(30 - 120)**	**SW846 8330**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	93	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

HPLC

Client Lot #...: A9G160265 **Work Order #...:** LGRDM1AE **Matrix.....:** WATER
LCS Lot-Sample#: G9G210000-121
Prep Date.....: 07/21/09 **Analysis Date..:** 07/26/09
Prep Batch #...: 9202121
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
1,3,5-Trinitrobenzene	1.0	0.92	ug/L	92	SW846 8330
1,3-Dinitrobenzene	1.0	0.93	ug/L	93	SW846 8330
2-Amino-4,6-dinitrotoluene	1.0	0.95	ug/L	95	SW846 8330
2,4,6-Trinitrotoluene	1.0	0.89	ug/L	89	SW846 8330
2,4-Dinitrotoluene	1.0	0.90	ug/L	90	SW846 8330
2,6-Dinitrotoluene	1.0	0.91	ug/L	91	SW846 8330
2-Nitrotoluene	1.0	0.90	ug/L	90	SW846 8330
3-Nitrotoluene	1.0	0.89	ug/L	89	SW846 8330
4-Amino-2,6-dinitrotoluene	1.0	0.91	ug/L	91	SW846 8330
4-Nitrotoluene	1.0	0.90	ug/L	90	SW846 8330
HMX	1.0	0.89	ug/L	89	SW846 8330
Nitrobenzene	1.0	0.93	ug/L	93	SW846 8330
Nitroglycerin	5.0	4.9	ug/L	97	SW846 8330
RDX	1.0	0.93	ug/L	93	SW846 8330
PETN	5.0	5.2	ug/L	104	SW846 8330
Tetryl	1.0	0.84	ug/L	84	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	93	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

8330MOD NITROGUANIDINE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ September 3, 2009

SDG: A9G160265 R0
Analysis: SW846 8330M Nitroguanadine

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.2- 4.6 °C	QAPP Table 4-2
3. Were holding times met?	✓			Checked by ADR.	QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Tale 3-7
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-7
7. Was a MDL Level Verification analyzed once per quarter with all target analytes detected?	✓			7/21/09	LCG Table 5 R
8. Was a MRL Level verification run at the beginning and end of every daily sequence or every 12 hours? Was the %D < 30%?	✓				LCG Table 5 >30%=J
9. Does the initial calibration curve consist of 5 concentration levels? (6 stds for quadratic curves)	✓			Varian Star #1 ICAL: 1/29/09 primary column Stds: 20, 50, 100, 200, 500, 1000	STL SOP Section 10.2, LCG R
10. Were all target analytes %RSD ≤ 20%? OR was the average RSD ≤ 20%?	✓				LCG Table 5 >20% RSD=J/R
11. If a linear regression curve was used, was the correlation coefficient r≥0.995? (0.990 for Quadratic curve)	✓			Linear fit used. No qualifications were made as r>0.995.	STL SOP Section 10.4, LCG R<0.99=-J/R
12. Was a second source verification (ICV) analyzed after the ICAL and all analytes 85-115%?	✓			1/29/09 @ 2110	STL SOP Section 9.9 >115%=J; 80-85%=J/UJ; <80%=J/R
13. Was a CCV run at least every 10 samples and at the end of the analytical run?	✓				STL SOP Section 10.9
14. Was the average %D (difference or drift) for all target analytes < 15%?	✓				LCG Table 5 D>15% (neg) = J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ September 3, 2009

SDG: A9G160265 R0
Analysis: SW846 8330M Nitroguanadine

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
					D>15% (pos) = J
15. Was a method blank prepared and analyzed with each batch?	✓				LCG Attachment A Section 5.6
16. Were target analytes reported in the method blank <1/2 the MRL?	✓				LCG Table 5 <5x = B
17. Was a field blank collected and analyzed?	✓			FWGEQUIPRinse4-1426-GW	
18. Were target analytes reported in the field blank analyses < ½ the MRL?	✓				<5x=B
19. Was a field duplicate analyzed? Were the RPDs ≤30%?		✓		No field duplicates were submitted with this work order.	QAPP Table 3-2 RPD >30=J
20. Were all positive results confirmed with a second column confirmation? Was the RPD ≤ 40%?			✓		LCG Table 5 RPD>40%=J
21. Was an LCS prepared and analyzed with each batch?	✓				STL SOP Section 9.6
22. Were the LCS recoveries within limits specified in LCG Appendix C?	✓				LCG Appendix C <UL=J; 30-LL=J/UJ; <30%=J/R
23. Was a MS/MSD pair prepared with each batch?	✓				STL SOP Section 9.7
24. Was the MS/MSD parent a Ravenna sample?	✓			Sample FWASYmw-007c-1409-GW was the parent MS/MSD sample from this SDG.	
25. Were MS/MSD recoveries 40-140% and RPD ≤20%?	✓				QAPP Table 3-2 Pj
27. Were reported sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
29. Were lab comments included in report? If yes, summarize contents.		✓			

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ September 3, 2009

SDG: A9G160265 R0
Analysis: SW846 8330M Nitroguanadine

References: Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 5 and Attachment A "Data Validation Guidelines.

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

STL SOP SAC-LC-0010 "Determination of Nitroguanidine Based on Method 8330, SW-846" April 2007, revision 2.0

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-007C-1409-GW

Dissolved HPLC

Lot-Sample #...:	A9G160265-001	**Work Order #...:**	LGLME1AD	**Matrix.....:**	WG
Date Sampled...:	07/16/09 08:50	**Date Received..:**	07/16/09		
Prep Date.....:	07/28/09	**Analysis Date..:**	07/28/09		
Prep Batch #...:	9209211				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1426-GW

Dissolved HPLC

Lot-Sample #...: A9G160265-002 **Work Order #...:** LGLMH1AD **Matrix.....:** WQ
Date Sampled...: 07/16/09 09:30 **Date Received..:** 07/16/09
Prep Date.....: 07/28/09 **Analysis Date..:** 07/28/09
Prep Batch #...: 9209211
Dilution Factor: 1 **Method.....:** SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-006C-1408-GW

Dissolved HPLC

Lot-Sample #...:	A9G160265-003	**Work Order #...:**	LGLMJ1AD	**Matrix.....:**	WG
Date Sampled...:	07/16/09 10:15	**Date Received..:**	07/16/09		
Prep Date.....:	07/28/09	**Analysis Date..:**	07/28/09		
Prep Batch #...:	9209211				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-009C-1411-GW

Dissolved HPLC

Lot-Sample #...:	A9G160265-004	**Work Order #...:**	LGLMK1AD	**Matrix.....:**	WG
Date Sampled...:	07/16/09 08:50	**Date Received..:**	07/16/09		
Prep Date.....:	07/28/09	**Analysis Date..:**	07/28/09		
Prep Batch #...:	9209211				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-010C-1412-GW

Dissolved HPLC

Lot-Sample #...:	A9G160265-005	**Work Order #...:**	LGLML1AD	**Matrix.....:**	WG
Date Sampled...:	07/16/09 09:50	**Date Received..:**	07/16/09		
Prep Date.....:	07/28/09	**Analysis Date..:**	07/28/09		
Prep Batch #...:	9209211				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-008C-1410-GW

Dissolved HPLC

Lot-Sample #...: A9G160265-006 **Work Order #...:** LGLMN1AD **Matrix.....:** WG
Date Sampled...: 07/16/09 08:45 **Date Received..:** 07/16/09
Prep Date.....: 07/28/09 **Analysis Date..:** 07/28/09
Prep Batch #...: 9209211
Dilution Factor: 1 **Method.....:** SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

METHOD BLANK REPORT

HPLC

Client Lot #...: A9G160265 **Work Order #...:** LG57D1AA **Matrix.....:** WATER
MB Lot-Sample #: G9G280000-211

Prep Date.....: 07/28/09
Analysis Date..: 07/28/09 **Prep Batch #...:** 9209211
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Nitroguanidine	ND	20	ug/L	SW846 8330 (Modif

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A9G160265 **Work Order #...:** LG57D1AC **Matrix.....:** WATER
LCS Lot-Sample#: G9G280000-211
Prep Date.....: 07/28/09 **Analysis Date..:** 07/28/09
Prep Batch #...: 9209211
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Nitroguanidine	**99**	**(73 - 117)**	**SW846 8330 (Modified**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A9G160265 **Work Order #...:** LGLME1AG-MS **Matrix.....:** WG
MS Lot-Sample #: A9G160265-001 LGLME1AH-MSD
Date Sampled...: 07/16/09 08:50 **Date Received..:** 07/16/09
Prep Date.....: 07/28/09 **Analysis Date..:** 07/28/09
Prep Batch #...: 9209211
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Nitroguanidine	**102**	**(73 - 117)**			**SW846 8330 (Modified**
	101	**(73 - 117)**	**0.59**	**(0-15)**	**SW846 8330 (Modified**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

GENERAL CHEMISTRY DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ September 3, 2009

SDG: A9G160265 Rev 0
Analysis: EPA 353.2- Nitrocellulose

Review Questions:	Yes	No	N/A	Comments	Qualifier
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.2- 4.6 °C	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	✓				QAPP Table 3.7
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3.7
7. Was Acetone used to extract the samples? Was the Acetone evaporated using Nitrogen?	✓				STL SOP Sections 11.4
8. Does the initial calibration curve consist of 5 concentration levels with the low standard near but > MDL?	✓			Instrument FS4; ICAL 7/28/09 Stds- 0, 0.05, 0.2, 0.4, 1, 2	STL SOP Section 10.2 R
9. Was the correlation coefficient >0.995?	✓				STL SOP Section 10.2
10. Was a MRL Level Verification run at the beginning and end of every daily sequence or every 12 hours? Was the %D <30%?	✓				LCG Table 5 >30%=J
11. Was a second source verification (ICV) analyzed after the ICAL? Were all analytes 90-110%?	✓				STL SOP Section 9.8, 10.3, LCG >110%=J; 90-85%=J/UJ; <85%=J/R
12. Was the ICB analyzed after the ICV with results <1/2 the MRL?	✓				STL SOP Section 9.8, LCG < 5x = U
13. Was a CCV run every 10 samples and at the end of the analytical run?	✓				STL SOP Section 10.4
14. Was the ICV and CCV a mid-level standard from the initial calibration curve?	✓				STL SOP Section 10.3.1

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ September 3, 2009

SDG: A9G160265 Rev 0
Analysis: EPA 353.2- Nitrocellulose

Review Questions:	Yes	No	N/A	Comments	Qualifier
15. Were all CCV calibration analytes within 90-110%?	✓				STL SOP Section 10.4, LCG >110%=J; 85-90%=J/UJ; <85%=J/R
16. Was the ICB analyzed after the ICV with results <1/2 the MRL?	✓				STL SOP Section 10.4, LCG < 5x = U
17. Was the Nitrocellulose assay available and/or analyzed to be within 10%?	✓				STL SOP Section 7.14.1 R
18. Was a method blank prepared and analyzed with each batch?	✓				
19. Were target analytes reported in the method blank <1/2 the MRL?	✓			ADR checked section.	STL SOP Section 9.4, LCG <5x=B
20. Was a field blank collected and analyzed?	✓			FWGEQUIPRinse4-1426-GW	
21. Were target analytes reported in the field blank analyses <1/2 the MRL?	✓				<5x=B
22. Was a field duplicate analyzed? Were the RPDs ≤30%?		✓		No field duplicates were submitted with this work order.	QAPP Table 3-2 RPD > 30% = J
23. Was an LCS prepared and analyzed with each batch? Was the LCS recovery within lab's in-house limits% (26-144%)?	✓				>UL%=J; 50-LL%=J/UJ; <50%=J/R
24. Was a MS/MSD pair prepared with each batch?	✓				
25. Was the MS/MSD parent a Ravenna sample?	✓			Sample FWASYmw-007c-1409-GW was the parent MS/MSD sample from this SDG.	
26. Were MS/MSD recoveries 26-144% and RPD ≤20?	✓			ADR checked section.	Method EPA 353.2 Section 9.4.2 >UL%=J; <LL%=J/UJ; RPD>20%=J/UJ

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2009
Data Reviewer/Date: Angye Dragotta/ September 3, 2009

SDG: A9G160265 Rev 0
Analysis: EPA 353.2- Nitrocellulose

Review Questions:	Yes	No	N/A	Comments	Qualifier
27. Were sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
30. Were lab comments included in report? If yes, summarize contents.		✓			

References: *STL SOP SAC-WC-0050 "Preparation and Analysis of Nitrocellulose in Aqueous and Soil/Sediment Samples by Colorimetric Autoanalyzer", Jan 2007, rev. 2.0*

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-007C-1409-GW

General Chemistry

Lot-Sample #...: A9G160265-001 **Work Order #...:** LGLME **Matrix.....:** WG
Date Sampled...: 07/16/09 08:50 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/24-07/28/09	9205429

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1426-GW

General Chemistry

Lot-Sample #...: A9G160265-002 **Work Order #...:** LGLMH **Matrix.....:** WQ
Date Sampled...: 07/16/09 09:30 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/24-07/28/09	9205429

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-006C-1408-GW

General Chemistry

Lot-Sample #...: A9G160265-003 **Work Order #...:** LGLMJ **Matrix.....:** WG
Date Sampled...: 07/16/09 10:15 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/24-07/28/09	9205429

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-009C-1411-GW

General Chemistry

Lot-Sample #...: A9G160265-004 **Work Order #...:** LGLMK **Matrix.....:** WG
Date Sampled...: 07/16/09 08:50 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/24-07/28/09	9205429

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-010C-1412-GW

General Chemistry

Lot-Sample #...: A9G160265-005 **Work Order #...:** LGLML **Matrix.....:** WG
Date Sampled...: 07/16/09 09:50 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/24-07/28/09	9205429

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-008C-1410-GW

General Chemistry

Lot-Sample #...: A9G160265-006 **Work Order #...:** LGLMN **Matrix.....:** WG
Date Sampled...: 07/16/09 08:45 **Date Received..:** 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	07/24-07/28/09	9205429

Dilution Factor: 1 MDL.....: 0.12

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A9G160265 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		Work Order #: LG20V1AA		MB Lot-Sample #:	G9G240000-429	
	ND	0.50	mg/L	MCAWW 353.2	07/24-07/28/09	9205429
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A9G160265 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		Work Order #: LG20V1AC	LCS Lot-Sample#: G9G240000-429		
	92	(26 - 144)	MCAWW 353.2	07/24-07/28/09	9205429
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A9G160265 **Matrix.....:** WG
Date Sampled...: 07/16/09 08:50 **Date Received..:** 07/16/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		WO#:	LGLME1AE-MS/LGLME1AF-MSD			MS Lot-Sample #: A9G160265-001	
	82	(26 - 144)			MCAWW 353.2	07/24-07/28/09	9205429
	90	(26 - 144)	9.1	(0-45)	MCAWW 353.2	07/24-07/28/09	9205429
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Appendix I

Reason Code Library: Example 1

Category	Code
Low Bias Indicator	-
High Bias Indicator	+
Temperature	A
Holding Times	
Sampling to Analysis	C
Sampling to Extraction	D
Extaction to Analysis	E
Method Blanks	F
Surrogate Recovery	G
MS/MSD	
MS/MSD Recovery	H
MS/MSD RPD	I
LCS	
LCS Recovery	J
LCS RPD	K
Reporting Limits	L
Field QC	
Field Blank	M
Equipment Blank	N
Trip Blank	O
Field Duplicate	P

Category	Code
Initial Calibration	
Initial Calibration RRF	Q
Initial Calibration RSD	R
Initial Calibration Cor. Coef	S
Initial Calibration Verification	
Initial Calibration Verificaton RRF	T
Initial CalibrationVerification %D	U
Continuing Calibration	
Continuing Calibraiton RRF	V
Continuing Calibration %D	W
GC/MS Tune	
GC/MS Tune for Initial Calibration	X
GC/MS Tune for Continuing Calibration	Y
Laboratory Duplicate	Z
Categories not Assessed by Automated Data Review*	
Internal Standards	Is
Calibration Blanks	Cb
Resolution Check Mixture	Rm
Performance Evaluation Mixture	Pm
Professional Judgement	Pj

* Qualifiers for data-review categories not assessed by automated data review are manually entered by the user. The application automaticallly adds reason codes listed here when the user manually adds qualifiers for these categories if the option for applying reason codes was selected during automated data review.

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G160265										
8330	FWGASYmw-008C-1410-GW	AQ	N							
				Nitrobenzene	0.097	0.084J		J	ug/L	L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGASYmw-008C-1410-GW **Lab Report Batch :** A9G160265 **Lab ID :** TALCAN

Sample Date : 07/16/2009 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A9G160265006

Reviewed By / Date : Angye Dragotta 9/14/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 0.97**															
Nitrobenzene	0.084		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

QC Outlier Report: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: A9G160265 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGASYmw-006C-1408-	A9G160265003	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGASYmw-007C-1409-	A9G160265001	8330	AQ	2-Nitrotoluene	U	0.51	0.20	ug/L
				3-Nitrotoluene	U	0.51	0.20	ug/L
				4-Nitrotoluene	U	0.51	0.20	ug/L
FWGASYmw-008C-1410-	A9G160265006	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGASYmw-009C-1411-	A9G160265004	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGASYmw-010C-1412-	A9G160265005	8330	AQ	2-Nitrotoluene	U	0.50	0.20	ug/L
				3-Nitrotoluene	U	0.50	0.20	ug/L
				4-Nitrotoluene	U	0.50	0.20	ug/L
FWGEQUIPRINSE4-1426	A9G160265002	8330	AQ	2-Nitrotoluene	U	0.50	0.20	ug/L
				3-Nitrotoluene	U	0.50	0.20	ug/L
				4-Nitrotoluene	U	0.50	0.20	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: **30240.0006 - RVAAP (OH)**

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A9G160265 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGASYmw-008C-1410-	A9G160265006	8330	AQ	Nitrobenzene	J	0.084	0.097	ug/L

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2009
STL Sample Delivery Group: A9G160271

Date: September 1, 2009
Revision: 0

Data Validator: Angye Dragotta/Environmental Quality Management, Inc. (EQM, Inc.)

QA/QC Summary

On July 16, 2009, the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A9G160271.

Field Sample ID	Analytes	Method
FWGASYmw-007c-1409-GF	Perchlorate	SW846 6860
FWGEQUIPRINSE4-1426-GW		
FWGASYmw-006c-1408-GF		
FWGASYmw-009c-1411-GF		
FWGASYmw-010c-1412-GF		
FWGASYmw-008c-1410-GF		

The data presented in this report were evaluated according to the *Final Quality Assurance Project Plan Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant Ravenna, OH, Portage Environmental, September 2004.* The following documents will be used as needed to supplement the project documentation: *Louisville Chemistry Guidelines, USACE, June 2002 version 5, EPA National Functional Guidelines (NFG) for Organic Data Review, EPA-540/R-99-008, October 1999, NFG for Inorganic Data Review, EPA-540/R-04-004, October 2004*, Analytical Methods, and Laboratory Standard Operating Procedures. These objectives represent accuracy and precision performance goals for each analytical method.

The completeness objective for the project was 90%. The completeness objective was met for this SDG, 100%. Limitations, if any, on the data are indicated with qualifiers detailed below.

All analytical results have been verified against compliance requirements specified in the project QAP, LCG, associated analytical methods and/or SOPs, as appropriate. Checklists used in review of the data have been inserted in the SDGs by parameter. Outliers have been noted below and results requiring qualification, as a result of this verification process, have been summarized in Appendix 1.

Perchlorate - 6860

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Tuning criteria
- Initial Calibration Criteria
- Internal standard area and retention time criteria
- ICV and CCV criteria
- Limit of Detection Verification criteria
- Interference Check Sample criteria
- MRL verification criteria
- Method blank/ equipment rinse/ laboratory reagent blanks was free from contamination
- LCS recovery criteria
- Field duplicate RPD

No QC outliers were noted.

Data Reviewer: Angye Dragotta 9/15/09
Date:

2nd Level Data Review: Erik Carbin
Date: 9/15/09

SAMPLE SUMMARY

A9G160271

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LGLM1	001	FWGASYmw-007C-1409-GF	07/16/09	08:50
LGLM9	002	FWGEQUIPRINSE4-1426-GW	07/16/09	09:30
LGLNA	003	FWGASYmw-006C-1408-GF	07/16/09	10:15
LGLND	004	FWGASYmw-009C-1411-GF	07/16/09	08:50
LGLNE	005	FWGASYmw-010C-1412-GF	07/16/09	09:50
LGLNF	006	FWGASYmw-008C-1410-GF	07/16/09	08:45

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 7/16/09	Chain of Custody Number: 003184
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513 825 7500 (fax 7495)	Lab Number: 3304979396	Page 1 of 1
City: Cincinnati; State: OH; Zip Code: 45240	Site Contact: E Corbin; Lab Contact: M Loeb		
Project Name and Location (State): RVAAP (OH) PN: 30240.0006	Carrier/Waybill Number: NA Lab Pickup		
Contract/Purchase Order/Quote No.: PO # 15660			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Explo 8330	Propellants	Cyanide 9012	Metals 6010/6020 7470	Perchlorates	Special Instructions/ Conditions of Receipt: Cooler ID
FWG Team 1 - Trip	7/16/09	0800		X						2			X									C8
FWGASYmw-007C-1409-GW	7/16/09	0850		X			9			3	1		X	X	X	X	X	X	X			M23
FWGASYmw-007C-1409-GF	7/16/09	0850		X			1		1											X	X	M23
FWGEQUIPRinse4-1426-GW	7/16/09	0930		X			10		1	3	1		X	X	X	X	X	X	X	X	X	183
FWGASYmw-006C-1408-GW	7/16/09	1015		X			9			3	1		X	X	X	X	X	X	X			C8
FWGASYmw-006C-1408-GF	7/16/09	1015		X			1		1											X	X	C8

AH

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other per SOW

QC Requirements (Specify): Metals/Perchlorates were field filtered

	Date	Time		Date	Time
1. Relinquished By: Steph Stinger	7-16-09	1250	1. Received By: RC Robison	7/16/09	1250
2. Relinquished By: RC Robison	7/16/09	1348	2. Received By: [signature]	7/16/09	1348
3. Relinquished By			3. Received By		

Comments: Temps may not meet requirements if sample collection is close to lab pickup time

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

All VOCs in Cooler C8

North Canton

14

Chain of Custody Record

TAL-4142 (0408)

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client: EQM	Project Manager: John Miller	Date: 7-16-09	Chain of Custody Number: 003266
Address: 1800 CARILLON BLVD	Telephone Number (Area Code)/Fax Number: 513 825 7500 (fax 7495)	Lab Number: 330497 9396	Page 1 of 1
City: Cincinnati; State: OH; Zip Code: 45240	Site Contact: E CORBIN; Lab Contact: M LOEB		
Project Name and Location (State): RVAAP Ravenna Oh	Carrier/Waybill Number: LAB PICKUP		
Contract/Purchase Order/Quote No.: PO 15560 PN30240.0006			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Explo 8330	Propellants	Cyanide 9012	Metals 6010	Perchlorates	Special Instructions/ Conditions of Receipt: Cooler ID #
FWG Team 2-Trip	7-16-09	0800		X			2						X									H112
FWGASYmw-009C-1411-GW	↓	0850		X			9			3	1		X	X	X	X	X	X	X			H112
FWGASYmw-009C-1411-GF	↓	↓		X			1		1											X	X	H112
FWGASYmw-010C-1412-GW	↓	0950		X			9			3	1		X	X	X	X	X	X	X			H113
FWGASYmw-010C-1412-GF	↓	0950		X			1		1											X	X	H113

Cool

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other Per SOW

QC Requirements (Specify): Metals + Perchlorates were field filtered.

	Date	Time		Date	Time
1. Relinquished By: [signature]	7-16-09	1250	1. Received By: [signature]	7/16/09	1250
2. Relinquished By: [signature]	7/16/09	1348	2. Received By: [signature]	7/16/09	1348
3. Relinquished By:			3. Received By:		

Comments: Temps may not meet requirements if sample collection is close to lab pickup time. All VOAs in H112

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

15

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
EQM	JOHN MILLER	07/16/2009	003169
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	
1800 CARILLON BLVD	(513) 825-7500 (FX 7495)	(330) 497-9396	Page 1 of 1

City	State	Zip Code	Site Contact	Lab Contact
CINCINNATI	OH	45240	E. CORBIN	M. LOEB

Project Name and Location (State)	Carrier/Waybill Number
RVAAP (OH) 030240.0006	N/A - LAB PICKUP

Contract/Purchase Order/Quote No.: PO 15660

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		Analysis (Attach list if more space is needed): VOCs 8260	SVOC 8270	PEST 8081	PCB 8082	EXPLO 8330	PROPELLANTS 9012	CYANIDE 6010/6020	METALS 7470	PERCHLORATES				Special Instructions/ Conditions of Receipt
FWG TEAM 3 - TRIP	07/16/09	0800		X							2				X												COOLER - 12009
FWG ASY MW-008C-1410-GW	07/16/09	0845		X				9			3	1			X	X	X	X	X	X	X						COOLER - 12009
FWG ASY MW-008C-1410-GF	07/16/09	0845		X				1		1												X	X				COOLER - 12009

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other PER SOW

QC Requirements (Specify): METALS/PERCHLORATES WERE FIELD FILTERED

	Date	Time		Date	Time
1. Relinquished By: [signature]	7-16-09	1250	1. Received By: [signature]	7/16/09	1250
2. Relinquished By: [signature]	7/16/09	1348	2. Received By: [signature]	7/16/09	1348
3. Relinquished By			3. Received By		

Comments: TEMPS MAY NOT MEET REQUIREMENTS IF SAMPLE COLLECTION IS CLOSE TO LAB PICKUP TIME

ALL VOCS IN COOLER 12009

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

16

TestAmerica Cooler Receipt Form/Narrative **Lot Number:** ~~A9G160256~~ A9G160276
North Canton Facility

Client ERM Project RVAAP By: [signature] (Signature)
Cooler Received on 7/16/09 Opened on 7/16/09
FedEx ☐ UPS ☐ DHL ☐ FAS ☐ Stetson ☐ Client Drop Off ☐ TestAmerica Courier ☒ Other ____
TestAmerica Cooler # ____ Multiple Coolers ☒ Foam Box ☐ Client Cooler ☐ Other ____

1. Were custody seals on the outside of the cooler(s)? Yes ☒ No ☐ Intact? Yes ☒ No ☐ NA ☐
   If YES, Quantity 6 Quantity Unsalvageable ____
   Were custody seals on the outside of cooler(s) signed and dated? Yes ☒ No ☐ NA ☐
   Were custody seals on the bottle(s)? Yes ☐ No ☒
   If YES, are there any exceptions? ____ 9/11/09
2. Shippers' packing slip attached to the cooler(s)? ~~Yes~~ ☒ No ☒
3. Did custody papers accompany the sample(s)? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Were the custody papers signed in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☒ Foam ☐ None ☐ Other ____
6. Cooler temperature upon receipt ____ °C See back of form for multiple coolers/temps ☒
   METHOD: IR ☒ Other ☐ ____
   COOLANT: Wet Ice ☒ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐
7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels be reconciled with the COC? Yes ☒ No ☐
9. Were sample(s) at the correct pH upon receipt? Yes ☒ No ☐ NA ☐
10. Were correct bottle(s) used for the test(s) indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☒ NA ☐
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a trip blank present in the cooler(s)? Yes ☒ No ☐ Were VOAs on the COC? Yes ☒ No ☐

Contacted PM ____ Date ____ by ____ via Verbal ☐ Voice Mail ☐ Other ☐
Concerning ____

14. CHAIN OF CUSTODY

The following discrepancies occurred:

____

15. SAMPLE CONDITION

Sample(s) ____ were received after the recommended holding time had expired.
Sample(s) ____ were received in a broken container.
Sample(s) ____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) ____ were further preserved in Sample Receiving to meet recommended pH level(s). *Nitric Acid Lot# 031909-HNO_3; Sulfuric Acid Lot# 100108-H_2SO_4; Sodium Hydroxide Lot# 073007 -NaOH; Hydrochloric Acid Lot# 092006-HCl; Sodium Hydroxide and Zinc Acetate Lot# 050205-$(CH_3COO)_2ZN/NaOH$.* What time was preservative added to sample(s)? ____

Client ID	pH	Date	Initials
1409	<2 >12	7/16/09	[illegible]
1426	<2 >12		
1408	<2 >12		
1411	<2 >12		
1412	<2 >12		
1410	<2 >12		

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials

Cooler #	Temp. °C	Method	Coolant
M23	2.2	IR	Ice
183	4.1		
C8	3.3		
H112	2.9		
H113	4.6		
12009	3.8		

Discrepancies Cont'd:

1.7°C

TestAmerica Laboratories, Inc.
SAMPLE ANALYSIS REQUISTION

Laboratory: TestAmerica AASG - Denver
4955 YARROW
ARVADA, CO 80002

Lab Request: SR113636

Report Package: Expanded Deliverables
Need Analytical Report: 2009-07-30

Client Code: 14091

Project Manager: MARK LOEB

Sample I.D.	Work Order Number	Client Sample ID	Sampling Date	Analysis Required
A9G160271-1	LGLM1	FWGASYmw-007C-1409-GF	2009-07-16 8:50	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G160271-2	LGLM9	FWGEQUIPRINSE4-1426-GW	2009-07-16 9:30	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G160271-3	LGLNA	FWGASYmw-006C-1408-GF	2009-07-16 10:15	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G160271-4	LGLND	FWGASYmw-009C-1411-GF	2009-07-16 8:50	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G160271-5	LGLNE	FWGASYmw-010C-1412-GF	2009-07-16 9:50	WATER, 6860, SW846 6860 Perchlorate, Spe
A9G160271-6	LGLNF	FWGASYmw-008C-1410-GF	2009-07-16 8:45	WATER, 6860, SW846 6860 Perchlorate, Spe

Please use Client Sample ID for report

Call MARK LOEB with questions at 330-497-9396

at the TAL North Canton Laboratory

Shipping Method: FED EX

Need detection limit and analysis date included in report.

Please send a signed copy of this form with the report at completion of analysis.

Relinquished by: [signature] Date/Time: 7/16/09 1520

Relinquished by: _____ Date/Time: _____

Received for lab by: Corinne Brin Date/Time: 7-17-09/0945

PLEASE RETURN ORIGINAL SAMPLE ANALYSIS REQUISITION

TestAmerica Denver

Sample Receiving Checklist

Lot #: A9G160271 Date/Time Received: 7-17-09/0845

Company Name & Sampling Site: TA North Canton

PM to Complete This Section:	*Yes*	*No*		*Yes*	*No*
Residual chlorine check required:	☐	☐	Quarantined :	☐	☐

Quote #:

Special Instructions:

Time Zone:
• EDT/EST • CDT/CST • MDT/MST • PDT/PST • OTHER

Unpacking Checks:

Cooler #(s): _____ _____ _____ _____ _____ _____ _____ _____

Temperatures (°C): 1.7 _____ _____ _____ _____ _____ _____ _____

N/A	*Yes*	*No*		*Initials*
☐	☑	☐	1. Cooler seals intact? (N/A if hand delivered) If no, document on CUR.	CGK
	☑	☐	2. Coolers scanned for radiation. Is the reading ≤ to background levels? Yes: ✓ No:____	
	☑	☐	3. Chain of custody present? If no, document on CUR.	
	☐	☑	4. Bottles broken and/or are leaking? If yes, document on CUR.	
	☐	☑	5. Multiphasic samples obvious? If yes, document on CUR.	
	☑	☐	6. Proper container & preservatives used? (ref. Attachment D of SOP# DV-QA-0003) If no, document on CUR.	
☑	☐	☐	7. pH of all samples checked and meet requirements? If no, document on CUR.	
	☑	☐	8. Sufficient volume provided for all analysis requested? (ref. Attachment D of SOP# DV-QA-0003) If no, document on CUR, and contact PM before proceeding.	
	☑	☐	9. Did chain of custody agree with labels ID and samples received? If no, document on CUR.	
☑	☐	☐	10. Were VOA samples without headspace? If no, document on CUR.	
☑	☐	☐	11. Were VOA vials preserved? Preservative ☐HCl ☐4±2°C ☐Sodium Thiosulfate ☐ Ascorbic Acid	
	☐	☑	12. Did samples require preservation with sodium thiosulfate?	
☑	☐	☐	13. If yes to #11, did the samples contain residual chlorine? If yes, document on CUR.	
☑	☐	☐	14. Sediment present in dissolved/filtered bottles? If yes, document on CUR.	
☑	☐	☐	15. Is sufficient volume provided for client requested MS, MSD or matrix duplicates? If no, document on CUR, and contact PM before proceeding.	
	☐	☑	16. Receipt date(s) > 48 hours past the collection date(s)? If yes, notify PA/PM.	
	☐	☑	17. Are analyses with short holding times requested?	
	☐	☑	18. Was a quick Turn Around (TAT) requested?	

CASE NARRATIVE

A9G160271

The following report contains the analytical results for six water samples submitted to TestAmerica North Canton by Environmental Quality Mgt., Inc. from the RVAAP (OH) Site, project number 30240.0006. The samples were received July 16, 2009, according to documented sample acceptance procedures.

The SW846 6860 Perchlorate analysis was performed at the TestAmerica Denver laboratory.

TestAmerica utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Angye Dragotta, Erik Corbin, and Jackie Doan on August 13, 2009. A summary of QC data for these analyses is included at the back of the report.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Please refer to the Quality Control Elements Narrative following this case narrative for additional quality control information.

If you have any questions, please call the Project Manager, Mark J. Loeb, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT."

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The coolers were received at temperatures ranging from 2.2 to 4.6°C.

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

QUALITY CONTROL ELEMENTS NARRATIVE (continued)

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

TestAmerica Certifications and Approvals:

The laboratory is certified for the analytes listed on the documents below. These are available upon request.

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225),
Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Nevada (#OH-000482008A), OhioVAP (#CL0024), Pennsylvania (#008), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit

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6860 PERCHLORATE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.12 **SDG**: A9G160110 R0
Sample Event: July 2009 **Analysis**: SW846 6860
Data Reviewer/Date: Angye Dragotta/September 1, 2009 Perchlorate

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.2- 4.6 °C.	
3. Were holding times met (28 days)?	✓			Samples collected 7/16/09, extracted 8/10/09, and analyzed on 8/11/09.	UJ/J/R
4. Were sample storage requirements met?	✓				
5. Was the DOD specified PQLs of 0.5ug/L achieved?	✓				
6. Were all QAPP-specified target analytes reported?	✓				
7. Was the LC/MS/MS system mass calibration checked?	✓				R
8. Were the masses within 0.3 amu of ions 99, 101, and 107?	✓				R
9. Was the instrument tuned daily?	✓				
10. Was the tune within criteria? (per laboratory SOP)	✓				R
11. Did the initial calibration curve consist of 5 concentration levels?	✓			LCMS1 8/6/2009 Standards(ng/L): 20, 50, 100, 200, 500, 1000	R
12. Was the correlation coefficient r≥0.995?	✓				R<0.995 =-J/R
13. Was a second source verification (SSCV) analyzed after the ICAL? Were results 90-110%?	✓				LCG Table 1 >120%=J; 60-80%=J/UJ; <60%=J/R
14. Was an ICV analyzed after the ICAL and daily before sample analysis?	✓			8/6/2009 @1747	R
15. Was the %Difference ≤ 15%?	✓				R
16. Was a CCV analyzed after every 10 samples?	✓				
17. Was the %Difference ≤ 15%?	✓				%D > 15% = UJ/J
18. Was a Limit of Detection Verification LODV) analyzed before and after every batch?	✓				

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.12 **SDG**: A9G160110 R0
Sample Event: July 2009 **Analysis**: SW846 6860
Data Reviewer/Date: Angye Dragotta/September 1, 2009 Perchlorate

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
19. Was the LODV recovery within 70-130%?	✓				>130%=J; 70-60%=J/UJ; <60%=J/R
20. Was an Interference Check Sample extracted and analyzed with every batch?	✓				
21.Was the ICS recovery within 70 to 130%?	✓				>120%=J; 50-79%=J/UJ; <50%=Pj/R
22. Was a method blank prepared and analyzed with each batch?	✓				
23. Were target analytes detected in the method blank at >1/2 the MRL?		✓		Checked by ADR.	<5X =B
24. Was a field blank (equipment) collected and analyzed?	✓			FWGEQUIPRINSE4-1426-GW	
25. Were target analytes detected in the field blank analyses >1/2 the MRL?		✓		Checked by ADR.	<5X =B
26. Was a LCS prepared and analyzed with each batch?	✓				
27. Were the LCS recoveries within 85-115%?	✓			Checked by ADR.	>115%=J; 50%-85%=J/UJ; <50%=J/R
28. Was a MS/MSD prepared with each batch?	✓				
29. Was the MS/MSD parent sample a Ravenna sample?		✓		The parent sample was from another SDG.	
30. Were MS/MSD recoveries 75-125% and RPD values ≤20%?			✓	No evaluation was made as the parent was from another SDG.	>125% = J 30% - 75% = J/UJ <30% = J/R
31. Was a Laboratory Reagent Blank (LRB) analyzed prior to calibration and after high concentration samples?	✓				
32. Were target analytes detected in the LRB at >1/2 the MRL?		✓			<5X =B
33. Was a MRL Verification run with every ICAL?	✓				
34. Were the MRL recoveries 70-130%?	✓				R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.12 **SDG**: A9G160110 R0
Sample Event: July 2009 **Analysis**: SW846 6860
Data Reviewer/Date: Angye Dragotta/September 1, 2009 Perchlorate

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
35. Were the internal standards added to every sample?	✓				
36. Were the retention times for all IS compounds within 0.98 and 1.02 seconds from the RT of the mid-point standard in the ICAL?	✓				R
37. Did the IS recover within 50% to150% of the ICAL mid-point standard?	✓				R
38. Was a field duplicate analyzed? Were the RPDs within ±30%?		✓		No field duplicates were submitted with this SDG.	RPD >30=J
39. Was the Isotope ratio between 99/101 and 83/85 monitored and fell between 2.3 and 3.08?	✓				J/UJ
40. Were reported sample concentrations within calibration range?	✓				
41. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
42. Were lab comments included in report? If yes, summarize contents.		✓			

References:

DOD Perchlorate Handbook, March 2006; Section G "Selecting Analytical Methods and Services"

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-007C-1409-GF

HPLC

Lot-Sample #...:	A9G160271-001	**Work Order #...:**	LGLM11AA	**Matrix.....:**	WG
Date Sampled...:	07/16/09 08:50	**Date Received..:**	07/16/09		
Prep Date.....:	08/10/09	**Analysis Date..:**	08/11/09		
Prep Batch #...:	9222390				
Dilution Factor:	1	**Method.....:**	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	**0.039 J**	**0.050**	**ug/L**	**0.0088**

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1426-GW

HPLC

Lot-Sample #...: A9G160271-002 **Work Order #...:** LGLM91AA **Matrix.....:** WQ
Date Sampled...: 07/16/09 09:30 **Date Received..:** 07/16/09
Prep Date.....: 08/10/09 **Analysis Date..:** 08/11/09
Prep Batch #...: 9222390
Dilution Factor: 1 **Method.....:** SW846 6860

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	ND	0.050	ug/L	0.0088

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-006C-1408-GF

HPLC

Lot-Sample #...:	A9G160271-003	**Work Order #...:**	LGLNA1AA	**Matrix.....:**	WG
Date Sampled...:	07/16/09 10:15	**Date Received..:**	07/16/09		
Prep Date.....:	08/10/09	**Analysis Date..:**	08/11/09		
Prep Batch #...:	9222390				
Dilution Factor:	1	**Method.....:**	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	**0.022 J**	**0.050**	**ug/L**	**0.0088**

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-009C-1411-GF

HPLC

Lot-Sample #...: A9G160271-004 Work Order #...: LGLND1AA Matrix.....: WG
Date Sampled...: 07/16/09 08:50 Date Received..: 07/16/09
Prep Date.....: 08/10/09 Analysis Date..: 08/11/09
Prep Batch #...: 9222390
Dilution Factor: 1 Method.....: SW846 6860

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	0.024 J	0.050	ug/L	0.0088

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-010C-1412-GF

HPLC

Lot-Sample #...:	A9G160271-005	**Work Order #...:**	LGLNE1AA	**Matrix.....:**	WG
Date Sampled...:	07/16/09 09:50	**Date Received..:**	07/16/09		
Prep Date.....:	08/10/09	**Analysis Date..:**	08/11/09		
Prep Batch #...:	9222390				
Dilution Factor:	1	**Method.....:**	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	**0.028 J**	**0.050**	**ug/L**	**0.0088**

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-008C-1410-GF

HPLC

Lot-Sample #...:	A9G160271-006	**Work Order #...:**	LGLNF1AA	**Matrix.....:**	WG
Date Sampled...:	07/16/09 08:45	**Date Received..:**	07/16/09		
Prep Date.....:	08/10/09	**Analysis Date..:**	08/11/09		
Prep Batch #...:	9222390				
Dilution Factor:	1	**Method.....:**	SW846 6860		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	**0.031 J**	**0.050**	**ug/L**	**0.0088**

NOTE(S):

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

HPLC

Client Lot #...: A9G160271 **Work Order #...:** LHW3G1AA **Matrix.....:** WATER
MB Lot-Sample #: R9H100000-390

Prep Date.....: 08/10/09
Analysis Date..: 08/11/09 **Prep Batch #...:** 9222390
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Perchlorate	ND	0.050	ug/L	SW846 6860

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A9G160271 **Work Order #...:** LHW3G1AC **Matrix.....:** WATER
LCS Lot-Sample#: R9H100000-390
Prep Date.....: 08/10/09 **Analysis Date..:** 08/11/09
Prep Batch #...: 9222390
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Perchlorate	**106**	**(80 - 120)**	**SW846 6860**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A9G160271 **Work Order #...:** LGKHV1AC-MS **Matrix.....:** WATER
MS Lot-Sample #: A9G160113-001 LGKHV1AD-MSD
Date Sampled...: 07/15/09 15:45 **Date Received..:** 07/16/09
Prep Date.....: 08/10/09 **Analysis Date..:** 08/11/09
Prep Batch #...: 9222390
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Perchlorate	102	(80 - 120)			SW846 6860
	106	(80 - 120)	3.9	(0-15)	SW846 6860

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Appendix I

Reason Code Library: Example 1

Category	Code
Low Bias Indicator	-
High Bias Indicator	+
Temperature	A
Holding Times	
Sampling to Analysis	C
Sampling to Extraction	D
Extaction to Analysis	E
Method Blanks	F
Surrogate Recovery	G
MS/MSD	
MS/MSD Recovery	H
MS/MSD RPD	I
LCS	
LCS Recovery	J
LCS RPD	K
Reporting Limits	L
Field QC	
Field Blank	M
Equipment Blank	N
Trip Blank	O
Field Duplicate	P

Category	Code
Initial Calibration	
Initial Calibration RRF	Q
Initial Calibration RSD	R
Initial Calibration Cor. Coef	S
Initial Calibration Verification	
Initial Calibration Verificaton RRF	T
Initial CalibrationVerification %D	U
Continuing Calibration	
Continuing Calibraiton RRF	V
Continuing Calibration %D	W
GC/MS Tune	
GC/MS Tune for Initial Calibration	X
GC/MS Tune for Continuing Calibration	Y
Laboratory Duplicate	Z
Categories not Assessed by Automated Data Review*	
Internal Standards	Is
Calibration Blanks	Cb
Resolution Check Mixture	Rm
Performance Evaluation Mixture	Pm
Professional Judgement	Pj

* Qualifiers for data-review categories not assessed by automated data review are manually entered by the user. The application automaticallly adds reason codes listed here when the user manually adds qualifiers for these categories if the option for applying reason codes was selected during automated data review.

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A9G160271										
6860	FWGASYmw-006C-1408-GF	AQ	N							
				Perchlorate	0.050	0.022J		J	ug/L	L
6860	FWGASYmw-007C-1409-GF	AQ	N							
				Perchlorate	0.050	0.039J		J	ug/L	L
6860	FWGASYmw-008C-1410-GF	AQ	N							
				Perchlorate	0.050	0.031J		J	ug/L	L
6860	FWGASYmw-009C-1411-GF	AQ	N							
				Perchlorate	0.050	0.024J		J	ug/L	L
6860	FWGASYmw-010C-1412-GF	AQ	N							
				Perchlorate	0.050	0.028J		J	ug/L	L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGASYmw-006C-1408-GF **Lab Report Batch :** A9G160271 **Lab ID :** TALCAN

Sample Date : 07/16/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160271003

Reviewed By / Date : Angye Dragotta 9/1/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6860						**Dilution: 1**															
Perchlorate	0.022		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGASYmw-007C-1409-GF **Lab Report Batch :** A9G160271 **Lab ID :** TALCAN

Sample Date : 07/16/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160271001

Reviewed By / Date : Angye Dragotta 9/1/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6860						**Dilution: 1**															
Perchlorate	0.039		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGASYmw-008C-1410-GF **Lab Report Batch :** A9G160271 **Lab ID :** TALCAN

Sample Date : 07/16/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160271006

Reviewed By / Date : Angye Dragotta 9/1/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6860						**Dilution: 1**															
Perchlorate	0.031		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGASYmw-009C-1411-GF **Lab Report Batch :** A9G160271 **Lab ID :** TALCAN

Sample Date : 07/16/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160271004

Reviewed By / Date : Angye Dragotta 9/1/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6860						**Dilution: 1**															
Perchlorate	0.024		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGASYmw-010C-1412-GF **Lab Report Batch :** A9G160271 **Lab ID :** TALCAN

Sample Date : 07/16/2009 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A9G160271005

Reviewed By / Date : Angye Dragotta 9/1/2009 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6860						**Dilution: 1**															
Perchlorate	0.028		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A9G160271 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGASYmw-006C-1408-	A9G160271003	6860	AQ	Perchlorate	J	0.022	0.050	ug/L
FWGASYmw-007C-1409-	A9G160271001			Perchlorate	J	0.039	0.050	ug/L
FWGASYmw-008C-1410-	A9G160271006			Perchlorate	J	0.031	0.050	ug/L
FWGASYmw-009C-1411-	A9G160271004			Perchlorate	J	0.024	0.050	ug/L
FWGASYmw-010C-1412-	A9G160271005			Perchlorate	J	0.028	0.050	ug/L

APPENDIX E

INVESTIGATIVE DERIVED WASTE CHARACTERIZATION AND DISPOSAL PLAN

OhioEPA

State of Ohio Environmental Protection Agency

Northeast District Office

2110 East Aurora Rd.
Twinsburg, Ohio 44087

TELE: (330) 963-1200 **FAX:** (330) 487-0769
www.epa.state.oh.us

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

July 15, 2009

RE: RAVENNA ARMY AMMUNITION PLANT, PORTAGE/TRUMBULL COUNTIES, DRAFT, INVESTIGATION DERIVED WASTE AND DISPOSAL PLAN, FWGWMP, WELL REDEVELOPMENT ACTIVITIES, JUNE 2009

Mr. Mark Patterson
Installation Manager
Ravenna Army Ammunition Plant
8451 State Route 5
Ravenna, OH 44266

CERTIFIED MAIL
7008 3230 0003 5419 7907

Dear Mr. Patterson:

The Ohio Environmental Protection Agency (Ohio EPA) has received and reviewed the "Draft, Investigation-Derived Waste (IDW) Characterization and Disposal Plan, for the Facility-Wide Groundwater Monitoring Program, Well Redevelopment Activities, at the Ravenna Army Ammunition Plant, Ravenna, OH" document. This document was received at Ohio EPA, Northeast District Office (NEDO), Division of Emergency and Remedial response (DERR), on July 13, 2009, and is dated July 2009. The document was prepared for the U.S. Army Corps of Engineers (USACE) – Louisville District, by Environmental Quality Management, Inc. (EQM), under contract no. W912QR-04-D-0036.

Monitoring well redevelopment activities were conducted during June 2009, resulting in the generation of IDW consisting of purge-water and decontamination water wastes. The water collected from the 7 areas of concern, where the wells were redeveloped, was stored in drums labeled for disposal. The decontamination water was mixed with the purge water.

The report is approved and Ohio EPA concurs that the IDW from the June 2009 well redevelopment activities may be disposed of as non-hazardous waste.

If you have any questions, please call me at (330) 963-1207.

Sincerely,

Vicki Deppisch

Vicki Deppisch, Project Coordinator
Division of Emergency and Remedial Response

VD/kss

cc: Bonnie Buthker, Ohio EPA, DERR, SWDO
John Miller, EQM
Maj. Ed Meade, OHARNG RTLS
Mark Nichter, USACE Louisville
Eileen Mohr, Ohio EPA, NEDO, DERR
Katie Elgin, OHARNG RTLS
Glen Beckham, USACE Louisville
Mark Krivansky, AEC

ec: Mike Eberle, Ohio EPA, NEDO, DERR
Todd Fisher, Ohio EPA, NEDO, DERR

DRAFT

FACILITY-WIDE GROUNDWATER MONITORING PROGRAM

INVESTIGATION-DERIVED WASTE CHARACTERIZATION AND DISPOSAL PLAN WELL REDEVELOPMENT ACTIVITIES 2009

RAVENNA ARMY AMMUNITION PLANT,
RAVENNA, OHIO

MARC Contract Number W912QR-04-D-0036
Delivery Order No. 0006

Prepared for:

U.S. Army Corps of Engineers
600 Martin Luther King Jr. Place
Louisville, Kentucky 40202

Prepared by:

Environmental Quality Management, Inc.
1800 Carillon Boulevard
Cincinnati Ohio 45240

July 2009

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APPENDICES

Appendix 1 Investigation-Derived Waste Analytical Report

ACRONYMS

AOC	Area of Concern
EQM	Environmental Quality Management, Inc.
EPA	U.S. Environmental Protection Agency
IDW	Investigation-derived wastes
Ohio EPA	Ohio Environmental Protection Agency
PPE	Personal protective equipment
RCRA	Resource Conservation and Recovery Act
RVAAP	Ravenna Army Ammunition Plant
SAP	Sampling and Analysis Plan
SVOC	Semi-volatile organic compounds
TCLP	Toxicity Characteristic Leaching Procedure
USACE	US Army Corps of Engineers
VOC	Volatile organic compounds

1.0 INTRODUCTION

Monitoring well redevelopment activities were conducted during June 2009 at the Ravenna Army Ammunition Plant (RVAAP), Ravenna, Ohio, resulting in the generation of investigation-derived wastes (IDW) consisting of purge-water and decontamination water wastes. The IDW purge/decontamination water was generated in the course of redeveloping each well. The purpose of this report is to characterize and classify the IDW for proper disposal. The report includes:

- A summary of the IDW generated and its origin,
- A review of the analytical results used for waste characterization,
- Classification of the IDW per the *Facility Wide Sampling and Analysis Plan*,
- Recommendations for disposal.

This document follows guidance established by the US Army Corps of Engineers (USACE) and the Ohio EPA regarding IDW disposition at RVAAP.

2.0 OPERATIONAL HISTORY AND WASTE GENERATION

Information regarding the operational history and suspected contaminants for the Facility Wide Groundwater Monitoring Program Plan is presented in Section 1.2 of the *Final Part 1- Sampling and Analysis Plan Addendum for the Facility-Wide Groundwater Monitoring Program Plan at the Ravenna Army Ammunition Plant, Ravenna, Ohio* (SAP Addendum) (Portage, 2004). Section 4.6 of the SAP Addendum describes procedures used for sampling and managing IDW at RVAAP.

Water (purged groundwater and decontamination water) IDW was generated during the redevelopment activities. The water collected from the 7 Areas of Concern (AOCs) where the wells were redeveloped was stored in drums labeled for disposal. The decontamination water was mixed with the purge water. Decontamination procedures are described in Section 4.3.8 Decontamination Procedures of the Facility Wide SAP.

The drum container label number, the type and size of drum container used, estimated volume within each drum, and the source of purge waste water or decontamination fluid is presented in Table 2.1 below.

Table 2.1. IDW Inventory of Drums

Drum Label	Drum Type & Size	Contents	Estimated Volume	Location/Source
EQM 2009-8	55 Gal. Steel	Purge/decontamination water	~50-gallons	Load Lines 6-9 and 12, Building 1200, Atlas Scrap Yard
EQM 2009-9	55 Gal. Steel	Purge/decontamination water	~50-gallons	Load Lines 6-9 and 12, Building 1200, Atlas Scrap Yard
EQM 2009-10	55 Gal. Steel	Purge/decontamination water	~50-gallons	Load Lines 6-9 and 12, Building 1200, Atlas Scrap Yard

3.0 MANAGEMENT OF ENVIRONMENTAL MEDIA

All environmental media were managed in a manner that minimized potential risk to human health and the environment. IDW was handled as nonhazardous material pending waste characterization and classification based on analytical results. The Facility-Wide SAP (SAIC, 2001) and the Final Part 1 Sampling and Analysis Plan (Portage, 2004) describe approved procedures used for containerizing and handling IDW.

All liquid indigenous IDW generated from each monitoring well that was redeveloped was placed into the 55-gallon drum as previously agreed upon by RVAAP, USACE and Ohio EPA. The water was transferred daily from each well location after redevelopment by closed-top 5-gallon buckets to the appropriately labeled 55-gallon drum located and staged inside Building 1036.

4.0 DISCUSSION OF ANALYTICAL RESULTS

Per Section 7.4 of the *Facility-Wide SAP* (2001), IDW Characterization and Classification for Disposal, all IDW indigenous wastes were characterized for disposal by taking a composite sample collected from the waste stream. The waste stream had a composite sample taken by using a "drum thief" until a total of approximately 4 liters was withdrawn in equal amounts from each of the drums. The waste stream composite sample was submitted to TestAmerica Laboratories, North Canton for full toxicity characteristic leaching procedure (TCLP) analysis using the following methods in accordance with the Facility-Wide SAP (SAIC, 2001):

- TCLP Mercury by SW846 1311/7470A
- TCLP Metals (Silver, arsenic, barium, cadmium, chromium, lead, and selenium) by SW846 1311/6010B
- TCLP Semi-volatile organic compounds (SVOCs) by SW846 1311/8270C
- TCLP Volatile organic compounds (VOCs) by SW846 1311/8260B
- Reactive Cyanide by SW846 7.3.3
- Reactive Sulfide by SW846 7.3.4
- Flash Point by SW846 1010
- pH by SW846 9040B

A trip blank was submitted with the samples and analyzed for Volatile Organic Compounds. The IDW analytical results are presented in Appendix 1.

5.0 RECOMMENDATIONS FOR DISPOSAL

Table 7-1 in the *Facility-Wide SAP* (SAIC, 2001) presents all the maximum concentration of contaminants for the toxicity characteristic for hazardous wastes as per 40 CFR 261.24. Analytical results for the June 2009 redevelopment waters IDW were

compared against these criteria to determine whether waste streams generated were potentially hazardous or non-hazardous.

5.1 Analytical Results

IDW was generated during the well redevelopment activities. After comparing the analytical data results generated from redevelopment activities to the contaminants and their regulatory levels from Table 7-1 1 in the *Facility-Wide SAP* (SAIC, 2001), the data indicated that no regulatory criteria for Resource Conservation and Recovery Act (RCRA) hazardous waste determinations were exceeded. Table 5.1 below presents the detected results compared to the regulatory characteristic for hazardous wastes as per 40 CFR 261.24.

It is recommended that the drums containing the redevelopment water be classified as contaminated, but non-hazardous and that it be sent off-site for disposal to a permitted water treatment facility in accordance with the *Facility-Wide SAP* (SAIC, 2001) guidance under Section 7.0 "Investigation-Derived Waste".

Table 5.1 Detected Analytical Results

Sample ID	Detected Contaminant	Detected Result	Regulatory Level[1]	Above Regulatory Yes/No
FWG-IDW-MWPURGEAPRIL2009	Barium	0.071mg/L J	100 mg/L	No
	Flashpoint	>180°F	<140°F	No
	pH	7.4	<2 or >12.5	No
FWG-IDW-MWTBApril2009	None detected			

J = Estimated result. Result is less than reporting limit.
Note that the flags used to qualify the data are consistent with USACE Laboratory Chemistry Guidelines and the RVAAP quarterly groundwater reports.
1 = USEPA Regulatory Characteristic Levels (40 CFR 261.20 through 24).

5.2 Summary of Disposal Recommendations

It is recommended that all drums be classified as contaminated, but non-hazardous and that they be sent off-site for disposal to a permitted water treatment facility. The TCLP/Characteristic test results for the composite sample shows that no chemical was detected in levels that required a labeling of hazardous waste. Table 5.2 presents a summary of each drum and the recommended disposal options for the waste streams presented and previously discussed.

Table 5.2. Summary of Drum Containers, TCLP/Characteristic Waste Criteria, and Disposal Recommendations

Drum Container Label	Media	TCLP Criteria	Disposal Recommendation
EQM 2009-8	Water	Maximum Concentration of Contaminants NOT exceeded	Off-Site Non-Hazardous Disposal
EQM 2009-9	Water	Maximum Concentration of Contaminants NOT exceeded	Off-Site Non-Hazardous Disposal
EQM 2009-10	Water	Maximum Concentration of Contaminants NOT exceeded	Off-Site Non-Hazardous Disposal

6.0 REFERENCES

SAIC, 2001. *Facility-Wide Sampling and Analysis Plan for Environmental Investigations at the Ravenna Army Ammunition Plant, Ravenna, Ohio.*

Portage Environmental, 2004, *RVAAP Facility Wide Groundwater Monitoring Program Plan.*

APPENDIX 1

INVESTIGATION-DERIVED WASTE ANALYTICAL REPORT

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

PROJECT NO. 30240.0006

RVAAP IDW

Lot #: A9F180190

Erik Corbin

Environmental Quality Mgt., I
1800 Carillon Blvd
Cincinnati, OH 45240

TESTAMERICA LABORATORIES, INC.

Approved for release.
Mark J. Loeb
Project Manager II
7/8/2009 4:10 PM

Mark J. Loeb
Project Manager
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July 8, 2009

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ACCREDITED IN ACCORDANCE WITH nelac

CASE NARRATIVE

A9F180190

The following report contains the analytical results for two water samples submitted to TestAmerica North Canton by Environmental Quality Mgt., Inc. from the RVAAP IDW Site, project number 30240.0006. The samples were received June 18, 2009, according to documented sample acceptance procedures.

The Reactive Cyanide and Reactive Sulfide analyses were performed at the TestAmerica Buffalo Laboratory.

TestAmerica utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Angye Dragotta, Erik Corbin, and Jackie Doan on June 29, 2009. A summary of QC data for these analyses is included at the back of the report.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Please refer to the Quality Control Elements Narrative following this case narrative for additional quality control information.

If you have any questions, please call the Project Manager, Mark J. Loeb, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT."

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The temperature of the cooler upon sample receipt was 3.7°C.

CASE NARRATIVE (continued)

GC/MS VOLATILES

The matrix spike/matrix spike duplicate(s) for FWG-IDW-MWPURGEJUNE2009 had recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

The matrix spike/matrix spike duplicate(s) for batch(es) 9176333 had recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

GC/MS SEMIVOLATILES

There were no client requested Matrix Spike/Matrix Spike Duplicate (MS/MSD) samples in batch(es) 9175043. Therefore, the laboratory has included a Laboratory Control Sample Duplicate (LCSD) in the QC batch. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system.

Batch(es) 9175043 had RPDs outside QC criteria in the LCS/LCSD, but recoveries were within QC criteria; therefore, no corrective action was required.

METALS

The sample(s) that contain results between the MDL and the RL were flagged with "B". There is the possibility of false positive or mis-identification at these quantitation levels. The acceptance criteria for the ICB, CCB, and Method Blank are +/- the standard reporting limit (SRL).

GENERAL CHEMISTRY

The analytical results met the requirements of the laboratory's QA/QC program.

MANUAL INTEGRATION SUMMARY

Manual integrations were performed on samples(s) reported herein. A list of samples and analytes for which manual integration was necessary is provided following this Case Narrative.

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC hatch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC hatch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will he reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

MANUAL INTEGRATION SUMMARY

Lot A9F180190

Client ID: FWG-IDW-MWPURGEJUNE
Compound Name: 2-Fluorophenol
Instrument ID: a4hp7.i
File Name: LE6RC1AD.D
Inj. Date and Time: 25-JUN-2009 13:27
Manual Integration Reason: Peak Tailing or Fronting

Client ID: FWG-IDW-MWPURGEJUNE
Compound Name: 2-Chlorophenol-d4
Instrument ID: a4hp7.i
File Name: LE6RC1AD.D
Inj. Date and Time: 25-JUN-2009 13:27
Manual Integration Reason: Poor Chromatography

Client ID: FWG-IDW-MWPURGEJUNE
Compound Name: 1,4-Dichlorobenzene-d4
Instrument ID: a4hp7.i
File Name: LE6RC1AD.D
Inj. Date and Time: 25-JUN-2009 13:27
Manual Integration Reason: Poor Chromatography

Client ID: FWG-IDW-MWPURGEJUNE
Compound Name: 1,2-Dichlorobenzene-d4
Instrument ID: a4hp7.i
File Name: LE6RC1AD.D
Inj. Date and Time: 25-JUN-2009 13:27
Manual Integration Reason: Peak Tailing or Fronting

Client ID: FWG-IDW-MWPURGEJUNE
Compound Name: Terphenyl-d14
Instrument ID: a4hp7.i
File Name: LE6RC1AD.D
Inj. Date and Time: 25-JUN-2009 13:27
Manual Integration Reason: Peak not found

EXECUTIVE SUMMARY - Detection Highlights

A9F180190

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWG-IDW-MWPURGEJUNE2009 06/18/09 08:30 002				
Barium - TCLP	0.071 B	10.0	mg/L	SW846 6010B
Flashpoint	>180		deg F	SW846 1010
pH (liquid)	7.4		No Units	SW846 9040B

ANALYTICAL METHODS SUMMARY

A9F180190

PARAMETER	ANALYTICAL METHOD
pH Aqueous	SW846 9040B
Inductively Coupled Plasma (ICP) Metals	SW846 6010B
Mercury in Liquid Waste (Manual Cold-Vapor)	SW846 7470A
Pensky-Martens Method for Determining Ignitability	SW846 1010
Semivolatile Organic Compounds by GC/MS	SW846 8270C
Volatile Organics by GC/MS	SW846 8260B

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

A9F180190

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LE6QG	001	FWG-IDW-MWTBJUNE2009	06/18/09	08:00
LE6RC	002	FWG-IDW-MWPURGEJUNE2009	06/18/09	08:30

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Environmental Quality Mgt., Inc.

Client Sample ID: FWG-IDW-MWTBJUNE2009

GC/MS Volatiles

Lot-Sample #...: A9F180190-001 **Work Order #...:** LE6QG1AA **Matrix.....:** WG
Date Sampled...: 06/18/09 08:00 **Date Received..:** 06/18/09
Prep Date.....: 06/24/09 **Analysis Date..:** 06/24/09
Prep Batch #...: 9176333
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzene	ND	5.0	ug/L	0.13
2-Butanone (MEK)	ND	20	ug/L	0.57
Carbon tetrachloride	ND	5.0	ug/L	0.13
Chlorobenzene	ND	5.0	ug/L	0.15
Chloroform	ND	5.0	ug/L	0.16
1,2-Dichloroethane	ND	5.0	ug/L	0.22
1,1-Dichloroethylene	ND	5.0	ug/L	0.19
Tetrachloroethylene	ND	5.0	ug/L	0.29
Trichloroethylene	ND	5.0	ug/L	0.17
Vinyl chloride	ND	5.0	ug/L	0.22

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	92	(78 - 115)
1,2-Dichloroethane-d4	90	(77 - 120)
Toluene-d8	105	(78 - 111)
4-Bromofluorobenzene	91	(80 - 114)

Environmental Quality Mgt., Inc.

Client Sample ID: FWG-IDW-MWPURGEJUNE2009

TCLP GC/MS Volatiles

Lot-Sample #...: A9F180190-002 **Work Order #...:** LE6RC1AA **Matrix.....:** WG
Date Sampled...: 06/18/09 08:30 **Date Received..:** 06/18/09
Leach Date.....: 06/23/09 **Prep Date.....:** 06/25/09 **Analysis Date..:** 06/25/09
Leach Batch #..: P917403 **Prep Batch #...:** 9175561
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzene	ND	0.025	mg/L	0.00013
2-Butanone (MEK)	ND	0.25	mg/L	0.00057
Carbon tetrachloride	ND	0.025	mg/L	0.00013
Chlorobenzene	ND	0.025	mg/L	0.00015
Chloroform	ND	0.025	mg/L	0.00016
1,2-Dichloroethane	ND	0.025	mg/L	0.00022
1,1-Dichloroethylene	ND	0.070	mg/L	0.00019
Tetrachloroethylene	ND	0.070	mg/L	0.00029
Trichloroethylene	ND	0.050	mg/L	0.00017
Vinyl chloride	ND	0.025	mg/L	0.00022

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	93	(86 - 125)
1,2-Dichloroethane-d4	89	(80 - 122)
Toluene-d8	103	(90 - 122)
4-Bromofluorobenzene	92	(84 - 125)

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

Environmental Quality Mgt., Inc.

Client Sample ID: FWG-IDW-MWPURGEJUNE2009

TCLP GC/MS Semivolatiles

Lot-Sample #...: A9F180190-002 **Work Order #...:** LE6RC1AD **Matrix.....:** WG
Date Sampled...: 06/18/09 08:30 **Date Received..:** 06/18/09
Leach Date.....: 06/23/09 **Prep Date.....:** 06/24/09 **Analysis Date..:** 06/25/09
Leach Batch #..: P917401 **Prep Batch #...:** 9175043
Dilution Factor: 1
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
o-Cresol	ND	0.0040	mg/L	0.00080
m-Cresol & p-Cresol	ND	0.040	mg/L	0.00075
1,4-Dichlorobenzene	ND	0.0040	mg/L	0.00034
2,4-Dinitrotoluene	ND	0.020	mg/L	0.00027
Hexachlorobenzene	ND	0.020	mg/L	0.00010
Hexachlorobutadiene	ND	0.020	mg/L	0.00027
Hexachloroethane	ND	0.020	mg/L	0.00080
Nitrobenzene	ND	0.0040	mg/L	0.000040
Pentachlorophenol	ND	0.040	mg/L	0.0024
Pyridine	ND	0.020	mg/L	0.00035
2,4,5-Trichloro-phenol	ND	0.020	mg/L	0.00030
2,4,6-Trichloro-phenol	ND	0.020	mg/L	0.00080

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	53	(27 - 110)
2-Fluorobiphenyl	53	(20 - 110)
Terphenyl-d14	68	(44 - 110)
Phenol-d5	34	(10 - 110)
2-Fluorophenol	41	(10 - 110)
2,4,6-Tribromophenol	44	(28 - 110)

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

Environmental Quality Mgt., Inc.

Client Sample ID: FWG-IDW-MWPURGEJUNE2009

TCLP Metals

Lot-Sample #...: A9F180190-002 **Matrix.....:** WG
Date Sampled...: 06/18/09 08:30 **Date Received..:** 06/18/09
Leach Date.....: 06/23/09 **Leach Batch #..:** P917401

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9175026						
Mercury	ND	0.0020	mg/L	SW846 7470A	06/24/09	LE6RC1AN
		Dilution Factor: 1		MDL.....: 0.00012		
Arsenic	ND	0.50	mg/L	SW846 6010B	06/24-06/25/09	LE6RC1AF
		Dilution Factor: 1		MDL.....: 0.0032		
Barium	**0.071 B**	**10.0**	**mg/L**	**SW846 6010B**	**06/24-06/25/09**	**LE6RC1AG**
		Dilution Factor: 1		MDL.....: 0.00067		
Cadmium	ND	0.10	mg/L	SW846 6010B	06/24-06/25/09	LE6RC1AH
		Dilution Factor: 1		MDL.....: 0.00066		
Chromium	ND	0.50	mg/L	SW846 6010B	06/24-06/25/09	LE6RC1AJ
		Dilution Factor: 1		MDL.....: 0.0022		
Lead	ND	0.50	mg/L	SW846 6010B	06/24-06/25/09	LE6RC1AK
		Dilution Factor: 1		MDL.....: 0.0019		
Selenium	ND	0.25	mg/L	SW846 6010B	06/24-06/25/09	LE6RC1AL
		Dilution Factor: 1		MDL.....: 0.0041		
Silver	ND	0.50	mg/L	SW846 6010B	06/24-06/25/09	LE6RC1AM
		Dilution Factor: 1		MDL.....: 0.0022		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWG-IDW-MWPURGEJUNE2009

General Chemistry

Lot-Sample #...: A9F180190-002 **Work Order #...:** LE6RC **Matrix.....:** WG
Date Sampled...: 06/18/09 08:30 **Date Received..:** 06/18/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (liquid)	**7.4**		**No Units**	**SW846 9040B**	**06/18/09**	**9169530**
	Dilution Factor: 1			MDL.....:		
Flashpoint	**>180**		**deg F**	**SW846 1010**	**06/25/09**	**9176475**
	Dilution Factor: 1			MDL.....:		

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

QUALITY CONTROL SECTION

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A9F180190 **Work Order #...:** LFLL91AA **Matrix.....:** WATER
MB Lot-Sample #: A9F250000-333

Prep Date.....: 06/24/09
Analysis Date..: 06/24/09 **Prep Batch #...:** 9176333
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	5.0	ug/L	SW846 8260B
2-Butanone (MEK)	ND	20	ug/L	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/L	SW846 8260B
Chlorobenzene	ND	5.0	ug/L	SW846 8260B
Chloroform	ND	5.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/L	SW846 8260B
1,1-Dichloroethylene	ND	5.0	ug/L	SW846 8260B
Tetrachloroethylene	ND	5.0	ug/L	SW846 8260B
Trichloroethylene	ND	5.0	ug/L	SW846 8260B
Vinyl chloride	ND	5.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(78 - 115)
1,2-Dichloroethane-d4	90	(77 - 120)
Toluene-d8	104	(78 - 111)
4-Bromofluorobenzene	91	(80 - 114)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

TCLP GC/MS Volatiles

Client Lot #...: A9F180190 **Work Order #...:** LFFGC1AA **Matrix.....:** WATER
MB Lot-Sample #: A9F230000-197
Leach Date.....: 06/23/09 **Prep Date.....:** 06/25/09 **Analysis Date..:** 06/25/09
Leach Batch #..: P917403 **Prep Batch #...:** 9175561
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	0.025	mg/L	SW846 8260B
2-Butanone (MEK)	ND	0.25	mg/L	SW846 8260B
Carbon tetrachloride	ND	0.025	mg/L	SW846 8260B
Chlorobenzene	ND	0.025	mg/L	SW846 8260B
Chloroform	ND	0.025	mg/L	SW846 8260B
1,2-Dichloroethane	ND	0.025	mg/L	SW846 8260B
1,1-Dichloroethylene	ND	0.070	mg/L	SW846 8260B
Tetrachloroethylene	ND	0.070	mg/L	SW846 8260B
Trichloroethylene	ND	0.050	mg/L	SW846 8260B
Vinyl chloride	ND	0.025	mg/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	93	(86 - 125)
1,2-Dichloroethane-d4	89	(80 - 122)
Toluene-d8	105	(90 - 122)
4-Bromofluorobenzene	92	(84 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

TCLP GC/MS Semivolatiles

Client Lot #...: A9F180190 **Work Order #...:** LFHFK1AA **Matrix.....:** WATER
MB Lot-Sample #: A9F240000-043
Leach Date.....: 06/23/09 **Prep Date.....:** 06/24/09 **Analysis Date..:** 06/25/09
Leach Batch #..: P917401 **Prep Batch #...:** 9175043
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
o-Cresol	ND	0.0040	mg/L	SW846 8270C
m-Cresol & p-Cresol	ND	0.040	mg/L	SW846 8270C
1,4-Dichlorobenzene	ND	0.0040	mg/L	SW846 8270C
2,4-Dinitrotoluene	ND	0.020	mg/L	SW846 8270C
Hexachlorobenzene	ND	0.020	mg/L	SW846 8270C
Hexachlorobutadiene	ND	0.020	mg/L	SW846 8270C
Hexachloroethane	ND	0.020	mg/L	SW846 8270C
Nitrobenzene	ND	0.0040	mg/L	SW846 8270C
Pentachlorophenol	ND	0.040	mg/L	SW846 8270C
Pyridine	ND	0.020	mg/L	SW846 8270C
2,4,5-Trichloro-phenol	ND	0.020	mg/L	SW846 8270C
2,4,6-Trichloro-phenol	ND	0.020	mg/L	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	70	(27 - 110)
2-Fluorobiphenyl	69	(20 - 110)
Terphenyl-d14	86	(44 - 110)
Phenol-d5	66	(10 - 110)
2-Fluorophenol	69	(10 - 110)
2,4,6-Tribromophenol	76	(28 - 110)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

TCLP Metals

Client Lot #...: A9F180190 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A9F230000-189 **Prep Batch #...:** 9175026						
Leach Date.....: 06/23/09 **Leach Batch #..:** P917401						
Mercury	ND	0.0020	mg/L	SW846 7470A	06/24/09	LFFFE1AK
		Dilution Factor: 1				
Arsenic	ND	0.50	mg/L	SW846 6010B	06/24-06/25/09	LFFFE1AC
		Dilution Factor: 1				
Barium	**0.0034 B**	**10.0**	**mg/L**	**SW846 6010B**	**06/24-06/25/09**	**LFFFE1AD**
		Dilution Factor: 1				
Cadmium	ND	0.10	mg/L	SW846 6010B	06/24-06/25/09	LFFFE1AE
		Dilution Factor: 1				
Chromium	**0.0024 B**	**0.50**	**mg/L**	**SW846 6010B**	**06/24-06/25/09**	**LFFFE1AF**
		Dilution Factor: 1				
Lead	ND	0.50	mg/L	SW846 6010B	06/24-06/25/09	LFFFE1AG
		Dilution Factor: 1				
Selenium	**0.0046 B**	**0.25**	**mg/L**	**SW846 6010B**	**06/24-06/25/09**	**LFFFE1AH**
		Dilution Factor: 1				
Silver	ND	0.50	mg/L	SW846 6010B	06/24-06/25/09	LFFFE1AJ
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

METHOD BLANK REPORT

TCLP Metals

Client Lot #...: A9F180190 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A9F240000-026 **Prep Batch #...:** 9175026						
Mercury	ND	0.0020	mg/L	SW846 7470A	06/24/09	LFHE11AJ
		Dilution Factor: 1				
Arsenic	ND	0.50	mg/L	SW846 6010B	06/24-06/25/09	LFHE11AA
		Dilution Factor: 1				
Barium	ND	10.0	mg/L	SW846 6010B	06/24-06/25/09	LFHE11AC
		Dilution Factor: 1				
Cadmium	ND	0.10	mg/L	SW846 6010B	06/24-06/25/09	LFHE11AD
		Dilution Factor: 1				
Chromium	ND	0.50	mg/L	SW846 6010B	06/24-06/25/09	LFHE11AE
		Dilution Factor: 1				
Lead	ND	0.50	mg/L	SW846 6010B	06/24-06/25/09	LFHE11AF
		Dilution Factor: 1				
Selenium	ND	0.25	mg/L	SW846 6010B	06/24-06/25/09	LFHE11AG
		Dilution Factor: 1				
Silver	ND	0.50	mg/L	SW846 6010B	06/24-06/25/09	LFHE11AH
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9F180190 **Work Order #...:** LFLL91AC **Matrix.....:** WATER
LCS Lot-Sample#: A9F250000-333
Prep Date.....: 06/24/09 **Analysis Date..:** 06/24/09
Prep Batch #...: 9176333
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Vinyl chloride	87	(55 - 121)	SW846 8260B
1,1-Dichloroethylene	**82**	**(65 - 119)**	**SW846 8260B**
Chloroform	92	(87 - 119)	SW846 8260B
1,2-Dichloroethane	85	(83 - 122)	SW846 8260B
2-Butanone (MEK)	89	(53 - 173)	SW846 8260B
Carbon tetrachloride	69 a	(81 - 126)	SW846 8260B
Trichloroethylene	**97**	**(80 - 122)**	**SW846 8260B**
Benzene	**95**	**(79 - 116)**	**SW846 8260B**
Tetrachloroethylene	104	(83 - 116)	SW846 8260B
Chlorobenzene	**95**	**(81 - 115)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(78 - 115)
1,2-Dichloroethane-d4	92	(77 - 120)
Toluene-d8	106	(78 - 111)
4-Bromofluorobenzene	98	(80 - 114)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9F180190 **Work Order #...:** LFKDJ1AA **Matrix.....:** WATER
LCS Lot-Sample#: A9F240000-561
Prep Date.....: 06/25/09 **Analysis Date..:** 06/25/09
Prep Batch #...: 9175561
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Benzene	**96**	**(76 - 118)**	**SW846 8260B**
2-Butanone (MEK)	95	(40 - 110)	SW846 8260B
Carbon tetrachloride	66 a	(71 - 124)	SW846 8260B
Chlorobenzene	**95**	**(76 - 113)**	**SW846 8260B**
Chloroform	91	(82 - 117)	SW846 8260B
1,2-Dichloroethane	87	(78 - 122)	SW846 8260B
1,1-Dichloroethylene	**84**	**(67 - 128)**	**SW846 8260B**
Tetrachloroethylene	106	(64 - 121)	SW846 8260B
Trichloroethylene	**98**	**(76 - 119)**	**SW846 8260B**
Vinyl chloride	90	(47 - 123)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	98	(86 - 124)
1,2-Dichloroethane-d4	93	(80 - 122)
Toluene-d8	107	(90 - 122)
4-Bromofluorobenzene	98	(84 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9F180190 **Work Order #...:** LFHFK1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A9F240000-043 LFHFK1AD-LCSD
Prep Date.....: 06/24/09 **Analysis Date..:** 06/25/09
Prep Batch #...: 9175043
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
o-Cresol	79	(23 - 110)			SW846 8270C
	65	(23 - 110)	20	(0-30)	SW846 8270C
m-Cresol & p-Cresol	70	(28 - 110)			SW846 8270C
	64	(28 - 110)	8.8	(0-30)	SW846 8270C
1,4-Dichlorobenzene	83	(13 - 110)			SW846 8270C
	57 p	(13 - 110)	37	(0-30)	SW846 8270C
2,4-Dinitrotoluene	81	(45 - 119)			SW846 8270C
	80	(45 - 119)	1.2	(0-30)	SW846 8270C
Hexachlorobenzene	79	(46 - 112)			SW846 8270C
	73	(46 - 112)	7.6	(0-30)	SW846 8270C
Hexachlorobutadiene	70	(10 - 110)			SW846 8270C
	57	(10 - 110)	21	(0-30)	SW846 8270C
Hexachloroethane	66	(10 - 110)			SW846 8270C
	52	(10 - 110)	22	(0-30)	SW846 8270C
Nitrobenzene	81	(29 - 118)			SW846 8270C
	66	(29 - 118)	20	(0-30)	SW846 8270C
Pentachlorophenol	65	(10 - 116)			SW846 8270C
	66	(10 - 116)	1.6	(0-30)	SW846 8270C
Pyridine	68	(15 - 110)			SW846 8270C
	56	(15 - 110)	18	(0-30)	SW846 8270C
2,4,5-Trichloro-phenol	74	(36 - 110)			SW846 8270C
	71	(36 - 110)	4.2	(0-30)	SW846 8270C
2,4,6-Trichloro-phenol	70	(32 - 110)			SW846 8270C
	66	(32 - 110)	5.8	(0-30)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	75	(27 - 110)
	60	(27 - 110)
2-Fluorobiphenyl	68	(20 - 110)
	59	(20 - 110)
Terphenyl-d14	83	(44 - 110)
	82	(44 - 110)
Phenol-d5	58	(10 - 110)
	49	(10 - 110)
2-Fluorophenol	66	(10 - 110)

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9F180190 **Work Order #...:** LFHFK1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A9F240000-043 LFHFK1AD-LCSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
	53	(10 - 110)
2,4,6-Tribromophenol	72	(28 - 110)
	71	(28 - 110)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

p Relative percent difference (RPD) is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TCLP Metals

Client Lot #...: A9F180190 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A9F240000-026 **Prep Batch #...:** 9175026					
Mercury	95	(50 - 150)	SW846 7470A	06/24/09	LFHE11AT
		Dilution Factor: 1			
Arsenic	94	(50 - 150)	SW846 6010B	06/24-06/25/09	LFHE11AK
		Dilution Factor: 1			
Barium	94	(50 - 150)	SW846 6010B	06/24-06/25/09	LFHE11AL
		Dilution Factor: 1			
Cadmium	100	(50 - 150)	SW846 6010B	06/24-06/25/09	LFHE11AM
		Dilution Factor: 1			
Chromium	97	(50 - 150)	SW846 6010B	06/24-06/25/09	LFHE11AN
		Dilution Factor: 1			
Lead	96	(50 - 150)	SW846 6010B	06/24-06/25/09	LFHE11AP
		Dilution Factor: 1			
Selenium	98	(50 - 150)	SW846 6010B	06/24-06/25/09	LFHE11AQ
		Dilution Factor: 1			
Silver	111	(50 - 150)	SW846 6010B	06/24-06/25/09	LFHE11AR
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A9F180190 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (liquid)		Work Order #: LE7191AA	LCS Lot-Sample#: A9F180000-530		
	99	(97 - 103)	SW846 9040B	06/18/09	9169530
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9F180190 **Work Order #...:** LFCH81AJ-MS **Matrix.....:** WATER
MS Lot-Sample #: A9F200142-001 LFCH81AK-MSD
Date Sampled...: 06/19/09 11:20 **Date Received..:** 06/20/09
Prep Date.....: 06/24/09 **Analysis Date..:** 06/24/09
Prep Batch #...: 9176333
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethylene	**85**	**(57 - 138)**			**SW846 8260B**
	81	**(57 - 138)**	**4.8**	**(0-15)**	**SW846 8260B**
Vinyl chloride	96	(52 - 122)			SW846 8260B
	92	(52 - 122)	3.7	(0-30)	SW846 8260B
Chloroform	91	(85 - 124)			SW846 8260B
	93	(85 - 124)	2.4	(0-30)	SW846 8260B
1,2-Dichloroethane	85	(84 - 126)			SW846 8260B
	84	(84 - 126)	1.4	(0-30)	SW846 8260B
2-Butanone (MEK)	101	(52 - 152)			SW846 8260B
	97	(52 - 152)	4.2	(0-30)	SW846 8260B
Carbon tetrachloride	64 a	(80 - 125)			SW846 8260B
	69 a	(80 - 125)	8.1	(0-30)	SW846 8260B
Trichloroethylene	**98**	**(58 - 141)**			**SW846 8260B**
	99	**(58 - 141)**	**0.64**	**(0-17)**	**SW846 8260B**
Benzene	**97**	**(73 - 123)**			**SW846 8260B**
	96	**(73 - 123)**	**1.9**	**(0-11)**	**SW846 8260B**
Tetrachloroethylene	105	(75 - 116)			SW846 8260B
	105	(75 - 116)	0.21	(0-30)	SW846 8260B
Chlorobenzene	**95**	**(70 - 122)**			**SW846 8260B**
	96	**(70 - 122)**	**0.14**	**(0-14)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	99	(78 - 115)
	95	(78 - 115)
1,2-Dichloroethane-d4	91	(77 - 120)
	91	(77 - 120)
Toluene-d8	106	(78 - 111)
	107	(78 - 111)
4-Bromofluorobenzene	94	(80 - 114)
	97	(80 - 114)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TCLP GC/MS Volatiles

Client Lot #...: A9F180190 **Work Order #...:** LE6RC1CD-MS **Matrix.....:** WG
MS Lot-Sample #: A9F180190-002 LE6RC1CE-MSD
Date Sampled...: 06/18/09 08:30 **Date Received..:** 06/18/09
Leach Date.....: 06/23/09 **Prep Date.....:** 06/25/09 **Analysis Date..:** 06/25/09
Leach Batch #..: P917403 **Prep Batch #...:** 9175561
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**96**	**(76 - 117)**			**SW846 8260B**
	96	**(76 - 117)**	**0.50**	**(0-30)**	**SW846 8260B**
2-Butanone (MEK)	104	(37 - 110)			SW846 8260B
	105	(37 - 110)	0.44	(0-30)	SW846 8260B
Carbon tetrachloride	68 a	(72 - 124)			SW846 8260B
	69 a	(72 - 124)	2.8	(0-30)	SW846 8260B
Chlorobenzene	**96**	**(72 - 114)**			**SW846 8260B**
	98	**(72 - 114)**	**1.6**	**(0-30)**	**SW846 8260B**
Chloroform	90	(82 - 117)			SW846 8260B
	92	(82 - 117)	1.5	(0-30)	SW846 8260B
1,2-Dichloroethane	87	(80 - 120)			SW846 8260B
	86	(80 - 120)	1.5	(0-30)	SW846 8260B
1,1-Dichloroethylene	**82**	**(67 - 129)**			**SW846 8260B**
	84	**(67 - 129)**	**1.4**	**(0-30)**	**SW846 8260B**
Tetrachloroethylene	102	(60 - 119)			SW846 8260B
	108	(60 - 119)	5.8	(0-30)	SW846 8260B
Trichloroethylene	**98**	**(72 - 121)**			**SW846 8260B**
	103	**(72 - 121)**	**5.0**	**(0-30)**	**SW846 8260B**
Vinyl chloride	90	(54 - 118)			SW846 8260B
	92	(54 - 118)	3.2	(0-30)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	95	(86 - 125)
	94	(86 - 125)
1,2-Dichloroethane-d4	91	(80 - 122)
	91	(80 - 122)
Toluene-d8	105	(90 - 122)
	109	(90 - 122)
4-Bromofluorobenzene	98	(84 - 125)
	98	(84 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TCLP Metals

Client Lot #...: A9F180190 **Matrix.....:** WG
Date Sampled...: 06/18/09 08:30 **Date Received..:** 06/18/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A9F180190-002 **Prep Batch #...:** 9175026							
Leach Date.....: 06/23/09 **Leach Batch #..:** P917401							
Mercury	91	(50 - 150)			SW846 7470A	06/24/09	LE6RC1CA
	93	(50 - 150)	2.2	(0-20)	SW846 7470A	06/24/09	LE6RC1CC
		Dilution Factor: 1					
Arsenic	92	(50 - 150)			SW846 6010B	06/24-06/25/09	LE6RC1AU
	92	(50 - 150)	0.18	(0-20)	SW846 6010B	06/24-06/25/09	LE6RC1AV
		Dilution Factor: 5					
Barium	92	(50 - 150)			SW846 6010B	06/24-06/25/09	LE6RC1AW
	92	(50 - 150)	0.43	(0-20)	SW846 6010B	06/24-06/25/09	LE6RC1AX
		Dilution Factor: 5					
Cadmium	98	(50 - 150)			SW846 6010B	06/24-06/25/09	LE6RC1A0
	99	(50 - 150)	0.37	(0-20)	SW846 6010B	06/24-06/25/09	LE6RC1A1
		Dilution Factor: 5					
Chromium	95	(50 - 150)			SW846 6010B	06/24-06/25/09	LE6RC1A2
	95	(50 - 150)	0.35	(0-20)	SW846 6010B	06/24-06/25/09	LE6RC1A3
		Dilution Factor: 5					
Lead	95	(50 - 150)			SW846 6010B	06/24-06/25/09	LE6RC1A4
	95	(50 - 150)	0.13	(0-20)	SW846 6010B	06/24-06/25/09	LE6RC1A5
		Dilution Factor: 5					
Selenium	94	(50 - 150)			SW846 6010B	06/24-06/25/09	LE6RC1A6
	95	(50 - 150)	0.71	(0-20)	SW846 6010B	06/24-06/25/09	LE6RC1A7
		Dilution Factor: 5					
Silver	97	(50 - 150)			SW846 6010B	06/24-06/25/09	LE6RC1A8
	97	(50 - 150)	0.31	(0-20)	SW846 6010B	06/24-06/25/09	LE6RC1A9
		Dilution Factor: 5					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A9F180190 **Work Order #...:** LE6G4-SMP LE6G4-DUP **Matrix.....:** WATER

Date Sampled...: 06/17/09 13:00 **Date Received..:** 06/18/09

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (liquid)						SD Lot-Sample #:	A9F180162-001	
	9.1	9.1	No Units	0.44	(0-20)	SW846 9040B	06/18/09	9169530

Dilution Factor: 1

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A9F180190 **Work Order #...:** LETHJ-SMP LETHJ-DUP **Matrix.....:** WATER

Date Sampled...: 06/09/09 11:00 **Date Received..:** 06/12/09

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Flashpoint						SD Lot-Sample #:	A9F120192-007	
	>180	>180	deg F	0.0	(0-20)	SW846 1010	06/25/09	9176475

Dilution Factor: 1

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: NORTH CANTON
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact			
Company Name: EQM	Client Project Manager: John Miller	Site Contact: E CORBIN	Lab Contact: M. LOEB
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City/State/Zip: CINCINNATI OH 45240	Email: JMiller@eqm.com		
Phone: 5138257500			
Project Name: RVAAP IDW	Method of Shipment/Carrier: EQ DROP OFF AT LAB		
Project Number: 30240.0006	Shipping/Tracking No: N/A		
PO# 151060			

COC No: 0001EQ
1 of 1 COCs

TAT if different from below
☐ 3 weeks
☒ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Analyses

Sample Identification	Sample Date	Sample Time	Air	Aqueous	Sediment	Solid	Other:	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:			TCLP VOCs	TCLP SVOCs	TCLP RCRA Metals	Cyanide/Sulfide Reactivity	pH Ignitability						Sample Specific Notes / Special Instructions:
FWG-IDW-MWTB June 2009	61809	0800		X						2					2	G	X										cooler IDW
FWG-IDW-MW Purge June 2009	61809	0830		X									5		2	G	X	X	X	X	X						R118
FWG-Cal																											R118

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

IDW Characterization

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	EQM	61809 0835	[signature]	EQM	6-18-09 0835
[signature]	EQM	6-18-09 1010	[signature]		
			Received in Laboratory by: [signature]	TA/NC	6/18/09 10:10

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TAL-0018 (1008)

TestAmerica Cooler Receipt Form/Narrative **Lot Number:** A9F180190
North Canton Facility

Client EQM Project RVAAP IDW By: [signature]
Cooler Received on 6-18-09 Opened on 6-18-09 (Signature)
FedEx ☐ UPS ☐ DHL ☐ FAS ☐ Stetson ☐ Client Drop Off ☒ TestAmerica Courier ☐ Other _____
TestAmerica Cooler # 8119 Multiple Coolers ☐ Foam Box ☐ Client Cooler ☐ Other _____

1. Were custody seals on the outside of the cooler(s)? Yes ☐ No ☒ Intact? Yes ☐ No ☐ NA ☒
   If YES, Quantity_____ Quantity Unsalvageable_____
   Were custody seals on the outside of cooler(s) signed and dated? Yes ☐ No ☐ NA ☒
   Were custody seals on the bottle(s)? Yes ☐ No ☒
   If YES, are there any exceptions? _____
2. Shippers' packing slip attached to the cooler(s)? Yes ☐ No ☒
3. Did custody papers accompany the sample(s)? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Were the custody papers signed in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☒ Foam ☐ None ☐ Other _____
6. Cooler temperature upon receipt 3.7 °C See back of form for multiple coolers/temps ☐
   METHOD: IR ☒ Other ☐ _____
   COOLANT: Wet Ice ☒ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐
7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels be reconciled with the COC? Yes ☒ No ☐
9. Were sample(s) at the correct pH upon receipt? Yes ☐ No ☐ NA ☒
10. Were correct bottle(s) used for the test(s) indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☒ NA ☐
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a trip blank present in the cooler(s)? Yes ☒ No ☐ Were VOAs on the COC? Yes ☒ No ☐

Contacted PM _____ Date _____ by _____ via Verbal ☐ Voice Mail ☐ Other ☐
Concerning _____

14. CHAIN OF CUSTODY

The following discrepancies occurred:

_____

15. SAMPLE CONDITION

Sample(s)_____ were received after the recommended holding time had expired.
Sample(s)_____ were received in a broken container.
Sample(s)_____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in Sample Receiving to meet recommended pH level(s). *Nitric Acid Lot#* 031909-HNO_3; *Sulfuric Acid Lot#* 100108-H_2SO_4; *Sodium Hydroxide Lot#* 073007 -*NaOH; Hydrochloric Acid Lot#* 092006-*HCl; Sodium Hydroxide and Zinc Acetate Lot#* 050205-$(CH_3COO)_2ZN/NaOH$. What time was preservative added to sample(s)? _____

Client ID	pH	Date	Initials

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials

Cooler #	Temp. °C	Method	Coolant

Discrepancies Cont'd:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

BUFFALO DATA

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Analytical Report

SDG Number: A9F180190

Project Description(s)
Work Order RSF0818 - Reactive Cyanide / Reactive Sulfide

For:

Mark Loeb

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

Sally Hoffman

Project Manager
Sally.Hoffman@testamericainc.com

Thursday, July 2, 2009

The test results in this report meet all NELAP requirements for analytes for which accreditation is required or available. Any exception to NELAP requirements are noted in this report. Persuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this test report should be directed to the TestAmerica Project manager who has signed this report.

TestAmerica Buffalo
Current Certifications

As of 1/27/2009

STATE	Program	Cert # / Lab ID
Arkansas	CWA, RCRA, SOIL	88-0686
California*	NELAP CWA, RCRA	01169CA
Connecticut	SDWA, CWA, RCRA, SOIL	PH-0568
Florida*	NELAP CWA, RCRA	E87672
Georgia*	SDWA,NELAP CWA, RCRA	956
Illinois*	NELAP SDWA, CWA, RCRA	200003
Iowa	SW/CS	374
Kansas*	NELAP SDWA, CWA, RCRA	E-10187
Kentucky	SDWA	90029
Kentucky UST	UST	30
Louisiana*	NELAP CWA, RCRA	2031
Maine	SDWA, CWA	NY0044
Maryland	SDWA	294
Massachusetts	SDWA, CWA	M-NY044
Michigan	SDWA	9937
Minnesota	SDWA,CWA, RCRA	036-999-337
New Hampshire*	NELAP SDWA, CWA	233701
New Jersey*	NELAP,SDWA, CWA, RCRA,	NY455
New York*	NELAP, AIR, SDWA, CWA, RCRA,CLP	10026
Oklahoma	CWA, RCRA	9421
Pennsylvania*	NELAP CWA,RCRA	68-00281
Tennessee	SDWA	02970
Texas*	NELAP CWA, RCRA	T104704412-08-TX
USDA	FOREIGN SOIL PERMIT	S-41579
USDOE	Department of Energy	DOECAP-STB
Virginia	SDWA	278
Washington*	NELAP CWA,RCRA	C1677
Wisconsin	CWA, RCRA	998310390
West Virginia	CWA,RCRA	252

*As required under the indicated accreditation, the test results in this report meet all NELAP requirements for parameters for which accre ditation is required or available. Any exceptions to NELAP requirements are noted in this report.

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A9F180190

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A9F180190

Received: 06/19/09
Reported: 07/02/09 15:01

Case Narrative

According to 40CFR Part 136.3, pH, Chlorine Residual, Dissolved Oxygen, Sulfite, and Temperature analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. field-pH), they were not analyzed immediately, but as soon as possible after laboratory receipt.

A pertinent document is appended to this report, 1 page, is included and is an integral part of this report.

Reproduction of this analytical report is permitted only in its entirety. This report shall not be reproduced except in full without the written approval of the laboratory.

TestAmerica Laboratories, Inc. certifies that the analytical results contained herein apply only to the samples tested as received by our Laboratory.

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A9F180190

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A9F180190

Received: 06/19/09
Reported: 07/02/09 15:01

DATA QUALIFIERS AND DEFINITIONS

NR Any inclusion of NR indicates that the project specific requirements do not require reporting estimated values below the laboratory reporting limit.

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A9F180190

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A9F180190

Received: 06/19/09
Reported: 07/02/09 15:01

Executive Summary - Detections

Analyte	Sample Result	Data Qualifiers	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
			Sampled:			Recvd:		

TestAmerica

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TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A9F180190

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A9F180190

Received: 06/19/09
Reported: 07/02/09 15:01

Sample Summary

Sample Identification	Lab Number	Client Matrix	Date/Time Sampled	Date/Time Received	Sample Qualifiers
FWG-IDW-MWPURGEJUNE2009	RSF0818-01	Water	06/18/09 08:30	06/19/09 17:17	

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THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A9F180190

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A9F180190

Received: 06/19/09
Reported: 07/02/09 15:01

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: FWG-IDW-MWPURGEJUNE2009 (RSF0818-01 - Water)				**Sampled: 06/18/09 08:30**			**Recvd: 06/19/09 17:17**		
General Chemistry Parameters									
HCN Released From Waste	ND		10.0	mg/L	1.00	07/02/09 14:16	RLG	9G01093	Section 7.3
H2S Released From Waste	ND		10.0	mg/L	1.00	07/02/09 14:21	RLG	9G01091	Section 7.3

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A9F180190

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A9F180190

Received: 06/19/09
Reported: 07/02/09 15:01

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracte	Units	Extract Volume	Units	Date Prepared	Lab Tech	Extraction Method
General Chemistry Parameters									
Section 7.3	9G01091	RSF0818-01	200.00	mL	200.00	mL	07/01/09 20:57	RLG	Reactivity
Section 7.3	9G01093	RSF0818-01	5.00	mL	5.00	mL	07/01/09 21:00	RLG	Reactivity

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A9F180190

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A9F180190

Received: 06/19/09
Reported: 07/02/09 15:01

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
General Chemistry Parameters										
Blank Analyzed: 07/01/09 (Lab Number:9G01091-BLK1, Batch: 9G01091)										
H2S Released From Waste			50.0	mg/L	ND					
LCS Analyzed: 07/01/09 (Lab Number:9G01091-BS1, Batch: 9G01091)										
H2S Released From Waste		570	10.0	mg/L	110	19	10-100			
General Chemistry Parameters										
Blank Analyzed: 07/01/09 (Lab Number:9G01093-BLK1, Batch: 9G01093)										
HCN Released From Waste			50.0	mg/L	ND					
LCS Analyzed: 07/01/09 (Lab Number:9G01093-BS1, Batch: 9G01093)										
HCN Released From Waste		1000	10.0	mg/L	342	34	10-100			

TestAmerica Laboratories, Inc.

SAMPLE ANALYSIS REQUISITION

Lab Request SR112865

Laboratory: TestAmerica Buffalo
Severn Trent Laboratories
10 Hazelwood Drive, Suite 106
Amherst, NY 14228

Client Code: 14091

Report Package: Report
Need Analytical Report: 2009-07-02

Project Manager: MARK LOED

Sample I.D.	Work Order Number	Client Sample ID	Sampling Date	Analysis Required
A9F180190-2	LE6RC	FWG-IDW-MWPURGEJUNE2009	2009-06-18 8:30	WATER, 7.3.3, Reactive Cyanide (Buffalo)
A9F180190-2	LE6RC	FWG-IDW-MWPURGEJUNE2009	2009-06-18 8:30	WATER, 7.3.4, Reactive Sulfide (Buffalo)

1x500

Please use Client Sample ID for report

Call MARK LOED with questions at 330-497-9396

at the TAL North Canton Laboratory

Shipping Method: FEDEX

Need detection limit and analysis date included in report.

Please send a signed copy of this form with the report at completion of analysis.

Relinquished by: [signature] Date/Time: 6/18/09 2:00p

Relinquished by: _____ Date/Time: _____

Received for lab by: [signature] Date/Time: 6/18/09 0900

PLEASE RETURN ORIGINAL SAMPLE ANALYSIS REQUISITION

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

END OF REPORT

OhioEPA

State of Ohio Environmental Protection Agency

Northeast District Office

2110 East Aurora Rd.
Twinsburg, Ohio 44087

TELE: (330) 963-1200 **FAX:** (330) 487-0769
www.epa.state.oh.us

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

August 3, 2009

RE: RAVENNA ARMY AMMUNITION PLANT, PORTAGE/TRUMBULL COUNTIES, DRAFT, INVESTIGATION DERIVED WASTE AND DISPOSAL PLAN, FWGWMP, JULY 2009 SAMPLING EVENT REPORT

Mr. Mark Patterson
Installation Manager
Ravenna Army Ammunition Plant
8451 State Route 5
Ravenna, OH 44266

CERTIFIED MAIL
7008 3230 0003 5419 7846

Dear Mr. Patterson:

The Ohio Environmental Protection Agency (Ohio EPA) has received and reviewed the "Draft, Investigation-Derived Waste Characterization and Disposal Plan (IDW), for the Facility-Wide Groundwater Monitoring Program, July 2009 Sampling Event, at the Ravenna Army Ammunition Plant, Ravenna, OH" document. This document was received at Ohio EPA, Northeast District Office (NEDO), Division of Emergency and Remedial response (DERR), on July 31, 2009, and is dated July 30, 2009. The document was prepared for the U.S. Army Corps of Engineers (USACE) – Louisville District, by Environmental Quality Management, Inc. (EQM), under contract no. W912QR-04-D-0036.

The report is approved and Ohio EPA concurs that the IDW (groundwater and decontamination fluids) from the July 2009 Sampling Event may be disposed of as contaminated, non-hazardous waste and that it be sent off-site for disposal to a permitted water treatment facility.

If you have any questions, please call me at (330) 963-1207.

Sincerely,

Vicki Deppisch
Project Coordinator
Division of Emergency and Remedial Response

VD/kss

cc: Bonnie Buthker, Ohio EPA, DERR, SWDO
John Miller, EQM
Maj. Ed Meade, OHARNG RTLS
Mark Nichter, USACE Louisville
Eileen Mohr, Ohio EPA, NEDO, DERR
Katie Elgin, OHARNG RTLS
Glen Beckham, USACE Louisville
Mark Krivansky, AEC

ec: Mike Eberle, Ohio EPA, NEDO, DERR
Todd Fisher, Ohio EPA, NEDO, DERR

DRAFT

FACILITY-WIDE GROUNDWATER MONITORING PROGRAM

INVESTIGATION-DERIVED WASTE CHARACTERIZATION AND DISPOSAL PLAN JULY 2009 SAMPLING EVENT

RAVENNA ARMY AMMUNITION PLANT, RAVENNA, OHIO

MARC Contract Number W912QR-04-D-0036
Delivery Order No. 0006

Prepared for:

U.S. Army Corps of Engineers
600 Martin Luther King Jr. Place
Louisville, Kentucky 40202

Prepared by:

Environmental Quality Management, Inc.
1800 Carillon Boulevard
Cincinnati Ohio 45240

July 2009

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Appendix 1 Investigation-Derived Waste Analytical Report

ACRONYMS

AOC	Area of Concern
EQM	Environmental Quality Management, Inc.
EPA	U.S. Environmental Protection Agency
IDW	Investigation-derived wastes
Ohio EPA	Ohio Environmental Protection Agency
PPE	Personal protective equipment
RCRA	Resource Conservation and Recovery Act
RVAAP	Ravenna Army Ammunition Plant
SAP	Sampling and Analysis Plan
SVOC	Semi-volatile organic compounds
TCLP	Toxicity Characteristic Leaching Procedure
USACE	US Army Corps of Engineers
VOC	Volatile organic compounds

1.0 INTRODUCTION

Investigative activities were conducted during the Facility Wide Groundwater Monitoring Program sampling events in July 2009 at the Ravenna Army Ammunition Plant (RVAAP), Ravenna, Ohio, resulting in the generation of investigation-derived wastes (IDW) consisting of purge-water and equipment decontamination water wastes. The IDW purge water was generated in the course of sampling each well. The IDW decontamination waters were generated from the cleaning and decontamination activities for non-dedicated equipment needed to sample the wells. The purpose of this report is to characterize and classify the IDW for proper disposal. The report includes:

- A summary of the IDW generated and its origin,
- A review of the analytical results used for waste characterization,
- Classification of the IDW per the *Facility Wide Sampling and Analysis Plan*,
- Recommendations for disposal.

This document follows guidance established by the US Army Corps of Engineers (USACE) and the Ohio EPA regarding IDW disposition at RVAAP.

2.0 OPERATIONAL HISTORY AND WASTE GENERATION

Information regarding the operational history and suspected contaminants for the Facility Wide Groundwater Monitoring Program Plan is presented in Section 1.2 of the *Final Part 1- Sampling and Analysis Plan Addendum for the Facility-Wide Groundwater Monitoring Program Plan at the Ravenna Army Ammunition Plant, Ravenna, Ohio* (SAP Addendum) (Portage, 2004). Section 4.6 of the SAP Addendum describes procedures used for sampling and managing IDW at RVAAP.

Water (purged groundwater and decontamination water) IDW was generated during the July 2009 sampling event. The purge water collected from the 7 Areas of Concern (AOCs) sampled was stored in drums labeled for purge water disposal, as opposed to previous events where each AOC had its own drum. The decision to composite the purge water was decided in a telephone conference between M. Patterson (RVAAP), E. Mohr (OEPA) and V. Deppisch (OEPA) on January 16, 2008. Purge water was generated in accordance with the Facility Wide Sampling and Analysis Plan (SAP), Section 4.3.4.2 (SAIC, 2001) under the Micro-Purging criteria. Decontamination water was generated from the washing, rinsing, and decontamination procedures used for all non-dedicated sampling equipment. The decontamination water was stored in a drum separate from the purge water. These decontamination procedures are described in Section 4.3.8 Decontamination Procedures of the Facility Wide SAP.

The drum container label number, the type and size of drum container used, estimated volume within each drum, and the source of purge waste water or decontamination fluid is presented in Table 2.1 below.

Table 2.1. IDW Inventory of Drums

Drum Label	Drum Type & Size	Contents	Estimated Volume	Location/Source
EQM 2009-11	55 Gal. Steel	Decontamination/Rinse Water	~20-gallons	Equipment Rinse/Decontamination
EQM 2009-12	55 Gal. Steel	Purge water	~50-gallons	Load Lines 6-11, Open, Atlas Scrap Yard.
EQM 2009-13	55 Gal. Steel	Purge water	~20-gallons	Load Lines 6-11, Open, Atlas Scrap Yard.

3.0 MANAGEMENT OF ENVIRONMENTAL MEDIA

All environmental media were managed in a manner that minimized potential risk to human health and the environment. IDW was handled as nonhazardous material pending waste characterization and classification based on analytical results. The Facility-Wide SAP (SAIC, 2001) and the Final Part 1 Sampling and Analysis Plan (Portage, 2004) describe approved procedures used for containerizing and handling IDW.

All liquid indigenous (purged groundwater) IDW generated from each monitoring well micro-purging was placed into the 55-gallon drum as previously agreed upon by RVAAP, USACE and Ohio EPA. The purge water was transferred daily from each well location after sampling by closed-top 5-gallon buckets to the appropriately labeled 55-gallon drum located and staged inside Building 1036.

4.0 DISCUSSION OF ANALYTICAL RESULTS

Per Section 7.4 of the *Facility-Wide SAP* (2001), IDW Characterization and Classification for Disposal, all IDW indigenous wastes were characterized for disposal by taking composite samples collected from each of the segregated waste streams. There were only two segregated waste streams that needed to be investigated: one for the purge water generated, and one for the decontamination procedures. Each waste stream had a composite sample taken by using a "drum thief" until a total of approximately 4 liters was withdrawn in equal amounts from all drums of that particular waste stream. Each waste stream composite sample was submitted to TestAmerica Laboratories, North Canton for full toxicity characteristic leaching procedure (TCLP) analysis using the following methods in accordance with the Facility-Wide SAP (SAIC, 2001):

- TCLP Mercury by SW846 1311/7470A
- TCLP Metals (Silver, arsenic, barium, cadmium, chromium, lead, and selenium) by SW846 1311/6010B
- TCLP Semi-volatile organic compounds (SVOCs) by SW846 1311/8270C

- TCLP Volatile organic compounds (VOCs) by SW846 1311/8260B
- Reactive Cyanide by SW846 7.3.3
- Reactive Sulfide by SW846 7.3.4
- Flash Point by SW846 1010
- pH by SW846 9040B

A trip blank was submitted with the samples and analyzed for Volatile Organic Compounds. The IDW analytical results are presented in Appendix 1.

5.0 RECOMMENDATIONS FOR DISPOSAL

Table 7-1 in the *Facility-Wide SAP* (SAIC, 2001) presents all the maximum concentration of contaminants for the toxicity characteristic for hazardous wastes as per 40 CFR 261.24. Analytical results for the July 2009 groundwater sampling event's IDW were compared against these criteria to determine whether waste streams generated were potentially hazardous or non-hazardous.

5.1 Groundwater

IDW was generated during the well sampling activities by micro-purging monitoring wells associated with this investigation. After comparing the analytical data results generated from groundwater sampling activities to the contaminants and their regulatory levels from Table 7-1 1 in the *Facility-Wide SAP* (SAIC, 2001), the data indicated that no regulatory criteria for Resource Conservation and Recovery Act (RCRA) hazardous waste determinations were exceeded. Table 5.1 below presents the detected results compared to the regulatory characteristic for hazardous wastes as per 40 CFR 261.24.

It is recommended that the drums containing purged groundwater be classified as contaminated, but non-hazardous and that it be sent off-site for disposal to a permitted water treatment facility in accordance with the *Facility-Wide SAP* (SAIC, 2001) guidance under Section 7.0 "Investigation-Derived Waste".

5.2 Decontamination Fluids

A composite sample collected from decontamination fluids generated from cleaning of non-dedicated sampling equipment used during the investigation indicated that all analytes were below TCLP threshold values and therefore should be classified as non-hazardous. It is recommended that the water in this drum be classified as contaminated, non-hazardous, and be sent off-site for disposal to a permitted water treatment facility in accordance with the *Facility-Wide SAP* (SAIC, 2001) guidance under Section 7.0 Investigation-Derived Waste.

Table 5.1 Detected Analytical Results

Sample ID	Detected Contaminant	Detected Result	Regulatory Level[1]	Above Regulatory Yes/No
FWG-IDW-MWPURGEJULY2009	Barium	0.024 mg/L J	100 mg/L	No
	Flashpoint	>180°F	<140°F	No
	Reactive Sulfide	10.3 mg/kg	See Table Notes	No
	pH	9.6	<2 or >12.5	No
FWG-IDW-MWDECONJULY2009	Arsenic	0.0040 mg/L J	5.0 mg/L	No
	Barium	0.044 mg/L J	100 mg/L	No
	Cadmium	0.0029 mg/L J	1.0 mg/L	No
	Chromium	0.0078 mg/L J	5.0 mg/L	No
	Lead	0.0047 mg/L J	5.0 mg/L	No
	Flashpoint	>180°F	<140°F	No
	Reactive Sulfide	10.3 mg/kg	See Table Notes	No
	pH	7.6	<2 or >12.5	No
FWG-IDW-MWTBJULY2009	None Detected			

J = Estimated result. Result is less than reporting limit.
Reactive Sulfide Note: Despite the presence of a low concentration of reactive sulfide the waste streams are deemed nonhazardous as they do not meet the hazardous waste criteria set forth in OAC 3725-51-23 (i.e., reacts violently with water or produces toxic gases, fumes or vapors between the ph of 2 and 12.5).
Note that the flags used to qualify the data are consistent with USACE Laboratory Chemistry Guidelines and the RVAAP quarterly groundwater reports.
1 = USEPA Regulatory Characteristic Levels (40 CFR 261.20 through 24).

5.3 Summary of Disposal Recommendations

It is recommended that all drums be classified as contaminated, but non-hazardous and that they be sent off-site for disposal to a permitted water treatment facility. The TCLP/Characteristic test results for both composite samples show that no chemical was detected in levels that required a labeling of hazardous. Table 5.2 presents a summary of each drum and the recommended disposal options for the waste streams presented and previously discussed.

Table 5.2. Summary of Drum Containers, TCLP/Characteristic Waste Criteria, and Disposal Recommendations

Drum Container Label	Media	TCLP Criteria	Disposal Recommendation
EQM 2009-11	Water	Maximum Concentration of Contaminants NOT exceeded	Off-Site Non-Hazardous Disposal
EQM 2009-12	Water	Maximum Concentration of Contaminants NOT exceeded	Off-Site Non-Hazardous Disposal
EQM 2009-13	Water	Maximum Concentration of Contaminants NOT exceeded	Off-Site Non-Hazardous Disposal

6.0 REFERENCES

SAIC, 2001. *Facility-Wide Sampling and Analysis Plan for Environmental Investigations at the Ravenna Army Ammunition Plant, Ravenna, Ohio.*

Portage Environmental, 2004, *RVAAP Facility Wide Groundwater Monitoring Program Plan.*

APPENDIX 1

INVESTIGATION-DERIVED WASTE ANALYTICAL REPORT

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

PROJECT NO. 30240.0006

RVAAP (OH)

Lot #: A9G160282

Erik Corbin

Environmental Quality Mgt., I
1800 Carillon Blvd
Cincinnati, OH 45240

TESTAMERICA LABORATORIES, INC.

Approved for release.
Mark J. Loeb
Project Manager II
7/29/2009 2:09 PM

Mark J. Loeb
Project Manager
mark.loeb@testamericainc.com

July 29, 2009

CASE NARRATIVE

A9G160282

The following report contains the analytical results for two water samples and one quality control sample submitted to TestAmerica North Canton by Environmental Quality Mgt., Inc. from the RVAAP (OH) Site, project number 30240.0006. The samples were received July 16, 2009, according to documented sample acceptance procedures.

The Reactive Cyanide and Reactive Sulfide analyses were performed at the TestAmerica Buffalo Laboratory.

TestAmerica utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Angye Dragotta, Erik Corbin, and Jackie Doan on July 23, 2009. A summary of QC data for these analyses is included at the back of the report.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Please refer to the Quality Control Elements Narrative following this case narrative for additional quality control information.

If you have any questions, please call the Project Manager, Mark J. Loeb, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT."

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The temperature of the cooler upon sample receipt was 5.8°C.

CASE NARRATIVE (continued)

GC/MS VOLATILES

Sample(s) FWG-IDW-MWDECONJULY2009 had elevated reporting limits due to foaming.

There were no client requested Matrix Spike/Matrix Spike Duplicate (MS/MSD) samples in batch(es) 9203456. Therefore, the laboratory has included a Laboratory Control Sample Duplicate (LCSD) in the QC batch. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system.

GC/MS SEMIVOLATILES

There were no client requested Matrix Spike/Matrix Spike Duplicate (MS/MSD) samples in batch(es) 9202029. Therefore, the laboratory has included a Laboratory Control Sample Duplicate (LCSD) in the QC batch. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system.

METALS

The sample(s) that contain results between the MDL and the RL were flagged with "B". There is the possibility of false positive or mis-identification at these quantitation levels. The acceptance criteria for the ICB, CCB, and Method Blank are +/- the standard reporting limit (SRL).

GENERAL CHEMISTRY

The analytical results met the requirements of the laboratory's QA/QC program.

MANUAL INTEGRATION SUMMARY

Manual integrations were performed on sample(s) reported herein. A list of samples and analytes for which manual integration was necessary is provided following this Case Narrative.

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

EXECUTIVE SUMMARY - Detection Highlights

A9G160282

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWG-IDW-MWPURGEJULY2009 07/16/09 11:30 001				
Barium - TCLP	0.024 B	10.0	mg/L	SW846 6010B
Flashpoint	>180		deg F	SW846 1010
pH (liquid)	9.6		No Units	SW846 9040B
FWG-IDW-MWDECONJULY2009 07/16/09 11:45 002				
Arsenic - TCLP	0.0040 B	0.50	mg/L	SW846 6010B
Barium - TCLP	0.044 B	10.0	mg/L	SW846 6010B
Cadmium - TCLP	0.0029 B	0.10	mg/L	SW846 6010B
Chromium - TCLP	0.0078 B	0.50	mg/L	SW846 6010B
Lead - TCLP	0.0047 B	0.50	mg/L	SW846 6010B
Flashpoint	>180		deg F	SW846 1010
pH (liquid)	7.6		No Units	SW846 9040B

ANALYTICAL METHODS SUMMARY

A9G160282

PARAMETER	ANALYTICAL METHOD
pH Aqueous	SW846 9040B
Inductively Coupled Plasma (ICP) Metals	SW846 6010B
Mercury in Liquid Waste (Manual Cold-Vapor)	SW846 7470A
Pensky-Martens Method for Determining Ignitability	SW846 1010
Semivolatile Organic Compounds by GC/MS	SW846 8270C
Volatile Organics by GC/MS	SW846 8260B

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

A9G160282

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LGLN1	001	FWG-IDW-MWPURGEJULY2009	07/16/09	11:30
LGLN8	002	FWG-IDW-MWDECONJULY2009	07/16/09	11:45
LGLN9	003	FWG-IDW-MWTBJULY2009	07/16/09	11:00

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Environmental Quality Mgt., Inc.

Client Sample ID: FWG-IDW-MWPURGEJULY2009

TCLP GC/MS Volatiles

Lot-Sample #...: A9G160282-001 **Work Order #...:** LGLN11AA **Matrix.....:** WG
Date Sampled...: 07/16/09 11:30 **Date Received..:** 07/16/09
Leach Date.....: 07/20/09 **Prep Date.....:** 07/21/09 **Analysis Date..:** 07/21/09
Leach Batch #..: P920102 **Prep Batch #...:** 9202381
Dilution Factor: 1
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzene	ND	0.025	mg/L	0.00013
2-Butanone (MEK)	ND	0.25	mg/L	0.00057
Carbon tetrachloride	ND	0.025	mg/L	0.00013
Chlorobenzene	ND	0.025	mg/L	0.00015
Chloroform	ND	0.025	mg/L	0.00016
1,2-Dichloroethane	ND	0.025	mg/L	0.00022
1,1-Dichloroethylene	ND	0.070	mg/L	0.00019
Tetrachloroethylene	ND	0.070	mg/L	0.00029
Trichloroethylene	ND	0.050	mg/L	0.00017
Vinyl chloride	ND	0.025	mg/L	0.00022

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	90	(86 - 125)
1,2-Dichloroethane-d4	95	(80 - 122)
Toluene-d8	102	(90 - 122)
4-Bromofluorobenzene	93	(84 - 125)

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

Environmental Quality Mgt., Inc.

Client Sample ID: FWG-IDW-MWPURGEJULY2009

TCLP GC/MS Semivolatiles

Lot-Sample #...: A9G160282-001 **Work Order #...:** LGLN11AD **Matrix.....:** WG
Date Sampled...: 07/16/09 11:30 **Date Received..:** 07/16/09
Leach Date.....: 07/20/09 **Prep Date.....:** 07/21/09 **Analysis Date..:** 07/24/09
Leach Batch #..: P920103 **Prep Batch #...:** 9202029
Dilution Factor: 1
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
o-Cresol	ND	0.0040	mg/L	0.00080
m-Cresol & p-Cresol	ND	0.040	mg/L	0.00075
1,4-Dichlorobenzene	ND	0.0040	mg/L	0.00034
2,4-Dinitrotoluene	ND	0.020	mg/L	0.00027
Hexachlorobenzene	ND	0.020	mg/L	0.00010
Hexachlorobutadiene	ND	0.020	mg/L	0.00027
Hexachloroethane	ND	0.020	mg/L	0.00080
Nitrobenzene	ND	0.0040	mg/L	0.000040
Pentachlorophenol	ND	0.040	mg/L	0.0024
Pyridine	ND	0.020	mg/L	0.00035
2,4,5-Trichloro-phenol	ND	0.020	mg/L	0.00030
2,4,6-Trichloro-phenol	ND	0.020	mg/L	0.00080

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	67	(27 - 110)
2-Fluorobiphenyl	57	(20 - 110)
Terphenyl-d14	91	(44 - 110)
Phenol-d5	46	(10 - 110)
2-Fluorophenol	56	(10 - 110)
2,4,6-Tribromophenol	68	(28 - 110)

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

Environmental Quality Mgt., Inc.

Client Sample ID: FWG-IDW-MWPURGEJULY2009

TCLP Metals

Lot-Sample #...: A9G160282-001 **Matrix.....:** WG
Date Sampled...: 07/16/09 11:30 **Date Received..:** 07/16/09
Leach Date.....: 07/20/09 **Leach Batch #..:** P920103

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9202016						
Mercury	ND	0.0020	mg/L	SW846 7470A	07/21/09	LGLN11AN
		Dilution Factor: 1		MDL.....: 0.00012		
Arsenic	ND	0.50	mg/L	SW846 6010B	07/21-07/22/09	LGLN11AF
		Dilution Factor: 1		MDL.....: 0.0032		
Barium	**0.024 B**	**10.0**	**mg/L**	**SW846 6010B**	**07/21-07/22/09**	**LGLN11AG**
		Dilution Factor: 1		MDL.....: 0.00067		
Cadmium	ND	0.10	mg/L	SW846 6010B	07/21-07/22/09	LGLN11AH
		Dilution Factor: 1		MDL.....: 0.00066		
Chromium	ND	0.50	mg/L	SW846 6010B	07/21-07/22/09	LGLN11AJ
		Dilution Factor: 1		MDL.....: 0.0022		
Lead	ND	0.50	mg/L	SW846 6010B	07/21-07/22/09	LGLN11AK
		Dilution Factor: 1		MDL.....: 0.0019		
Selenium	ND	0.25	mg/L	SW846 6010B	07/21-07/22/09	LGLN11AL
		Dilution Factor: 1		MDL.....: 0.0041		
Silver	ND	0.50	mg/L	SW846 6010B	07/21-07/22/09	LGLN11AM
		Dilution Factor: 1		MDL.....: 0.0022		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWG-IDW-MWPURGEJULY2009

General Chemistry

Lot-Sample #...: A9G160282-001 Work Order #...: LGLN1 Matrix.....: WG
Date Sampled...: 07/16/09 11:30 Date Received..: 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (liquid)	9.6	Dilution Factor: 1	No Units	SW846 9040B MDL.....:	07/16/09	9197445
Flashpoint	>180	Dilution Factor: 1	deg F	SW846 1010 MDL.....:	07/17/09	9198437

Environmental Quality Mgt., Inc.

Client Sample ID: FWG-IDW-MWDECONJULY2009

TCLP GC/MS Volatiles

Lot-Sample #...: A9G160282-002 **Work Order #...:** LGLN81AA **Matrix.....:** WG
Date Sampled...: 07/16/09 11:45 **Date Received..:** 07/16/09
Leach Date.....: 07/20/09 **Prep Date.....:** 07/22/09 **Analysis Date..:** 07/22/09
Leach Batch #..: P920102 **Prep Batch #...:** 9202381
Dilution Factor: 4

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzene	ND	0.10	mg/L	0.00052
2-Butanone (MEK)	ND	1.0	mg/L	0.0023
Carbon tetrachloride	ND	0.10	mg/L	0.00052
Chlorobenzene	ND	0.10	mg/L	0.00060
Chloroform	ND	0.10	mg/L	0.00064
1,2-Dichloroethane	ND	0.10	mg/L	0.00088
1,1-Dichloroethylene	ND	0.10	mg/L	0.00076
Tetrachloroethylene	ND	0.10	mg/L	0.0012
Trichloroethylene	ND	0.10	mg/L	0.00068
Vinyl chloride	ND	0.10	mg/L	0.00088

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	92	(86 - 125)
1,2-Dichloroethane-d4	98	(80 - 122)
Toluene-d8	102	(90 - 122)
4-Bromofluorobenzene	95	(84 - 125)

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

Environmental Quality Mgt., Inc.

Client Sample ID: FWG-IDW-MWDECONJULY2009

TCLP GC/MS Semivolatiles

Lot-Sample #...: A9G160282-002 **Work Order #...:** LGLN81AD **Matrix.....:** WG
Date Sampled...: 07/16/09 11:45 **Date Received..:** 07/16/09
Leach Date.....: 07/20/09 **Prep Date.....:** 07/21/09 **Analysis Date..:** 07/24/09
Leach Batch #..: P920103 **Prep Batch #...:** 9202029
Dilution Factor: 1

Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
o-Cresol	ND	0.0040	mg/L	0.00080
m-Cresol & p-Cresol	ND	0.040	mg/L	0.00075
1,4-Dichlorobenzene	ND	0.0040	mg/L	0.00034
2,4-Dinitrotoluene	ND	0.020	mg/L	0.00027
Hexachlorobenzene	ND	0.020	mg/L	0.00010
Hexachlorobutadiene	ND	0.020	mg/L	0.00027
Hexachloroethane	ND	0.020	mg/L	0.00080
Nitrobenzene	ND	0.0040	mg/L	0.000040
Pentachlorophenol	ND	0.040	mg/L	0.0024
Pyridine	ND	0.020	mg/L	0.00035
2,4,5-Trichloro-phenol	ND	0.020	mg/L	0.00030
2,4,6-Trichloro-phenol	ND	0.020	mg/L	0.00080

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	55	(27 - 110)
2-Fluorobiphenyl	42	(20 - 110)
Terphenyl-d14	68	(44 - 110)
Phenol-d5	37	(10 - 110)
2-Fluorophenol	41	(10 - 110)
2,4,6-Tribromophenol	57	(28 - 110)

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

Environmental Quality Mgt., Inc.

Client Sample ID: FWG-IDW-MWDECONJULY2009

TCLP Metals

Lot-Sample #...: A9G160282-002 **Matrix.....:** WG
Date Sampled...: 07/16/09 11:45 **Date Received..:** 07/16/09
Leach Date.....: 07/20/09 **Leach Batch #..:** P920103

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9202016						
Mercury	ND	0.0020	mg/L	SW846 7470A	07/21/09	LGLN81AN
		Dilution Factor: 1		MDL.....: 0.00012		
Arsenic	**0.0040 B**	**0.50**	**mg/L**	**SW846 6010B**	**07/21-07/22/09**	**LGLN81AF**
		Dilution Factor: 1		MDL.....: 0.0032		
Barium	**0.044 B**	**10.0**	**mg/L**	**SW846 6010B**	**07/21-07/22/09**	**LGLN81AG**
		Dilution Factor: 1		MDL.....: 0.00067		
Cadmium	**0.0029 B**	**0.10**	**mg/L**	**SW846 6010B**	**07/21-07/22/09**	**LGLN81AH**
		Dilution Factor: 1		MDL.....: 0.00066		
Chromium	**0.0078 B**	**0.50**	**mg/L**	**SW846 6010B**	**07/21-07/22/09**	**LGLN81AJ**
		Dilution Factor: 1		MDL.....: 0.0022		
Lead	**0.0047 B**	**0.50**	**mg/L**	**SW846 6010B**	**07/21-07/22/09**	**LGLN81AK**
		Dilution Factor: 1		MDL.....: 0.0019		
Selenium	ND	0.25	mg/L	SW846 6010B	07/21-07/22/09	LGLN81AL
		Dilution Factor: 1		MDL.....: 0.0041		
Silver	ND	0.50	mg/L	SW846 6010B	07/21-07/22/09	LGLN81AM
		Dilution Factor: 1		MDL.....: 0.0022		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWG-IDW-MWDECONJULY2009

General Chemistry

Lot-Sample #...: A9G160282-002 Work Order #...: LGLN8 Matrix.....: WG
Date Sampled...: 07/16/09 11:45 Date Received..: 07/16/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (liquid)	7.6	Dilution Factor: 1	No Units	SW846 9040B MDL.....:	07/16/09	9197445
Flashpoint	>180	Dilution Factor: 1	deg F	SW846 1010 MDL.....:	07/17/09	9198437

Environmental Quality Mgt., Inc.

Client Sample ID: FWG-IDW-MWTBJULY2009

GC/MS Volatiles

Lot-Sample #...: A9G160282-003 Work Order #...: LGLN91AA Matrix.....: WQ
Date Sampled...: 07/16/09 11:00 Date Received..: 07/16/09
Prep Date.....: 07/21/09 Analysis Date..: 07/21/09
Prep Batch #...: 9203456
Dilution Factor: 1 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzene	ND	5.0	ug/L	0.13
2-Butanone (MEK)	ND	20	ug/L	0.57
Carbon tetrachloride	ND	5.0	ug/L	0.13
Chlorobenzene	ND	5.0	ug/L	0.15
Chloroform	ND	5.0	ug/L	0.16
1,2-Dichloroethane	ND	5.0	ug/L	0.22
1,1-Dichloroethylene	ND	5.0	ug/L	0.19
Tetrachloroethylene	ND	5.0	ug/L	0.29
Trichloroethylene	ND	5.0	ug/L	0.17
Vinyl chloride	ND	5.0	ug/L	0.22

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	90	(78 - 115)
1,2-Dichloroethane-d4	80	(77 - 120)
Toluene-d8	96	(78 - 111)
4-Bromofluorobenzene	85	(80 - 114)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

QUALITY CONTROL SECTION

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A9G160282
MB Lot-Sample #: A9G220000-456

Work Order #...: LGWVK1AA

Matrix.....: WATER

Prep Date.....: 07/21/09
Prep Batch #...: 9203456

Analysis Date..: 07/21/09
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	5.0	ug/L	SW846 8260B
2-Butanone (MEK)	ND	20	ug/L	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/L	SW846 8260B
Chlorobenzene	ND	5.0	ug/L	SW846 8260B
Chloroform	ND	5.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/L	SW846 8260B
1,1-Dichloroethylene	ND	5.0	ug/L	SW846 8260B
Tetrachloroethylene	ND	5.0	ug/L	SW846 8260B
Trichloroethylene	ND	5.0	ug/L	SW846 8260B
Vinyl chloride	ND	5.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	87	(78 - 115)
1,2-Dichloroethane-d4	80	(77 - 120)
Toluene-d8	94	(78 - 111)
4-Bromofluorobenzene	84	(80 - 114)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

TCLP GC/MS Volatiles

Client Lot #...: A9G160282 **Work Order #...:** LGPVD1AA **Matrix.....:** SOLID
MB Lot-Sample #: A9G200000-105
Leach Date.....: 07/20/09 **Prep Date.....:** 07/21/09 **Analysis Date..:** 07/21/09
Leach Batch #..: P920102 **Prep Batch #...:** 9202381
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	0.025	mg/L	SW846 8260B
2-Butanone (MEK)	ND	0.25	mg/L	SW846 8260B
Carbon tetrachloride	ND	0.025	mg/L	SW846 8260B
Chlorobenzene	ND	0.025	mg/L	SW846 8260B
Chloroform	ND	0.025	mg/L	SW846 8260B
1,2-Dichloroethane	ND	0.025	mg/L	SW846 8260B
1,1-Dichloroethylene	ND	0.025	mg/L	SW846 8260B
Tetrachloroethylene	ND	0.025	mg/L	SW846 8260B
Trichloroethylene	ND	0.025	mg/L	SW846 8260B
Vinyl chloride	ND	0.025	mg/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	92	(86 - 125)
1,2-Dichloroethane-d4	95	(80 - 122)
Toluene-d8	103	(90 - 122)
4-Bromofluorobenzene	96	(84 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

TCLP GC/MS Semivolatiles

Client Lot #...: A9G160282 **Work Order #...:** LGQ361AA **Matrix.....:** WATER
MB Lot-Sample #: A9G210000-029
Leach Date.....: 07/20/09 **Prep Date.....:** 07/21/09 **Analysis Date..:** 07/24/09
Leach Batch #..: P920103 **Prep Batch #...:** 9202029
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
o-Cresol	ND	0.0040	mg/L	SW846 8270C
m-Cresol & p-Cresol	ND	0.040	mg/L	SW846 8270C
1,4-Dichlorobenzene	ND	0.0040	mg/L	SW846 8270C
2,4-Dinitrotoluene	ND	0.020	mg/L	SW846 8270C
Hexachlorobenzene	ND	0.020	mg/L	SW846 8270C
Hexachlorobutadiene	ND	0.020	mg/L	SW846 8270C
Hexachloroethane	ND	0.020	mg/L	SW846 8270C
Nitrobenzene	ND	0.0040	mg/L	SW846 8270C
Pentachlorophenol	ND	0.040	mg/L	SW846 8270C
Pyridine	ND	0.020	mg/L	SW846 8270C
2,4,5-Trichloro-phenol	ND	0.020	mg/L	SW846 8270C
2,4,6-Trichloro-phenol	ND	0.020	mg/L	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	65	(27 - 110)
2-Fluorobiphenyl	59	(20 - 110)
Terphenyl-d14	84	(44 - 110)
Phenol-d5	55	(10 - 110)
2-Fluorophenol	64	(10 - 110)
2,4,6-Tribromophenol	69	(28 - 110)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

TCLP Metals

Client Lot #...: A9G160282

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A9G200000-106		**Prep Batch #...:** 9202016				
Leach Date.....: 07/20/09		**Leach Batch #..:** P920103				
Mercury	ND	0.0020	mg/L	SW846 7470A	07/21/09	LGPVH1AK
		Dilution Factor: 1				
Arsenic	ND	0.50	mg/L	SW846 6010B	07/21-07/22/09	LGPVH1AC
		Dilution Factor: 1				
Barium	**0.0033 B**	**10.0**	**mg/L**	**SW846 6010B**	**07/21-07/22/09**	**LGPVH1AD**
		Dilution Factor: 1				
Cadmium	ND	0.10	mg/L	SW846 6010B	07/21-07/22/09	LGPVH1AE
		Dilution Factor: 1				
Chromium	ND	0.50	mg/L	SW846 6010B	07/21-07/22/09	LGPVH1AF
		Dilution Factor: 1				
Lead	**0.0027 B**	**0.50**	**mg/L**	**SW846 6010B**	**07/21-07/22/09**	**LGPVH1AG**
		Dilution Factor: 1				
Selenium	**0.0051 B**	**0.25**	**mg/L**	**SW846 6010B**	**07/21-07/22/09**	**LGPVH1AH**
		Dilution Factor: 1				
Silver	ND	0.50	mg/L	SW846 6010B	07/21-07/22/09	LGPVH1AJ
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

METHOD BLANK REPORT

TCLP Metals

Client Lot #...: A9G160282 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A9G210000-016 **Prep Batch #...:** 9202016						
Mercury	ND	0.0020	mg/L	SW846 7470A	07/21/09	LGQ3G1AJ
		Dilution Factor: 1				
Arsenic	ND	0.50	mg/L	SW846 6010B	07/21-07/22/09	LGQ3G1AA
		Dilution Factor: 1				
Barium	ND	10.0	mg/L	SW846 6010B	07/21-07/22/09	LGQ3G1AC
		Dilution Factor: 1				
Cadmium	ND	0.10	mg/L	SW846 6010B	07/21-07/22/09	LGQ3G1AD
		Dilution Factor: 1				
Chromium	ND	0.50	mg/L	SW846 6010B	07/21-07/22/09	LGQ3G1AE
		Dilution Factor: 1				
Lead	ND	0.50	mg/L	SW846 6010B	07/21-07/22/09	LGQ3G1AF
		Dilution Factor: 1				
Selenium	ND	0.25	mg/L	SW846 6010B	07/21-07/22/09	LGQ3G1AG
		Dilution Factor: 1				
Silver	ND	0.50	mg/L	SW846 6010B	07/21-07/22/09	LGQ3G1AH
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G160282 **Work Order #...:** LGWVK1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A9G220000-456 LGWVK1AD-LCSD
Prep Date.....: 07/21/09 **Analysis Date..:** 07/21/09
Prep Batch #...: 9203456
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Vinyl chloride	82	(55 - 121)			SW846 8260B
	78	(55 - 121)	4.3	(0-30)	SW846 8260B
1,1-Dichloroethylene	**94**	**(65 - 119)**			**SW846 8260B**
	90	**(65 - 119)**	**4.4**	**(0-20)**	**SW846 8260B**
Chloroform	93	(87 - 119)			SW846 8260B
	90	(87 - 119)	3.6	(0-30)	SW846 8260B
1,2-Dichloroethane	87	(83 - 122)			SW846 8260B
	85	(83 - 122)	2.3	(0-30)	SW846 8260B
2-Butanone (MEK)	87	(53 - 173)			SW846 8260B
	89	(53 - 173)	2.6	(0-40)	SW846 8260B
Carbon tetrachloride	94	(81 - 126)			SW846 8260B
	92	(81 - 126)	2.6	(0-30)	SW846 8260B
Trichloroethylene	**108**	**(80 - 122)**			**SW846 8260B**
	106	**(80 - 122)**	**2.5**	**(0-20)**	**SW846 8260B**
Benzene	**97**	**(79 - 116)**			**SW846 8260B**
	93	**(79 - 116)**	**4.5**	**(0-20)**	**SW846 8260B**
Tetrachloroethylene	116	(83 - 116)			SW846 8260B
	107	(83 - 116)	8.1	(0-30)	SW846 8260B
Chlorobenzene	**102**	**(81 - 115)**			**SW846 8260B**
	97	**(81 - 115)**	**4.6**	**(0-20)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	95	(78 - 115)
	92	(78 - 115)
1,2-Dichloroethane-d4	79	(77 - 120)
	79	(77 - 120)
Toluene-d8	99	(78 - 111)
	95	(78 - 111)
4-Bromofluorobenzene	90	(80 - 114)
	88	(80 - 114)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A9G160282 **Work Order #...:** LGTLE1AA **Matrix.....:** WASTE
LCS Lot-Sample#: A9G210000-381
Prep Date.....: 07/21/09 **Analysis Date..:** 07/21/09
Prep Batch #...: 9202381
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Benzene	**97**	**(76 - 118)**	**SW846 8260B**
2-Butanone (MEK)	90	(40 - 110)	SW846 8260B
Carbon tetrachloride	83	(71 - 124)	SW846 8260B
Chlorobenzene	**103**	**(76 - 113)**	**SW846 8260B**
Chloroform	96	(82 - 117)	SW846 8260B
1,2-Dichloroethane	98	(78 - 122)	SW846 8260B
1,1-Dichloroethylene	**91**	**(67 - 128)**	**SW846 8260B**
Tetrachloroethylene	108	(64 - 121)	SW846 8260B
Trichloroethylene	**105**	**(76 - 119)**	**SW846 8260B**
Vinyl chloride	95	(47 - 123)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	97	(86 - 124)
1,2-Dichloroethane-d4	100	(80 - 122)
Toluene-d8	103	(90 - 122)
4-Bromofluorobenzene	104	(84 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G160282 Work Order #...: LGQ361AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A9G210000-029 LGQ361AD-LCSD
Prep Date.....: 07/21/09 Analysis Date..: 07/24/09
Prep Batch #...: 9202029
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
o-Cresol	67	(23 - 110)			SW846 8270C
	67	(23 - 110)	0.38	(0-30)	SW846 8270C
m-Cresol & p-Cresol	72	(28 - 110)			SW846 8270C
	72	(28 - 110)	0.82	(0-30)	SW846 8270C
1,4-Dichlorobenzene	36	(13 - 110)			SW846 8270C
	42	(13 - 110)	16	(0-30)	SW846 8270C
2,4-Dinitrotoluene	83	(45 - 119)			SW846 8270C
	81	(45 - 119)	1.9	(0-30)	SW846 8270C
Hexachlorobenzene	73	(46 - 112)			SW846 8270C
	72	(46 - 112)	1.6	(0-30)	SW846 8270C
Hexachlorobutadiene	30	(10 - 110)			SW846 8270C
	32	(10 - 110)	5.7	(0-30)	SW846 8270C
Hexachloroethane	28	(10 - 110)			SW846 8270C
	31	(10 - 110)	11	(0-30)	SW846 8270C
Nitrobenzene	72	(29 - 118)			SW846 8270C
	76	(29 - 118)	5.0	(0-30)	SW846 8270C
Pentachlorophenol	70	(10 - 116)			SW846 8270C
	72	(10 - 116)	1.6	(0-30)	SW846 8270C
Pyridine	68	(15 - 110)			SW846 8270C
	76	(15 - 110)	11	(0-30)	SW846 8270C
2,4,5-Trichloro-phenol	76	(36 - 110)			SW846 8270C
	72	(36 - 110)	5.0	(0-30)	SW846 8270C
2,4,6-Trichloro-phenol	69	(32 - 110)			SW846 8270C
	69	(32 - 110)	0.61	(0-30)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	72	(27 - 110)
	74	(27 - 110)
2-Fluorobiphenyl	64	(20 - 110)
	60	(20 - 110)
Terphenyl-d14	86	(44 - 110)
	85	(44 - 110)
Phenol-d5	61	(10 - 110)
	60	(10 - 110)
2-Fluorophenol	69	(10 - 110)

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A9G160282 **Work Order #...:** LGQ361AC-LCS LGQ361AD-LCSD **Matrix.....:** WATER
LCS Lot-Sample#: A9G210000-029

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
	69	(10 - 110)
	75	(28 - 110)
2,4,6-Tribromophenol	72	(28 - 110)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TCLP Metals

Client Lot #...: A9G160282 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A9G210000-016 **Prep Batch #...:** 9202016					
Mercury	99	(50 - 150)	SW846 7470A	07/21/09	LGQ3G1AT
		Dilution Factor: 1			
Arsenic	106	(50 - 150)	SW846 6010B	07/21-07/22/09	LGQ3G1AK
		Dilution Factor: 1			
Barium	108	(50 - 150)	SW846 6010B	07/21-07/22/09	LGQ3G1AL
		Dilution Factor: 1			
Cadmium	106	(50 - 150)	SW846 6010B	07/21-07/22/09	LGQ3G1AM
		Dilution Factor: 1			
Chromium	109	(50 - 150)	SW846 6010B	07/21-07/22/09	LGQ3G1AN
		Dilution Factor: 1			
Lead	109	(50 - 150)	SW846 6010B	07/21-07/22/09	LGQ3G1AP
		Dilution Factor: 1			
Selenium	110	(50 - 150)	SW846 6010B	07/21-07/22/09	LGQ3G1AQ
		Dilution Factor: 1			
Silver	121	(50 - 150)	SW846 6010B	07/21-07/22/09	LGQ3G1AR
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A9G160282 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (liquid)		Work Order #: LGLVP1AA	LCS Lot-Sample#: A9G160000-445		
	100	(97 - 103)	SW846 9040B	07/16/09	9197445
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TCLP GC/MS Volatiles

Client Lot #...: A9G160282 **Work Order #...:** LGLN11AU-MS **Matrix.....:** WG
MS Lot-Sample #: A9G160282-001 LGLN11AV-MSD
Date Sampled...: 07/16/09 11:30 **Date Received..:** 07/16/09
Leach Date.....: 07/20/09 **Prep Date.....:** 07/21/09 **Analysis Date..:** 07/21/09
Leach Batch #..: P920102 **Prep Batch #...:** 9202381
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**93**	**(76 - 117)**			**SW846 8260B**
	98	**(76 - 117)**	**5.2**	**(0-30)**	**SW846 8260B**
2-Butanone (MEK)	97	(37 - 110)			SW846 8260B
	95	(37 - 110)	1.7	(0-30)	SW846 8260B
Carbon tetrachloride	78	(72 - 124)			SW846 8260B
	82	(72 - 124)	4.7	(0-30)	SW846 8260B
Chlorobenzene	**96**	**(72 - 114)**			**SW846 8260B**
	101	**(72 - 114)**	**5.3**	**(0-30)**	**SW846 8260B**
Chloroform	90	(82 - 117)			SW846 8260B
	95	(82 - 117)	5.9	(0-30)	SW846 8260B
1,2-Dichloroethane	94	(80 - 120)			SW846 8260B
	99	(80 - 120)	5.0	(0-30)	SW846 8260B
1,1-Dichloroethylene	**96**	**(67 - 129)**			**SW846 8260B**
	91	**(67 - 129)**	**5.4**	**(0-30)**	**SW846 8260B**
Tetrachloroethylene	104	(60 - 119)			SW846 8260B
	110	(60 - 119)	5.2	(0-30)	SW846 8260B
Trichloroethylene	**99**	**(72 - 121)**			**SW846 8260B**
	105	**(72 - 121)**	**6.2**	**(0-30)**	**SW846 8260B**
Vinyl chloride	93	(54 - 118)			SW846 8260B
	94	(54 - 118)	1.2	(0-30)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	97	(86 - 125)
	98	(86 - 125)
1,2-Dichloroethane-d4	100	(80 - 122)
	99	(80 - 122)
Toluene-d8	104	(90 - 122)
	104	(90 - 122)
4-Bromofluorobenzene	104	(84 - 125)
	102	(84 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

TCLP Metals

Matrix.....: WG

Client Lot #...: A9G160282
Date Sampled...: 07/16/09 11:45 Date Received..: 07/16/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A9G160282-002					Prep Batch #...: 9202016		
Leach Date.....: 07/20/09					Leach Batch #..: P920103		
Mercury	101	(50 - 150)			SW846 7470A	07/21/09	LGLN81CC
	99	(50 - 150)	2.3	(0-20)	SW846 7470A	07/21/09	LGLN81CD
		Dilution Factor: 1					
Arsenic	102	(50 - 150)			SW846 6010B	07/21-07/22/09	LGLN81AV
	100	(50 - 150)	2.1	(0-20)	SW846 6010B	07/21-07/22/09	LGLN81AW
		Dilution Factor: 5					
Barium	105	(50 - 150)			SW846 6010B	07/21-07/22/09	LGLN81AX
	104	(50 - 150)	1.2	(0-20)	SW846 6010B	07/21-07/22/09	LGLN81A0
		Dilution Factor: 5					
Cadmium	102	(50 - 150)			SW846 6010B	07/21-07/22/09	LGLN81A1
	100	(50 - 150)	1.9	(0-20)	SW846 6010B	07/21-07/22/09	LGLN81A2
		Dilution Factor: 5					
Chromium	107	(50 - 150)			SW846 6010B	07/21-07/22/09	LGLN81A3
	106	(50 - 150)	1.6	(0-20)	SW846 6010B	07/21-07/22/09	LGLN81A4
		Dilution Factor: 5					
Lead	108	(50 - 150)			SW846 6010B	07/21-07/22/09	LGLN81A5
	105	(50 - 150)	2.2	(0-20)	SW846 6010B	07/21-07/22/09	LGLN81A6
		Dilution Factor: 5					
Selenium	105	(50 - 150)			SW846 6010B	07/21-07/22/09	LGLN81A7
	101	(50 - 150)	3.8	(0-20)	SW846 6010B	07/21-07/22/09	LGLN81A8
		Dilution Factor: 5					
Silver	101	(50 - 150)			SW846 6010B	07/21-07/22/09	LGLN81A9
	99	(50 - 150)	2.0	(0-20)	SW846 6010B	07/21-07/22/09	LGLN81CA
		Dilution Factor: 5					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A9G160282 **Work Order #...:** LGK92-SMP LGK92-DUP **Matrix.....:** WATER

Date Sampled...: 07/15/09 10:50 **Date Received..:** 07/16/09

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (liquid)						SD Lot-Sample #:	A9G160211-001	
	8.0	8.1	No Units	0.74	(0-20)	SW846 9040B	07/16/09	9197445

Dilution Factor: 1

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A9G160282 **Work Order #...:** LGLN8-SMP LGLN8-DUP **Matrix.....:** WG

Date Sampled...: 07/16/09 11:45 **Date Received..:** 07/16/09

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (liquid)						SD Lot-Sample #:	A9G160282-002	
	7.6	7.6	No Units	0.26	(0-20)	SW846 9040B	07/16/09	9197445

Dilution Factor: 1

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A9G160282 **Work Order #...:** LGFRN-SMP **Matrix.....:** WATER
LGFRN-DUP
Date Sampled...: 07/13/09 10:10 **Date Received..:** 07/14/09

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Flashpoint						SD Lot-Sample #:	A9G140142-003	
	>180	>180	deg F	0.0	(0-20)	SW846 1010	07/17/09	9198437

Dilution Factor: 1

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 7/16/09	Chain of Custody Number: 003147
Address: 1800 Carillon Blvd.	Telephone Number (Area Code)/Fax Number: 513-825-7500	Lab Number	Page 1 of 1
City: Cincinnati OH; State: OH; Zip Code: 45240	Site Contact: E. Corbin	Lab Contact: M. Loeb	
Project Name and Location (State): RVAAP (OH) PN: 30240.0006	Carrier/Waybill Number: Lab Pick-up		
Contract/Purchase Order/Quote No.: PO 15660			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	TCLP VOCs	TCLP SVOCs	TCLP Metals	Reactive CN	Reactive Sulfide	pH	Ignitability	Total VOCs	Special Instructions/ Conditions of Receipt
FWG-IDW-MWPURGEJULY2009	7/16/09	11:30		X			4						X	X	X	X	X	X	X		
FWG-IDW-MWDECONJULY2009	7/16/09	11:45		X			4						X	X	X	X	X	X	X		
FWG-IDW-MWTBJULY2009	7/16/09	11:00		X						1										X	

EC 7/16/09

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☒ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other 1 week

QC Requirements (Specify)

1. Relinquished By: [signature]	Date: 7-16-09	Time: 1250	1. Received By: RC Robison	Date: 7/16/09	Time: 1258
2. Relinquished By: RC Robison	Date: 7/16/09	Time: 1348	2. Received By: [signature]	Date: 7/16/09	Time: 1348
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

TestAmerica Cooler Receipt Form/Narrative **Lot Number:** A9G160782
North Canton Facility

Client EPM Project RVAAP By: [illegible] (Signature)
Cooler Received on 16 JUL 2009 Opened on 16 JUL 2009
FedEx ☐ UPS ☐ DHL ☐ FAS ☐ Stetson ☐ Client Drop Off ☐ TestAmerica Courier ☒ Other ____
TestAmerica Cooler # A311 Multiple Coolers ☐ Foam Box ☐ Client Cooler ☐ Other ____

1. Were custody seals on the outside of the cooler(s)? Yes ☒ No ☐ Intact? Yes ☒ No ☐ NA ☐
   If YES, Quantity 1 Quantity Unsalvageable ____
   Were custody seals on the outside of cooler(s) signed and dated? Yes ☒ No ☐ NA ☐
   Were custody seals on the bottle(s)? Yes ☐ No ☒
   If YES, are there any exceptions? ____
2. Shippers' packing slip attached to the cooler(s)? Yes ☒ No ☐
3. Did custody papers accompany the sample(s)? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Were the custody papers signed in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☒ Foam ☒ None ☐ Other Plastic Bag
6. Cooler temperature upon receipt 5.8 °C See back of form for multiple coolers/temps ☐
   METHOD: IR ☒ Other ☐ ____
   COOLANT: Wet Ice ☒ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐
7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels be reconciled with the COC? Yes ☒ No ☐
9. Were sample(s) at the correct pH upon receipt? Yes ☐ No ☐ NA ☒
10. Were correct bottle(s) used for the test(s) indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☒ NA ☐
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a trip blank present in the cooler(s)? Yes ☒ No ☐ Were VOAs on the COC? Yes ☒ No ☐

Contacted PM ____ Date ____ by ____ via Verbal ☐ Voice Mail ☐ Other ☐
Concerning ____

14. CHAIN OF CUSTODY

The following discrepancies occurred:

____

15. SAMPLE CONDITION

Sample(s) ____ were received after the recommended holding time had expired.
Sample(s) ____ were received in a broken container.
Sample(s) ____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) ____ were further preserved in Sample Receiving to meet recommended pH level(s). *Nitric Acid Lot# 031909-HNO_3; Sulfuric Acid Lot# 100108-H_2SO_4; Sodium Hydroxide Lot# 073007 -NaOH; Hydrochloric Acid Lot# 092006-HCl; Sodium Hydroxide and Zinc Acetate Lot# 050205-$(CH_3COO)_2ZN$/NaOH.* What time was preservative added to sample(s)? ____

Client ID	pH	Date	Initials

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials

Cooler #	Temp. °C	Method	Coolant

Discrepancies Cont'd:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

BUFFALO DATA

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Analytical Report

SDG Number: A9G160282

Project Description(s)
Work Order RSG0673 - Reactive Cyanide / Reactive Sulfide

For:

Mark Loeb

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

Sally Hoffman

Project Manager
Sally.Hoffman@testamericainc.com

Wednesday, July 22, 2009

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TestAmerica Buffalo
Current Certifications

As of 1/27/2009

STATE	Program	Cert # / Lab ID
Arkansas	CWA, RCRA, SOIL	88-0686
California*	NELAP CWA, RCRA	01169CA
Connecticut	SDWA, CWA, RCRA, SOIL	PH-0568
Florida*	NELAP CWA, RCRA	E87672
Georgia*	SDWA,NELAP CWA, RCRA	956
Illinois*	NELAP SDWA, CWA, RCRA	200003
Iowa	SW/CS	374
Kansas*	NELAP SDWA, CWA, RCRA	E-10187
Kentucky	SDWA	90029
Kentucky UST	UST	30
Louisiana*	NELAP CWA, RCRA	2031
Maine	SDWA, CWA	NY0044
Maryland	SDWA	294
Massachusetts	SDWA, CWA	M-NY044
Michigan	SDWA	9937
Minnesota	SDWA,CWA, RCRA	036-999-337
New Hampshire*	NELAP SDWA, CWA	233701
New Jersey*	NELAP,SDWA, CWA, RCRA,	NY455
New York*	NELAP, AIR, SDWA, CWA, RCRA,CLP	10026
Oklahoma	CWA, RCRA	9421
Pennsylvania*	NELAP CWA,RCRA	68-00281
Tennessee	SDWA	02970
Texas*	NELAP CWA, RCRA	T104704412-08-TX
USDA	FOREIGN SOIL PERMIT	S-41579
USDOE	Department of Energy	DOECAP-STB
Virginia	SDWA	278
Washington*	NELAP CWA,RCRA	C1677
Wisconsin	CWA, RCRA	998310390
West Virginia	CWA,RCRA	252

*As required under the indicated accreditation, the test results in this report meet all NELAP requirements for parameters for which accre ditation is required or available. Any exceptions to NELAP requirements are noted in this report.

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A9G160282

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A9G160282

Received: 07/17/09
Reported: 07/22/09 13:57

Case Narrative

According to 40CFR Part 136.3, pH, Chlorine Residual, Dissolved Oxygen, Sulfite, and Temperature analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. field-pH), they were not analyzed immediately, but as soon as possible after laboratory receipt.

A pertinent document is appended to this report, 1 page, is included and is an integral part of this report.

Reproduction of this analytical report is permitted only in its entirety. This report shall not be reproduced except in full without the written approval of the laboratory.

TestAmerica Laboratories, Inc. certifies that the analytical results contained herein apply only to the samples tested as received by our Laboratory.

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A9G160282

Received: 07/17/09
Reported: 07/22/09 13:57

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A9G160282

DATA QUALIFIERS AND DEFINITIONS

NR Any inclusion of NR indicates that the project specific requirements do not require reporting estimated values below the laboratory reporting limit.

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A9G160282

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A9G160282

Received: 07/17/09
Reported: 07/22/09 13:57

Executive Summary - Detections

Analyte	Sample Result	Data Qualifiers	RL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: FWG-IDW-MWDECONJULY2009 (RSG0673-02 - Water)					**Sampled: 07/16/09 11:45**		**Recvd: 07/17/09 09:00**		
General Chemistry Parameters									
H2S Released From Waste	**10.3**		10.0	mg/L	1.00	07/21/09 08:30	RJP	9G21064	Section 7.3
Client ID: FWG-IDW-MWPURGEJULY2009 (RSG0673-01 - Water)					**Sampled: 07/16/09 11:30**		**Recvd: 07/17/09 09:00**		
General Chemistry Parameters									
H2S Released From Waste	**10.3**		10.0	mg/L	1.00	07/21/09 08:30	RJP	9G21064	Section 7.3

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A9G160282

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A9G160282

Received: 07/17/09
Reported: 07/22/09 13:57

Sample Summary

Sample Identification	Lab Number	Client Matrix	Date/Time Sampled	Date/Time Received	Sample Qualifiers
FWG-IDW-MWDECONJULY2009	RSG0673-02	Water	07/16/09 11:45	07/17/09 09:00	
FWG-IDW-MWPURGEJULY2009	RSG0673-01	Water	07/16/09 11:30	07/17/09 09:00	

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A9G160282

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A9G160282

Received: 07/17/09
Reported: 07/22/09 13:57

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: FWG-IDW-MWDECONJULY2009 (RSG0673-02 - Water)					**Sampled: 07/16/09 11:45**		**Recvd: 07/17/09 09:00**		
General Chemistry Parameters									
HCN Released From Waste	ND		10.0	mg/L	1.00	07/21/09 11:30	RJP	9G21061	Section 7.3
H2S Released From Waste	**10.3**		10.0	mg/L	1.00	07/21/09 08:30	RJP	9G21064	Section 7.3

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A9G160282

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A9G160282

Received: 07/17/09
Reported: 07/22/09 13:57

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: FWG-IDW-MWPURGEJULY2009 (RSG0673-01 - Water)					**Sampled: 07/16/09 11:30**		**Recvd: 07/17/09 09:00**		
General Chemistry Parameters									
HCN Released From Waste	ND		10.0	mg/L	1.00	07/21/09 11:30	RJP	9G21061	Section 7.3
H2S Released From Waste	**10.3**		10.0	mg/L	1.00	07/21/09 08:30	RJP	9G21064	Section 7.3

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A9G160282

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A9G160282

Received: 07/17/09
Reported: 07/22/09 13:57

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracte	Units	Extract Volume	Units	Date Prepared	Lab Tech	Extraction Method
General Chemistry Parameters									
Section 7.3	9G21064	RSG0673-01	200.00	mL	200.00	mL	07/21/09 08:30	RJP	Reactivity
Section 7.3	9G21064	RSG0673-02	200.00	mL	200.00	mL	07/21/09 08:30	RJP	Reactivity
Section 7.3	9G21061	RSG0673-01	5.00	mL	5.00	mL	07/21/09 11:30	RJP	Reactivity
Section 7.3	9G21061	RSG0673-02	5.00	mL	5.00	mL	07/21/09 11:30	RJP	Reactivity

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A9G160282

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A9G160282

Received: 07/17/09
Reported: 07/22/09 13:57

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
General Chemistry Parameters										
Blank Analyzed: 07/21/09 (Lab Number:9G21061-BLK1, Batch: 9G21061)										
HCN Released From Waste			50.0	mg/L	ND					
LCS Analyzed: 07/21/09 (Lab Number:9G21061-BS1, Batch: 9G21061)										
HCN Released From Waste		1000	10.0	mg/L	178	18	10-100			
General Chemistry Parameters										
Blank Analyzed: 07/21/09 (Lab Number:9G21064-BLK1, Batch: 9G21064)										
H2S Released From Waste			50.0	mg/L	ND					
LCS Analyzed: 07/21/09 (Lab Number:9G21064-BS1, Batch: 9G21064)										
H2S Released From Waste		570	10.0	mg/L	120	21	10-100			

TestAmerica Laboratories, Inc.

SAMPLE ANALYSIS REQUISITION

Laboratory TestAmerica Buffalo
Severn Trent Laboratories
10 Hazelwood Drive, Suite 106
Amherst, NY 14228

Lab Request SK113645

Report Package: Report
Need Analytical Report 2009-07-23

Client Code: 14091

Project Manager: MARK LOEB

Sample I.D.	Work Order Number	Client Sample ID	Sampling Date	Analysis Required
A9G160282-1	LGLN1	FWG-IDW-MWPURGEJULY2009	2009-07-16 11:30	WATER, 7.3.3, Reactive Cyanide (Buffalo)
A9G160282-1	LGLN1	FWG-IDW-MWPURGEJULY2009	2009-07-16 11:30	WATER, 7.3.4, Reactive Sulfide (Buffalo)
A9G160282-2	LGLN8	FWG-IDW-MWDECONJULY2009	2009-07-16 11:45	WATER, 7.3.3, Reactive Cyanide (Buffalo)
A9G160282-2	LGLN8	FWG-IDW-MWDECONJULY2009	2009-07-16 11:45	WATER, 7.3.4, Reactive Sulfide (Buffalo)

Please use Client Sample ID for report

Call MARK LOEB with questions at 330-497-9396

at the TAL North Canton Laboratory

Shipping Method: FED EX

Need detection limit and analysis date included in report.

Please send a signed copy of this form with the report at completion of analysis.

Relinquished by: [signature] Date/Time: 7/16/09 1600

Relinquished by: _____ Date/Time: _____

Received for lab by: [signature] Date/Time: 7/17/09 0900

PLEASE RETURN ORIGINAL SAMPLE ANALYSIS REQUISITION

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

END OF REPORT

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Analytical Report

SDG Number: A9G160282

Project Description(s)
Work Order RSG0673 - Reactive Cyanide / Reactive Sulfide

For:

Mark Loeb

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

Sally Hoffman
Project Manager
Sally.Hoffman@testamericainc.com

Wednesday, July 22, 2009

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TestAmerica Buffalo
Current Certifications

As of 1/27/2009

STATE	Program	Cert # / Lab ID
Arkansas	CWA, RCRA, SOIL	88-0686
California*	NELAP CWA, RCRA	01169CA
Connecticut	SDWA, CWA, RCRA, SOIL	PH-0568
Florida*	NELAP CWA, RCRA	E87672
Georgia*	SDWA,NELAP CWA, RCRA	956
Illinois*	NELAP SDWA, CWA, RCRA	200003
Iowa	SW/CS	374
Kansas*	NELAP SDWA, CWA, RCRA	E-10187
Kentucky	SDWA	90029
Kentucky UST	UST	30
Louisiana*	NELAP CWA, RCRA	2031
Maine	SDWA, CWA	NY0044
Maryland	SDWA	294
Massachusetts	SDWA, CWA	M-NY044
Michigan	SDWA	9937
Minnesota	SDWA,CWA, RCRA	036-999-337
New Hampshire*	NELAP SDWA, CWA	233701
New Jersey*	NELAP,SDWA, CWA, RCRA,	NY455
New York*	NELAP, AIR, SDWA, CWA, RCRA,CLP	10026
Oklahoma	CWA, RCRA	9421
Pennsylvania*	NELAP CWA,RCRA	68-00281
Tennessee	SDWA	02970
Texas*	NELAP CWA, RCRA	T104704412-08-TX
USDA	FOREIGN SOIL PERMIT	S-41579
USDOE	Department of Energy	DOECAP-STB
Virginia	SDWA	278
Washington*	NELAP CWA,RCRA	C1677
Wisconsin	CWA, RCRA	998310390
West Virginia	CWA,RCRA	252

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TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A9G160282

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A9G160282

Received: 07/17/09
Reported: 07/22/09 13:57

Case Narrative

According to 40CFR Part 136.3, pH, Chlorine Residual, Dissolved Oxygen, Sulfite, and Temperature analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. field-pH), they were not analyzed immediately, but as soon as possible after laboratory receipt.

A pertinent document is appended to this report, 1 page, is included and is an integral part of this report.

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TestAmerica Laboratories, Inc. certifies that the analytical results contained herein apply only to the samples tested as received by our Laboratory.

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A9G160282

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A9G160282

Received: 07/17/09
Reported: 07/22/09 13:57

DATA QUALIFIERS AND DEFINITIONS

NR Any inclusion of NR indicates that the project specific requirements do not require reporting estimated values below the laboratory reporting limit.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A9G160282

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A9G160282

Received: 07/17/09
Reported: 07/22/09 13:57

Executive Summary - Detections

Analyte	Sample Result	Data Qualifiers	RL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: FWG-IDW-MWDECONJULY2009 (RSG0673-02 - Water)				**Sampled: 07/16/09 11:45**			**Recvd: 07/17/09 09:00**		
General Chemistry Parameters									
H2S Released From Waste	**10.3**		10.0	mg/L	1.00	07/21/09 08:30	RJP	9G21064	Section 7.3
Client ID: FWG-IDW-MWPURGEJULY2009 (RSG0673-01 - Water)				**Sampled: 07/16/09 11:30**			**Recvd: 07/17/09 09:00**		
General Chemistry Parameters									
H2S Released From Waste	**10.3**		10.0	mg/L	1.00	07/21/09 08:30	RJP	9G21064	Section 7.3

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A9G160282

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A9G160282

Received: 07/17/09
Reported: 07/22/09 13:57

Sample Summary

Sample Identification	Lab Number	Client Matrix	Date/Time Sampled	Date/Time Received	Sample Qualifiers
FWG-IDW-MWDECONJULY2009	RSG0673-02	Water	07/16/09 11:45	07/17/09 09:00	
FWG-IDW-MWPURGEJULY2009	RSG0673-01	Water	07/16/09 11:30	07/17/09 09:00	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A9G160282

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A9G160282

Received: 07/17/09
Reported: 07/22/09 13:57

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: FWG-IDW-MWDECONJULY2009 (RSG0673-02 - Water)					**Sampled: 07/16/09 11:45**		**Recvd: 07/17/09 09:00**		
General Chemistry Parameters									
HCN Released From Waste	ND		10.0	mg/L	1.00	07/21/09 11:30	RJP	9G21061	Section 7.3
H2S Released From Waste	**10.3**		10.0	mg/L	1.00	07/21/09 08:30	RJP	9G21064	Section 7.3

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A9G160282

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A9G160282

Received: 07/17/09
Reported: 07/22/09 13:57

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: FWG-IDW-MWPURGEJULY2009 (RSG0673-01 - Water)					**Sampled: 07/16/09 11:30**		**Recvd: 07/17/09 09:00**		
General Chemistry Parameters									
HCN Released From Waste	ND		10.0	mg/L	1.00	07/21/09 11:30	RJP	9G21061	Section 7.3
H2S Released From Waste	**10.3**		10.0	mg/L	1.00	07/21/09 08:30	RJP	9G21064	Section 7.3

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A9G160282

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A9G160282

Received: 07/17/09
Reported: 07/22/09 13:57

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracte	Units	Extract Volume	Units	Date Prepared	Lab Tech	Extraction Method
General Chemistry Parameters									
Section 7.3	9G21064	RSG0673-01	200.00	mL	200.00	mL	07/21/09 08:30	RJP	Reactivity
Section 7.3	9G21064	RSG0673-02	200.00	mL	200.00	mL	07/21/09 08:30	RJP	Reactivity
Section 7.3	9G21061	RSG0673-01	5.00	mL	5.00	mL	07/21/09 11:30	RJP	Reactivity
Section 7.3	9G21061	RSG0673-02	5.00	mL	5.00	mL	07/21/09 11:30	RJP	Reactivity

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A9G160282

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A9G160282

Received: 07/17/09
Reported: 07/22/09 13:57

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
General Chemistry Parameters										
Blank Analyzed: 07/21/09 (Lab Number:9G21061-BLK1, Batch: 9G21061)										
HCN Released From Waste			50.0	mg/L	ND					
LCS Analyzed: 07/21/09 (Lab Number:9G21061-BS1, Batch: 9G21061)										
HCN Released From Waste		1000	10.0	mg/L	178	18	10-100			
General Chemistry Parameters										
Blank Analyzed: 07/21/09 (Lab Number:9G21064-BLK1, Batch: 9G21064)										
H2S Released From Waste			50.0	mg/L	ND					
LCS Analyzed: 07/21/09 (Lab Number:9G21064-BS1, Batch: 9G21064)										
H2S Released From Waste		570	10.0	mg/L	120	21	10-100			

TESTAMERICA LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Environmental Quality Mgt., Inc. PAGE 1

Lot #: A9G160282 RVAAP (OH) **Date Reported:** 7/23/09

Project Number: 30240.0006

Client Sample ID: FWG-IDW-MWPURGEJULY2009

Sample #: 001 Date Sampled: 07/16/09 11:30 Date Received: 07/16/09 Matrix: WATER

PARAMETER		RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Mercury in Liquid Waste (Manual Cold-Vapor) TCLP						Reviewed
Mercury	TCLP	ND	0.0020	mg/L	SW846 7470A	
Inductively Coupled Plasma (ICP) Metals TCLP						Reviewed
Silver	TCLP	ND	0.50	mg/L	SW846 6010B	
Arsenic	TCLP	ND	0.50	mg/L	SW846 6010B	
Barium	**TCLP**	**0.024 B**	**10.0**	**mg/L**	**SW846 6010B**	
Cadmium	TCLP	ND	0.10	mg/L	SW846 6010B	
Chromium	TCLP	ND	0.50	mg/L	SW846 6010B	
Lead	TCLP	ND	0.50	mg/L	SW846 6010B	
Selenium	TCLP	ND	0.25	mg/L	SW846 6010B	

B Estimated result. Result is less than RL.

Volatile Organics by GC/MS TCLP						Reviewed
Benzene		ND	0.025	mg/L	SW846 8260B	
2-Butanone (MEK)		ND	0.25	mg/L	SW846 8260B	
Carbon tetrachloride		ND	0.025	mg/L	SW846 8260B	
Chlorobenzene		ND	0.025	mg/L	SW846 8260B	
Chloroform		ND	0.025	mg/L	SW846 8260B	
1,2-Dichloroethane		ND	0.025	mg/L	SW846 8260B	
1,1-Dichloroethylene		ND	0.070	mg/L	SW846 8260B	
Tetrachloroethylene		ND	0.070	mg/L	SW846 8260B	
Trichloroethylene		ND	0.050	mg/L	SW846 8260B	
Vinyl chloride		ND	0.025	mg/L	SW846 8260B	
Semivolatile Organic Compounds by GC/MS TCLP						Reviewed
o-Cresol		ND	0.0040	mg/L	SW846 8270C	
m-Cresol & p-Cresol		ND	0.040	mg/L	SW846 8270C	
1,4-Dichlorobenzene		ND	0.0040	mg/L	SW846 8270C	
2,4-Dinitrotoluene		ND	0.020	mg/L	SW846 8270C	
Hexachlorobenzene		ND	0.020	mg/L	SW846 8270C	
Hexachlorobutadiene		ND	0.020	mg/L	SW846 8270C	
Hexachloroethane		ND	0.020	mg/L	SW846 8270C	
Nitrobenzene		ND	0.0040	mg/L	SW846 8270C	
Pentachlorophenol		ND	0.040	mg/L	SW846 8270C	

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TESTAMERICA LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Environmental Quality Mgt., Inc.

Lot #: A9G160282 RVAAP (OH) **Date Reported:** 7/23/09

Project Number: 30240.0006

Client Sample ID: FWG-IDW-MWPURGEJULY2009

Sample #: 001 Date Sampled: 07/16/09 11:30 Date Received: 07/16/09 Matrix: WATER

PARAMETER		RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Semivolatile Organic Compounds by GC/MS TCLP						Reviewed
Pyridine		ND	0.020	mg/L	SW846 8270C	
2,4,5-Trichloro-phenol		ND	0.020	mg/L	SW846 8270C	
2,4,6-Trichloro-phenol		ND	0.020	mg/L	SW846 8270C	
Inorganic Analysis			ility			Reviewed
Pensky-Martens Method for Determining Ignitability		**>180**		**deg F**	**SW846 1010**	
pH Aqueous		**9.6**		**No Units**	**SW846 9040B**	

Client Sample ID: FWG-IDW-MWDECONJULY2009

Sample #: 002 Date Sampled: 07/16/09 11:45 Date Received: 07/16/09 Matrix: WATER

PARAMETER		RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Mercury in Liquid Waste (Manual Cold-Vapor) TCLP						Reviewed
Mercury	TCLP	ND	0.0020	mg/L	SW846 7470A	
Inductively Coupled Plasma (ICP) Metals TCLP						Reviewed
Silver	TCLP	ND	0.50	mg/L	SW846 6010B	
Arsenic	**TCLP**	**0.0040 B**	**0.50**	**mg/L**	**SW846 6010B**	
Barium	**TCLP**	**0.044 B**	**10.0**	**mg/L**	**SW846 6010B**	
Cadmium	**TCLP**	**0.0029 B**	**0.10**	**mg/L**	**SW846 6010B**	
Chromium	**TCLP**	**0.0078 B**	**0.50**	**mg/L**	**SW846 6010B**	
Lead	**TCLP**	**0.0047 B**	**0.50**	**mg/L**	**SW846 6010B**	
Selenium	TCLP	ND	0.25	mg/L	SW846 6010B	

B Estimated result. Result is less than RL.

PARAMETER		RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Volatile Organics by GC/MS TCLP						Reviewed
Benzene		ND	0.10	mg/L	SW846 8260B	
2-Butanone (MEK)		ND	1.0	mg/L	SW846 8260B	
Carbon tetrachloride		ND	0.10	mg/L	SW846 8260B	
Chlorobenzene		ND	0.10	mg/L	SW846 8260B	
Chloroform		ND	0.10	mg/L	SW846 8260B	

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TESTAMERICA LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Environmental Quality Mgt., Inc.

Lot #: A9G160282 RVAAP (OH) **Date Reported:** 7/23/09

Project Number: 30240.0006

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: FWG-IDW-MWDECONJULY2009					
Sample #: 002 Date Sampled: 07/16/09 11:45 Date Received: 07/16/09 Matrix: WATER					
Volatile Organics by GC/MS TCLP					Reviewed
1,2-Dichloroethane	ND	0.10	mg/L	SW846 8260B	
1,1-Dichloroethylene	ND	0.10	mg/L	SW846 8260B	
Tetrachloroethylene	ND	0.10	mg/L	SW846 8260B	
Trichloroethylene	ND	0.10	mg/L	SW846 8260B	
Vinyl chloride	ND	0.10	mg/L	SW846 8260B	
Semivolatile Organic Compounds by GC/MS TCLP					Reviewed
o-Cresol	ND	0.0040	mg/L	SW846 8270C	
m-Cresol & p-Cresol	ND	0.040	mg/L	SW846 8270C	
1,4-Dichlorobenzene	ND	0.0040	mg/L	SW846 8270C	
2,4-Dinitrotoluene	ND	0.020	mg/L	SW846 8270C	
Hexachlorobenzene	ND	0.020	mg/L	SW846 8270C	
Hexachlorobutadiene	ND	0.020	mg/L	SW846 8270C	
Hexachloroethane	ND	0.020	mg/L	SW846 8270C	
Nitrobenzene	ND	0.0040	mg/L	SW846 8270C	
Pentachlorophenol	ND	0.040	mg/L	SW846 8270C	
Pyridine	ND	0.020	mg/L	SW846 8270C	
2,4,5-Trichloro-phenol	ND	0.020	mg/L	SW846 8270C	
2,4,6-Trichloro-phenol	ND	0.020	mg/L	SW846 8270C	
Inorganic Analysis		ility			Reviewed
Pensky-Martens Method for Determining Ignitability	**>180**		**deg F**	**SW846 1010**	
pH Aqueous	**7.6**		**No Units**	**SW846 9040B**	
Client Sample ID: FWG-IDW-MWTBJULY2009					
Sample #: 003 Date Sampled: 07/16/09 11:00 Date Received: 07/16/09 Matrix: WATER					
Volatile Organics by GC/MS					Reviewed
Benzene	ND	5.0	ug/L	SW846 8260B	
2-Butanone (MEK)	ND	20	ug/L	SW846 8260B	
Carbon tetrachloride	ND	5.0	ug/L	SW846 8260B	

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TESTAMERICA LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Environmental Quality Mgt., Inc. PAGE 4

Lot #: A9G160282 RVAAP (OH) **Date Reported:** 7/23/09

Project Number: 30240.0006

Client Sample ID: FWG-IDW-MWTBJULY2009

Sample #: 003 Date Sampled: 07/16/09 11:00 Date Received: 07/16/09 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Volatile Organics by GC/MS					Reviewed
Chlorobenzene	ND	5.0	ug/L	SW846 8260B	
Chloroform	ND	5.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	5.0	ug/L	SW846 8260B	
1,1-Dichloroethylene	ND	5.0	ug/L	SW846 8260B	
Tetrachloroethylene	ND	5.0	ug/L	SW846 8260B	
Trichloroethylene	ND	5.0	ug/L	SW846 8260B	
Vinyl chloride	ND	5.0	ug/L	SW846 8260B	

APPENDIX F

REPORTING LIMITS THAT CURRENTLY DO NOT MEET THE RVAAP QAPP PQLS AND/OR REGION 9 PRGS

VOCs

CAS No.	Analyte Name	MDL	Lab RL	RVAAP QAPP PQL	Region 9 PRG	MCL
107-06-2	1,2-Dichloroethane	0.16	1.0	1.0	0.12	5.0
71-43-2	Benzene	0.22	1.0	1.0	0.35	5.0
67-66-3	Chloroform	0.16	1.0	1.0	0.17	NA
10061-01-5	cis-1,3-Dichloropropene	0.12	1.0	1.0	0.4	NA
75-01-4	Vinyl chloride	0.21	1.0	1.0	0.02	2.0
79-34-5	1,1,2,2-Tetrachloroethane	0.22	1.0	1.0	0.055	NA
106-93-4	1,2-Dibromoethane	0.24	1.0	1.0	0.0056	NA
79-01-6	Trichloroethene	0.28	1.0	1.0	0.028	5.0
127-18-4	Tetrachloroethene	0.19	1.0	1.0	0.1	5.0
75-27-4	Bromodichloromethane	0.14	1.0	1.0	0.18	NA
79-00-5	1,1,2-Trichloroethane	0.22	1.0	1.0	0.2	5.0
124-48-1	Dibromochloromethane	0.19	1.0	1.0	0.13	NA
10061-02-6	Trans-1,3-Dichloropropene	0.17	1.0	1.0	0.4	NA
56-23-5	Carbon tetrachloride	0.19	1.0	1.0	0.17	5.0

Note: All units are µg/L
NA = Not Available

SVOCs

CAS No.	Analyte Name	MDL	Lab RL	RVAAP QAPP PQL	Region 9 PRG	MCL
111-44-4	Bis(2-Chloroethyl) ether	0.088	1.0	10	0.01	NA
50-32-8	Benzo(a)pyrene	0.048	0.20	10	0.0092	0.2
53-70-3	Dibenz(a,h)anthracene	0.039	0.20	10	0.0093	NA
118-74-1	Hexachlorobenzene	0.065	0.20	10	0.042	1.0
205-99-2	Benzo(b)fluoranthene	0.049	0.20	10	0.092	NA
193-39-5	Indeno(1,2,3-cd)pyrene	0.065	0.20	10	0.092	NA
56-55-3	Benzo(a)anthracene	0.052	0.20	10	0.092	NA
91-94-1	3,3'-Dichlorobenzidine	0.48	5.0	10	0.15	NA
106-46-7	1,4-Dichlorobenzene	0.52	1.0	10	0.5	75
87-86-5	Pentachlorophenol	0.48	5.0	25	0.56	1.0
87-68-3	Hexachlorobutadiene	0.51	1.0	10	0.86	NA
88-06-2	2,4,6-Trichlorophenol	1.4	5.0	10	3.6	NA

Note: All units are µg/L
NA = Not Available

Pesticides

CAS No.	Analyte Name	MDL	Lab RL	RVAAP QAPP PQL	Region 9 PRG	MCL
60-57-1	Dieldrin	0.0067	0.030	0.05	0.0042	NA
309-00-2	Aldrin	0.0061	0.030	0.05	0.004	NA
1024-57-3	Heptachlor epoxide	0.0065	0.030	0.05	0.0074	0.2
319-84-6	alpha-BHC	0.0062	0.030	0.05	0.011	NA
76-44-8	Heptachlor	0.0062	0.030	0.05	0.015	0.4

Note: All units are µg/L
NA = Not Available

Explosives

CAS No.	Analyte Name	MDL	Lab RL	RVAAP QAPP PQL	Region 9 PRG	MCL
88-72-2	2-Nitrotoluene	0.1	0.48	0.2	120	NA
99-08-1	3-Nitrotoluene	0.1	0.48	0.2	0.049	NA
99-99-0	4-Nitrotoluene	0.1	0.48	0.2	0.66	NA

Note: All units are µg/L
NA = Not Available

PCBs

CAS No.	Analyte Name	MDL	Lab RL	RVAAP QAPP PQL	Region 9 PRG	MCL
11104-28-2	PCB-1221	0.49	0.50	0.50	0.034	5.0
11141-16-5	PCB-1232	0.41	0.50	0.50	0.034	5.0
53469-21-9	PCB-1242	0.11	0.50	0.50	0.034	5.0
12672-29-6	PCB-1248	0.049	0.50	0.50	0.034	5.0
11097-69-1	PCB-1254	0.087	0.50	0.50	0.034	5.0
11096-82-5	PCB-1260	0.071	0.50	0.50	0.034	5.0

Note: All units are µg/L
NA = Not Available

Inorganics

CAS No.	Analyte Name	MDL	Lab RL	RVAAP QAPP PQL	Region 9 PRG	MCL
7440-70-2	Calcium	80	100	100	NS	NA
7440-23-5	Sodium	410	1000	200	NS	NA
7440-09-7	Potassium	72	1000	200	NS	NA

Note: All units are µg/L
NA = Not Available
These compounds will not meet the reporting limits specified in the QAPP. However, these chemicals have consistently been found naturally occurring on the site at values that exceed the QAPP RLs.

APPENDIX G

CORRESPONDENCE & COMMENT RESPONSE TABLE

OhioEPA

State of Ohio Environmental Protection Agency

Northeast District Office

2110 East Aurora Rd.
Twinsburg, Ohio 44087

TELE: (330) 963-1200 **FAX:** (330) 487-0769
www.epa.state.oh.us

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

January 5, 2010

RE: RAVENNA ARMY AMMUNITION PLANT, PORTAGE/TRUMBULL COUNTIES, DRAFT, FWGWMP JULY 2009 SAMPLING EVENT REPORT, RESPONSE TO OHIO EPA COMMENTS DATED DECEMBER 21, 2009

Mr. Mark Patterson
Installation Manager
Ravenna Army Ammunition Plant
8451 State Route 5
Ravenna, OH 44266

CERTIFIED MAIL
7009 1680 0000 6381 0865

Dear Mr. Patterson:

The Ohio Environmental Protection Agency (Ohio EPA) has received and reviewed the "Response to Ohio EPA Comments, Facility-Wide Ground Water Monitoring Program (FWGWMP) Draft July 2009 Sampling Event" document. The "Investigative Derived Waste and Characterization and Disposal Plan" (IDW) has been included in Appendix E in this document. The document was received at Ohio EPA, Northeast District Office (NEDO), Division of Emergency and Remedial Response (DERR), on December 21, 2009. The document was prepared for the U.S. Army Corps of Engineers (USACE) – Louisville District, by Environmental Quality Management, Inc. (EQM), under contract no. W912QR-04-D-0036.

The IDW plan, Appendix E, was previously approved. The comments have been adequately addressed and the report is approved. Please forward one copy of the replacement pages and titles.

If you have any questions, please call me at (330) 963-1207.

Sincerely,

Vicki Deppisch
Project Coordinator
Division of Emergency and Remedial Response

VD/kss

cc: Bonnie Buthker, Ohio EPA, DERR, SWDO
Katie Elgin, OHARNG RTLS
Glen Beckham, USACE Louisville
John Miller, EQM
Conni McCambridge, Ohio EPA, DERR, NEDO
Eileen Mohr, Ohio EPA, DERR, NEDO
Maj. Ed Meade, OHARNG RTLS
Mark Krivansky, AEC
Mark Nichter, USACE Louisville

ec: Mike Eberle, Ohio EPA, DERR, NEDO
Todd Fisher, Ohio EPA, DERR, NEDO

OhioEPA
State of Ohio Environmental Protection Agency
Northeast District Office

2110 East Aurora Rd.
Twinsburg, Ohio 44087

TELE: (330) 963-1200 FAX: (330) 487-0769
www.epa.state.oh.us

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

December 2, 2009

RE: RAVENNA ARMY AMMUNITION PLANT, PORTAGE/TRUMBULL COUNTIES, FWGWMP, DRAFT, JULY 2009 SAMPLING EVENT REPORT

Mr. Mark Patterson
Installation Manager
Ravenna Army Ammunition Plant
8451 State Route 5
Ravenna, OH 44266

CERTIFIED MAIL
7009 1680 0000 6381 0926

Dear Mr. Patterson:

The Ohio Environmental Protection Agency (Ohio EPA) has received and reviewed the "Draft, Facility-Wide Ground Water Monitoring Program (FWGWMP) July 2009 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio" document. The "Investigative Derived Waste and Characterization and Disposal Plan" (IDW) has been included as Appendix E. The document was received at Ohio EPA, Northeast District Office (NEDO), Division of Emergency and Remedial response (DERR), on November 3, 2009. The document was prepared for the U.S. Army Corps of Engineers (USACE) – Louisville District, by Environmental Quality Management, Inc. (EQM), under contract no. W912QR-04-D-0036. This document was reviewed by Ohio EPA personnel in NEDO, DERR, and NEDO's Division of Drinking and Ground Waters (DDAGW).

This monitoring event was completed under the FWGWMP. Forty-six wells were sampled during an eight-day sampling event, on July 13 through July 16, 2009 (Section 2.2, page 7).

Five quality assurance (QA) samples were collected for this sampling event from the same wells where the duplicate samples were collected. However, this did not occur with well LL7mw-006. A split QA sample originally collected from this well was received by the lab at greater than 10°C. Since this was out of the acceptable temperature range, an additional split sample was collected from well ASYmw-008 (Section 2.2, pg. 8).

Seven wells were redeveloped between June 16 and June 17, 2009, based on documentation of historical sediment accumulation footages (Section 3.1.1, pg. 11). These wells are: ASYmw-001, ASYmw-003, LL12mw-113, LL12mw-243, LL12mw-244, LL12mw-245, LL6mw-004, LL7mw-002, LL7mw-003, LL7mw-004, LL7mw-005, LL8mw-002, LL8mw-003, LL8mw-004, LL9mw-004, LL9mw-007, and B12mw-010.

The IDW Plan, Appendix E, was approved in an August 3, 2009 letter from Ohio EPA. Enclosed are Ohio EPA's comments that need to be addressed before the entire document can be approved.

The Director's Final Findings and Orders require that the responses to comments (RTCs) be received within fifteen (15) days of the Army's receipt of Ohio EPA's correspondence, and that the revised document be submitted within thirty (30) days of the Army's receipt of Agency correspondence.

If you have any questions, please call me at (330) 963-1207.

Sincerely,

Vicki Deppisch
Project Coordinator
Division of Emergency and Remedial Response

VD/kss

enclosure

cc: Bonnie Buthker, Ohio EPA, DERR, SWDO
Eileen Mohr, Ohio EPA, DERR, NEDO
Katie Elgin, OHARNG RTLS
Maj. Ed Meade, OHARNG RTLS
Glen Beckham, USACE Louisville
Mark Nichter, USACE Louisville
Mark Krivansky, AEC
Conni McCambridge, Ohio EPA, DERR, NEDO
John Miller, EQM

ec: Mike Eberle, Ohio EPA, DERR, NEDO
Todd Fisher, Ohio EPA, DERR, NEDO

PRELIMINARY DRAFT FACILITY-WIDE GROUNDWATER MONITORING PROGRAM
(REPORT ON THE JULY 2009 SAMPLING EVENT)
RAVENNA ARMY AMMUNITION PLANT, RAVENNA OHIO
COMMENT RESPONSE TABLE
December 2, 2009

Comment Number	Page or Sheet	New Page or Sheet	Comment	Recommendation	Response
			Ohio EPA (V. Deppisch/C. McCambridge)		
O-1	Page 16/Line 7 (Section 3.1.2, Appendix C		Section 3.1.2 text and associated table indicate that many wells were purged by low-flow technique. A pH value of less than 5 was recorded during purging and sampling of several wells (i.e., LL11mw-005, LL6mw-007, LL7mw-006, LL9mw-002, LL9mw-009, and LL9mw-007. The text indicates *that "...a full evaluation of the conditions at these wells will be conducted once all of the wells have been sampled."* A time frame for completing the evaluation is not indicated in the text. Since a lower pH could be indicative of ground water contamination, it needs to be addressed within a reasonable time.	The issue of pH value less than 5 was noted in several wells. These values remained relatively unchanged since the January 2009 sampling event. Please provide a brief discussion concerning the possible reason(s) for these pH values and whether these values may be decreasing through time.	EQM has reviewed the historical purge records for these wells over the past 4 quarters dating back to January 2009 (sampling of the referenced wells started in January 2009). The July 2009 pH readings for all of these wells appear to have declined slightly from the April 2009 sampling event. It should be noted that the October 2009 pH readings for these wells show pH readings above 5.0 with the exception of LL9mw-006 which has consistently remained around 4.5. As stated in the text of the report this could be indicative of groundwater contamination however a full evaluation of the conditions at these wells will be conducted once all of the wells have been sampled. The July quarterly report contains an evaluation of "potential" contamination, as determined by background conditions, Region IX PRGs, and MCLs. The July report indicates that wells LL6mw-007 (Cd, Mg), LL7mw-006 (Cd, Co, Mg, Fe, trinitrobenzene, HMX), LL9mw-0002 (As, Mg, Fe) and LL9mw-007 (Co, Mg, Fe) may be impacted. Wells LL9mw-009 and LL11mw-005 are not potentially impacted. A similar evaluation is present with each quarterly report and is also presented in the annual report. The additional investigation of metals described in the response to comment O-2 (see below)

Comment Number	Page or Sheet	New Page or Sheet	Comment	Recommendation	Response
Ohio EPA (V. Deppisch/C. McCambridge)					
					may provide further in-sight into the relationship of pH and metals contamination.
O-2	Pages 27 to 37 (Section 3.2.2, Table 3-4		Table 3-4 contains several inorganic parameters that exceeded their respective MCLs and/or Region 9 PRGs in various wells. These parameters are: arsenic, iron, and manganese. As previously noted during the review of earlier sampling reports, these parameters exceeded their respective MCL and/or Region 9 PRG values, yet have remained relatively unchanged. It remains unclear what course of action will be taken to address these exceedances. This issue has not yet been addressed.	Please provide a discussion of how and when the exceedances of the MCL and/or Region 9 PRG for these inorganic parameters will be addressed.	This comment pertains to potential remedial activities for groundwater at the facility. As stated in Section 3.2.2 the facility-wide groundwater conditions are still being evaluated, including background levels for all inorganic compounds. This will also include an evaluation of arsenic, iron and manganese as it relates to exceedances of the MCL. No remedial activities associated with the groundwater are planned until all groundwater wells at the facility have completed a minimum of 4 quarters of sampling. It should be further noted that additional sampling for metals was completed in October 2009. This data will be used to conduct a specialized geochemical study to better characterize the groundwater quality as it pertains to metals at the site. This study will be completed in 2010. It should also be noted that the facility is currently in the remedial investigation (RI) stage of the CERCLA process for facility-wide groundwater. Since there are no immediate threats to human health and the environment, the Army plans to address any possible remedial action activities by next conducting a feasibility study (FS). The FS will address how the Army plans to implement any remedial activities for the facility-wide groundwater. SAIC is currently contracted (under the

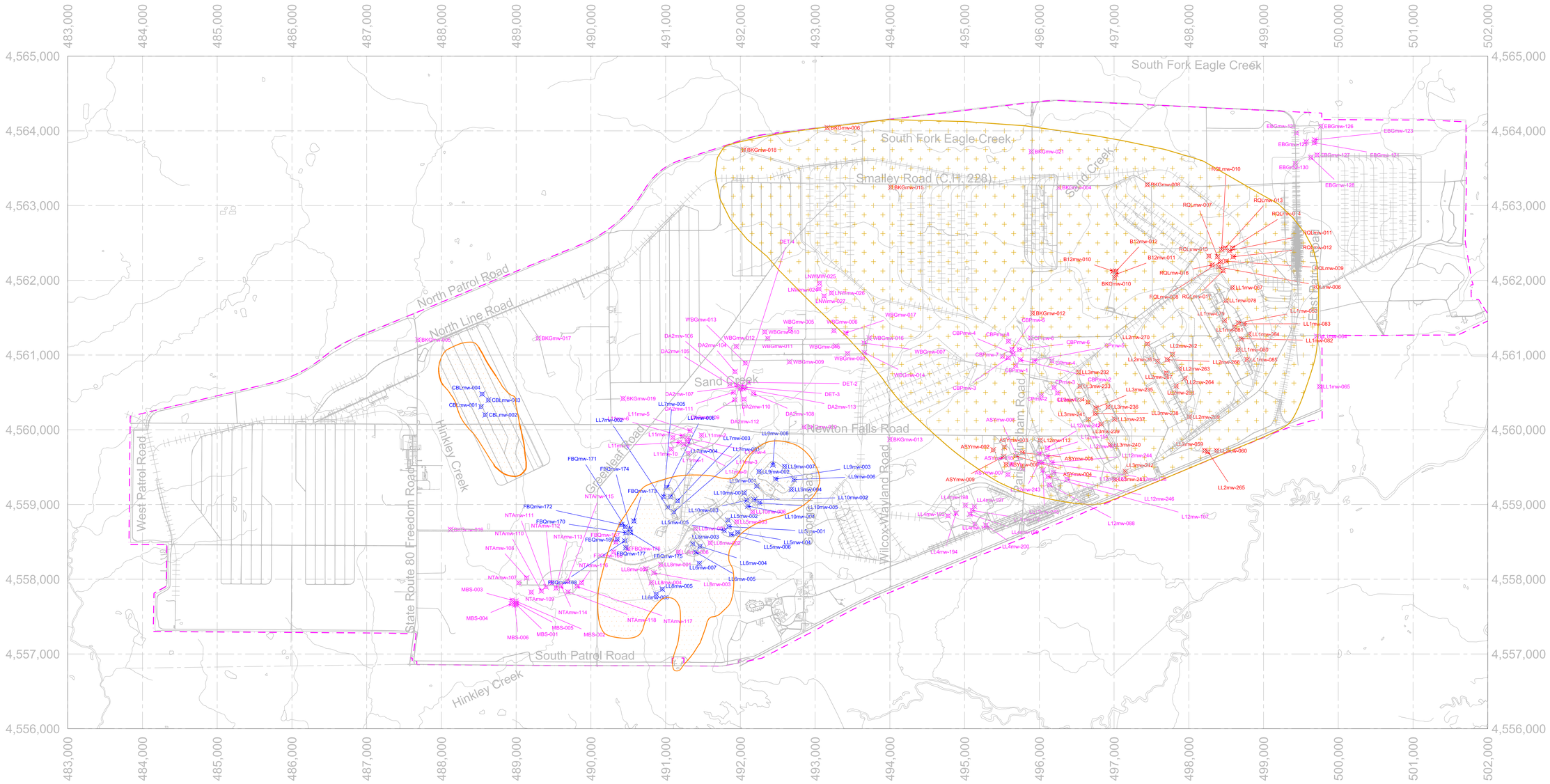
Comment Number	Page or Sheet	New Page or Sheet	Comment	Recommendation	Response
			Ohio EPA (V. Deppisch/C. McCambridge)		
					PBA-2008 Delivery Order) to implement further RI and FS activities for groundwater at several of the AOCs. SAIC has already conducted the FS for groundwater at Load Line 12, and will continue to do so for the other AOCs.
O-3	Page 29 (section 3.2.2, Line8)		The text includes the following statements *"The elevated concentrations of the subject parameters will be evaluated with respect to Ravenna's Draft Facility-Wide Clean Up Goals (CUGs). If the parameters are identified as Contaminants of Concern (COCs), then a risk management analysis will be performed during the RI/FS process. Remedial actions will be implemented at the facility at any time the Groundwater COCs are deemed to represent an immediate threat to human health or the environment."* The time frame of completing this evaluation of elevated concentrations is not indicated in the text. Furthermore, DDAGW is not aware of concurring with last two statements	Please delete the last two statements of this paragraph (*"If the parameters are..."* and *"Remedial actions will be..."*). The time frame for completing the evaluation of those parameters with elevated concentrations also needs to be clarified.	The last two sentences will be deleted (note that this comment was also addressed for the April 2009 groundwater report, however the draft of the July 2009 had already been submitted to the Ohio EPA prior to receiving the request to delete these two sentences). To date there have been no elevated concentrations of the subject parameters found in the groundwater which would pose an immediate threat to human health or the environment. The evaluation of elevated concentrations of COCs is ongoing and includes the geochemical study referenced in Comment O-2. Additionally, the annual report will recommend additional sampling at various facility wells to further gauge the extent of any contamination in the groundwater. The following text will be added to Section 3.2.2: *To date there have been no elevated concentrations of the subject parameters found in the groundwater which would pose an immediate threat to human health or the environment. The evaluation of elevated concentrations of COCs is ongoing and includes a geochemical study to better*

Comment Number	Page or Sheet	New Page or Sheet	Comment	Recommendation	Response
			Ohio EPA (V. Deppisch/C. McCambridge)		
					characterize the groundwater quality as it pertains to metals at the site. This study will be completed in 2010. Additionally, further sampling at various facility wells will be conducted in 2010 to further gauge the extent of any contamination in the groundwater.
O-4	Pages 48 to 62 (Section 3.2.4 – Table 3-7)		Table 3-7 contains "rejected data" for various analytical parameters (i.e., 2,4-dinitrophenol, 4,6-dinitro-2-methylphenol) in several sampled wells. The issue of "rejected data" has been noted in several previous submittals. In each case, the Facility has responded that the issue will be addressed with the analytical lab to avoid further problems. Yet, the problem reoccurs with different chemicals of concern in various sampled wells. Thus, it appears that the implemented measures may not be preventing the initial problem.	The recurrent problem with "rejected data" needs to be prevented by implementing adequate and effective steps. An additional discussion is needed to clarify how these new steps are more likely to prevent the same problem from reoccurring in the next sampling event than previously adopted measures.	As stated in previous responses to this comment, overall the data acceptance goals for usable data (>90%), as specified in the facility QAPP, have been met since the April 2007 sampling event. As presented in Table 3.10 of the July 2009 report, overall data acceptance for samples collected in July 2009 was 99.9% of the 10,148 data points (18 rejected data points). Given the volume of samples for multiple analyses (including complex matrices on occasion) required of this project, it is not unreasonable to expect data points to infrequently be rejected. While the entire project team continually strives to avoid instances that would result in rejected data, inevitably events will occur that in the end make the data unusable. When factoring the large scope of these sampling events, the complexities associated with these events, and the human involvement in these events the amount of data rejected truly is minimal. With the exception of benzoic acid and HCPD no consistent trends have been identified for any of the other compounds rejected for the previous sampling events. The steps

Comment Number	Page or Sheet	New Page or Sheet	Comment	Recommendation	Response
			Ohio EPA (V. Deppisch/C. McCambridge)		
					implemented by the laboratory have corrected the previous issues encountered for these two compounds, and there have been no rejected data for either compound from several of the past sampling rounds. The current (July 2009) data was rejected during this sampling and analysis event for MRL check failures as described in the Data Validation Reports. 2,4-Dintrophenol and 4,6-Dinitro-2-methylphenol, the only compounds rejected from data for this sampling event, were rejected from only one analytical batch consisting of 9 samples. These two compounds had acceptable QC, including MRL recoveries, for the remaining samples from this event. This is not indicative of any sort of trend, but clearly an isolated event. Typical 8270 analysis does not require an MRL check, and therefore, would not normally be evaluated during the data review process. However, the MRL check is a requirement of the *Louisville Chemistry Guidelines*, and was therefore included as evaluation criteria during our review of this data. Every event is an opportunity for us to take additional steps to mitigate issues which would lead to the rejection of data, and we have implemented steps after each event in an effort to do so. The important thing is to identify each issue responsible, which in this particular case was likely simply human oversight, for data

PRELIMINARY DRAFT FACILITY-WIDE GROUNDWATER MONITORING PROGRAM
(REPORT ON THE JULY 2009 SAMPLING EVENT)
RAVENNA ARMY AMMUNITION PLANT, RAVENNA OHIO
COMMENT RESPONSE TABLE
December 2, 2009

Comment Number	Page or Sheet	New Page or Sheet	Comment	Recommendation	Response
			Ohio EPA (V. Deppisch/C. McCambridge)		
					being rejected and implement steps to prevent recurrence of these issues on future events. To date, we have still not seen any obvious trends which have caused rejection of significant portions of data sets, at the same sample locations, for the same reason over multiple, consecutive events. Therefore we do not believe that additional steps or new procedures are warranted for future analyses.



LEGEND

- UNCONSOLIDATED WELL
- HOMEWOOD MEMBER WELL
- SHARON MEMBER WELL
- PROPERTY LINE
- HOMEWOOD MEMBER
- SHARON MEMBER

NOTE: THE UNCONSOLIDATED AQUIFER OVERLAYS THE HOMEWOOD AND SHARON MEMBERS, EXCEPT AS INDICATED ON PLATE 2

0 50 1000

SCALE (METERS)

N

COORDINATE SYSTEM UTM NAD 83 ZONE 17

ENVIRONMENTAL QUALITY MANAGEMENT, INC.
1800 CARILLON BLVD.
CINCINNATI, OHIO 45240
P (513)825-7500
F (513)825-7495

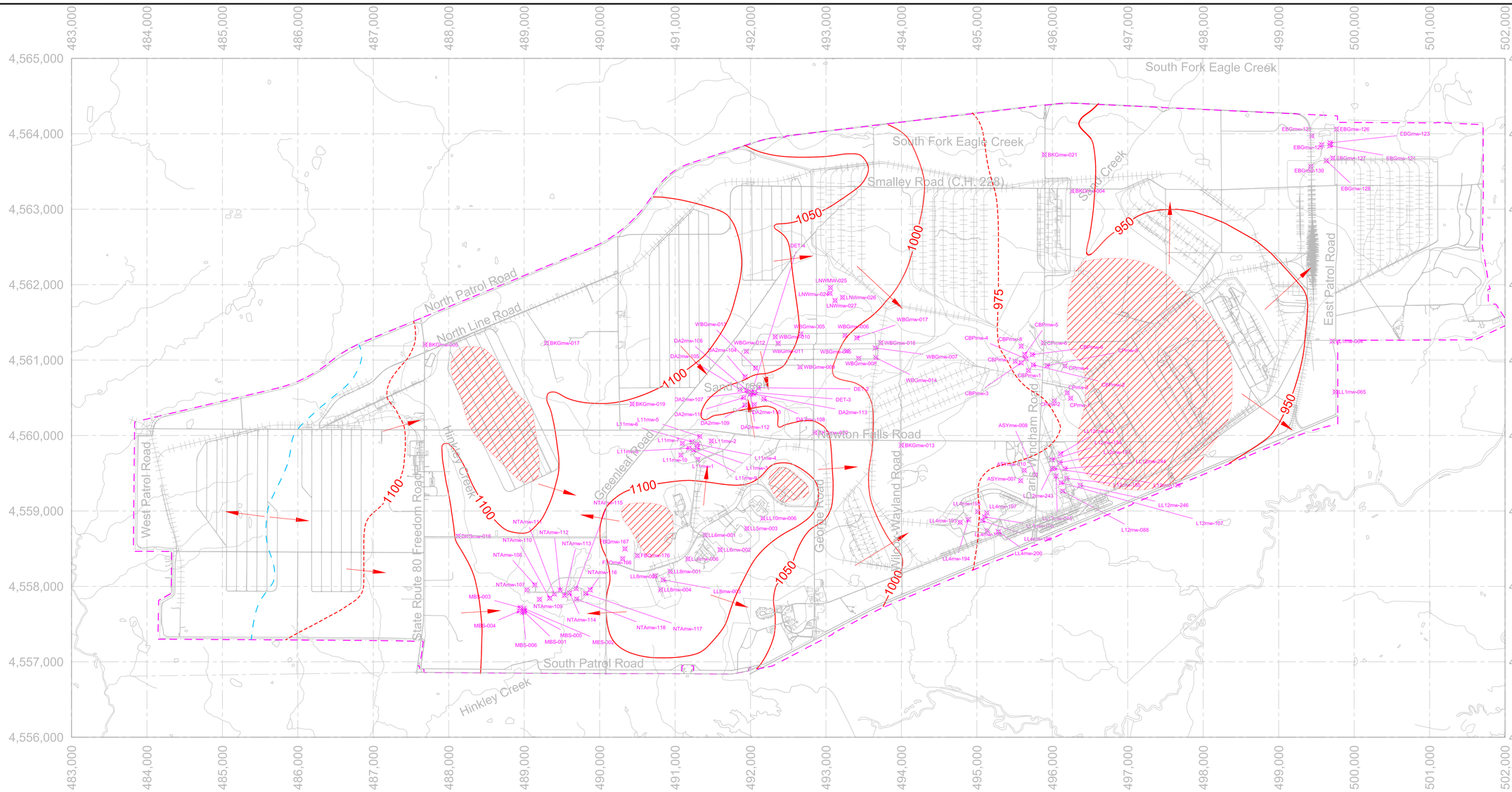
REV	DESCRIPTION	DATE	APPROVED
1	ADDED NOTE	12-04-08	BT

REVISIONS

DRAWN	D.TOMO	10/22/07
CHECKED		
APPROVED		
SCALE:	NONE	

MONITORING WELLS AT RVAAP

ORIGINAL SIZE	PROJECT NO.	DWG NO.	REV
E	030240.0006	PLATE 1	1



Well ID	Elevation (ft, amsl)
BKGmw-004	953.35
BKGmw-005	1140.72
BKGmw-013	976.63
BKGmw-016	1095.20
BKGmw-017	1117.78
BKGmw-019	1089.52
BKGmw-020	1058.90
BKGmw-021	955.46
LL1mw-064	932.95
LL1mw-065	932.47
LL4mw-193	976.20
LL4mw-194	975.67
LL4mw-195	972.23
LL4mw-196	971.83
LL4mw-197	971.30
LL4mw-198	975.17
LL4mw-199	969.79
LL4mw-200	969.83
LL5mw-003	1108.05
LL6mw-001	1110.65
LL6mw-002	1117.65

Well ID	Elevation (ft, amsl)
LL6mw-006	1109.15
LL8mw-001	1110.01
LL8mw-002	1106.24
LL8mw-003	1106.36
LL8mw-004	1104.88
LL10mw-006	1111.64
LL11mw-001	1091.45
L L11mw-002	1078.41
LL11mw-003	1087.78
LL11mw-004	1084.32
LL11mw-005	1073.00
LL11mw-006	1083.01
LL11mw-007	1068.41
LL11mw-008	1084.06
LL11mw-009	FROZEN
LL11mw-010	1078.95
LL12mw-088	973.62
LL12mw-107	970.30
LL12mw-128	968.12
LL12mw-153	971.62
LL12mw-154	970.12

Well ID	Elevation (ft, amsl)
LL12mw-182	974.18
LL12mw-184	970.45
LL12mw-185	973.07
LL12mw-187	970.42
LL12mw-188	976.45
LL12mw-242	972.68
LL12mw-243	971.16
LL12mw-244	970.54
LL12mw-245	971.11
LL12mw-246	967.87
ASYmw-007	968.29
ASYmw-008	973.74
ASYmw-010	968.08
CBPmw-001	961.99
CBPmw-002	959.63
CBPmw-003	961.98
CBPmw-004	960.15
CBPmw-005	959.38
CBPmw-006	959.54
CBPmw-007	960.08
CBPmw-008	956.91

Well ID	Elevation (ft, amsl)
CPmw-001	972.32
CPmw-002	972.21
CPmw-003	968.96
CPmw-004	970.66
CPmw-005	962.15
CPmw-006	956.99
DETmw-001B	1042.86
DETmw-002	1028.66
DETmw-003	1027.31
DETmw-004	1028.17
DA2mw-104	1052.27
DA2mw-105	1042.11
DA2mw-106	1040.14
DA2mw-107	1034.75
DA2mw-108	1026.57
DA2mw-109	1057.45
DA2mw-110	1055.63
DA2mw-111	1037.62
DA2mw-112	1030.16
DA2mw-113	1029.26
EBGmw-123	938.50
EBGmw-124	938.41

Well ID	Elevation (ft, amsl)
EBGmw-125	938.44
EBGmw-126	938.62
EBGmw-127	938.84
EBGmw-128	938.82
EBGmw-129	939.02
EBGmw-130	937.91
FBQmw-166	1104.15
FBQmw-167	1111.41
FBQmw-176	1122.38
LNWmw-024	1025.58
LNWmw-025	1024.09
LNWmw-026	1023.93
LNWmw-027	1020.43
NTAmw-107	1067.95
NTAmw-108	1068.16
NTAmw-109	1072.19
NTAmw-110	1068.64
NTAmw-111	1077.67
NTAmw-112	1069.63
NTAmw-113	1068.99
NTAmw-114	1072.79
NTAmw-115	1075.86

Well ID	Elevation (ft, amsl)
NTAmw-116	1089.54
NTAmw-117	1081.57
NTAmw-118	1072.89
WBGmw-005	1049.11
WBGmw-006	1007.79
WBGmw-007	986.14
WBGmw-008	993.72
WBGmw-009	1033.73
WBGmw-010	1061.84
WBGmw-011	1061.68
WBGmw-012	1054.20
WBGmw-013	1059.59
WBGmw-014	980.76
WBGmw-015	1000.20
WBGmw-016	979.74
WBGmw-017	998.23
MBS-001	1064.71
MBS-002	1065.21
MBS-003	1065.60
MBS-004	1064.95
MBS-005	1064.67
MBS-006	1064.63

0 50 1000

SCALE (METERS)

LEGEND

UNCONSOLIDATED WELL

PROPERTY LINE

1100 LINE OF EQUAL GROUNDWATER ELEVATION (ft,amsl)
975 (INTERMEDIATE DASHED)

GROUNDWATER DIRECTION

UNCONSOLIDATED AQUIFER MISSING

INFERRED GROUNDWATER DIVIDE

N

COORDINATE SYSTEM UTM NAD 83 ZONE 17

ENVIRONMENTAL QUALITY MANAGEMENT, INC.
1800 CARILLON BLVD.
CINCINNATI, OHIO 45240
P (513)825-7500
F (513)825-7495

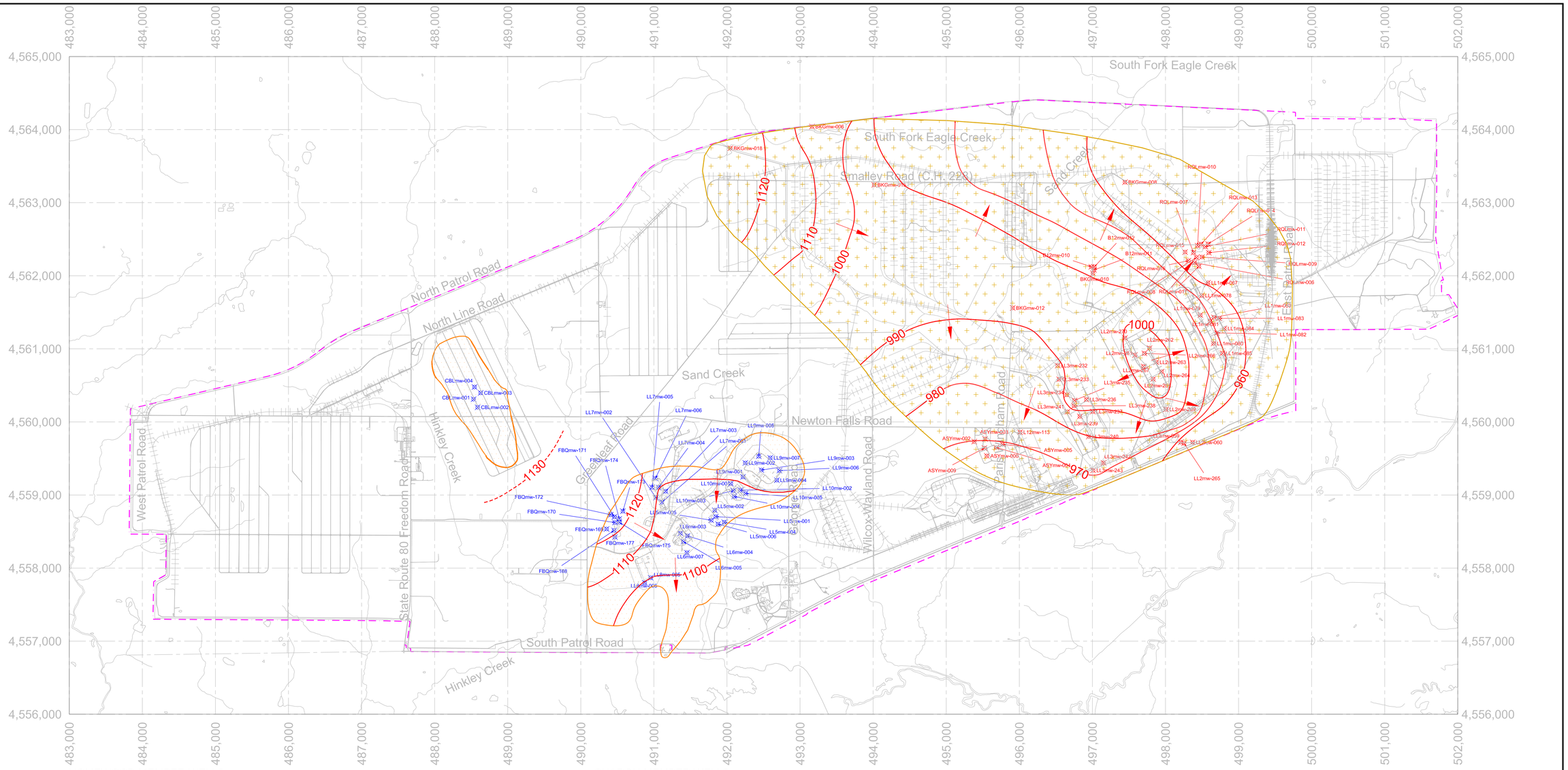
REV	DESCRIPTION	DATE	APPROVED

REVISIONS

DRAWN	D.TOMO	3-30-09
CHECKED	W.THOMPSON	3-30-09
APPROVED		
SCALE:	NONE	

POTENTIOMETRIC SURFACE OF UNCONSOLIDATED AQUIFER (JAN. 2009)

ORIGINAL SIZE	PROJECT NO.	DWG NO.	REV
E	030240.0006	PLATE 2	1



HOMEWOOD MEMBER WELLS

Well ID	Elevation (ft, amsl)
LL5mw-001	1107.89
LL5mw-002	1107.83
LL5mw-004	1107.91
LL5mw-005	1107.87
LL5mw-006	1107.58
LL6mw-003	1108.94
LL6mw-004	1108.39
LL6mw-005	1108.61
LL6mw-007	1110.12
LL7mw-001	1109.29
LL7mw-002	1113.93
LL7mw-003	1109.61
LL7mw-004	1111.57
LL7mw-005	1114.23
LL7mw-006	1113.18
LL8mw-005	1101.95
LL8mw-006	1097.47
LL9mw-001	1119.61
LL9mw-002	1116.61
LL9mw-003	1124.33
LL9mw-004	1110.62

Well ID	Elevation (ft, amsl)
LL9mw-005	1114.83
LL9mw-006	1110.96
LL9mw-007	1110.69
LL10mw-001	1107.67
LL10mw-002	1109.33
LL10mw-003	1109.33
LL10mw-004	1108.97
LL10mw-005	1109.92
CBLmw-001	1136.26
CBLmw-002	1136.09
CBLmw-003	1137.39
CBLmw-004	1137.48
FBQmw-168	1121.76
FBQmw-169	1115.10
FBQmw-170	1122.31
FBQmw-171	1124.35
FBQmw-172	1121.27
FBQmw-173	1120.59
FBQmw-174	1121.59
FBQmw-175	1121.00
FBQmw-177	1115.26

SHARON MEMBER WELLS

Well ID	Elevation (ft, amsl)
BKGmw-006	1005.87
BKGmw-008	954.09
BKGmw-010	990.76
BKGmw-012	991.57
BKGmw-015	991.50
BKGmw-018	1029.32
LL1mw-063	964.95
LL1mw-067	959.42
LL1mw-078	961.88
LL1mw-079	963.98
LL1mw-080	985.65
LL1mw-081	967.02
LL1mw-082	975.10
LL1mw-083	960.20
LL1mw-084	969.48
LL1mw-085	960.67
LL2mw-059	952.09
LL2mw-060	951.61
LL2mw-261	1004.48
LL2mw-262	1003.81
LL2mw-263	1003.32
LL2mw-264	1005.67

Well ID	Elevation (ft, amsl)
LL2mw-265	951.42
LL2mw-266	1004.38
LL2mw-267	1005.81
LL2mw-268	1003.00
LL2mw-269	994.95
LL2mw-270	1002.56
LL3mw-232	978.28
LL3mw-233	977.37
LL3mw-234	996.45
LL3mw-235	990.72
LL3mw-236	993.88
LL3mw-237	990.19
LL3mw-238	991.39
LL3mw-239	978.55
LL3mw-240	978.81
LL3mw-241	985.00
LL3mw-242	983.90
LL3mw-243	978.18
ASYmw-001	968.48
ASYmw-002	968.88
ASYmw-003	968.61
ASYmw-004	969.64

Well ID	Elevation (ft, amsl)
ASYmw-005	971.52
ASYmw-006	968.25
ASYmw-009	969.19
B12mw-010	986.77
B12mw-011	983.27
B12mw-012	981.60
RQLmw-006	958.55
RQLmw-007	957.66
RQLmw-008	958.34
RQLmw-009	958.49
RQLmw-010	954.66
RQLmw-011	952.81
RQLmw-012	953.71
RQLmw-013	953.39
RQLmw-014	951.80
RQLmw-015	957.43
RQLmw-016	959.12
RQLmw-017	959.65

0 50 1000

SCALE (METERS)

LEGEND

- HOMEWOOD MEMBER WELL
- SHARON MEMBER WELL
- PROPERTY LINE
- 1100 / 1030 — LINE OF EQUAL GROUNDWATER ELEVATION (ft,amsl) (INTERMEDIATE DASHED)
- GROUNDWATER DIRECTION
- HOMEWOOD MEMBER
- SHARON MEMBER

N

COORDINATE SYSTEM UTM NAD 83 ZONE 17

ENVIRONMENTAL QUALITY MANAGEMENT, INC.
1800 CARILLON BLVD.
CINCINNATI, OHIO 45240
P (513)825-7500
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REV	DESCRIPTION	DATE	APPROVED

REVISIONS

DRAWN	D.TOMO	3-30-09
CHECKED	W.THOMPSON	3-30-09
APPROVED		
SCALE:	NONE	

POTENTIOMETRIC SURFACE OF BEDROCK -HOMEWOOD AND SHARON (JAN. 2009)

ORIGINAL SIZE	PROJECT NO.	DWG NO.	REV
E	030240.0006	PLATE 3	0