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Environmental Quality Management, Inc
1800 Carillon Boulevard
Cincinnati, Ohio 45240

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US Army Corps of Engineers
600 Dr. Martin Luther King Jr. Place
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14. ABSTRACT

This document presents a summary of the facility-wide groundwater monitoring conducted in January 2010. 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.

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FINAL
FACILITY-WIDE GROUNDWATER MONITORING PROGRAM

REPORT ON THE JANUARY 2010 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
600 Martin Luther King Jr. Place
Louisville, Kentucky 40202

Prepared by

Environmental Quality Management, Inc.
1800 Carillon Boulevard
Cincinnati Ohio 45240

July 6, 2010

FWGWMP January 2010 Final Sampling Event Report
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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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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

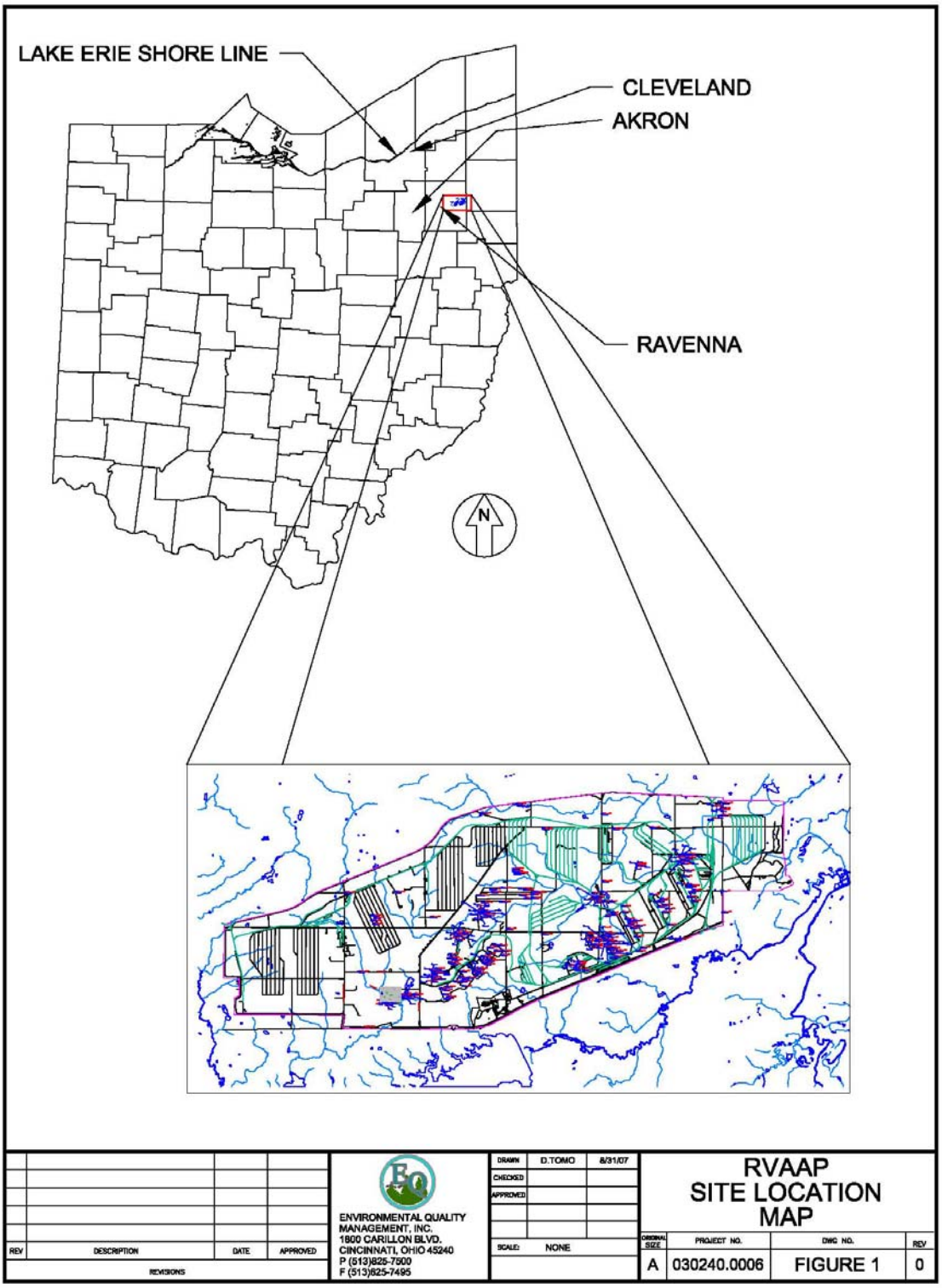

Fig. 1-1 General Location Map



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 January 2010 event is presented in Appendix B.

1.3 Scope of Work for the January 2010 Sampling Event

Environmental Quality Management, Inc. (EQM) was 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 11 wells identified in Appendix B. Note that only 11 wells were sampled during this event. These were the last wells identified for 4 quarters of sampling in the *Draft Proposal to Update the Facility-Wide Ground Water Monitoring Program* (USACE October 2007).
- Collected water level measurements and performed well inspections for all 237 facility groundwater monitoring wells.
- 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.
- Performed metals sampling (filtered and unfiltered) for 3 wells at the facility - LL1mw-063, LL3mw-235, RQLmw-017. These wells did not have sufficient water (i.e., <0..25-feet of water in the wells) to sample them during the October 2009 metals sampling event. The results of the metals sampling will be included as addendum to the *Report on the 2009 Metals Sampling Event*.

1.4 Report Presentation

This report presents the results of the January 2010 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 2008-2010.
- Appendix B – List of Wells Sampled During the January 2010 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

SECTION 2

PROJECT ACTIVITIES

2.1 Groundwater Level Monitoring

Depth to water from the top of the inner casing was measured in the 237 FWGWMP wells during January18-20, 2010. Water level measurements were taken with a Herron Dipper-T or Enviro Inspector electronic 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 2010 are presented on Plates 2 and 3. The potentiometric maps were generated from the January 2010 water level measurements taken from all 237 facility wells and the six deep Sharon Conglomerate wells. These maps are updated on a yearly basis. The water levels from the quarterly events are not included in these plates. Additionally, the groundwater elevations from the new Sharon Conglomerate wells were evaluated and determined not to be representative of either the Homewood or the Sharon aquifers, therefore they were not used to determine the potentiometric contours.

To determine if groundwater elevations of Sharon Conglomerate wells (as determined in January 2010) are representative of the Sharon or Homewood Aquifers, the groundwater elevation data are compared as indicated on the attached table.

As the table indicates the groundwater elevation of water in the Homewood Aquifer (well LL10mw-003) is more than 78 feet higher than the Sharon Conglomerate well (well SCFmw-1). This demonstrates that the Homewood Aquifer and Sharon Conglomerate are not representative of the same hydraulic unit. If in the same hydraulic unit, the water levels would be expected to be much the same.

There are five Sharon Conglomerate wells that are located through the Sharon (Sandstone) Aquifer. The groundwater elevations of the five Sharon Aquifer wells are 1.28 to 24.57 feet higher than the Sharon Conglomerate groundwater elevations at the same locations. The average elevation difference is over 9 feet. Again this groundwater elevation difference indicates that the Sharon Conglomerate and the Sharon Aquifer are not the same hydraulic unit.

It should be noted that the groundwater elevations from the deep wells are used for purging and sampling purposes and not necessarily for deep aquifer flow direction,

however a separate potentiometric map has been produced to show flow direction for the deep wells. This well is included as Plate 4.

Comparison of Groundwater Elevation, Sharon Conglomerate and Sharon and Homewood Aquifers

Well ID	Monitored Zone Groundwater Elevation (ft, msl)			Difference (ft)
	Sharon Conglomerate	Sharon Sandstone	Homewood	
SCFmw-1	1030.94	-	1109.29	+ 78.35
SCFmw-2	964.16	969.20	-	+ 5.04
SCFmw-3	948.98	950.26	-	+ 1.28
SCFmw-4	943.47	955.00 *	-	+ 11.53
SCFmw-5	947.85	952.52	-	+ 4.67
SCFmw-6	947.43	972.00 *	-	+ 24.57

All water-level elevations (ft, msl) are January 2010. Sharon Sandstone and Homewood water-level elevations are nearest well to physical location of Sharon Conglomerate Well except as noted (*). Elevation is from potentiometric map (Plate 3).
" + " indicates that Sharon Sandstone or Homewood elevation is higher

2.2 Groundwater Sampling

All identified quarterly and RCRA monitoring wells were sampled between January 20-21, 2010. 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 with the exception of LL3mw-235 which was sampled using a Teflon bailer. 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.

Filtered metals samples collected through the bladder pump used an inline 0.45 micron filter emptying directly into sample bottles containing nitric acid. For the sample collected using a bailer the sample was poured from the bailer into a decontaminated holding vessel and then filtered using a hand-pump through a 0.45 micron filter into sample bottles containing nitric acid. All sampling procedures for the filtered metals

were conducted in accordance with Section 4.3.5 of the *Facility-Wide Sampling and Analysis Plan for Environmental Investigations at the Ravenna Army Ammunition Plant* March 2001.

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

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

All quarterly groundwater samples were analyzed for the following parameters: explosives, propellants (nitrocellulose and nitroguanidine), cyanide, volatile organic compounds (VOCs), semi-volatile compounds (SVOCs), target analyte list (TAL) metals (filtered), pesticides, and polychlorinated biphenyls (PCBs). Additionally the 3 wells that did not have sufficient volume for sampling during the) October 2009 metals sampling event were analyzed for target analyte list (TAL) metals (filtered and unfiltered).

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

LL11mw-009 – Duplicate sample
ASYmw-008 – Duplicate Sample
ASYmw-004 – MS/MSD
ASYmw-005 – 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. Two QA samples were collected for this sampling event from the same wells where the duplicate samples were collected.

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 January 2010 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

An Investigation Derived Waste (IDW) Report was prepared for the sampling and water level measurement 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 Report is presented in Appendix E.

2.6 Additional Sampling and Analysis

In addition to the quarterly FWGWMP sampling event SAIC conducted the January groundwater monitoring event for the six deep Sharon Conglomerate wells during the time period of January 18 through January 20, 2010. This monitoring event represents the fourth and final quarterly sampling event for the new deep Sharon Conglomerate wells. Subsequent to the completion of four quarters of monitoring, SAIC published the

preliminary draft "Monitoring Report for the Deep Bedrock Well Installation in the Basal Sharon Conglomerate" document on March 12, 2010. The document is currently subject to review by the Army, and will be issued to the RVAAP stake holders after Army review is completed.

Table 2-2 QA Table for January 2010 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	Filtered Metals / Cyanide	Total Metals
ASYmw-001	FWGASYmw-001C-1496-GW/GF	01/20/10	GW	DUP1-1512	EQUIPRinse1-1513	FWGTeam1-Trip		FWGASYmw-001C-1509S-GW/GF	Trip Blank	X	X	X	X	X	
ASYmw-002	FWGASYmw-002C-1497-GW/GF	01/20/10	GW		EQUIPRinse1-1513	FWGTeam1-Trip				X	X	X	X	X	
ASYmw-003	FWGASYmw-003C-1498-GW/GF	01/20/10	GW		EQUIPRinse1-1513	FWGTeam1-Trip				X	X	X	X	X	
ASYmw-005	FWGASYmw-005C-1500-GW/GF	01/20/10	GW		EQUIPRinse1-1513	FWGTeam2-Trip	Yes			X	X	X	X	X	
ASYmw-006	FWGASYmw-006C-1501-GW/GF	01/20/10	GW		EQUIPRinse1-1513	FWGTeam2-Trip				X	X	X	X	X	
ASYmw-007	FWGASYmw-007C-1502-GW/GF	01/20/10	GW		EQUIPRinse1-1513	FWGTeam1-Trip				X	X	X	X	X	
ASYmw-008	FWGASYmw-008C-1503-GW/GF	01/20/10	GW	DUP2-1511	EQUIPRinse1-1513	FWGTeam2-Trip		FWGASYmw-008C-1510S-GW/GF	Trip Blank	X	X	X	X	X	
ASYmw-010	FWGASYmw-010C-1505-GW/GF	01/20/10	GW		EQUIPRinse1-1513	FWGTeam2-Trip				X	X	X	X	X	
LL11mw-009	FWGLL11mw-009C-1495-GW/GF	01/20/10	GW		EQUIPRinse1-1513	FWGTeam1-Trip				X	X	X	X	X	
LL3mw-235	FWGLL3mw-235C-1507-GW/GF	01/20/10	GW		EQUIPRinse1-1513	NA								X	X
ASYmw-004	FWGASYmw-004C-1499-GW/GF	01/21/10	GW		EQUIPRinse2-1514	FWGTeam1-Trip	Yes			X	X	X	X	X	
ASYmw-009	FWGASYmw-009C-1504-GW/GF	01/21/10	GW		EQUIPRinse2-1514	FWGTeam2-Trip				X	X	X	X	X	

SECTION 3

RESULTS

3.1 Groundwater Elevations

Groundwater elevations for the 14 FWGWMP quarterly wells were obtained on January18-20, 2010 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 2010 event are also included in this report.

3.2 Summary of Analytical Results

Summaries of laboratory analytical results are presented in Tables 3-3, 3-4, 3-6, 3-7, and 3-8. 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.

Table 3-1 January 2010 FWGMP Monitoring Well Measurements

Well	Monitoring Zone	Top of Casing (TOC) Elevation[a] (ft)	2009 2nd Quarter Groundwater Elevation (Apr/2009) (ft)	2009 3rd Quarter Groundwater Elevation (Jul/2009) (ft)	2009 4th Quarter Groundwater Elevation (Oct/2009) (ft)	2010 1st Quarter Groundwater Elevation (Jan/2010) (ft)	Depth to Water (ft below TOC) Jan/2010	Reported Construction Depth from TOC[a] (ft)	Jan/2010 Measured Depth from TOC (ft)	Jan/2010 Sediment Accumulation (ft)	Jan/2010 Description of Bottom
Loadline 3											
LL3mw-235	Sharon	1,009.94	NM	NM	NM	989.89	20.05	22.20	22.88	-0.68	Hard
Loadline 11											
LL11mw-009	Unconsolidated	1091.54	1,089.52	1,086.93	1,086.83	1,089.44	2.10	16.6	19.48	-2.88	Hard
Atlas Scrap Yard											
ASYmw-001	Sharon	981.13	970.52	968.89	967.29	967.99	13.14	23.7	23.05	0.65	Hard
ASYmw-002	Sharon	985.24	974.86	970.61	968.78	968.27	16.97	22.7	22.88	-0.18	Hard
ASYmw-003	Sharon	982.21	970.89	969.01	957.46	968.03	14.18	23.5	23.45	0.05	Hard
ASYmw-004	Sharon	979.66	971.41	969.88	967.73	969.20	10.46	29.6	29.73	-0.13	Hard
ASYmw-005	Sharon	979.8	973.03	971.57	968.75	971.29	8.51	26.2	27.12	-0.92	Hard
ASYmw-006	Sharon	983.01	969.96	968.77	967.47	967.72	15.29	28.8	28.83	-0.03	Hard
ASYmw-007	Unconsolidated	984.16	969.64	968.91	967.92	967.80	16.36	28.8	28.82	-0.02	Hard
ASYmw-008	Unconsolidated	978.85	974.64	974.75	972.24	973.63	5.22	27.7	26.25	1.45	Soft
ASYmw-009	Sharon	982.7	971.73	969.65	968.31	968.84	13.86	24.3	24.3	0.00	Soft
ASYmw-010	Unconsolidated	981.05	969.72	968.63	967.25	967.54	13.51	29.8	31.05	-1.25	Hard

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

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

- 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 3-2. The following compounds were detected at concentrations above the method detection limits:

- 1,3,5-Trinitrobenzene –LL11mw-009 (0.036 µg/L J B), ASYmw-006 (0.032 µg/L J), ASYmw-008 (0.033 µg/L J B), ASYmw-009 (0.033 µg/L J B), ASYmw-010 (0.044 µg/L J B). There is no MCL for 1,3,5-Trinitrobenzene. The Region 9 PRG is 1,100 µg/L.

- 2,6-Dinitotoluene – ASYmw-005 (0.060 µg/L J), There is no MCL for 2,6-Dinbitrotoluene. The Region 9 PRG is 36 µg/L.

- 3-Nitrotoluene – ASYmw-008 (0.16 µg/L), There is no MCL for RD3-nitrotoluene. The Region 9 PRG is 120 µg/L.

As shown in Table 3-2, no explosives or propellants were detected at levels above the MCL or Region 9 PRGs during the January 2010 sampling.

Table 3-2. FWGWMP January 2010 Explosive and Propellant Analytical Results

Station ID				LL11mw-009	ASYmw-001	ASYmw-002	ASYmw-003	ASYmw-004	ASYmw-005
Sample ID		MCL	Region 9 PRG	FWGLL11mw-009C-1495-GW	FWGASYmw-001C-1496-GW	FWGASYmw-002C-1497-GW	FWGASYmw-003C-1498-GW	FWGASYmw-004C-1499-GW	FWGASYmw-005C-1467-GW
Date Collected				1/20/2010	1/20/2010	1/20/2010	1/20/2010	1/21/2010	1/20/2010
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units								
1,3,5-Trinitrobenzene	µg/L	NS	1100	**0.036 JB**	0.098 U	0.10 U	0.099 U	0.099 U	0.10 U
1,3-Dinitrobenzene	µg/L	NS	3.6	0.10 U	0.098 U	0.10 U	0.099 U	0.099 U	0.10 U
2,4,6-Trinitrolouene	µg/L	NS	2.2	0.10 U	0.098 U	0.10 U	0.099 U	0.099 U	0.10 U
2,4-Dinitrotoluene	µg/L	NS	73	0.10 U	0.098 U	0.10 U	0.099 U	0.099 U	0.10 U
2,6-Dinitrotoluene	µg/L	NS	36	0.10 U	0.098 U	0.10 U	0.099 U	0.099 U	**0.060 J**
2-Amino-4,6-dinitrotoluene	µg/L	NS	NS	0.10 UJ	0.098 UJ	0.10 UJ	0.099 UJ	0.099 UJ	0.10 UJ
2-Nitrotoluene	µg/L	NS	0.049	0.50 U	0.49 U	0.50 U	0.50 U	0.50 U	0.52 U
3-Nitrotoluene	µg/L	NS	120	0.50 U	0.49 U	0.50 U	0.50 U	0.50 U	0.52 U
4-Amino-2,6-Dinitrotoluene	µg/L	NS	NS	0.10 U	0.098 U	0.10 U	0.099 U	0.099 U	0.10 U
4-Nitrotoluene	µg/L	NS	0.66	0.50 U	0.49 U	0.50 U	0.50 U	0.50 U	0.52 U
HMX	µg/L	NS	1800	0.10 U	0.098 U	0.10 U	0.099 U	0.099 U	0.10 U
Nitrobenzene	µg/L	NS	3.4	0.064 J	0.098 U	0.10 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
Nitroglycerin	µg/L	NS	4.8	0.66 U	0.64 U	0.65 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
PETN	µg/L	NS	NS	0.66 U	0.64 U	0.65 U	0.64 U	0.64 U	0.68 U
RDX	µg/L	NS	0.61	0.10 U	0.098 U	0.10 U	0.099 U	0.099 U	0.10 U
Tetryl	µg/L	NS	360	0.10 U	0.098 U	0.10 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 3-2. FWGWMP January 2010 Explosive and Propellant Analytical Results

Station ID				ASYmw-006	ASYmw-007	ASYmw-008	ASYmw-009	ASYmw-010
Sample ID		MCL	Region 9 PRG	FWGASYmw-006C-1501-GW	FWGASYmw007C-1502-GW	FWGASYmw-008C-1503-GW	FWGASYmw-009C-1504-GW	FWGASYmw-010C-1505-GW
Date Collected				1/20/2010	1/20/2010	1/20/2010	1/21/2010	1/20/2010
Sample Type				Grab	Grab	Grab	Grab	Grab
Analyte	Units							
1,3,5-Trinitrobenzene	µg/L	NS	1100	**0.032 JB**	0.10 U	**0.033 JB**	**0.033 JB**	**0.044 JB**
1,3-Dinitrobenzene	µg/L	NS	3.6	0.10 U	0.10 U	0.10 U	0.099 U	0.10 U
2,4,6-Trinitrolouene	µg/L	NS	2.2	0.10 U	0.10 U	0.10 U	0.099 U	0.10 U
2,4-Dinitrotoluene	µg/L	NS	73	0.10 U	0.10 U	0.10 U	0.099 U	0.10 U
2,6-Dinitrotoluene	µg/L	NS	36	0.10 U	0.10 U	0.10 U	0.099 U	0.10 U
2-Amino-4,6-dinitrotoluene	µg/L	NS	NS	0.10 UJ	0.10 UJ	0.10 UJ	0.099 UJ	0.10 UJ
2-Nitrotoluene	µg/L	NS	0.049	0.50 U	0.51 U	0.52 U	0.50 U	0.52 U
3-Nitrotoluene	µg/L	NS	120	0.50 U	0.51 U	**0.16 J**	0.50 U	0.52 U
4-Amino-2,6-Dinitrotoluene	µg/L	NS	NS	0.10 U	0.10 U	0.10 U	0.099 U	0.10 U
4-Nitrotoluene	µg/L	NS	0.66	0.50 U	0.51 U	0.52 U	0.50 U	0.52 U
HMX	µg/L	NS	1800	0.10 U	0.10 U	0.10 U	0.099 U	0.10 U
Nitrobenzene	µg/L	NS	3.4	0.10 U	0.10 U	0.10 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
Nitroglycerin	µg/L	NS	4.8	0.66 U	0.66 U	0.68 U	0.64 U	0.67 U
Nitroguanidine	µg/L	NS	NS	20 U	20 U	20 U	20 U	20 U
PETN	µg/L	NS	NS	0.66 U	0.66 U	0.68 U	0.64 U	0.67 U
RDX	µg/L	NS	0.61	0.10 U	0.10 U	0.10 U	0.099 U	0.10 U
Tetryl	µg/L	NS	360	0.10 U	0.10 U	0.10 U	0.099 U	0.10 U

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

Table 3-2 FWGWMP January 2010 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 3-3. The inorganics detected in the samples included: aluminum, arsenic, barium, calcium, chromium, iron, magnesium, manganese, nickel, potassium, sodium, 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 3-4:

Aluminum

- Bedrock Zone –ASYmw-002 (67.3 µg/L J), ASYmw-009 (496 µg/L). The Groundwater Bedrock Zone Background Criteria (filtered) is 0 µg/L.
- Unconsolidated Zone – LL11mw-009 (26.0 µg/L J), ASYmw-008 (1,160 µg/L J), ASYmw-010 (1,160 µg/L). The Groundwater Unconsolidated Zone Background Criteria (filtered) is 0 µg/L. The MCL for aluminum is 200 µg/L. The Region 9 PRG is 36,000 µg/L.

Arsenic

- Bedrock Zone – ASYmw-004 (23.2 µg/L), ASYmw-006 (16.1 µg/L). The Groundwater Bedrock Zone Background Criteria (filtered) is 0 µg/L.
- Unconsolidated Zone – ASYmw-008 (10.3 µg/L J), ASYmw-010 (148 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.

Nickel

- Bedrock Zone: - None. The Groundwater Bedrock Zone Background Criteria (filtered) is 83.4 µg/L.
- Unconsolidated Zone: - ASYmw-008 (4.4 µg/L). 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.

Several inorganic compounds were detected at levels exceeding the MCLs and/or Region 9 PRGs. These included aluminum, manganese, arsenic, 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).

3.2.3 Volatile Organic Compounds (VOCs)

VOC analytical results are summarized in Table 3-5. The following VOCs were detected above the MDL for this sampling event.

- Acetone – ASYmw-004 (1.2 μg/L J B). There is no MCL for acetone. The Region 9 PRG is 5,500 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 3-5, the only VOC detected at levels above the MCLs or Region 9 PRGs during the July 2009 event was:

- 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 3-6. 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).

- Bis(2-Ethylhexyl)phthalate – ASYmw-001 (1.0 μg/L J), ASYmw-002 (0.97 μg/L J), ASYmw-004 (0.90 μg/L J), ASYmw-005 (1.0 μg/L J), ASYmw-006 (1.1 μg/L J), ASYmw-009 (0.95 μg/L J). There is no MCL for Bis(2-Ethylhexyl)phthalate. The Region 9 PRG is 4.8 μg/L.

- Phenol – ASYmw-008 (1.1 μg/L). There is no MCL for Phenol. The Region 9 PRG is 11,000 μg/L.

As shown in Table 3-6 there were no SVOCs detected at a level exceeding either the MCL or the Region 9 PRGs.

3.2.5 Pesticides and Polychlorinated Biphenyls (PCBs)

Pesticides and PCBs analytical results are summarized in Table 3-7. No pesticides or PCBs were detected above the MDL for this sampling event.

Table 3-3. FWGWMP January 2010 Inorganics Analytical Results

Station ID				LL11mw-009	ASYmw-001	ASYmw-002	ASYmw-003	ASYmw-004	ASYmw-005
Sample ID		MCL	Region 9 PRG	FWGLL11mw-009C-1495-GF	FWGASYmw-001C-1496-GF	FWGASYmw-002C-1497-GF	FWGASYmw-003C-1498-GF	FWGASYmw-004C-1499-GF	FWGASYmw-005C-1467-GF
Date Collected				1/20/2010	1/20/2010	1/20/2010	1/20/2010	1/21/2010	1/20/2010
Sample Type				Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units								
Aluminum	µg/L	200	36000	**26.0 J**	50.0 U	**67.3**	50.0 U	50.0 U	50.0 U
Antimony	µg/L	6	15	2.0 U	2.0 U	2.0 U	0.16 UJ	2.0 U	2.0 U
Arsenic	µg/L	10	0.045	5.0 U	5.0 U	5.0 U	5.0 U	**23.2**	5.0 U
Barium	µg/L	2000	2600	**76.4**	**16.6**	**14.7**	**18.9**	**12.7**	**28.5**
Beryllium	µg/L	4	73	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
Calcium	µg/L	NS	NS	**85400**	**170000**	**96800**	**175000**	**157000**	**146000**
Chromium	µg/L	100	110	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
Copper	µg/L	1300	1500	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
Iron	µg/L	300	11000	50.0 U	50.0 U	50.0 U	50.0 U	**1490 J**	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
Magnesium	µg/L	NS	NS	**27800**	**55400**	**20000**	**55800**	**79600**	**42600**
Manganese	µg/L	50	880	**856**	**1140**	4.0 J	**45.0**	**211**	**207**
Mercury	µg/L	2	11	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
Potassium	µg/L	NS	NS	**905 J**	**1120**	634 UJ	**1070**	**2850**	**1740**
Selenium	µg/L	50	180	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
Sodium	µg/L	NS	NS	**11600**	**7020**	**2130**	**29000**	**51600**	**32300**
Thallium	µg/L	2	2.4	0.35 UJ	0.20 UJ	0.20 UJ	1.0 U	0.15 UJB	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
Zinc	µg/L	5000	11000	10.0 U	4.7 UJ	10.0 U	10.0 U	10.0 U	10.0 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-3. FWGWMP January 2010 Inorganics Analytical Results

Station ID				ASYmw-006	ASYmw-007	ASYmw-008	ASYmw-009	ASYmw-010
Sample ID		MCL	Region 9 PRG	FWGASYmw-006C-1501-GF	FWGASYmw-007C-1502-GF	FWGASYmw-008C-1503-GF	FWGASYmw-009C-1504-GF	FWGASYmw-010C-1505-GF
Date Collected				1/20/2010	1/20/2010	1/20/2010	1/21/2010	1/20/2010
Sample Type				Grab	Grab	Grab	Grab	Grab
Analyte	Units							
Aluminum	µg/L	200	36000	50.0 U	50.0 U	**1160 J**	**496**	**1160**
Antimony	µg/L	6	15	2.0 U	2.0 U	0.23 UJ	2.0 U	0.15 UJ
Arsenic	µg/L	10	0.045	**16.1**	5.0 U	**10.3 J**	5.0 U	**148**
Barium	µg/L	2000	2600	**14.8**	**18.5**	**18.8**	**27.1**	**56.4**
Beryllium	µg/L	4	73	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
Calcium	µg/L	NS	NS	**116000**	**126000**	**167000**	**188000**	**94400**
Chromium	µg/L	100	110	5.0 U	5.0 U	**2.1 J**	5.0 U	5.0 U
Cobalt	µg/L	NS	730	5.0 U	5.0 U	1.6 UJ	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
Cyanide	mg/L	0.2	0.73	0.010 UJ	0.010 UJ	0.010 UJ	0.010 UJ	0.010 UJ
Iron	µg/L	300	11000	**1120 J**	50.0 **U**	**3210 J**	**811 J**	**6760 J**
Lead	µg/L	15	NS	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Magnesium	µg/L	NS	NS	**72300**	**47300**	**78100**	**69900**	**80300**
Manganese	µg/L	50	880	**169**	**188**	**64.7**	**624**	**96.2**
Mercury	µg/L	2	11	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	**4.4 J**	10.0 U	**2.6 J**
Potassium	µg/L	NS	NS	**2860**	**1170**	**3660**	**1500**	**2760**
Selenium	µg/L	50	180	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
Sodium	µg/L	NS	NS	**39900**	**33500**	**31000**	**22500**	**43800**
Thallium	µg/L	2	2.4	1.0 U	0.17 UJ	1.0 U	0.38 UJB	1.0 U
Vanadium	µg/L	NS	36	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Zinc	µg/L	5000	11000	10.0 U	10.0 U	**11.5 B**	**5.0 JB**	**12.3 B**

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-3 FWGWMP January 2010 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 3-4 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

Table 3-5. FWGWMP Janaury 2010 VOCs Analytical Results

Station ID				LL11mw-009	ASYmw-001	ASYmw-002	ASYmw-003	ASYmw-004
Sample ID		MCL	Region 9 PRG	FWGLL11mw-009C-1495-GW	FWGASYmw-001C-1496-GW	FWGASYmw-002C-1497-GW	FWGASYmw-003C-1498-GW	FWGASYmw-004C-1499-GW
Date Collected				1/20/2010	1/20/2010	1/20/2010	1/20/2010	1/21/2010
Sample Type				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
1,1,2,2-Tetrachloroethane	µg/L	NS	0.052	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	NS	0.2	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
1,1-Dichloroethene (total)	µg/L	7	340	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
1,2-Dichloroethane	µg/L	5	0.12	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
1,2-Dichloropropane	µg/L	5	0.16	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
2-Hexanone	µg/L	NS	NS	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
Acetone	µg/L	NS	5500	10 UJ	10 UJ	10 UJ	10 UJ	**1.2 JB**
Benzene	µg/L	5	0.35	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
Bromodichloromethane	µg/L	NS	0.18	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
Bromomethane	µg/L	NS	8.7	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
Carbon tetrachloride	µg/L	5	0.17	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
Chloroethane	µg/L	NS	4.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	µg/L	NS	0.17	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	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
cis-1,3-Dichloropropene	µg/L	NS	0.4	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
Ethylbenzene	µg/L	700	1300	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
Methylene chloride	µg/L	NS	4.3	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
Styrene	µg/L	100	1600	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	5	0.1	**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
Total Xylenes	µg/L	10000	210	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
trans-1,3-Dichloropropene	µg/L	NS	0.4	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
Vinyl chloride	µg/L	2	0.02	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 3-5. FWGWMP Janaury 2010 VOCs Analytical Results

Station ID				ASYmw-005	ASYmw-006	ASYmw-007	ASYmw-008	ASYmw-009	ASYmw-010
Sample ID		MCL	Region 9 PRG	FWGASYmw-005C-1467-GW	FWGASYmw-006C-1501-GW	FWGASYmw-007C-1502-GW	FWGASYmw-008C-1503-GW	FWGASYmw-009C-1504-GW	FWGASYmw-010C-1505-GW
Date Collected				1/20/2010	1/20/2010	1/20/2010	1/20/2010	1/21/2010	1/20/2010
Sample Type				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
1,1,2,2-Tetrachloroethane	µg/L	NS	0.052	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	NS	0.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	NS	810	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene (total)	µg/L	7	340	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane	µg/L	NS	0.0056	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	5	0.12	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethene (total)	µg/L	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	5	0.16	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	µg/L	NS	7000	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
4-Methyl-2-pentanone	µg/L	NS	NS	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
Benzene	µg/L	5	0.35	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
Bromodichloromethane	µg/L	NS	0.18	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
Bromomethane	µg/L	NS	8.7	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
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
Chlorobenzene	µg/L	NS	110	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 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	µg/L	NS	0.17	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	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
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
Dibromochloromethane	µg/L	NS	0.13	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
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
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
o-xylene	µg/L	NS	NS	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
Tetrachloroethene	µg/L	5	0.1	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
Total Xylenes	µg/L	10000	210	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
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
Trichloroethene	µg/L	5	0.028	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 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 3-5 FWGWMP January 2010 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 3-6. FWGWMP Janaury 2010 SVOCs Analytical Results

Station ID				LL11mw-009	ASYmw-001	ASYmw-002	ASYmw-003	ASYmw-004
Sample ID		MCL	Region 9 PRG	FWGLL11mw-009C-1495-GW	FWGASYmw-001C-1496-GW	FWGASYmw-002C-1497-GW	FWGASYmw-003C-1498-GW	FWGASYmw-004C-1499-GW
Date Collected				1/20/2010	1/20/2010	1/20/2010	1/20/2010	1/21/2010
Sample Type				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
1,2-Dichlorobenzene	µg/L	NS	370	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
1,4-Dichlorobenzene	µg/L	NS	0.5	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
2,4,5-Trichlorophenol	µg/L	NS	3600	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
2,4-Dichlorophenol	µg/L	NS	110	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
2,4-Dinitrophenol	µg/L	NS	73	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
2,6-Dinitrotoluene	µg/L	NS	36	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
2-Chlorophenol	µg/L	NS	30	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
2-Methylphenol	µg/L	NS	1800	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-Nitrophenol	µg/L	NS	NS	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
3-Nitroaniline	µg/L	NS	3.2	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
4-Bromophenyl phenyl ether	µg/L	NS	NS	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
4-Chloroaniline	µg/L	NS	150	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
4-Methylphenol	µg/L	NS	NS	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
4-Nitrophenol	µg/L	NS	NS	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
Acenaphthylene	µg/L	NS	NS	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
Benzo(a)anthracene	µg/L	NS	0.092	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
Benzo(b)fluoranthene	µg/L	NS	0.092	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

Table 3-6. FWGWMP Janaury 2010 SVOCs Analytical Results

Station ID				LL11mw-009	ASYmw-001	ASYmw-002	ASYmw-003	ASYmw-004
Sample ID		MCL	Region 9 PRG	FWGLL11mw-009C-1495-GW	FWGASYmw-001C-1496-GW	FWGASYmw-002C-1497-GW	FWGASYmw-003C-1498-GW	FWGASYmw-004C-1499-GW
Date Collected				1/20/2010	1/20/2010	1/20/2010	1/20/2010	1/21/2010
Sample Type				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
Benzoic acid	µg/L	NS	150000	10 UJ	10 UJ	10 UJ	10 UJ	10 U
Benzyl alcohol	µg/L	NS	NS	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
bis(2-Chloroethyl) ether	µg/L	NS	0.001	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	**1.0 J**	**0.97 J**	10 U	**0.90 J**
Butyl benzyl phthalate	µg/L	NS	7300	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
Chrysene	µg/L	NS	9.2	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
Dibenzofuran	µg/L	NS	12	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
Dimethyl phthalate	µg/L	NS	360000	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
Di-n-octyl phthalate	µg/L	NS	1500	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
Fluorene	µg/L	NS	NS	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
Hexachlorobutadiene	µg/L	NS	0.86	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
Hexachloroethane	µg/L	NS	4.8	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
Isophorone	µg/L	NS	71	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
Nitrobenzene	µg/L	NS	3.4	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
N-Nitrosodiphenylamine	µg/L	NS	14	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
Phenanthrene	µg/L	NS	NS	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
Pyrene	µg/L	NS	NS	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 3-6. FWGWMP Janaury 2010 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-1467-GW	FWGASYmw-006C-1501-GW	FWGASYmw-007C-1502-GW	FWGASYmw-008C-1503-GW	FWGASYmw-009C-1504-GW	FWGASYmw-010C-1505-GW
Date Collected				1/20/2010	1/20/2010	1/20/2010	1/20/2010	1/21/2010	1/20/2010
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 3-6. FWGWMP Janaury 2010 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-1467-GW	FWGASYmw-006C-1501-GW	FWGASYmw-007C-1502-GW	FWGASYmw-008C-1503-GW	FWGASYmw-009C-1504-GW	FWGASYmw-010C-1505-GW
Date Collected				1/20/2010	1/20/2010	1/20/2010	1/20/2010	1/21/2010	1/20/2010
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 UJ	10 UJ	10 UJ	10 UJ	10 U	10 UJ
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	**1.0 J**	**1.1 J**	10 U	10 U	**0.95 J**	**1.2 J**
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	**1.1**	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 3-6 FWGWMP January 2010 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 3-7. FWGWMP January 2010 Pesticides and PCBs Analytical Results

Station ID				LL11mw-009	ASYmw-001	ASYmw-002	ASYmw-003	ASYmw-004
Sample ID		MCL	Region 9 PRG	FWGLL11mw-009C-1495-GW	FWGASYmw-001C-1496-GW	FWGASYmw-002C-1497-GW	FWGASYmw-003C-1498-GW	FWGASYmw-004C-1499-GW
Date Collected				1/20/2010	1/20/2010	1/20/2010	1/20/2010	1/21/2010
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 U
4,4'-DDE	µg/L	NS	0.2	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U
4,4'-DDT	µg/L	NS	0.2	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U
Aldrin	µg/L	NS	0.004	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U
alpha-BHC	µg/L	NS	0.011	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U
alpha-Chordane	µg/L	NS	NS	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U
beta-BHC	µg/L	NS	0.037	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U
delta-BHC	µg/L	NS	NS	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U
Dieldrin	µg/L	NS	0.0042	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U
Endosulfan I	µg/L	NS	0.022	0.025 UJ	0.025 UJ	0.025 UJ	0.025 UJ	0.025 U
Endosulfan II	µg/L	NS	0.022	0.025 UJ	0.025 UJ	0.025 UJ	0.025 UJ	0.025 U
Endosulfan sulfate	µg/L	NS	NS	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U
Endrin	µg/L	2	11	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U
Endrin aldehyde	µg/L	NS	11	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U
Endrin ketone	µg/L	NS	NS	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U
Gamma-BHC	µg/L	0.2	0.052	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U
gamma-Chlordane	µg/L	NS	NS	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U
Heptachlor	µg/L	0.4	0.015	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U
Heptachlor epoxide	µg/L	0.2	0.0074	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U
Methoxychlor	µg/L	40	180	0.10 UJ	0.10 UJ	0.10 UJ	0.10 UJ	0.10 U
Toxaphene	µg/L	3	0.061	2.0 UJ	2.0 UJ	2.0 UJ	2.0 UJ	2.0 U
PCB- 1016	µg/L	0.5	0.96	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 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 U
PCB- 1232	µg/L	0.5	0.034	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 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 U
PCB- 1248	µg/L	0.5	0.034	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 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 U
PCB- 1260	µg/L	0.5	0.034	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 3-7. FWGWMP January 2010 Pesticides and PCBs Analytical Results

Station ID				ASYmw-005	ASYmw-006	ASYmw-007	ASYmw-008	ASYmw-009	ASYmw-010
Sample ID		MCL	Region 9 PRG	FWGASYmw-005C-1467-GW	FWGASYmw-006C-1501-GW	FWGASYmw007C-1502-GW	FWGASYmw-008C-1503-GW	FWGASYmw-009C-1504-GW	FWGASYmw-010C-1505-GW
Date Collected				1/20/2010	1/20/2010	1/20/2010	1/20/2010	1/21/2010	1/20/2010
Sample Type				Grab	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	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	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	0.030 UJ
Aldrin	µg/L	NS	0.004	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 UJ	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	0.030 UJ
beta-BHC	µg/L	NS	0.037	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 UJ	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	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	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	0.025 UJ
Endosulfan sulfate	µg/L	NS	NS	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 UJ	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	0.030 UJ
Endrin ketone	µg/L	NS	NS	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 UJ	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	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	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	0.030 UJ
Methoxychlor	µg/L	40	180	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 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 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
PCB- 1221	µg/L	0.5	0.034	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
PCB- 1232	µg/L	0.5	0.034	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
PCB- 1242	µg/L	0.5	0.034	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
PCB- 1248	µg/L	0.5	0.034	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
PCB- 1254	µg/L	0.5	0.034	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
PCB- 1260	µg/L	0.5	0.034	0.50 UJ	0.50 UJ	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 3-7 FWGWMP January 2010 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.

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 January 2010 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 3-2, 3-3, 3-5, 3-6, and 3-7 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.

Eleven wells were sampled during a three-day quarterly sampling event from January 20-21, 2010. During the quarterly event, four trip blanks were submitted for volatile organic analysis to TestAmerica.

Two 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 January 2010 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.

A0A210417/ A0A210493

Equipment Rinse

- FWGEQUIPRinse1-1513-GW had 2-butanone detected at 3.8ug/L, acetone at 15ug/L and toluene at 0.20ug/L and FWGEQUIPRinse2-1514-GW had acetone detected at 4.9ug/L. The acetone results for samples FWGASYmw-004c-1499-GW and FWGEQUIPRINSE2-1514-GW were qualified, "B" as the results were

<10x the equipment rinse contamination. As there were no detected concentrations of the other blank contaminants, no additional qualifications were made.

- Thallium was detected in FWGEQUIPRinse2-1514-GW at 0.19ug/L. The thallium results for samples FWGASYmw-004c-1499-GF and FWGASYmw-009c-1504-GF were qualified, "B", as the sample results were <5x contamination.

Trip Blanks

The trip blanks collected 1/20-1/21/10 had acetone contamination detected from 2.4-3.8ug/L.

The acetone results for samples FWGASYmw-004c-1499-GW and FWGEQUIPRINSE2-1514-GW were qualified, "B" as the results were <10x the trip blank contamination.

Method Blanks

- Iron was detected in the method blank(s) at 34ug/L and zinc at 5.0ug/. The zinc results for samples FWGASYmw-001c-1496-GF, FWGASYmw-008c-1503-GF, FWGASYmw-009c-1504-GF, FWGASYmw-010c-1505-GF, FWGASYmw-DUP1-1512-GF, FWGASYmw-DUP2-1511-GF and FWGLL3mw-235c-1507-GF were qualified, "B", as the sample results were <5x contamination. The iron results did not require qualification of the data as all detected contaminants were >5x the blank contamination.
- Due to excessive particulates, samples FWGASYmw-002c-1497-GW, FWGASYmw-008c-1503-GW, FWGASYmw-DUP2-1511-GW, FWGASYmw-010c-1505-GW and FWGASYmw-006c-1501-GW required filtration. A filter blank was prepared and analyzed. The method blank had 1,3,5 -trinitrobenzene detected at 0.052ug/L. The filter blank had 1,3,5 -trinitrobenzene detected at 0.042ug/L. 1,3,5 –trinitrobenzene results for samples FWGASYmw-006c-1501-GW, FWGASYmw-008c-1503-GW, FWGASYmw-DUP1-1512-GW, FWGASYmw-DUP2-1511-GW, FWGASYmw-010c-1505-GW, FWGASYmw-009c-1504-GW and FWGLL1mw-009c-1495-GW were qualified, "JB" as the detected concentrations were less than 5x contamination.

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.

Table 3-8 presents the percent, by analytical method, of data that was acceptable (based on data not rejected) for use. No data were rejected during this event. 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 3-8. Percent of Acceptable Data

Analytical Method	Total Number of Analytes	Number of Rejects	Percent Completeness
353.2 Modified	15	0	100
6010B	255	0	100
6020	119	0	100
7470A	17	0	100
8081A	315	0	100
8082	105	0	100
8260B	741	0	100
8270C	990	0	100
8330	240	0	100
9012A	15	0	100
8330 Modified	15	0	100
TOTAL	**2,827**	**0**	**100**

SECTION 4

SUMMARY OF RESULTS

Explosive and Propellant Compounds

As shown in Table 3-2, no explosives or propellants were detected at levels above the MCL or Region 9 PRGs during the January 2010 sampling.

Inorganic Elements

Several inorganic compounds were detected at levels exceeding the MCLs and/or Region 9 PRGs. These included manganese, aluminum, arsenic, 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 3-5, the only VOC detected at levels above the MCLs or Region 9 PRGs during the July 2009 event was:

- 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 3-6 there were no SVOCs detected at a level exceeding either the MCL or the Region 9 PRGs.

Pesticides and Polychlorinated Biphenyls (PCBs)

As shown in Table 3-7 no pesticides or PCBs were detected at level exceeding either the MCL or the Region 9 PRGs.

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

Area	Well Number	Compound or Element Detected	Jan-10 Level (ug/L)		MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background Criteria (ug/L)
Load Line 11	LL11mw-009	Manganese	**856**		50	880	1,020
Atlas Scrap Yard	ASYmw-001	Manganese	**1,140**		50	880	1,340
	ASYmw-004	Manganese	**211**		50	880	1,340
		Arsenic	**23.2**		10	0.045	0
	ASYmw-005	Manganese	**207**		50	880	1,340
	ASYmw-006	Arsenic	**16.1**		10	0.045	0
		Iron	**1,120**	**J**	300	11,000	1,430
		Manganese	**169**		50	880	1,340
	ASYmw-007	Manganese	**188**		50	880	1,020
	ASYmw-008	Aluminum	**1,160**	**J**	200	36,000	0
		Iron	**3,210**	**J**	300	11,000	279
		Manganese	**64.7**		50	880	1,020
		Arsenic	**10.3**	**J**	10	0.045	11.7
	ASYmw-009	Aluminum	**496**		200	36,000	0
		Iron	**811.0**	**J**	300	11,000	1,430
		Manganese	**624**		50	880	1,340
	ASYmw-010	Aluminum	**1,160**		200	36,000	0
		Arsenic	**148**		10	0.045	11.7
		Manganese	**96.2**		50	880	1020
		Iron	**6,760**	**J**	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

Portage Environmental, 2004. *RVAAP Facility-Wide Groundwater Monitoring Program Plan*.

SAIC, 2001. *RVAAP Facility-Wide Sampling and Analysis Plan/Quality Assurance Project Plan.*

SAIC, 2001b, *Phase II Remedial Investigation report for the Winklepeck Burning Grounds at Ravenna Army Ammunition Plant, Ravenna, Ohio.*

SAIC/REIMS, 2005. *Table of Reported Construction Depths from REIMS Information.*

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.*

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

SpecPro, Inc. 2006a, *Facility-Wide Groundwater Monitoring Program, Annual Report for 2005, Ravenna Training and Logistics Site/Ravenna Army Ammunition Plant, Ravenna, Ohio*

SpecPro, Inc. 2006b, *Facility-Wide Groundwater Monitoring Program, Report on the March 2006 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio*

SpecPro, Inc. 2006c, *Facility-Wide Groundwater Monitoring Program, Report on the May 2006 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio*

SpecPro, Inc. 2006d, (Draft) *Facility-Wide Groundwater Monitoring Program, Annual Report for 2006, Ravenna Army Ammunition Plant, Ravenna, Ohio*

SpecPro, Inc. 2007a, *Facility-Wide Groundwater Monitoring Program, Report on the July 2006 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio*

SpecPro, Inc. 2007b, *Facility-Wide Groundwater Monitoring Program, Report on the October 2006 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio*

SpecPro, Inc. 2007c, *Facility- Wide Groundwater Monitoring Program, Report on the January 2006 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio.*

Environmental Quality Management, Inc. 2007d, *Facility- Wide Groundwater Monitoring Program, Report on the April 2007 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio*.

Environmental Quality Management, Inc. 2007e, *Facility- Wide Groundwater Monitoring Program, Report on the July 2007 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio*.

Environmental Quality Management, Inc. 2007f, *Facility- Wide Groundwater Monitoring Program, Report on the October 2007 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio.*

Environmental Quality Management, Inc. 2008a, *Facility- Wide Groundwater Monitoring Program, Report on the January 2008 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio*.

Environmental Quality Management, Inc. 2008b, *Facility- Wide Groundwater Monitoring Program, Report on the April 2008 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio*.

Environmental Quality Management, Inc. 2008c, *Facility- Wide Groundwater Monitoring Program, Report on the July 2008 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio*.

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Environmental Quality Management, Inc. 2009c, *Facility- Wide Groundwater Monitoring Program, Report on the July 2009 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio*.

Environmental Quality Management, Inc. 2009c, *Facility- Wide Groundwater Monitoring Program, Report on the October 2009 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio*.

APPENDIX A

CORRESPONDENCE DOCUMENTING THE CHANGE IN WELLS TO BE SAMPLED IN 2008-2010

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.

FW: FWGWMP modifications

Thanks.

Rick

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

APPENDIX B

LIST OF WELLS SAMPLED DURING THE JANUARY 2010 EVENT

Wells Monitored During The January 2010 Event

Well ID	Location
LL11mw-009	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

January 2010 FWGMP Monitoring Well Event
Field Personnel Abbreviations and Signatures Page

Field Personnel

Name	Affiliation	Initials
Angye Dragotta	EQM	AD
Colleen A. Lear	EQM	CAL
Erik Corbin	EQM	EC
John Miller	EQM	JM
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: Erik Corbin

Comprehensive Water Level Measurements

COMPREHENSIVE WATER LEVEL MEASUREMENTS

RVAAP FACILITY-WIDE GROUNDWATER MONITORING PROGRAM JANUARY 2010

Well Number	Location	Date	Time	Depth To Water*	Depth to Bottom	Description of bottom	Instrument/Serial Number
ASY MW-001	Atlas Scrap Yard	1/20/2010	10:10	13.14	23.05	Hard	05767
ASY MW-002	Atlas Scrap Yard	1/20/2010	10:15	16.97	22.88	Hard	05767
ASY MW-003	Atlas Scrap Yard	1/20/2010	10:05	14.18	23.45	Hard	05767
ASY MW-004	Atlas Scrap Yard	1/20/2010	10:00	10.46	29.73	Hard	05767
ASY MW-005	Atlas Scrap Yard	1/20/2010	9:50	8.51	27.12	Hard	05767
ASY MW-006	Atlas Scrap Yard	1/20/2010	9:35	15.29	28.83	Hard	05767
ASY MW-007	Atlas Scrap Yard	1/20/2010	9:30	16.36	28.82	Hard	05767
ASY MW-008	Atlas Scrap Yard	1/20/2010	9:25	5.22	26.25	Soft	05767
ASY MW-009	Atlas Scrap Yard	1/20/2010	9:45	13.86	24.30	Soft	05767
ASY MW-010	Atlas Scrap Yard	1/20/2010	9:40	13.51	31.05	Hard	05767
BKG MW-004	Background	1/19/2010	16:05	14.70	22.22	Hard	05769
BKG MW-005	Background	1/18/2010	15:15	11.52	20.88	Hard	05767
BKG MW-006	Background	1/19/2010	15:26	24.43	37.50	Hard	05769
BKG MW-008	Background	1/19/2010	15:56	19.34	27.35	Hard	05769
BKG MW-010	Background	1/19/2010	16:57	15.55	21.96	Hard	05769
BKG MW-012	Background	1/19/2010	8:37	8.80	62.11	Soft	05769
BKG MW-013	Background	1/19/2010	14:53	12.64	27.95	Hard	OH02911
BKG MW-015	Background	1/19/2010	16:22	49.25	52.97	Hard	05769
BKG MW-016	Background	1/18/2010	14:55	4.02	21.14	Hard	05767
BKG MW-017	Background	1/19/2010	15:40	16.56	27.50	Hard	05769
BKG MW-018	Background	1/18/2010	16:15	21.62	35.61	Hard	05767
BKG MW-019	Background	1/19/2010	8:25	7.85	33.18	Hard	OH02911
BKG MW-020	Background	1/19/2010	16:12	20.14	21.43	Hard	05769
BKG MW-021	Background	1/18/2010	15:30	17.38	35.92	Hard	05767

*All measurements from top of casing

COMPREHENSIVE WATER LEVEL MEASUREMENTS

RVAAP FACILITY-WIDE GROUNDWATER MONITORING PROGRAM JANUARY 2010

Well Number		Location	Date	Time	Depth To Water*	Depth to Bottom	Description of bottom	Instrument/Serial Number
B12	MW-010	Building 1200	1/19/2010	16:45	18.59	22.80	Hard	05769
B12	MW-011	Building 1200	1/19/2010	16:52	22.34	26.70	Hard	05769
B12	MW-012	Building 1200	1/19/2010	16:39	23.55	24.80	Hard	05769
CBL	MW-001	C-Block Quarry	1/18/2010	15:40	46.62	51.60	Medium	05767
CBL	MW-002	C-Block Quarry	1/18/2010	15:45	41.01	47.32	Hard	05767
CBL	MW-003	C-Block Quarry	1/18/2010	16:06	39.45	44.67	Medium	05767
CBL	MW-004	C-Block Quarry	1/18/2010	15:50	38.94	47.01	Hard	05767
CBP	MW-001	Central Burn Pits	1/19/2010	10:53	14.03	34.24	Soft	05769
CBP	MW-002	Central Burn Pits	1/19/2010	11:10	10.17	31.83	Soft	05769
CBP	MW-003	Central Burn Pits	1/19/2010	10:30	12.74	30.18	Hard	05769
CBP	MW-004	Central Burn Pits	1/19/2010	10:46	11.34	29.61	Medium	05769
CBP	MW-005	Central Burn Pits	1/19/2010	10:41	12.53	27.37	Soft	05769
CBP	MW-006	Central Burn Pits	1/19/2010	9:00	8.48	25.20	Soft	05769
CBP	MW-007	Central Burn Pits	1/19/2010	10:26	16.45	31.73	Hard	05769
CBP	MW-008	Central Burn Pits	1/19/2010	8:53	16.29	27.89	Hard	05769
CP	MW-001	Cobbs Pond	1/18/2010	16:47	1.86	14.71	Hard	OH02911
CP	MW-002	Cobbs Pond	1/19/2010	11:25	0.15	14.99	Hard	05769
CP	MW-003	Cobbs Pond	1/18/2010	16:53	0.58	17.69	Hard	OH02911
CP	MW-004	Cobbs Pond	1/19/2010	10:10	10.43	22.53	Hard	05769
CP	MW-005	Cobbs Pond	1/19/2010	10:15	12.08	43.15	Hard	05769
CP	MW-006	Cobbs Pond	1/19/2010	8:43	7.75	20.61	Hard	05769
DA2	MW-104	Demo Area 2	1/19/2010	12:22	22.23	29.19	Hard	05769
DA2	MW-105	Demo Area 2	1/19/2010	12:27	2.90	16.20	Hard	05769
DA2	MW-106	Demo Area 2	1/19/2010	12:35	7.75	16.76	Hard	05769

*All measurements from top of casing

COMPREHENSIVE WATER LEVEL MEASUREMENTS

RVAAP FACILITY-WIDE GROUNDWATER MONITORING PROGRAM JANUARY 2010

Well Number	Location	Date	Time	Depth To Water*	Depth to Bottom	Description of bottom	Instrument/Serial Number
DA2 MW-107	Demo Area 2	1/19/2010	12:59	6.51	16.82	Hard	05769
DA2 MW-108	Demo Area 2	1/19/2010	11:53	5.78	17.13	Hard	05769
DA2 MW-109	Demo Area 2	1/19/2010	13:20	14.02	24.24	Soft	05769
DA2 MW-110	Demo Area 2	1/19/2010	13:28	7.61	22.34	Hard	05769
DA2 MW-111	Demo Area 2	1/19/2010	13:12	3.76	14.78	Hard	05769
DA2 MW-112	Demo Area 2	1/19/2010	13:08	6.55	17.04	Hard	05769
DA2 MW-113	Demo Area 2	1/19/2010	13:05	7.34	16.28	Hard	05769
DET MW-001	Demo Area 2	1/19/2010	12:17	23.53	38.50	Hard	05769
DET MW-002	Demo Area 2	1/19/2010	12:00	32.29	41.93	Soft	05769
DET MW-003	Demo Area 2	1/19/2010	12:45	9.15	16.01	Hard	05769
DET MW-004	Demo Area 2	1/19/2010	12:53	9.51	13.80	Hard	05769
EBG MW-123	Erie Burning Grounds	1/18/2010	13:27	9.28	34.73	Hard	05769
EBG MW-124	Erie Burning Grounds	1/18/2010	13:17	2.90	32.63	Soft	05769
EBG MW-125	Erie Burning Grounds	1/18/2010	13:33	11.37	27.43	Hard	05769
EBG MW-126	Erie Burning Grounds	1/18/2010	13:54	1.91	27.80	Medium	05769
EBG MW-127	Erie Burning Grounds	1/18/2010	14:03	4.32	32.82	Medium	05769
EBG MW-128	Erie Burning Grounds	1/18/2010	14:10	6.21	28.19	Hard	05769
EBG MW-129	Erie Burning Grounds	1/18/2010	13:41	5.29	30.90	Hard	05769
EBG MW-130	Erie Burning Grounds	1/18/2010	13:04	5.93	28.38	Hard	05769
FBQ MW-166	Fuze and Booster Quarry	1/19/2010	13:50	5.57	19.69	Hard	05769
FBQ MW-167	Fuze and Booster Quarry	1/19/2010	13:59	4.48	18.95	Hard	05769
FBQ MW-168	Fuze and Booster Quarry	1/19/2010	14:45	12.93	21.21	Hard	05769
FBQ MW-169	Fuze and Booster Quarry	1/19/2010	13:56	4.94	18.05	Hard	05769
FBQ MW-170	Fuze and Booster Quarry	1/19/2010	14:22	21.93	32.66	Hard	05769

*All measurements from top of casing

COMPREHENSIVE WATER LEVEL MEASUREMENTS

RVAAP FACILITY-WIDE GROUNDWATER MONITORING PROGRAM JANUARY 2010

Well Number		Location	Date	Time	Depth To Water*	Depth to Bottom	Description of bottom	Instrument/Serial Number
FBQ	MW-171	Fuze and Booster Quarry	1/19/2010	14:41	21.64	31.38	Hard	05769
FBQ	MW-172	Fuze and Booster Quarry	1/19/2010	14:32	30.31	34.36	Medium	05769
FBQ	MW-173	Fuze and Booster Quarry	1/19/2010	14:06	46.96	52.95	Medium	05769
FBQ	MW-174	Fuze and Booster Quarry	1/19/2010	14:12	20.89	22.99	Soft	05769
FBQ	MW-175	Fuze and Booster Quarry	1/19/2010	14:19	21.51	25.78	Soft	05769
FBQ	MW-176	Fuze and Booster Quarry	1/19/2010	14:49	10.45	23.60	Soft	05769
FBQ	MW-177	Fuze and Booster Quarry	1/19/2010	14:53	13.88	24.74	Soft	05769
LNW	MW-024	Landfill North Winklepeck	1/19/2010	9:00	12.50	22.51	Hard	05767
LNW	MW-025	Landfill North Winklepeck	1/19/2010	8:55	4.98	20.30	Hard	05767
LNW	MW-026	Landfill North Winklepeck	1/19/2010	8:50	3.73	25.94	Hard	05767
LNW	MW-027	Landfill North Winklepeck	1/19/2010	8:40	7.05	28.85	Hard	05767
LL1	MW-063	Loadline 1	1/18/2010	13:32	30.06	30.05	Hard	OH02911
LL1	MW-064	Loadline 1	1/18/2010	14:17	3.14	21.06	Hard	OH02911
LL1	MW-065	Loadline 1	1/18/2010	14:14	13.26	23.06	Hard	OH02911
LL1	MW-067	Loadline 1	1/18/2010	13:18	22.35	25.68	Hard	OH02911
LL1	MW-078	Loadline 1	1/18/2010	13:28	35.83	41.08	Medium	OH02911
LL1	MW-079	Loadline 1	1/18/2010	13:58	36.19	41.71	Hard	OH02911
LL1	MW-080	Loadline 1	1/18/2010	13:54	12.71	22.33	Hard	OH02911
LL1	MW-081	Loadline 1	1/18/2010	13:46	33.66	41.96	Hard	OH02911
LL1	MW-082	Loadline 1	1/18/2010	13:42	36.77	41.53	Medium	OH02911
LL1	MW-083	Loadline 1	1/18/2010	13:35	36.97	41.38	Hard	OH02911
LL1	MW-084	Loadline 1	1/18/2010	13:39	32.56	39.04	Hard	OH02911
LL1	MW-085	Loadline 1	1/18/2010	13:51	38.40	39.92	Hard, Obstruction?	OH02911
LL10	MW-001	Loadline 10	1/19/2010	16:06	25.63	29.54	Hard	05769

*All measurements from top of casing

COMPREHENSIVE WATER LEVEL MEASUREMENTS

RVAAP FACILITY-WIDE GROUNDWATER MONITORING PROGRAM JANUARY 2010

Well Number	Location	Date	Time	Depth To Water*	Depth to Bottom	Description of bottom	Instrument/Serial Number
LL10 MW-002	Loadline 10	1/19/2010	16:15	18.30	29.75	Hard	05769
LL10 MW-003	Loadline 10	1/19/2010	15:55	20.99	28.59	Hard	05767
LL10 MW-004	Loadline 10	1/19/2010	16:05	13.98	33.49	Hard	05767
LL10 MW-005	Loadline 10	1/19/2010	16:15	16.39	29.19	Hard	05767
LL10 MW-006	Loadline 10	1/19/2010	16:10	12.78	26.45	Hard	05767
LL11 MW-001	Loadline 11	1/19/2010	11:25	8.43	23.31	Medium	05767
LL11 MW-002	Loadline 11	1/19/2010	12:05	0.72	16.39	Hard	05767
LL11 MW-003	Loadline 11	1/19/2010	12:35	<0.08	16.05	Hard	05767
LL11 MW-004	Loadline 11	1/19/2010	12:30	<0.08	16.15	Hard	05767
LL11 MW-005	Loadline 11	1/19/2010	12:20	6.78	16.37	Hard	05767
LL11 MW-006	Loadline 11	1/19/2010	12:15	2.88	15.68	Hard	05767
LL11 MW-007	Loadline 11	1/19/2010	12:10	13.60	25.26	Hard	05767
LL11 MW-008	Loadline 11	1/19/2010	11:55	<0.08	15.67	Hard	05767
LL11 MW-009	Loadline 11	1/19/2010	11:30	2.10	19.48	Hard	05767
LL11 MW-010	Loadline 11	1/19/2010	11:40	3.53	23.42	Hard	05767
LL12 MW-088	Loadline 12	1/19/2010	13:20	7.77	27.36	Hard	OH02911
LL12 MW-107	Loadline 12	1/19/2010	13:15	10.51	33.64	Hard	OH02911
LL12 MW-113	Loadline 12	1/19/2010	12:23	5.34	21.42	Soft	OH02911
LL12 MW-128	Loadline 12	1/19/2010	13:05	11.89	34.02	Soft	OH02911
LL12 MW-153	Loadline 12	1/19/2010	12:54	6.68	25.04	Hard	OH02911
LL12 MW-154	Loadline 12	1/19/2010	12:57	9.66	28.58	Hard	OH02911
LL12 MW-182	Loadline 12	1/19/2010	13:49	10.95	37.95	Hard	OH02911
LL12 MW-183	Loadline 12	1/19/2010	13:34	13.52	36.27	Hard	OH02911
LL12 MW-184	Loadline 12	1/19/2010	13:24	13.64	31.02	Hard	OH02911

*All measurements from top of casing

COMPREHENSIVE WATER LEVEL MEASUREMENTS

RVAAP FACILITY-WIDE GROUNDWATER MONITORING PROGRAM JANUARY 2010

Well Number	Location	Date	Time	Depth To Water*	Depth to Bottom	Description of bottom	Instrument/Serial Number
LL12 MW-185	Loadline 12	1/19/2010	12:37	8.99	23.21	Hard	OH02911
LL12 MW-186	Loadline 12	1/19/2010	14:00	5.72	20.68	Hard	OH02911
LL12 MW-187	Loadline 12	1/19/2010	12:30	10.41	29.57	Hard	OH02911
LL12 MW-188	Loadline 12	1/19/2010	12:49	4.10	22.05	Soft	OH02911
LL12 MW-189	Loadline 12	1/19/2010	13:54	3.25	19.94	Soft	OH02911
LL12 MW-242	Loadline 12	1/20/2010	10:30	9.19	28.81	Soft	05767
LL12 MW-243	Loadline 12	1/19/2010	13:09	10.03	25.38	Soft	OH02911
LL12 MW-244	Loadline 12	1/19/2010	12:33	11.00	31.94	Soft	OH02911
LL12 MW-245	Loadline 12	1/19/2010	13:12	8.88	30.15	Soft	OH02911
LL12 MW-246	Loadline 12	1/19/2010	12:42	18.21	34.96	Hard	OH02911
LL2 MW-059	Loadline 2	1/18/2010	14:25	15.16	21.84	Soft	OH02911
LL2 MW-060	Loadline 2	1/18/2010	14:32	11.31	20.77	Hard	OH02911
LL2 MW-261	Loadline 2	1/18/2010	15:01	7.04	22.42	Hard	OH02911
LL2 MW-262	Loadline 2	1/18/2010	14:54	9.63	22.61	Hard	OH02911
LL2 MW-263	Loadline 2	1/18/2010	14:48	8.52	23.39	Hard	OH02911
LL2 MW-264	Loadline 2	1/18/2010	14:44	6.81	22.34	Hard	OH02911
LL2 MW-265	Loadline 2	1/18/2010	14:29	11.30	24.39	Hard	OH02911
LL2 MW-266	Loadline 2	1/18/2010	14:51	12.44	22.68	Hard	OH02911
LL2 MW-267	Loadline 2	1/18/2010	15:07	9.59	22.68	Hard	OH02911
LL2 MW-268	Loadline 2	1/18/2010	14:38	14.70	29.86	Medium	OH02911
LL2 MW-269	Loadline 2	1/18/2010	14:58	16.89	30.25	Hard	OH02911
LL2 MW-270	Loadline 2	1/18/2010	16:05	7.95	22.37	Medium	OH02911
LL3 MW-232	Loadline 3	1/18/2010	16:00	23.06	39.80	Soft	OH02911
LL3 MW-233	Loadline 3	1/18/2010	15:55	27.77	32.75	Hard	OH02911

*All measurements from top of casing

COMPREHENSIVE WATER LEVEL MEASUREMENTS

RVAAP FACILITY-WIDE GROUNDWATER MONITORING PROGRAM JANUARY 2010

Well Number	Location	Date	Time	Depth To Water*	Depth to Bottom	Description of bottom	Instrument/Serial Number
LL3 MW-234	Loadline 3	1/18/2010	16:10	9.87	22.60	Hard	OH02911
LL3 MW-235	Loadline 3	1/18/2010	16:13	20.05	22.88	Hard	OH02911
LL3 MW-236	Loadline 3	1/18/2010	16:19	18.72	26.54	Hard	OH02911
LL3 MW-237	Loadline 3	1/18/2010	15:49	17.09	25.51	Hard	OH02911
LL3 MW-238	Loadline 3	1/18/2010	15:45	15.34	23.30	Hard	OH02911
LL3 MW-239	Loadline 3	1/18/2010	15:40	26.61	36.62	Soft	OH02911
LL3 MW-240	Loadline 3	1/18/2010	16:33	28.81	36.64	Soft	OH02911
LL3 MW-241	Loadline 3	1/18/2010	15:29	10.31	25.53	Hard	OH02911
LL3 MW-242	Loadline 3	1/18/2010	15:34	17.53	22.47	Hard	OH02911
LL3 MW-243	Loadline 3	1/18/2010	15:12	16.83	26.28	Hard	OH02911
LL4 MW-193	Loadline 4	1/19/2010	14:18	6.42	24.24	Soft	OH02911
LL4 MW-194	Loadline 4	1/19/2010	14:24	8.22	23.47	Medium	OH02911
LL4 MW-195	Loadline 4	1/19/2010	14:31	11.15	22.77	Soft	OH02911
LL4 MW-196	Loadline 4	1/19/2010	14:34	13.57	21.75	Hard	OH02911
LL4 MW-197	Loadline 4	1/19/2010	14:37	14.86	23.55	Hard	OH02911
LL4 MW-198	Loadline 4	1/19/2010	14:42	9.82	21.92	Soft	OH02911
LL4 MW-199	Loadline 4	1/19/2010	14:14	8.13	23.13	Medium	OH02911
LL4 MW-200	Loadline 4	1/19/2010	14:06	18.81	25.14	Medium	OH02911
LL5 MW-001	Loadline 5	1/19/2010	15:00	20.50	26.98	Hard	05767
LL5 MW-002	Loadline 5	1/19/2010	15:35	21.33	27.49	Hard	05767
LL5 MW-003	Loadline 5	1/19/2010	15:30	20.32	23.93	Hard	05767
LL5 MW-004	Loadline 5	1/19/2010	15:25	18.33	25.27	Medium	05767
LL5 MW-005	Loadline 5	1/19/2010	15:10	22.03	29.65	Soft	05767
LL5 MW-006	Loadline 5	1/19/2010	15:15	20.61	27.05	Hard	05767

*All measurements from top of casing

COMPREHENSIVE WATER LEVEL MEASUREMENTS

RVAAP FACILITY-WIDE GROUNDWATER MONITORING PROGRAM JANUARY 2010

Well Number	Location	Date	Time	Depth To Water*	Depth to Bottom	Description of bottom	Instrument/Serial Number
LL6 MW-001	Loadline 6	1/19/2010	14:30	13.84	17.59	Hard	05767
LL6 MW-002	Loadline 6	1/19/2010	14:20	21.25	24.45	Hard	05767
LL6 MW-003	Loadline 6	1/19/2010	14:25	16.89	25.64	Medium	05767
LL6 MW-004	Loadline 6	1/19/2010	14:15	17.48	24.50	Hard	05767
LL6 MW-005	Loadline 6	1/19/2010	14:10	12.25	22.14	Hard	05767
LL6 MW-006	Loadline 6	1/19/2010	13:50	15.70	17.56	Hard	05767
LL6 MW-007	Loadline 6	1/19/2010	14:05	5.99	19.33	Hard	05767
LL7 MW-001	Loadline 7	1/19/2010	13:20	21.28	33.04	Hard	05767
LL7 MW-002	Loadline 7	1/19/2010	13:15	17.09	27.14	Hard	05767
LL7 MW-003	Loadline 7	1/19/2010	13:05	12.01	33.53	Hard	05767
LL7 MW-004	Loadline 7	1/19/2010	13:00	15.39	32.22	Hard	05767
LL7 MW-005	Loadline 7	1/19/2010	12:50	22.48	30.32	Hard	05767
LL7 MW-006	Loadline 7	1/19/2010	12:45	10.50	30.30	Hard	05767
LL8 MW-001	Loadline 8	1/18/2010	16:25	11.99	27.40	Soft	05767
LL8 MW-002	Loadline 8	1/18/2010	16:40	18.62	32.55	Hard	05767
LL8 MW-003	Loadline 8	1/18/2010	16:30	13.09	23.00	Hard	05767
LL8 MW-004	Loadline 8	1/18/2010	16:45	11.29	22.70	Hard	05767
LL8 MW-005	Loadline 8	1/18/2010	17:06	13.74	27.08	Medium	05767
LL8 MW-006	Loadline 8	1/18/2010	16:50	10.48	27.00	Hard	05767
LL9 MW-001	Loadline 9	1/19/2010	15:40	15.78	23.27	Hard	05767
LL9 MW-002	Loadline 9	1/19/2010	15:31	10.83	22.68	Hard	OH02911
LL9 MW-003	Loadline 9	1/19/2010	15:35	11.61	24.12	Hard	OH02911
LL9 MW-004	Loadline 9	1/19/2010	15:14	21.75	34.60	Hard	OH02911
LL9 MW-005	Loadline 9	1/19/2010	15:28	16.13	23.43	Hard	OH02911

*All measurements from top of casing

COMPREHENSIVE WATER LEVEL MEASUREMENTS

RVAAP FACILITY-WIDE GROUNDWATER MONITORING PROGRAM JANUARY 2010

Well Number	Location	Date	Time	Depth To Water*	Depth to Bottom	Description of bottom	Instrument/Serial Number
LL9 MW-006	Loadline 9	1/19/2010	15:18	19.36	28.74	Hard	OH02911
LL9 MW-007	Loadline 9	1/19/2010	15:23	9.63	18.09	Hard	OH02911
NTA MW-107	NACA Test Area	1/18/2010	13:30	12.92	24.01	Soft	05767
NTA MW-108	NACA Test Area	1/18/2010	13:40	18.06	24.43	Medium	05767
NTA MW-109	NACA Test Area	1/18/2010	13:45	12.10	20.88	Soft	05767
NTA MW-110	NACA Test Area	1/18/2010	14:00	14.39	29.74	Hard	05767
NTA MW-111	NACA Test Area	1/18/2010	14:05	3.20	22.05	Hard	05767
NTA MW-112	NACA Test Area	1/18/2010	14:45	9.08	26.60	Hard	05767
NTA MW-113	NACA Test Area	1/18/2010	14:40	7.02	29.60	Hard	05767
NTA MW-114	NACA Test Area	1/18/2010	14:35	6.11	22.75	Hard	05767
NTA MW-115	NACA Test Area	1/18/2010	14:30	13.74	25.25	Hard	05767
NTA MW-116	NACA Test Area	1/18/2010	14:15	4.23	22.55	Hard	05767
NTA MW-117	NACA Test Area	1/18/2010	14:20	13.13	27.49	Hard	05767
NTA MW-118	NACA Test Area	1/18/2010	14:25	8.79	24.69	Hard	05767
RQL MW-006	Ramsdell Quarry	1/18/2010	14:52	38.12	41.96	Hard	05769
RQL MW-007	Ramsdell Quarry	1/18/2010	14:22	9.86	18.56	Hard	05769
RQL MW-008	Ramsdell Quarry	1/18/2010	14:31	9.42	18.60	Hard	05769
RQL MW-009	Ramsdell Quarry	1/18/2010	15:06	7.54	18.76	Hard	05769
RQL MW-010	Ramsdell Quarry	1/19/2010	15:42	29.01	35.25	Hard	05769
RQL MW-011	Ramsdell Quarry	1/18/2010	15:20	25.56	35.29	Hard	05769
RQL MW-012	Ramsdell Quarry	1/18/2010	15:11	25.13	32.60	Hard	05769
RQL MW-013	Ramsdell Quarry	1/18/2010	15:35	28.65	36.40	Soft	05769
RQL MW-014	Ramsdell Quarry	1/18/2010	15:28	22.91	31.48	Hard	05769
RQL MW-015	Ramsdell Quarry	1/18/2010	14:39	34.92	41.96	Hard	05769

*All measurements from top of casing

COMPREHENSIVE WATER LEVEL MEASUREMENTS

RVAAP FACILITY-WIDE GROUNDWATER MONITORING PROGRAM JANUARY 2010

Well Number	Location	Date	Time	Depth To Water*	Depth to Bottom	Description of bottom	Instrument/Serial Number
RQL MW-016	Ramsdell Quarry	1/18/2010	14:45	38.54	41.63	Hard	05769
RQL MW-017	Ramsdell Quarry	1/18/2010	13:14	32.58	32.70	Hard	OH02911
MBS MW-001	Suspect Mustard Area	1/18/2010	13:00	17.51	30.98	Hard	05767
MBS MW-002	Suspect Mustard Area	1/18/2010	13:15	18.11	31.13	Hard	05767
MBS MW-003	Suspect Mustard Area	1/18/2010	12:45	18.71	30.70	Hard	05767
MBS MW-004	Suspect Mustard Area	1/18/2010	12:50	16.74	27.16	Hard	05767
MBS MW-005	Suspect Mustard Area	1/18/2010	13:10	17.75	30.00	Soft	05767
MBS MW-006	Suspect Mustard Area	1/18/2010	12:55	17.20	28.10	Medium	05767
WBG MW-005	Winklepeck Burning	1/19/2010	11:20	5.42	21.11	Hard	OH02911
WBG MW-006	Winklepeck Burning	1/19/2010	9:30	6.44	20.14	Hard	05769
WBG MW-007	Winklepeck Burning	1/19/2010	8:48	17.83	26.38	Hard	OH02911
WBG MW-008	Winklepeck Burning	1/19/2010	8:40	14.37	20.81	Hard	OH02911
WBG MW-009	Winklepeck Burning	1/19/2010	11:52	13.20	24.27	Hard	OH02911
WBG MW-010	Winklepeck Burning	1/19/2010	11:26	8.80	23.31	Soft	OH02911
WBG MW-011	Winklepeck Burning	1/19/2010	11:33	11.40	23.85	Soft	OH02911
WBG MW-012	Winklepeck Burning	1/19/2010	11:41	27.51	31.61	Hard	OH02911
WBG MW-013	Winklepeck Burning	1/19/2010	11:47	12.91	24.01	Soft	OH02911
WBG MW-014	Winklepeck Burning	1/19/2010	8:44	16.40	24.99	Soft	OH02911
WBG MW-015	Winklepeck Burning	1/19/2010	11:58	11.10	23.51	Hard	OH02911
WBG MW-016	Winklepeck Burning	1/19/2010	8:50	17.70	25.21	Soft	OH02911
WBG MW-017	Winklepeck Burning	1/19/2010	8:57	8.16	23.50	Soft	OH02911

*All measurements from top of casing

Logbook

RVAAP: USACE

Book #1

"Rite in the Rain"®

ALL-WEATHER

ENVIRONMENTAL

No. 550

EQM

Ravenna Ohio

RVAAP: USACE

No. 550 Enviro-Poly Cover

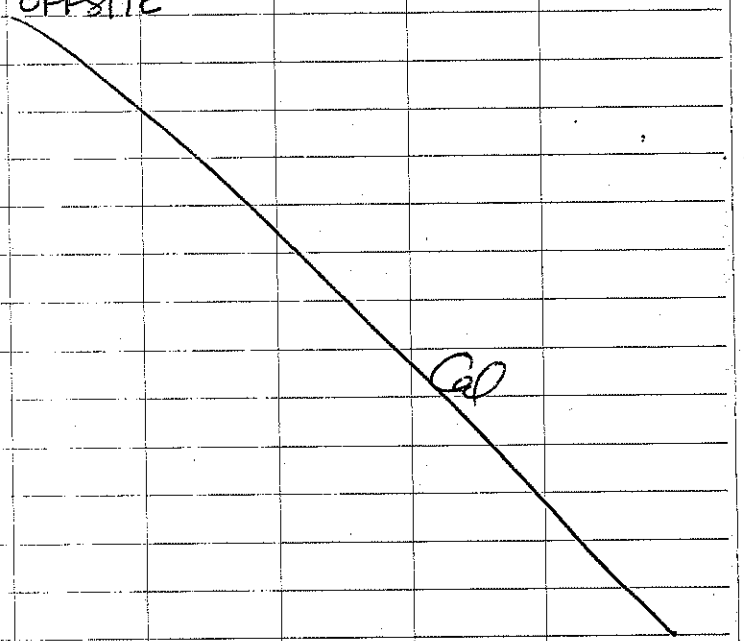
6 32281 55011 2

Location RVAAP Date 1-18-10

Project / Client USACE Annual

CAL, JM, SS, AD, EC Event (WL) Maintenance

1145	EQM onsite for annual well maintenance and water level event / H+S
1200	Check equipment and supplies
1230	Start locations. BKG, CBL, CP EBG, U1, U2, U3, U8, NTA, RQC MBG,
1715	Rtn to 1036 prep for next day suspend for next day
1730	OFFSITE

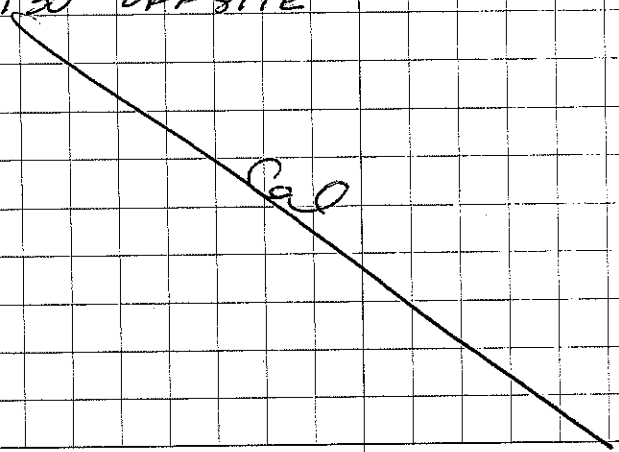


Location RVAAP Date 1-19-10

Project / Client USACE Annual

CAL JM SS AD EC Event

0745	EQM onsite / H+S
0800	Begin WL + maintenance for sites: con't BKG, B12, CBP, con't CP DA2 EBG, LNW, WBG, U10, U11, U12 U4, U5, U6, U7, U9, con't RQC
1600	Check on low WL metals only wells, U1mw63 - insufficient WL RQLmw017 tried to purge insufficient amount to even sample U3mw-235 purged dry will sample w/ in 24 hours
1700	Rtn to 1036 prep for final WL + sample tomorrow
1730	OFFSITE



Location RVAAP Date 1-20-10

Project / Client USACE water levels

Jm SS CAL EC AD qtrly event

0745 ONSITE

0800 CALIBRATE & H&S prep for day pack equipment /coolers

0900 Jm to finalize the water levels at ASY + LL12. 11

0900 2 teams to U9 Cal, LL3 & ASY. purge and sample for qtrly except U3mw235 pick up from Metal (Oct) event.

1700 partial rtn to 1036 pack coolers for fedex and lab pickup. pack and organize for the next day & finalization of qtrly event

1730 1036 lab pick up.

1745 samples to Fed Exp.

1800 OFFSITE

Cal

Location RVAAP Date 1/18/10 to 1/21/10

Project / Client USACE

Drum Log

Drum ID	Area / Contents
EQM 2010-1	Decon Water
EQM 2010-2	Purge Water LL11, LL1, LL3, ASY, RQL

Location RVAAP Date 1-21-10

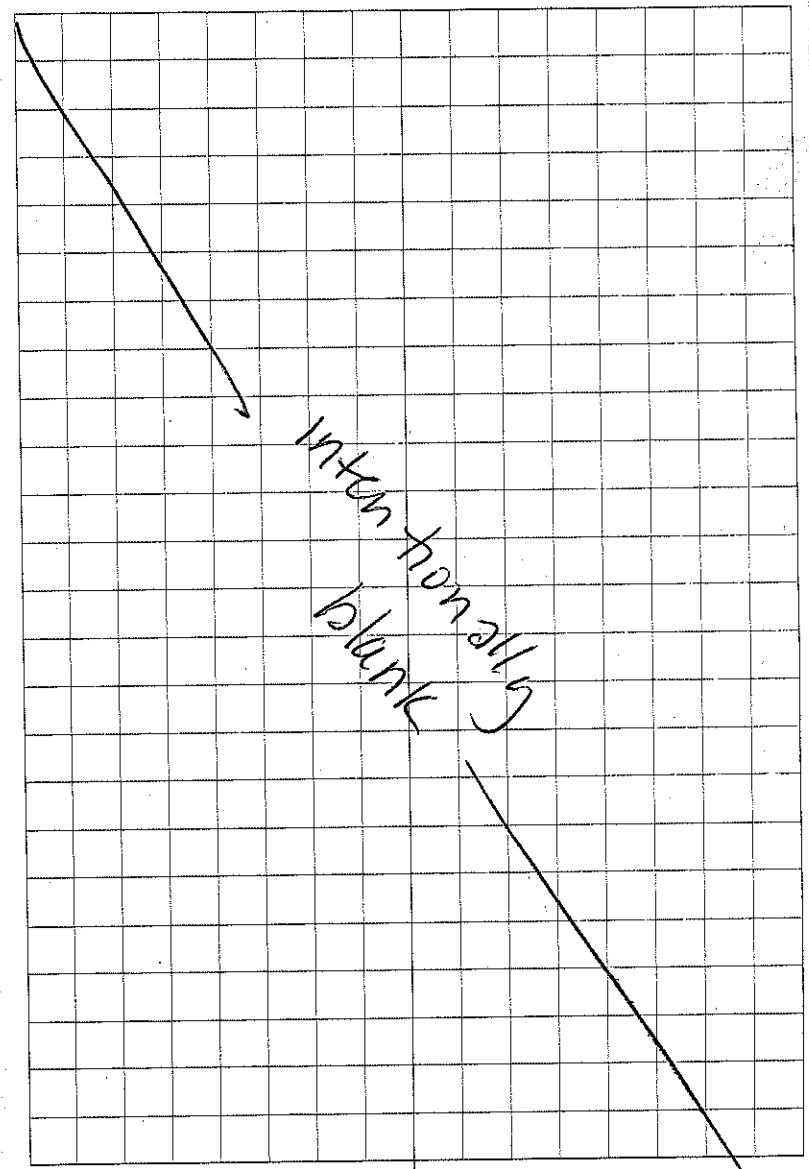
Project / Client USACE

CAL SS EC AD qtrly event

0745 ONSITE
0800 CALIBRATION + H+S
PACK FOR DAYS WELLS
0830 Finalize last wells at ASI
0920 Sample wells
1130 Rtn to 1036 for organization of coolers
1145 Sample IDW
1200 Lab pickup
Clean 1036 pack to Demob
1245 OFFSITE / DEMOB

Location Date

Project / Client



Static Water Level Measurements

MONITOR WELL STATIC WATER LEVEL FORM

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

FIELD BOOK#: 1 DATE: 1/19/2010

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
LL3mw-235	Loadline 3	23.02	OH02911	CAL	16:10	20.05		0
	Cmt:Good, dry at 22.86 16157retum 1/20 for recharge and sample							
RQLmw-017	Ramsdell Qu	32.84	OH02911	CAL	15:54	32.58		0
	Cmt:Good, insufficient water to sample <40ml							

MONITOR WELL STATIC WATER LEVEL FORM

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

FIELD BOOK#: 1 DATE: 1/20/2010

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	26.25	05767	JM	9:25	5.22		0
	Cmt:Good, Soft							
ASYmw-007	Atlas Scrap	28.82	05767	JM	9:30	16.36		0
	Cmt:Good, Hard							
ASYmw-006	Atlas Scrap	28.83	05767	JM	9:35	15.29		0
	Cmt:Good, Hard							
ASYmw-010	Atlas Scrap	31.05	05767	JM	9:40	13.51		0
	Cmt:Good, Hard							
ASYmw-009	Atlas Scrap	24.3	05767	JM	9:45	13.86		0
	Cmt:Good, Soft							
ASYmw-008	Atlas Scrap		OH02911	CAL	9:47	5.18		0
	Cmt:Good,							
ASYmw-005	Atlas Scrap	27.12	05767	JM	9:50	8.51		0
	Cmt:Good, Hard							
ASYmw-004	Atlas Scrap	29.73	05767	JM	10:00	10.46		0
	Cmt:Good, Hard							
ASYmw-003	Atlas Scrap	23.45	05767	JM	10:05	14.18		0
	Cmt:Good, Hard							
ASYmw-001	Atlas Scrap	23.05	05767	JM	10:10	13.14		0
	Cmt:Good, Hard							
ASYmw-002	Atlas Scrap	22.88	05767	JM	10:15	16.97		0
	Cmt:Good, Hard							
ASYmw-001	Atlas Scrap		05697	EC	11:45	12.97		0
	Cmt:Good,							
ASYmw-010	Atlas Scrap		OH02911	CAL	12:32	13.6		0
	Cmt:Good,							
ASYmw-003	Atlas Scrap		05679	EC	13:25	14.15		0
	Cmt:Good,							
ASYmw-006	Atlas Scrap		OH02911	CAL	13:41	15.55		0
	Cmt:Good, orange							
ASYmw-002	Atlas Scrap		05697	EC	14:35	16.94		0
	Cmt:Good,							
ASYmw-005	Atlas Scrap		OH02911	CAL	14:55	8.53		0
	Cmt:Good, tint grey							

MONITOR WELL STATIC WATER LEVEL FORM

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

FIELD BOOK#: 1 DATE: 1/20/2010

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		05697	EC	16:03	16.45		0
	Cmt:Good,							
LL11mw-009	Loadline 11		05769	EC	9:45	1.77		0
	Cmt:Good,							
LL12mw-242	Loadline 12	28.81	05767	JM	10:30	9.19		0
	Cmt:Good, Soft							

MONITOR WELL STATIC WATER LEVEL FORM

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

FIELD BOOK#: 1 DATE: 1/21/2010

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	8:44	13.83		0
	Cmt:Good, brown-grey							
ASYmw-004	Atlas Scrap		05697	EC	8:44	9.91		0
	Cmt:Good,							

Purge/Sample Records

MONITOR WELL PURGING FORM

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

LOCATION: ATLAS SCRAP DATE: 1/20/2010 START TIME: 11:45

WELL ID: ASYmw-001

WELL DEPTH: INITIAL WATER LEVEL: 12.97

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)
11:55	13.22	0.2	0.2	10	1.18	9.5	6.49	399
11:58	13.25	0.2	0.6	9.8	1.17	6.25	6.49	308
12:01	13.25	0.2	0.6	9.8	1.17	3.59	6.49	312

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-001 SampleID: FWGASYmw-001C-1496-GW/GF DuplID: FWGASYmw-DUP1-1512-GW/GF

SplitID: FWGASYmw-001C-1509S-GW/GF RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/20/2010 TIME: 12:05

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 297	Color:	Clear
		Odor:	None

pH: 6.49 Temperature (°C): 9.8 DO (mg/L): 3.79 Specific Conductivity (mS/cm): 1.17

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: NE AMBIENT TEMP (°F): 31

SHIPPED VIA: Lab PU/FedEx

SHIPPED TO: Multiple Labs

SAMPLER: EC Cmt: Dup at 1225

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
250ml/Poly	2	NaOH	9012	Cyanide
1L/Poly	2	HNO3	6010/6020/7470	Metals
1L/Amber	5	4C	353.2/8330	Propellants
1L/Amber	3	4C	8330	Explo
1L/Amber	5	4C	8082	PCB
1L/Amber	5	4C	8081	Pest
1L/Amber	5	4C	8270	SVOC
40ml/Vial	8	HCl	8260	VOC

MONITOR WELL PURGING FORM

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

LOCATION: ATLAS SCRAP DATE: 1/20/2010 START TIME: 14:35

WELL ID: ASYmw-002

WELL DEPTH: _____ INITIAL WATER LEVEL: 16.94

WELL DIAMETER _____ SCREEN INTERVAL: 10 - 19.5

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 14.8

PUMP READINGS: Throttle: 10 Recharge: 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)
14:51	16.95	0.2	0.2	9.1	0.481	14.17	6.75	642
14:54	16.95	0.2	0.6	9.1	0.48	13.74	6.71	614
14:57	16.95	0.2	0.6	9.1	0.479	10.41	6.69	655

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-002 SampleID: FWGASYmw-002C-1497-GW/GF DupIID:

SplitID: RinseID:

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

GRAB: **Y** COMPOSITE: **N** DATE: 1/20/2010 TIME: 15:01

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 773	Color:	Clear
		Odor:	None

pH: 6.7 Temperature (°C): 9.1 DO (mg/L): 9.79 Specific Conductivity (mS/cm): 0.479

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: NE AMBIENT TEMP (°F): 33

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt:

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/Amber	2	4C	8270	SVOC
1L/Poly	1	HNO3	6010/6020/7470	Metals

MONITOR WELL PURGING FORM

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

LOCATION: ATLAS SCRAP DATE: 1/20/2010 START TIME: 13:25

WELL ID: ASYmw-003

WELL DEPTH: INITIAL WATER LEVEL: 14.15

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)
13:44	14.27	0.2	6.2	9.8	1.13	14.24	6.6	379
13:45	14.27	0.2	6.2	9.8	1.13	14.2	6.6	370
13:47	14.27	0.2	6.2	9.8	1.14	7.68	6.56	294
13:50	14.28	0.2	0.6	9.9	1.13	6.75	6.55	218

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-1498-GW/GF DupIID:

SplitID: RinseID:

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

GRAB: **Y** COMPOSITE: **N** DATE: 1/20/2010 TIME: 14:05

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 211	Color:	Clear
		Odor:	None

pH: 6.56 Temperature (°C): 9.8 DO (mg/L): 6.78 Specific Conductivity (mS/cm): 1.13

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: NE AMBIENT TEMP (°F): 33

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt:

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: 1/21/2010 START TIME: 8:44

WELL ID: ASYmw-004

WELL DEPTH: INITIAL WATER LEVEL: 9.91

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)
8:55	10.92	0.2	0.2	8.9	1.41	5.56	6.43	106
8:58	11.20	0.2	0.6	9	1.4	5.87	6.53	87.2
9:01	11.63	0.2	0.6	9.2	1.4	6.79	6.62	94.2
9:04	12.09	0.2	0.6	9.3	1.39	5.81	6.67	68.7
9:08	12.48	0.2	0.8	9.2	1.39	5.69	6.69	63.4

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-1499-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: **Y** COMPOSITE: **N** DATE: 1/21/2010 TIME: 9:15

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 61.2	Color:	Clear
		Odor:	None

pH: 6.69 Temperature (°C): 9.3 DO (mg/L): 5.7 Specific Conductivity (mS/cm): 1.39

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: NE AMBIENT TEMP (°F): 20

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Poly	3	HNO3	6010/6020/7470	Metals
1L/Amber	6	4C	353.2/8330	Propellants
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	8082	PCB

MONITOR WELL PURGING FORM

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

LOCATION: ATLAS SCRAP DATE: 1/20/2010 START TIME: 14:55

WELL ID: ASYmw-005

WELL DEPTH: INITIAL WATER LEVEL: 8.53

WELL DIAMETER SCREEN INTERVAL: 14 - 24

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

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

COMMENTS tint grey 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)
14:58	8.56	0.2	0.2	9.63	1.14	10.7	7.36	23.6
15:01	8.72	0.2	0.6	9.5	1.12	9.62	7.27	35.5
15:04	9.00	0.2	0.6	9.57	1.12	9.01	7.25	59.6
15:07	9.22	0.2	0.6	9.61	1.12	8.79	7.27	59

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-005 SampleID: FWGASYmw-005C-1500-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/20/2010 TIME: 15:20

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 60.4	Color:	tint
		Odor:	None

pH: 7.28 Temperature (°C): 9.67 DO (mg/L): 8.21 Specific Conductivity (mS/cm): 1.12

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: N AMBIENT TEMP (°F): 30

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt:

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

MONITOR WELL PURGING FORM

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

LOCATION: ATLAS SCRAP DATE: 1/20/2010 START TIME: 13:41

WELL ID: ASYmw-006

WELL DEPTH: INITIAL WATER LEVEL: 15.55

WELL DIAMETER SCREEN INTERVAL: 16 - 26

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

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

COMMENTS 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)
13:45	15.58	0.2	0.2	9.33	1.16	11.78	7.14	374
13:48	15.79	0.2	0.6	9.41	1.15	10.22	6.99	252
13:51	16.00	0.2	0.6	9.39	1.16	9.51	6.96	207
13:54	16.05	0.2	0.6	9.45	1.15	9.14	6.94	191

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-006 SampleID: FWGASYmw-006C-1501-GW/GF DupIID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/20/2010 TIME: 14:00

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 163	Color:	tint
		Odor:	None

pH: 6.94 Temperature (°C): 9.42 DO (mg/L): 8.89 Specific Conductivity (mS/cm): 1.15

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: N AMBIENT TEMP (°F): 29

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
40ml/Vial	3	HCl	8260	VOC
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
1L/Amber	2	4C	8082	PCB
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: ATLAS SCRAP DATE: 1/20/2010 START TIME: 16:03

WELL ID: ASYmw-007

WELL DEPTH: INITIAL WATER LEVEL: 16.45

WELL DIAMETER SCREEN INTERVAL: 16 - 26

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

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)
16:14	16.96	0.2	0.2	8.2	0.846	3.3	6.53	106
16:22	16.96	0.2	1.6	8.1	0.842	3.4	6.52	105
16:26	16.96	0.2	0.8	8.2	0.834	3.27	6.52	102

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-1502-GW/GF DupIID:

SplitID: RinseID: FWGEQUIPRinse1-1513-GW

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

GRAB: Y COMPOSITE: N DATE: 1/20/2010 TIME: 16:31

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 101	Color:	Clear
		Odor:	None

pH: 6.52 Temperature (°C): 8.2 DO (mg/L): 3.26 Specific Conductivity (mS/cm): 0.834

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: NE AMBIENT TEMP (°F): 32

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt: Rinse at 1730

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8270	SVOC
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: ATLAS SCRAP DATE: 1/20/2010 START TIME: 9:47

WELL ID: ASYmw-008

WELL DEPTH: INITIAL WATER LEVEL: 5.18

WELL DIAMETER SCREEN INTERVAL: 15 - 25

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

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

COMMENTS brwn 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)
9:57	5.25	0.1	0.2	7.28	1.65	11.5	6.57	915
10:00	5.41	0.1	0.3	7.74	1.59	8.01	6.69	654
10:03	5.79	0.1	0.3	7.95	1.58	8.27	6.73	577
10:06	6.03	0.1	0.3	8.23	1.57	7.93	6.79	621

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-008 SampleID: FWGASYmw-008C-1503-GW/GF DupIID: FWGASYmw-DUP2-1511-GW/GF

SplitID: FWGASYmw-008C-1510S-GW/GF RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/20/2010 TIME: 10:15

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 657	Color:	brwn
		Odor:	None

pH: 6.86 Temperature (°C): 8.43 DO (mg/L): 8.01 Specific Conductivity (mS/cm): 1.57

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: N AMBIENT TEMP (°F): 30

SHIPPED VIA: Lab PU/FedEx

SHIPPED TO: Multiple Labs

SAMPLER: CAL Cmt: dup at 1102

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

MONITOR WELL PURGING FORM

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

LOCATION: ATLAS SCRAP DATE: 1/21/2010 START TIME: 8:44

WELL ID: ASYmw-009

WELL DEPTH: INITIAL WATER LEVEL: 13.83

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 Discharge: 3

COMMENTS brown-grey 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)
8:58	14.00	0.15	0.2	8.66	1.44	9.94	6.32	415
9:01	14.01	0.15	0.45	8.55	1.42	9.7	6.45	585
9:04	13.99	0.15	0.45	8.62	1.42	9.03	6.58	405
9:07	13.98	0.15	0.45	8.69	1.41	8.54	6.65	258
9:10	13.97	0.15	0.45	8.7	1.42	8.22	6.7	196
9:13	13.96	0.15	0.45	8.79	1.42	7.93	6.74	142

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-1504-GW/GF DupID:

SplitID: RinseID: FWGEQUIPRinse2-1514-GW

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

GRAB: Y COMPOSITE: N DATE: 1/21/2010 TIME: 9:20

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 136	Color:	tint
		Odor:	None

pH: 6.74 Temperature (°C): 8.81 DO (mg/L): 7.86 Specific Conductivity (mS/cm): 1.42

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: NW AMBIENT TEMP (°F): 29

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt:

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	8270	SVOC
1L/Amber	2	4C	8081	Pest
1L/Poly	1	HNO3	6010/6020/7470	Metals

MONITOR WELL PURGING FORM

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

LOCATION: ATLAS SCRAP DATE: 1/20/2010 START TIME: 12:32

WELL ID: ASYmw-010

WELL DEPTH: INITIAL WATER LEVEL: 13.6

WELL DIAMETER SCREEN INTERVAL: 17 - 27

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

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

COMMENTS grey 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)
12:41	13.68	0.15	0.2	9.8	1.29	10.3	6.9	537
12:44	13.67	0.15	0.45	9.18	1.28	9.67	6.89	771
12:47	13.66	0.15	0.45	9	1.26	8.9	6.82	725

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-1505-GW/GF DupID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/20/2010 TIME: 12:54

FIELD READINGS / OBSERVATIONS

	Turb (NTU):	746	Color: grey
			Odor: None

pH: 6.85 Temperature (°C): 9.95 DO (mg/L): 7.61 Specific Conductivity (mS/cm): 1.26

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: N AMBIENT TEMP (°F): 30

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	353.2/8330	Propellants
1L/Amber	2	4C	8270	SVOC
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	8081	Pest
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 3 DATE: 1/19/2010 START TIME: 16:10

WELL ID: LL3mw-235

WELL DEPTH: 23.02 INITIAL WATER LEVEL: 20.05

WELL DIAMETER SCREEN INTERVAL: 10.1 - 20.1

PUMP/PURGING DEVICE: B - BAILER PUMP INTAKE DEPTH: 15.1

PUMP READINGS: Throttle: 0 Recharge: 0 Discharge: 0

COMMENTS dry at 22.86 16157return 1/20 for recharge and sample Odor:

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
16:13	22.68	0.5	0.5	10.7	0.597	16.13	5.87	999
16:15	22.80	0.2	0.4	10.3	0.536	16.1	5.8	999
16:17	22.86	0.2	0.4	9	0.533	16.02	5.72	999

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

Field Personnel: CAL

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 3** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL3mw-235 SampleID: FWGLL3mw-235C-1507-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: B - Bailer MS/MSD: N

GRAB: **Y** COMPOSITE: **N** DATE: 1/20/2010 TIME: 9:20

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 490	Color:	tan
		Odor:	None

pH: 5.81 Temperature (°C): 10.1 DO (mg/L): 16.01 Specific Conductivity (mS/cm): 0.539

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: N AMBIENT TEMP (°F): 29

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Poly	2	HNO3	6010/6020/7470	Metals

MONITOR WELL PURGING FORM

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

LOCATION: LOADLINE 11 DATE: 1/20/2010 START TIME: 9:45

WELL ID: LL11mw-009

WELL DEPTH: _____ INITIAL WATER LEVEL: 1.77

WELL DIAMETER _____ SCREEN INTERVAL: 6.7 - 16.7

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 11.7

PUMP READINGS: Throttle: 2 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)
9:50	2.85	0.2	0.2	7	0.549	4.6	6.3	650
9:53	2.96	0.2	0.6	7.1	0.547	4.66	6.38	612
9:56	3.17	0.2	0.6	7.2	0.545	5.6	6.44	565
10:00	3.28	0.2	0.8	7.2	0.544	5.73	6.49	523
10:03	3.29	0.2	0.6	7.3	0.543	6.02	6.56	325
10:06	3.31	0.2	0.6	7.4	0.542	6.33	6.54	294

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-009 SampleID: FWGLL11mw-009C-1495-GW/GF DupID:

SplitID: RinseID:

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

GRAB: **Y** COMPOSITE: **N** DATE: 1/20/2010 TIME: 10:10

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 268	Color:	Clear
		Odor:	None

pH: 6.55 Temperature (°C): 7.3 DO (mg/L): 6.21 Specific Conductivity (mS/cm): 0.543

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: NE AMBIENT TEMP (°F): 30

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
40ml/Vial	3	HCl	8260	VOC
1L/Poly	1	HNO3	6010/6020/7470	Metals
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

Daily QC Records

Date: 18-Jan

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	X			
Wind	**Still**	**Moder**	**High**	**Report No.**	
		X			
Humidity	**Dry**	**Moder**	**Humid**	011810	
		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):

Water levels were measured at a total of 89 Wells

Project	Ravenna Army Ammunition Plant Groundwater Monitorin	Report No.	011810
Job No.	30240	Date:	1/18/2010

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 dress appropriately for the prevailing weather conditions. Personnel were also instructed to be alert for storms, slippery conditions, and roaming deer.

PROBLEMS ENCOUNTERED/CORRECTIVE ACTION (S) TAKEN:

NA

SPECIAL NOTES:

NA

TOMORROWS EXPECTATIONS:

Expectations for tomorrow are to safely and correctly measure water levels from a minimum of 90 wells.

Date: 19-Jan

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	X			
Wind	**Still**	**Moder**	**High**	**Report No.**	
		X			
Humidity	**Dry**	**Moder**	**Humid**	011910	
		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):

Water levels were measured at a total of 137 Wells

Project	Ravenna Army Ammunition Plant Groundwater Monitorin	Report No.	011910
Job No.	30240	Date:	1/19/2010

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 dress appropriately for the prevailing weather conditions. Personnel were also instructed to be alert for storms, slippery conditions, and roaming deer.

PROBLEMS ENCOUNTERED/CORRECTIVE ACTION (S) TAKEN:

NA

SPECIAL NOTES:

NA

TOMORROWS EXPECTATIONS:

Expectations for tomorrow are to safely and correctly conclude water level measurements of remaining RVAAP GW wells, and collect samples from a minimum of 6 wells.

Date: 20-Jan

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	X			
Wind	Still	Moder	High	Report No.	
		X			
Humidity	Dry	Moder	Humid		
		X	X	012010	

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):

Remaining water level measurements were performed (11 wells). Samples were collected at the following locations: ASYmw-001, ASYmw-002, ASYmw-003, ASYmw-005, ASYmw-006, ASYmw-007, ASYmw-008, ASYmw-010, and LL11mw-009. Field duplicate and QA split samples were collected from ASYmw-001 and ASYmw-008. Extra volume was collected from ASYmw-005 to be designated for matrix spike/matrix spike duplicate analysis at the laboratory. Additionally, a field rinsate was collected by Team #1.

Project	Ravenna Army Ammunition Plant Groundwater Monitorin	Report No.	012010
Job No.	30240	Date:	1/20/2010

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 dress appropriately for the prevailing weather conditions. Personnel were also instructed to be alert for storms, slippery conditions, and roaming deer.

PROBLEMS ENCOUNTERED/CORRECTIVE ACTION (S) TAKEN:

An attempt was made to sample LL1mw-063 and RQLmw-107 for both filtered and non-filtered metals. There was insufficient volume in each well to collect a sample for either parameter.

SPECIAL NOTES:

NA

TOMORROWS EXPECTATIONS:

Expectations for tomorrow are to safely and correctly collect samples from remaining wells for the January 2010 quarterly sampling event.

Date: 21-Jan

S	M	T	W	X 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	012110	
		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: ASYmw-004 and ASYmw-009. Extra volume was collected from ASYmw-004 to be designated for matrix spike/matrix spike duplicate analysis at the laboratory. Additionally, a field rinsate was collected by Team #2. Collected IDW samples, 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.	012110
Job No.	30240	Date:	1/21/2010

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 dress appropriately for the prevailing weather conditions. Personnel were also instructed to be alert for storms, slippery conditions, and roaming deer.

PROBLEMS ENCOUNTERED/CORRECTIVE ACTION (S) TAKEN:

NA

SPECIAL NOTES:

NA

TOMORROWS EXPECTATIONS:

NA

APPENDIX D

DATA VERIFICATION REPORTS/LABORATORY DATA SHEETS

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: January 2010 **Date:** March 12, 2010
STL Sample Delivery Group: A0A210493 **Revision:** 0

Data Validator: Angye Dragotta/Environmental Quality Management, Inc. (EQM, Inc.)

QA/QC Summary

On January 20 and 21, 2010, the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A0A210493.

Field Sample ID	Analytes	Method
FWGLL11mw-009c-1495-GW	Explosives	SW846 8330
FWGASYmw-001c-1496-GW	Nitroguanidine	SW846 M8330
FWGASYmw-DUP1-1512-GW	Nitrocellulose	SW846 353.2
FWGASYmw-003c-1498-GW		
FWGASYmw-002c-1497-GW		
FWGASYmw-007c-1502-GW		
FWGEQUIPRinse1-1513-GW		
FWGASYmw-008c-1503-GW		
FWGASYmw-DUP2-1511-GW		
FWGASYmw-010c-1505-GW		
FWGASYmw-006c-1501-GW		
FWGASYmw-005c-1500-GW		
FWGASYmw-009c-1504-GW		
FWGEQUIPRinse2-1514-GW		
FWGASYmw-004c-1499-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: January 2010 **Date:** March 12, 2010
STL Sample Delivery Group: A0A210493 **Revision:** 0

Explosives- 8330

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration Criteria
- ICV and CCV criteria
- Retention time criteria
- MDL Verification
- Surrogate recovery criteria
- Equipment and method blanks free from contamination
- MS Recovery Criteria
- Field Duplicate RPD Criteria
- Second Column Confirmation

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.

MRL Recovery

LC10-The MRL for 2-Amino-4,6-dinitrotolunene was manually integrated due to poor peak resolution. 2-Amino-4,6-dinitrotolunene co-elutes with 3,4-dinitrotoluene. The sample results for 2-Amino-4,6-dinitrotolunene were qualified as estimated, "UJ".

- The MRL analyzed 1/30/10 1541 recovered above control limits for 4-Amino-2,6-dinitrotolunene at 140%.
- The MRL analyzed 1/31/10 0035 recovered above control limits for 4-Amino-2,6-dinitrotolunene at 141%.

No qualifications were made as there were no detected concentrations of target analytes bracketed by the MRL outliers.

Blanks

Due to excessive particulates, samples FWGASYmw-002c-1497-GW, FWGASYmw-008c-1503-GW, FWGASYmw-DUP2-1511-GW, FWGASYmw-010c-1505-GW and FWGASYmw-006c-1501-GW required filtration. A filter blank was prepared and analyzed.

The method blank had 1,3,5 -trinitrobenzene detected at 0.052ug/L. The filter blank had 1,3,5 -trinitrobenzene detected at 0.042ug/L. 1,3,5 –trinitrobenzene results for samples FWGASYmw-006c-1501-GW, FWGASYmw-008c-1503-GW, FWGASYmw-DUP1-1512-GW, FWGASYmw-DUP2-1511-GW, FWGASYmw-010c-1505-GW, FWGASYmw-009c-1504-GW and FWGLL1mw-009c-1495-GW were qualified, "JB" as the detected concentrations were less than 5x contamination.

Field Duplicate RPD

Sample FWGASYmw-DUP1-1512-GW was the field duplicate for FWGASYmw-001c-1496-GW and sample FWGASYmw-DUP2-1511-GW was the field duplicate for FWGASYmw-008c-1503-GW. The duplicate RPD was above control limits for 1,3,5-trinitrobenzene at 31% and 2-nitrotoluene at 200% for the field duplicate pair FWGASYmw-DUP2-1511-GW and FWGASYmw-008c-1503-GW. The 1,3,5-trinitrobenzene and 2-nitrotoluene results for FWGASYmw-008c-1503-GW were qualified as estimated, "J".

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: January 2010 **Date:** March 12, 2010
STL Sample Delivery Group: A0A210493 **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 method and equipment 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 were noted.

Data Validator: [signature]
Date: 3/12/10

2nd Level Data Review: [signature]
Date: 3/12/10

SAMPLE SUMMARY

A0A210493

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LTHWT	001	FWGLL11mw-009C-1495-GW	01/20/10	10:10
LTHW3	002	FWGASYmw-001C-1496-GW	01/20/10	12:05
LTHW9	003	FWGASYmw-DUP1-1512-GW	01/20/10	12:25
LTHXE	004	FWGASYmw-003C-1498-GW	01/20/10	14:05
LTHX4	005	FWGASYmw-002C-1497-GW	01/20/10	15:01
LTHX5	006	FWGASYmw-007C-1502-GW	01/20/10	16:31
LTHX8	007	FWGEQUIPRinse1-1513-GW	01/20/10	17:30
LTH0N	008	FWGASYmw-008C-1503-GW	01/20/10	10:15
LTH03	009	FWGASYmw-DUP2-1511-GW	01/20/10	11:02
LTH07	010	FWGASYmw-010C-1505-GW	01/20/10	12:54
LTH1A	011	FWGASYmw-006C-1501-GW	01/20/10	14:00
LTH1D	012	FWGASYmw-005C-1500-GW	01/20/10	15:20
LTH8R	013	FWGASYmw-009C-1504-GW	01/21/10	09:20
LTH82	014	FWGEQUIPRinse2-1514-GW	01/21/10	10:22
LTH88	015	FWGASYmw-004C-1499-GW	01/21/10	09:15

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

TAL-4142 (0907)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Page 2 COC 375257

Client: EQM	Project Manager: John Miller	Date: 1/20/10	Chain of Custody Number: 375258
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 030240.0002e	Carrier/Waybill Number: N/A Lab Pickup		
Contract/Purchase Order/Quote No.: PO 14436			

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	Explosives 8330	Cyanide 9012	Metals 6010 6020 7470	Special Instructions/ Conditions of Receipt: Cooler ID
FWGLL11MW-009C-1495-GF	1/20/10	1010		X					1											X	405
FWGLL11MW-009C-1495-GW		1010		X			9			3	1		X	X	X	X	X	X	X		405
FWGTeam1-Trip		0800		X						2			X								E21
FWGASYMW-001C-1496-GW		1205		X			9			3	1		X	X	X	X	X	X	X		E21
FWGASYMW-001C-1496-GF		↓		X					1											X	E21
FWGASYMW-DUP1-1512-GW		1225		X			9			3	1		X	X	X	X	X	X	X		PH12
FWGASYMW-DUP1-1512-GF		↓		X					1											X	PH12
FWGASYMW-003C-1498-GW		1405		X			9			3	1		X	X	X	X	X	X	X		E120
FWGASYMW-003C-1498-GF		1405		X					1											X	E120
FWGASYMW-002C-1497-GW		1501		X			9			3	1		X	X	X	X	X	X	X		M12
FWGASYMW-002C-1497-GF		1501		X					1											X	M12

ASD 1/20/10

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)

	Date	Time		Date	Time
1. Relinquished By: [signature]	1/20/10	1730	1. Received By: [signature] R Corbell	1/20/10	1730
2. Relinquished By: [signature] R Corbell	1/20/10	1830	2. Received By: [signature]	1/21/10	800
3. Relinquished By			3. Received By		

Comments: Metals field filtered

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

COC #1
375258

TAL-4142 (0907)

Client: EQM	Project Manager: John Miller	Date: 1/20/10	Chain of Custody Number: 375257
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) FN: 030240.0006	Carrier/Waybill Number: N/A Lab Pickup		
Contract/Purchase Order/Quote No.: PO 14436			

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	VOA 8260	SVOA 8270	PEST 8081	PCB 8082	Propellants	Explosive 8330	Cyanide 9010	Metals 6010 7470	Special Instructions/ Conditions of Receipt
FWGASYMW-007C-1502-GW	1/20/10	1631		X			9			3	1		X	X	X	X	X	X	X		EC9
FWGASYMW-007C-1502-GF	↓	1631		X					1											X	EC9
FWGEQUIP Rinsel-1513-GW	1/20/10	1730		X			9		1	3	1		X	X	X	X	X	X	X	X	405

[illegible] 1/20/10

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)

	Date	Time		Date	Time
1. Relinquished By: [signature]	1/20/10	1730	1. Received By: [signature]	1/20/10	1730
2. Relinquished By: [signature]	1/20/10	1830	2. Received By: [signature]	1/21/10	800
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

[illegible] in [illegible] Field [illegible]

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0907)

ACOC#=375225

Client: EQM	Project Manager: John Miller	Date: 1-20-10	Chain of Custody Number: 375224
Address: 1800 CARILLON BLVD	Telephone Number (Area Code)/Fax Number: 513 825 7500 (FAX 7495)	Lab Number: 330497 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 Ravenna, OH	Carrier/Waybill Number: LAB PICKUP		
Contract/Purchase Order/Quote No.: PO:15660 EQPN030240.0006			

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: VOC 8260	SVOC 8270	Pest 8081	PCB 8082	DRO 8330	Propellants	Cyanide 9012	Metals 6010/7000/7470	Special Instructions/ Conditions of Receipt
FWGTeam Trip Blank Team 2-Trip	1-20-10	0800		X						2			X								PH4
FWGLL3mw-235C-1507-GW		0920		X					1											X	NOT FILTERED ASL
FWGLL3mw-235C-1507-GF				X					1											X	FILTERED ASL
FWGASYmw-008C-1503-GW		1015		X			9			3	1		X	X	X	X	X	X	X		C8
FWGASYmw-008C-1503-GF EQD				X					1											X	FILTERED C8
FWGASYmw-DUP2-1511-GW		1102		X			9			3	1		X	X	X	X	X	X	X		727
FWGASYmw-DUP2-1511-GF				X					1											X	FILTERED 727
FWGASYmw-010C-1505-GW		1254		X			9			3	1		X	X	X	X	X	X	X		ASL
FWGASYmw-010C-1505-GF				X					1											X	FILTERED ASL
FWGASYmw-006C-1501-GW		1400		X									X	X	X	X	X	X	X		PH4
FWGASYmw-006C-1501-GF				X																X	FILTERED PH4

Cal — Cont on pg 2

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 [X] Other Persaw

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	1/20/10	1730	1. Received By	1/20/10	1730
2. Relinquished By	1/20/10	1930	2. Received By (TEST AMERICA)	21 JAN 2010	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 PH4

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0907)

pg 1 COC # = 375224

Client	Project Manager	Date	Chain of Custody Number
EQM	John Miller	1-20-10	375225
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 2 of 2**
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**		
RVAAP Ravenna Ohio	Lab Pickup		
Contract/Purchase Order/Quote No.			
PO 15660 EQPM30240.0006			

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: VOC 8260	SVOC 8270	Pest 8081	PCB 8082	EXPLO 8330	Propellants	Cyanide 9012	Metals 6010 6020 7470					Special Instructions/ Conditions of Receipt
																									Cooler # 10
FWGASY/mw-005C-1500-GW	1-20-10	1520		V	-		27			9	3		X	X	X	X	X	X	X						(MS/MSD) STL-1, H113, TS2
FWGASY/mw-005C-1500-GF	↓	↓		X					3											X					(MS/MSD) STL-1, H113, TS2

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)

	Date	Time		Date	Time
1. Relinquished By	1/20/10	1730	1. Received By	1/20/10	1730
2. Relinquished By	1/20/10	1930	2. Received By (TEST AMERICA)	21 JAN 2010	0800
3. Relinquished By			3. Received By		

Comments
Temps may not meet requirements if sample collection is close to lab pickup time. All vocs in pH 4 coolers

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Canton

TAL-4142 (0907)

Client: EQM	Project Manager: John Miller	Date: 1-21-10	Chain of Custody Number: 375226
Address: 1800 LARILLON BLVD	Telephone Number (Area Code)/Fax Number: 513 8257500 (fax 7495)	Lab Number: 330-	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 15660 EQPN 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	Special Instructions/ Conditions of Receipt: Cooler ID
FWG ~~Team 2~~ Cal. Trip Team 2	1-21-10	0800		X						2			X								173
FWGASYmw-009C-1504-GW		0920		X			9			3	1		X	X	X	X	X	X	X		173
FWGASYmw-009C-1504-GF		0920		X					1											X	Filtered. 173
FWGEQUIPRinse 2-1514-GW	1-21-10	1022		X			9		1	3	1		X	X	X	X	X	X	X	X	Not Filtered S-1
~~FWGEQUIPRinse 2 Cal~~																					

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 [X] Other per SOW/Quote

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	1/21/10	1200	1. Received By: [signature]	1/21/10	1200
2. Relinquished By: [signature]	1/21/10	1340	2. Received By: [signature]	1/21/10	1340
3. Relinquished By			3. Received By		

Comments: temps may not meet requirement if sample collection close to lab pickup time. All VOAs in cooler 173.

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 1/21/2010	Chain of Custody Number: 003191
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 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	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Voc 8260	SVOC 8270	Pest 8081	PCB 8082	Exp6 8330	Propellants	Cyanide 9012	Metals 6010 6020 7470	Special Instructions/ Conditions of Receipt
FWGASYMW-004C-1499-GW	1/21/10	0915		X			27			9	3		X	X	X	X	X	X	X		Cooler IDS MS/MSD, C10, Cleans 75
FWGASYMW-004C-1499-GF	↓	↓		X					3											X	↓
FWGTeam1-Trip	1/21/10	0830		X						2			X								C10

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)

	Date	Time		Date	Time
1. Relinquished By: [signature]	1/21/10	1200	1. Received By: [signature] R Cutell	1/21/10	1200
2. Relinquished By: [signature] R Cutell	1/21/10	1340	2. Received By: [signature]	1/21/10	1340
3. Relinquished By			3. Received By		

Comments: Metals field filtered.

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

TestAmerica Cooler Receipt Form/Narrative **Lot Number:** A0A210493
North Canton Facility

Client EGM Project RVAAP By: [signature] (Signature)
Cooler Received on 1-21-10 Opened on 1-21-10
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 14 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# 082509-HNO_3; Sulfuric Acid Lot# 082509-H_2SO_4; Sodium Hydroxide Lot# 100108 -NaOH; Hydrochloric Acid Lot# 092006-HCl; Sodium Hydroxide and Zinc Acetate Lot# 100108-$(CH_3COO)_2ZN$/NaOH.* What time was preservative added to sample(s)? ____

Client ID	pH	Date	Initials
1495 GF	<2	1-21-10	CSL
1495 GW	>12		
1496 GF	<2		
1496 GW	>12		
1512 GF	<2		
1512 GW	>12		
1498 GF	<2		
1498 GW	>12		

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials
1497 GF	<2	1-21-10	CSL
1497 GW	>12		
1502 GF	<2		
1502 GW	>12		
1513 GW	<2, 7		
1507 GW	<2	21 JAN 10	MAF
1507 GF	<2		
1503 GW	>12		
1503 GF	<2		
1511 GW	>12		
1511 GF	<2		
1505 GW	>12		
1505 GF	<2		
1501 GW	>12		
1501 GF	<2		
1500 GW	>12 >12 >12		
1500 GF	<2 <2 <2		

Cooler #	Temp. °C	Method	Coolant
E21	3.2	IR	Ice
PH12	2.9		
F12D	4.1		
M18	4.0		
EC9	1.9		
405	2.2		
HOSA	3.0		
TS2	0.8		
STL 1	1.0		
H113	1.6		
PH4	2.4		
AR60	3.2		

Discrepancies Cont'd:

727	2.2		
08	0.2		

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Lot Number: A0A216493

Client EQM
Cooler Received on 1/21/10 Project RVAAP By: [signature] (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 Leach 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)? TB 1/21/10 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# 082509-HNO_3; Sulfuric Acid Lot# 082509-H_2SO_4; Sodium Hydroxide Lot# 100108 -NaOH; Hydrochloric Acid Lot# 092006-HCl; Sodium Hydroxide and Zinc Acetate Lot# 100108-$(CH_3COO)_2ZN$/NaOH.* What time was preservative added to sample(s)?

Client ID	pH	Date	Initials
009C-1504	<2, >12	1/21/10	TB
EQUIPRINSE	<2, >12		
004C-1499	<2, <2, <2, >12, >12, >12		

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials

Cooler #	Temp. °C	Method	Coolant
Cletus	2.2°C	IR	wet ice
5-1	2.9°C	"	"
173	3.2°C	"	"
757	3.8°C	"	"
C10	2.7°C	"	"

Discrepancies Cont'd:

CASE NARRATIVE

A0A210493

The following report contains the analytical results for fifteen water samples submitted to TestAmerica North Canton by Environmental Quality Mgt., Inc. from the RVAAP (OH) Site, project number 030240.0006. The samples were received January 21, 2010, according to documented sample acceptance procedures.

The 8330 Explosives, 353.2 Nitrocellulose as N, and Nitroguanidine 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 February 04, 2010. 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.

All parameters were evaluated to the method detection limit and include qualified results where applicable.

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 4.1°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 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

- 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

Case Narrative

TestAmerica West Sacramento Project Number A0A210493

General Comments
The samples were received at 1-3 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 chromatograms, which are provided in the raw data package. The raw data also includes the original chromatograms prior to any manual integration being performed. The following samples and analytes required manual integration:

The following samples were reintegrated for nitroguanidine on instrument PDA-1:
On 1-30-10
@00:10 MRL (Method Reporting Limit) standard
@00:26 CCV (Continuing Calibration Verification)
@00:58 Laboratory Control Sample
@3:53 MRL standard
@4:09 CCV
On 2-02-10
@11:52 MRL standard
@12:40 –sample 12 MS (matrix spike)
@14:16 sample 15 MSD (matrix spike duplicate)
@14:32 MRL standard
@14:48 CCV

The following were reintegrated for 8330:
2X MDL check on LC10 (1/29/10 @ 12:58) – 2-amino-4,6-dinitrotoluene & 3,4-dinitrotoluene
MRL on LC10 (1/29/10 @ 21:53) – 2-amino-4,6-dinitrotoluene & 3,4-dinitrotoluene
MRL on LC10 (1/30/10 @ 06:47) – 2-amino-4,6-dinitrotoluene & 3,4-dinitrotoluene
MRL on LC10 (1/30/10 @ 15:41) – 2-amino-4,6-dinitrotoluene & 3,4-dinitrotoluene
MRL on LC10 (1/31/10 @ 00:35) – 2-amino-4,6-dinitrotoluene & 3,4-dinitrotoluene
MRL on LC10 (2/03/10 @ 14:05) – 2-amino-4,6-dinitrotoluene & 3,4-dinitrotoluene
MRL on LC10 (2/03/10 @ 22:58) – 2-amino-4,6-dinitrotoluene & 3,4-dinitrotoluene
MRL on LC9 (1/31/10 @ 23:13 - 3,4-dinitrotoluene, 2,4,6-trinitrotoluene, 2-nitrotoluene, & 3-nitrotoluene
MRL on LC9 (2/01/10 @ 10:10) – 3,4-dinitrotoluene, 2,4,6-trinitrotoluene, 2-nitrotoluene, & 3-nitrotoluene

Case Narrative

TestAmerica West Sacramento Project Number A0A210493

MRL on LC9 (2/01/10 @ 21:07) – 3,4-dinitrotoluene, 2,4,6-trinitrotoluene, 2-nitrotoluene, & 3-nitrotoluene
CCV on LC9 (2/01/10 @ 09:04) –2-nitrotoluene & 3-nitrotoluene
CCV on LC9 (2/01/10 @ 20:10) – 2-nitrotoluene & 3-nitrotoluene

WATER, 8330, Explosives
Sample(s): 5, 8, 9, 10, 11
These samples were filtered prior to extraction since they contained excessive sediment/particulates. A filtered blank was included with the batch.

Sample(s): 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 12
MS, 12MSD, 13, 14, 15, 15MS, 15MSD
The percent difference values for 2-amino-4,6-dinitrotoluene are above the method acceptance limit in the following MRL standards, which may indicate a high bias: 1/30/10 @ 06:47, 1/30/10 @ 15:41, & 1/31/10 @ 00:35. This standard was an opening CCV for some associated samples and a closing CCV for some associated samples. Since the associated sample results were all "ND" for this analyte, no corrective action was performed.

There were no other anomalies associated with this project.

8330 EXPLOSIVES DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2010
Data Reviewer/Date: Angye Dragotta/ March 10, 2010

SDG: A0A210493 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 - 4.1 °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?	✓				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%?		✓		LC10- The MRL for 2-Amino-4,6-dinitrotolunene was manually integrated due to poor peak resolution. 2-Amino-4,6-dinitrotolunene co-elutes with 3,4-dinitrotoluene. The sample results for 2-Amino-4,6-dinitrotolunene were qualified as estimated, "UJ". • The MRL analyzed 1/30/10 1541 recovered above control limits for 4-Amino-2,6-dinitrotolunene at 140%. • The MRL analyzed 1/31/10 0035 recovered above control limits for 4-Amino-2,6-dinitrotolunene at 141%. No qualifications were made as there were no detected concentrations of target analytes bracketed by the MRL outliers.	LCG Table 5 >30%=J
9. Does the initial calibration curve consist of 5 concentration levels? (6 stds for quadratic curves)	✓			LC10 1/9/2010 @0851 , LC9 1/15/10 @ 0216	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

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2010
Data Reviewer/Date: Angye Dragotta/ March 10, 2010

SDG: A0A210493 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
12. Was a second source verification (ICV) analyzed after the ICAL and all analytes 85-115%?	✓			LC10 1/9/10@1028 LC9 1/15/10 @0427- 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
15. Was a method blank prepared and analyzed with each batch?	✓			Due to excessive particulates, samples FWGASYmw-002c-1497-GW, FWGASYmw-008c-1503-GW, FWGASYmw-DUP2-1511-GW, FWGASYmw-010c-1505-GW and FWGASYmw-006c-1501-GW required filtration. A filter blank was prepared and analyzed.	LCG Attachment A Section 5.6
16. Were target analytes in the method blank <1/2 the MRL?		✓		Checked by ADR. The method blank had 1,3,5 -trinitrobenzene detected at 0.052ug/L. The filter blank had 1,3,5 -trinitrobenzene detected at 0.042ug/L. 1,3,5 –trinitrobenzene results for samples FWGASYmw-006c-1501-GW, FWGASYmw-008c-1503-GW, FWGASYmw-DUP1-1512-GW, FWGASYmw-DUP2-1511-GW, FWGASYmw-010c-1505-GW, FWGASYmw-009c-1504-GW and FWGLL1mw-009c-1495-GW were qualified, "JB" as the detected concentrations were less than 5x contamination.	LCG Table 5 <5x = B
17. Was a field blank collected and analyzed?	✓				
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%?	✓			Sample FWGASYmw-DUP1-1512-GW was the field duplicate for FWGASYmw-001c-1496-GW and sample FWGASYmw-DUP2-1511-GW was the field duplicate for FWGASYmw-008c-1503-GW. The duplicate RPD was above control limits for 1,3,5-trinitrobenzene at 31% and 2-nitrotoluene at 200% for the field duplicate pair FWGASYmw-DUP2-1511-GW and FWGASYmw-008c-1503-GW. The 1,3,5-trinitrobenzene and 2-nitrotoluene results for FWGASYmw-008c-1503-GW were qualified as estimated, "J".	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

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2010
Data Reviewer/Date: Angye Dragotta/ March 10, 2010

SDG: A0A210493 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
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?	✓				
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.	

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: FWGLL11mw-009C-1495-GW

HPLC

Lot-Sample #...: A0A210493-001 **Work Order #...:** LTHWT1AA **Matrix.....:** WG
Date Sampled...: 01/20/10 10:10 **Date Received..:** 01/21/10
Prep Date.....: 01/26/10 **Analysis Date..:** 01/30/10
Prep Batch #...: 0026085
Dilution Factor: 1.01 **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	0.089
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	**0.064 J**	**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	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: FWGASYmw-001C-1496-GW

HPLC

Lot-Sample #...: A0A210493-002 Work Order #...: LTHW31AA Matrix.....: WG
Date Sampled...: 01/20/10 12:05 Date Received..: 01/21/10
Prep Date.....: 01/26/10 Analysis Date..: 01/30/10
Prep Batch #...: 0026085
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	97	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-DUP1-1512-GW

HPLC

Lot-Sample #...: A0A210493-003 **Work Order #...:** LTHW91AA **Matrix.....:** WG
Date Sampled...: 01/20/10 12:25 **Date Received..:** 01/21/10
Prep Date.....: 01/26/10 **Analysis Date..:** 01/30/10
Prep Batch #...: 0026085
Dilution Factor: 0.99 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	**0.032 J,B**	**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	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: FWGASYmw-003C-1498-GW

HPLC

Lot-Sample #...: A0A210493-004 **Work Order #...:** LTHXE1AA **Matrix.....:** WG
Date Sampled...: 01/20/10 14:05 **Date Received..:** 01/21/10
Prep Date.....: 01/26/10 **Analysis Date..:** 01/30/10
Prep Batch #...: 0026085
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	99	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-002C-1497-GW

HPLC

Lot-Sample #...: A0A210493-005 **Work Order #...:** LTHX41AA **Matrix.....:** WG
Date Sampled...: 01/20/10 15:01 **Date Received..:** 01/21/10
Prep Date.....: 01/26/10 **Analysis Date..:** 01/30/10
Prep Batch #...: 0026085
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	98	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-007C-1502-GW

HPLC

Lot-Sample #...: A0A210493-006 **Work Order #...:** LTHX51AA **Matrix.....:** WG
Date Sampled...: 01/20/10 16:31 **Date Received..:** 01/21/10
Prep Date.....: 01/26/10 **Analysis Date..:** 01/30/10
Prep Batch #...: 0026085
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	98	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRinse1-1513-GW

HPLC

Lot-Sample #...:	A0A210493-007	**Work Order #...:**	LTHX81AA	**Matrix.....:**	WG
Date Sampled...:	01/20/10 17:30	**Date Received..:**	01/21/10		
Prep Date.....:	01/26/10	**Analysis Date..:**	01/30/10		
Prep Batch #...:	0026085				
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	97	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-008C-1503-GW

HPLC

Lot-Sample #...: A0A210493-008 **Work Order #...:** LTH0N1AA **Matrix.....:** WG
Date Sampled...: 01/20/10 10:15 **Date Received..:** 01/21/10
Prep Date.....: 01/26/10 **Analysis Date..:** 01/30/10
Prep Batch #...: 0026085
Dilution Factor: 1.05 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	**0.033 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	**0.16 J**	**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	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: FWGASYmw-DUP2-1511-GW

HPLC

Lot-Sample #...: A0A210493-009 **Work Order #...:** LTH031AA **Matrix.....:** WG
Date Sampled...: 01/20/10 11:02 **Date Received..:** 01/21/10
Prep Date.....: 01/26/10 **Analysis Date..:** 01/30/10
Prep Batch #...: 0026085
Dilution Factor: 0.99 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	**0.045 J,B**	**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	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: FWGASYmw-010C-1505-GW

HPLC

Lot-Sample #...: A0A210493-010 **Work Order #...:** LTH071AA **Matrix.....:** WG
Date Sampled...: 01/20/10 12:54 **Date Received..:** 01/21/10
Prep Date.....: 01/26/10 **Analysis Date..:** 01/30/10
Prep Batch #...: 0026085
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	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: FWGASYmw-006C-1501-GW

HPLC

Lot-Sample #...: A0A210493-011	**Work Order #...:** LTH1A1AA	**Matrix.....:** WG	
Date Sampled...: 01/20/10 14:00	**Date Received..:** 01/21/10		
Prep Date.....: 01/26/10	**Analysis Date..:** 01/30/10		
Prep Batch #...: 0026085			
Dilution Factor: 1.01	**Method.....:** SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	**0.032 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	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: FWGASYmw-005C-1500-GW

HPLC

Lot-Sample #...: A0A210493-012 Work Order #...: LTH1D1AA Matrix.....: WG
Date Sampled...: 01/20/10 15:20 Date Received..: 01/21/10
Prep Date.....: 01/26/10 Analysis Date..: 01/30/10
Prep Batch #...: 0026085
Dilution Factor: 1.04 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	0.052
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	**0.060 J**	**0.10**	**ug/L**	**0.052**
2-Nitrotoluene	ND	0.52	ug/L	0.092
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	0.092
HMX	ND	0.10	ug/L	0.037
Nitrobenzene	ND	0.10	ug/L	0.052
Nitroglycerin	ND	0.68	ug/L	0.34
RDX	ND	0.10	ug/L	0.037
PETN	ND	0.68	ug/L	0.31
Tetryl	ND	0.10	ug/L	0.052

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	98	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-009C-1504-GW

HPLC

Lot-Sample #...: A0A210493-013 **Work Order #...:** LTH8R1AA **Matrix.....:** WG
Date Sampled...: 01/21/10 09:20 **Date Received..:** 01/21/10
Prep Date.....: 01/26/10 **Analysis Date..:** 01/30/10
Prep Batch #...: 0026085
Dilution Factor: 0.99 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	**0.033 J,B**	**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	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: FWGEQUIPRinse2-1514-GW

HPLC

Lot-Sample #...:	A0A210493-014	**Work Order #...:**	LTH821AA	**Matrix.....:**	WG
Date Sampled...:	01/21/10 10:22	**Date Received..:**	01/21/10		
Prep Date.....:	01/26/10	**Analysis Date..:**	01/30/10		
Prep Batch #...:	0026085				
Dilution Factor:	1.08	**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	0.054
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	98	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-004C-1499-GW

HPLC

Lot-Sample #...:	A0A210493-015	**Work Order #...:**	LTH881AA	**Matrix.....:**	WG
Date Sampled...:	01/21/10 09:15	**Date Received..:**	01/21/10		
Prep Date.....:	01/26/10	**Analysis Date..:**	01/30/10		
Prep Batch #...:	0026085				
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	96	(50 - 150)

METHOD BLANK REPORT

HPLC

Client Lot #...: A0A210493 **Work Order #...:** LTQGK1AA **Matrix.....:** WATER
MB Lot-Sample #: G0A260000-085

Prep Date.....: 01/26/10
Analysis Date..: 01/30/10 **Prep Batch #...:** 0026085
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
1,3,5-Trinitrobenzene	**0.042 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	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

HPLC

Client Lot #...: A0A210493 **Work Order #...:** LTQGK1AD **Matrix.....:** WATER
MB Lot-Sample #: G0A260000-085

Prep Date.....: 01/26/10
Analysis Date..: 01/30/10 **Prep Batch #...:** 0026085
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
1,3,5-Trinitrobenzene	**0.052 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 #...: A0A210493 Work Order #...: LTQGK1AC Matrix.....: WATER
LCS Lot-Sample#: G0A260000-085
Prep Date.....: 01/26/10 Analysis Date..: 01/30/10
Prep Batch #...: 0026085
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,3,5-Trinitrobenzene	111	(53 - 135)	SW846 8330
1,3-Dinitrobenzene	111	(54 - 120)	SW846 8330
2-Amino-4,6-dinitrotoluene	112	(53 - 120)	SW846 8330
2,4,6-Trinitrotoluene	103	(37 - 120)	SW846 8330
2,4-Dinitrotoluene	106	(58 - 136)	SW846 8330
2,6-Dinitrotoluene	106	(52 - 144)	SW846 8330
2-Nitrotoluene	102	(52 - 120)	SW846 8330
3-Nitrotoluene	102	(48 - 136)	SW846 8330
4-Amino-2,6-dinitrotoluene	104	(58 - 159)	SW846 8330
4-Nitrotoluene	103	(46 - 136)	SW846 8330
HMX	105	(45 - 140)	SW846 8330
Nitrobenzene	111	(49 - 120)	SW846 8330
Nitroglycerin	107	(60 - 120)	SW846 8330
RDX	115	(39 - 120)	SW846 8330
PETN	102	(60 - 120)	SW846 8330
Tetryl	97	(30 - 120)	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	100	(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 #...: A0A210493 Work Order #...: LTH1D1AC-MS Matrix.....: WG
MS Lot-Sample #: A0A210493-012 LTH1D1AD-MSD
Date Sampled...: 01/20/10 15:20 Date Received..: 01/21/10
Prep Date.....: 01/26/10 Analysis Date..: 01/30/10
Prep Batch #...: 0026085
Dilution Factor: 1.02

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3,5-Trinitrobenzene	102	(50 - 150)			SW846 8330
	102	(50 - 150)	2.7	(0-50)	SW846 8330
1,3-Dinitrobenzene	106	(50 - 150)			SW846 8330
	106	(50 - 150)	3.0	(0-50)	SW846 8330
2-Amino-4,6-dinitrotoluene	110	(50 - 150)			SW846 8330
	109	(50 - 150)	2.5	(0-50)	SW846 8330
2,4,6-Trinitrotoluene	99	(50 - 150)			SW846 8330
	99	(50 - 150)	3.1	(0-50)	SW846 8330
2,4-Dinitrotoluene	103	(50 - 150)			SW846 8330
	103	(50 - 150)	3.6	(0-50)	SW846 8330
2,6-Dinitrotoluene	96	(50 - 150)			SW846 8330
	98	(50 - 150)	4.2	(0-50)	SW846 8330
2-Nitrotoluene	98	(50 - 150)			SW846 8330
	101	(50 - 150)	5.9	(0-50)	SW846 8330
3-Nitrotoluene	100	(50 - 150)			SW846 8330
	104	(50 - 150)	6.2	(0-50)	SW846 8330
4-Amino-2,6-dinitrotoluene	101	(50 - 150)			SW846 8330
	100	(50 - 150)	2.2	(0-50)	SW846 8330
4-Nitrotoluene	97	(50 - 150)			SW846 8330
	100	(50 - 150)	5.8	(0-50)	SW846 8330
HMX	102	(50 - 150)			SW846 8330
	102	(50 - 150)	2.7	(0-50)	SW846 8330
Nitrobenzene	104	(50 - 150)			SW846 8330
	107	(50 - 150)	6.2	(0-50)	SW846 8330
Nitroglycerin	103	(50 - 150)			SW846 8330
	103	(50 - 150)	2.3	(0-50)	SW846 8330
RDX	108	(50 - 150)			SW846 8330
	107	(50 - 150)	2.3	(0-50)	SW846 8330
PETN	100	(50 - 150)			SW846 8330
	102	(50 - 150)	4.2	(0-50)	SW846 8330
Tetryl	92	(50 - 150)			SW846 8330
	93	(50 - 150)	3.9	(0-50)	SW846 8330

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A0A210493 **Work Order #...:** LTH1D1AC-MS **Matrix.....:** WG
MS Lot-Sample #: A0A210493-012 LTH1D1AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	98	(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

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A0A210493 Work Order #...: LTH881AC-MS Matrix.....: WG
MS Lot-Sample #: A0A210493-015 LTH881AD-MSD
Date Sampled...: 01/21/10 09:15 Date Received..: 01/21/10
Prep Date.....: 01/26/10 Analysis Date..: 01/30/10
Prep Batch #...: 0026085
Dilution Factor: 1.01

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3,5-Trinitrobenzene	103	(50 - 150)			SW846 8330
	102	(50 - 150)	2.7	(0-50)	SW846 8330
1,3-Dinitrobenzene	106	(50 - 150)			SW846 8330
	106	(50 - 150)	1.3	(0-50)	SW846 8330
2-Amino-4,6-dinitrotoluene	109	(50 - 150)			SW846 8330
	107	(50 - 150)	3.4	(0-50)	SW846 8330
2,4,6-Trinitrotoluene	98	(50 - 150)			SW846 8330
	97	(50 - 150)	1.9	(0-50)	SW846 8330
2,4-Dinitrotoluene	105	(50 - 150)			SW846 8330
	101	(50 - 150)	5.2	(0-50)	SW846 8330
2,6-Dinitrotoluene	106	(50 - 150)			SW846 8330
	100	(50 - 150)	6.6	(0-50)	SW846 8330
2-Nitrotoluene	100	(50 - 150)			SW846 8330
	99	(50 - 150)	1.6	(0-50)	SW846 8330
3-Nitrotoluene	99	(50 - 150)			SW846 8330
	98	(50 - 150)	2.8	(0-50)	SW846 8330
4-Amino-2,6-dinitrotoluene	100	(50 - 150)			SW846 8330
	101	(50 - 150)	0.79	(0-50)	SW846 8330
4-Nitrotoluene	100	(50 - 150)			SW846 8330
	98	(50 - 150)	3.6	(0-50)	SW846 8330
HMX	100	(50 - 150)			SW846 8330
	99	(50 - 150)	3.0	(0-50)	SW846 8330
Nitrobenzene	107	(50 - 150)			SW846 8330
	105	(50 - 150)	3.3	(0-50)	SW846 8330
Nitroglycerin	102	(50 - 150)			SW846 8330
	101	(50 - 150)	3.2	(0-50)	SW846 8330
RDX	107	(50 - 150)			SW846 8330
	105	(50 - 150)	3.1	(0-50)	SW846 8330
PETN	98	(50 - 150)			SW846 8330
	96	(50 - 150)	3.4	(0-50)	SW846 8330
Tetryl	93	(50 - 150)			SW846 8330
	93	(50 - 150)	1.7	(0-50)	SW846 8330

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A0A210493 **Work Order #...:** LTH881AC-MS **Matrix.....:** WG
MS Lot-Sample #: A0A210493-015 LTH881AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	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

TestAmerica West Sacramento

A-000015.D

Chromatography Summary

Injection Date: 1/29/2010 21:53 **Operator:** NS

DataFile: LC10.I\01292010.B\A-000015.D **Vial Num:** 5

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample : **STD_MRL 10GCSV0074 5-20 ng/mL**

Method File: LC10.I\01292010.B\8330AB.M

Start Cal Date: 1/9/2010 3:12 **End Cal Date:** 1/9/2010 8:51

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	20 mL	1000 mL	0 g

Matrix: WATER **SubList:** WATER.sub **SpikeList:**

Samp. Info: STD_MRL 10GCSV0074 5-20 ng/mL;2;

Misc. Info: ;;1000;;20;1;WATER.sub;;0;1;

	Synergi Hydro-RP C18(250nm-265nm)							Synergi Hydro-RP C18(358nm-205nm)								
Compound Name	**RT**	**Response**	**Conc (ug/L)**	**Spike Level**	**%D**	**Result**	**Flag**	**RT**	**Response**	**Conc (ug/L)**	**Spike Level**	**%D**	**Result**	**Flag**	**Limits(%)**	**Flag**
3,4-Dinitrotoluene	17.48	977	18.9300<	20	-5%	Acceptable	M	17.49	1899	21.1100	20	6%	Acceptable		(±15)	
HMX	5.27	589	4.5420<	5	-9%	Acceptable					5	-100%	Fails		(±15)	45
RDX	7.67	351	4.2850<	5	-14%	Acceptable					5	-100%	Fails		(±15)	45
Picric ACID	8.83	3896	49.4500	50	-1%	Acceptable		8.83	5744	49.5700<	50	-1%	Acceptable		(±15)	
1,3,5-Trinitrobenzene	9.96	764	4.8080<	5	-4%	Acceptable					5	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.84	699	4.7320<	5	-5%	Acceptable					5	-100%	Fails		(±15)	45
TETRYL	13.77	511	4.9100<	5	-2%	Acceptable					5	-100%	Fails		(±15)	45
Nitrobenzene	14.62	318	4.8290<	5	-3%	Acceptable					5	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	15.94	468	4.8690<	5	-3%	Acceptable					5	-100%	Fails		(±15)	45
4-AM-2,6-DNT	16.81	347	4.9090<	5	-2%	Acceptable					5	-100%	Fails		(±15)	45
2-AM-4,6-DNT	**17.75**	**545**	**6.3960<**	**5**	**28%**	**Fails**	**M**				5	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	19.49	313	5.3690<	5	7%	Acceptable					5	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	20.16	466	5.0310<	5	1%	Acceptable					5	-100%	Fails		(±15)	45
2-Nitrotoluene	23.67	196	4.8810<	5	-2%	Acceptable					5	-100%	Fails		(±15)	45
4-Nitrotoluene	25.37	216	4.4450<	5	-11%	Acceptable					5	-100%	Fails		(±15)	45
3-Nitrotoluene	**27.40**	**276**	**5.7640<**	**5**	**15%**	**Fails**					5	-100%	Fails		(±15)	45
Nitroglycerin				**20**	**-100%**	**Fails**		15.23	1155	18.2300<	20	-9%	Acceptable		(±15)	45
PETN				**20**	**-100%**	**Fails**		28.93	742	22.1100<	20	11%	Acceptable		(±15)	45
3,5-Dinitroaniline	13.50	472	4.8180<	5	-4%	Acceptable					5	-100%	Fails		(±15)	45

OK to 30.1.
2/4/2010 m

m 2/4/10

Notes:
M = Manually Integrated
D = Operator Disabled Result
O = Over Calibration Range

Signals Differ by More Than 40%
Signals Differ by More Than 50%

RE-INTEGRATION CODES

1 Poor Peak Shape
2 Poor Peak Resolution
3 Peak Not Integrated
4 Sample Matrix Interference
5 Column Bleed
6 Instrument Noise
7 Baseline Correction
8 Other (reason must be stated)

ALL RE-INTEGRATIONS MUST BE INITIALED, DATED AND CODED

m 2/4/10

Printed: 2/4/2010 10:30 AM

TestAmerica West Sacramento

Method 8330

Data file : \\Terastation\share\GCdata\LC10.I\01292010.B\A-000015.d
Lab Smp Id: STD_MRL 10GCSV0074
Inj Date : 29-JAN-2010 21:53
Operator : NS Inst ID: LC10.i
Smp Info : STD_MRL 10GCSV0074 5-20 ng/mL;2;
Misc Info : ;;1000;;20;1;WATER.sub;;0;1;
Comment : SOP SAC-LC-0009
Method : \\Terastation\share\GCdata\LC10.I\01292010.B\8330AB.m
Meth Date : 04-Feb-2010 10:30 shafern Quant Type: AREA%
Cal Date : 09-JAN-2010 08:51 Cal File: A-000016.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATER.sub
Target Version: 4.14
Processing Host: SACP307FK

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

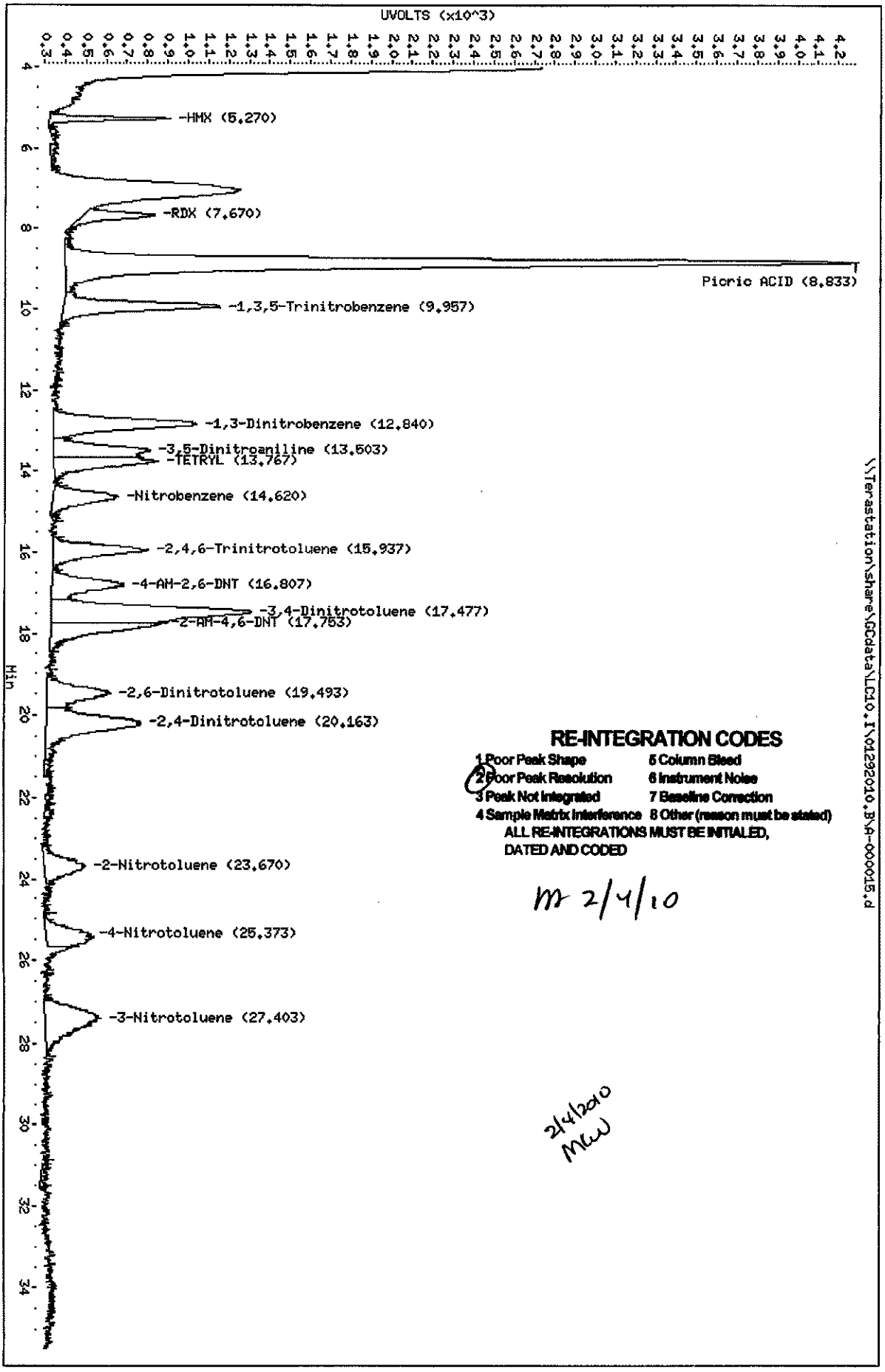
RE-INTEGRATION CODES
1 Poor Peak Shape 5 Column Bleed
2 Poor Peak Resolution 6 Instrument Noise
3 Peak Not Integrated 7 Baseline Correction
4 Sample Matrix Interference 8 Other (reason must be stated)
ALL RE-INTEGRATIONS MUST BE INITIALED, DATED AND CODED

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

MR 2/4/10

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
5.270	3747	589	0.157	5.06		2 HMX
5.603	222	40	0.180	0.34		
6.003	602	39	0.065	0.33		
7.670	4210	351	0.083	3.01		3 RDX
8.833	62347	3896	0.062	33.59		5 Picric ACID
9.957	11568	764	0.066	6.56		6 1,3,5-Trinitrobenze
12.840	13039	699	0.054	6.00		7 1,3-Dinitrobenzene
13.503	8159	472	0.058	4.05		8 3,5-Dinitroaniline
13.767	8019	511	0.064	4.39		9 TETRYL
14.620	6275	318	0.051	2.73		10 Nitrobenzene
15.157	132	38	0.288	0.32		
15.937	8523	468	0.055	4.02		12 2,4,6-Trinitrotolue
16.807	7457	347	0.047	2.98		13 4-AM-2,6-DNT
17.477	20694	977	0.047	8.39	$	1 3,4-Dinitrotoluene
17.753	8803	545	0.062	4.68		14 2-AM-4,6-DNT
19.493	7179	313	0.044	2.68		15 2,6-Dinitrotoluene
20.163	13579	466	0.034	4.00		16 2,4-Dinitrotoluene
22.037	222	31	0.140	0.26		
22.367	477	44	0.092	0.37		
23.670	5337	196	0.037	1.68		17 2-Nitrotoluene
25.373	5606	216	0.039	1.85		18 4-Nitrotoluene
27.403	9956	276	0.028	2.37		19 3-Nitrotoluene
31.050	736	40	0.054	0.34		
	206888	11636		100.000		

Total unknown % height = 1.960



Data File: \\Terastation\share\GCdata\LC10,I\01292010,B\A-000015.d
Date : 29-JAN-2010 21:53
Client ID:
Sample Info: STD_MRL 10CCSV0074 5-20 ng/mL;2;
Volume Injected (uL): 500.0
Column phase: SYNERGI HYDRORP C18

Instrument: LC10,i
Operator: NS
Column diameter: 4.60

\\Terastation\share\GCdata\LC10,I\01292010,B\A-000015.d

TestAmerica West Sacramento

A-000015.D

Chromatography Summary

Injection Date: 1/29/2010 21:53 **Operator:** NS

DataFile: LC10.I\01292010.B\A-000015.D **Vial Num:** 5

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample : **STD_MRL 10GCSV0074 5-20 ng/mL**

Method File: LC10.I\01292010.B\8330AB.M

Start Cal Date: 1/9/2010 3:12 **End Cal Date:** 1/9/2010 8:51

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	20 mL	1000 mL	0 g

Matrix: WATER **SubList:** WATER.sub **SpikeList:**

Samp. Info: STD_MRL 10GCSV0074 5-20 ng/mL;2;

Misc. Info: ;;1000;;20;1;WATER.sub;;0;1;

	Synergi Hydro-RP C18(250nm-265nm)							Synergi Hydro-RP C18(358nm-205nm)								
Compound Name	**RT**	**Response**	**Conc (ug/L)**	**Spike Level**	**%D**	**Result**	**Flag**	**RT**	**Response**	**Conc (ug/L)**	**Spike Level**	**%D**	**Result**	**Flag**	**Limits(%)**	**Flag**
3,4-Dinitrotoluene	17.49	979	18.9600<	20	-5%	Acceptable		17.49	1899	21.1100	20	6%	Acceptable		(±15)	
HMX	5.27	589	4.5420<	5	-9%	Acceptable					5	-100%	Fails		(±15)	45
RDX	7.67	351	4.2850<	5	-14%	Acceptable					5	-100%	Fails		(±15)	45
Picric ACID	8.83	3896	49.4500	50	-1%	Acceptable		8.83	5744	49.5700<	50	-1%	Acceptable		(±15)	
1,3,5-Trinitrobenzene	9.96	764	4.8080<	5	-4%	Acceptable					5	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.84	699	4.7320<	5	-5%	Acceptable					5	-100%	Fails		(±15)	45
TETRYL	13.77	511	4.9100<	5	-2%	Acceptable					5	-100%	Fails		(±15)	45
Nitrobenzene	14.62	318	4.8290<	5	-3%	Acceptable					5	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	15.94	468	4.8690<	5	-3%	Acceptable					5	-100%	Fails		(±15)	45
4-AM-2,6-DNT	16.81	347	4.9090<	5	-2%	Acceptable					5	-100%	Fails		(±15)	45
2-AM-4,6-DNT				5	-100%	Fails					5	-100%	Fails		(±15)	
2,6-Dinitrotoluene	19.49	313	5.3690<	5	7%	Acceptable					5	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	20.16	466	5.0310<	5	1%	Acceptable					5	-100%	Fails		(±15)	45
2-Nitrotoluene	23.67	196	4.8810<	5	-2%	Acceptable					5	-100%	Fails		(±15)	45
4-Nitrotoluene	25.37	216	4.4450<	5	-11%	Acceptable					5	-100%	Fails		(±15)	45
3-Nitrotoluene	**27.40**	**276**	**5.7640<**	**5**	**15%**	**Fails**					5	-100%	Fails		(±15)	45
Nitroglycerin				20	-100%	Fails		15.23	1155	18.2300<	20	-9%	Acceptable		(±15)	45
PETN				20	-100%	Fails		28.93	742	22.1100<	20	11%	Acceptable		(±15)	45
3,5-Dinitroaniline	13.50	472	4.8180<	5	-4%	Acceptable					5	-100%	Fails		(±15)	45

mr 2/4/10

See reintegration.

Notes: M = Manually Integrated
D = Operator Disabled Result
O = Over Calibration Range

Signals Differ by More Than 40%
Signals Differ by More Than 50%

Printed: 2/4/2010 10:35 AM

TestAmerica West Sacramento

Method 8330

Data file : \\Terastation\share\GCdata\LC10.I\01292010.B\A-000015.d
Lab Smp Id: STD_MRL 10GCSV0074
Inj Date : 29-JAN-2010 21:53
Operator : NS Inst ID: LC10.i
Smp Info : STD_MRL 10GCSV0074 5-20 ng/mL;2;
Misc Info : ;;1000;;20;1;WATER.sub;;0;1;
Comment : SOP SAC-LC-0009
Method : \\Terastation\share\GCdata\LC10.I\01292010.B\8330AB.m
Meth Date : 04-Feb-2010 10:34 shafern Quant Type: AREA%
Cal Date : 09-JAN-2010 08:51 Cal File: A-000016.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATER.sub
Target Version: 4.14
Processing Host: SACP307FK

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

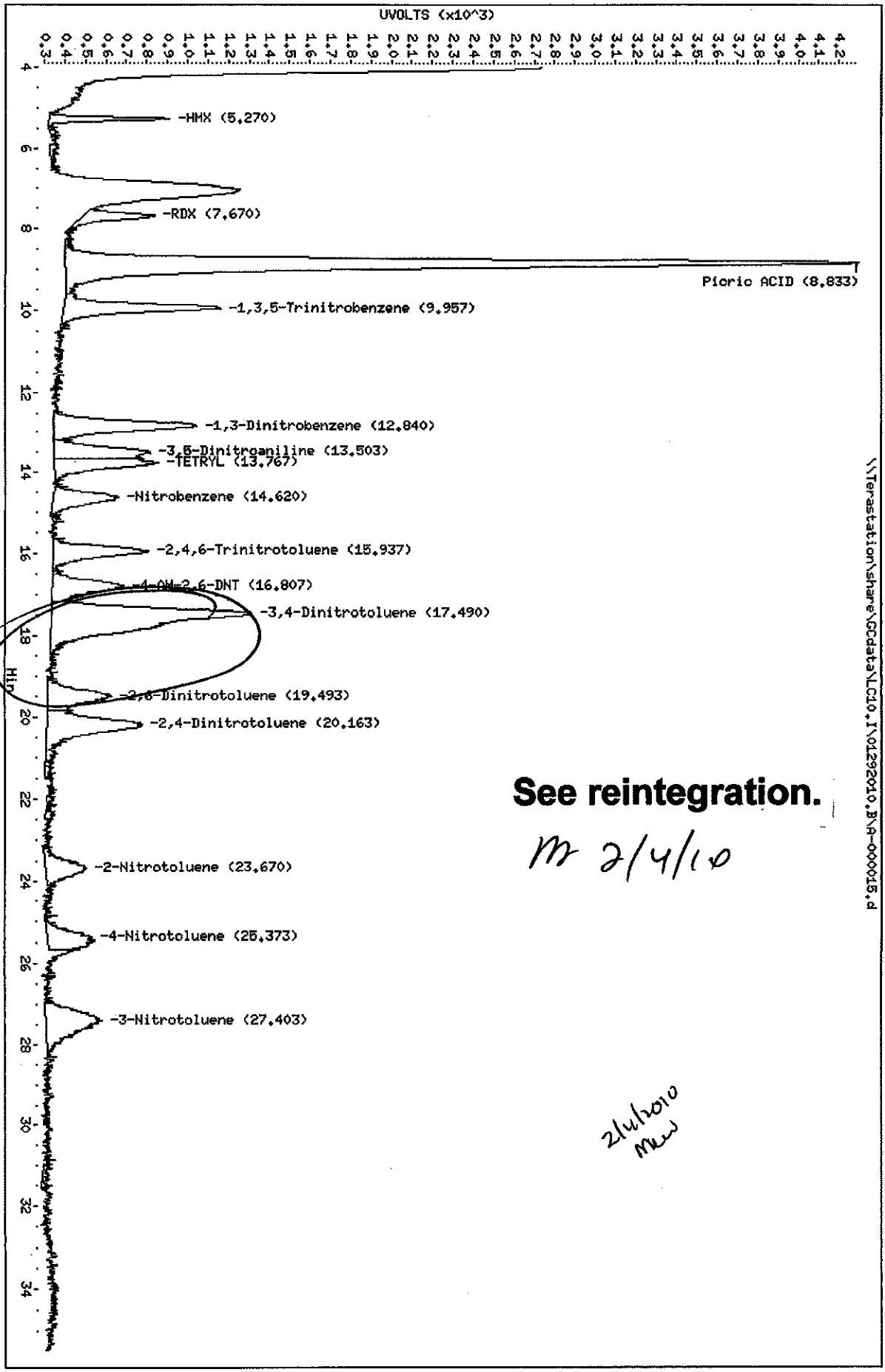
m 2/4/10

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

See reintegration.

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
5.270	3747	589	0.157	5.30		2 HMX
5.603	222	40	0.180	0.36		
6.003	602	39	0.065	0.35		
7.670	4210	351	0.083	3.16		3 RDX
8.833	62347	3896	0.062	35.23		5 Picric ACID
9.957	11568	764	0.066	6.88		6 1,3,5-Trinitrobenze
12.840	13039	699	0.054	6.30		7 1,3-Dinitrobenzene
13.503	8159	472	0.058	4.25		8 3,5-Dinitroaniline
13.767	8019	511	0.064	4.60		9 TETRYL
14.620	6275	318	0.051	2.86		10 Nitrobenzene
15.157	132	38	0.288	0.34		
15.937	8523	468	0.055	4.21		12 2,4,6-Trinitrotolue
16.807	7457	347	0.047	3.12		13 4-AM-2,6-DNT
17.490	29395	979	0.033	8.82	$	1 3,4-Dinitrotoluene
19.493	7179	313	0.044	2.82		15 2,6-Dinitrotoluene
20.163	13579	466	0.034	4.20		16 2,4-Dinitrotoluene
22.037	222	31	0.140	0.27		
22.367	477	44	0.092	0.39		
23.670	5337	196	0.037	1.76		17 2-Nitrotoluene
25.373	5606	216	0.039	1.94		18 4-Nitrotoluene
27.403	9956	276	0.028	2.48		19 3-Nitrotoluene
31.050	736	40	0.054	0.36		
	206787	11093		100.000		

Total unknown % height = 2.070



Data File: \\Terastation\share\GCdata\LC10,I\01292010,B\A-000015.d
Date : 29-JAN-2010 21:53
Client ID:
Sample Info: STD_MRL 100CSV0074 5-20 ng/mL;2;
Volume Injected (uL): 500.0
Column phase: SYNERGI HYDRORP C18

Instrument: LC10,i
Operator: NS
Column diameter: 4.60

TestAmerica West Sacramento

Method 8330

Data file : \\Terastation\share\GCdata\LC10.I\01292010.B\A-000015.d\A-000015
Lab Smp Id: STD_MRL 10GCSV0074
Inj Date : 29-JAN-2010 21:53
Operator : NS Inst ID: LC10.i
Smp Info : STD_MRL 10GCSV0074 5-20 ng/mL;2;
Misc Info : ;;1000;;20;1;WATER.sub;;0;1;
Comment : SOP SAC-LC-0009
Method : \\Terastation\share\GCdata\LC10.I\01292010.B\8330AB.M\83302.m
Meth Date : 01-Feb-2010 09:34 kenneyf Quant Type: AREA%
Cal Date : 09-JAN-2010 04:00 Cal File: A-000010.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATER.sub
Target Version: 4.14
Processing Host: SACP307FK

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

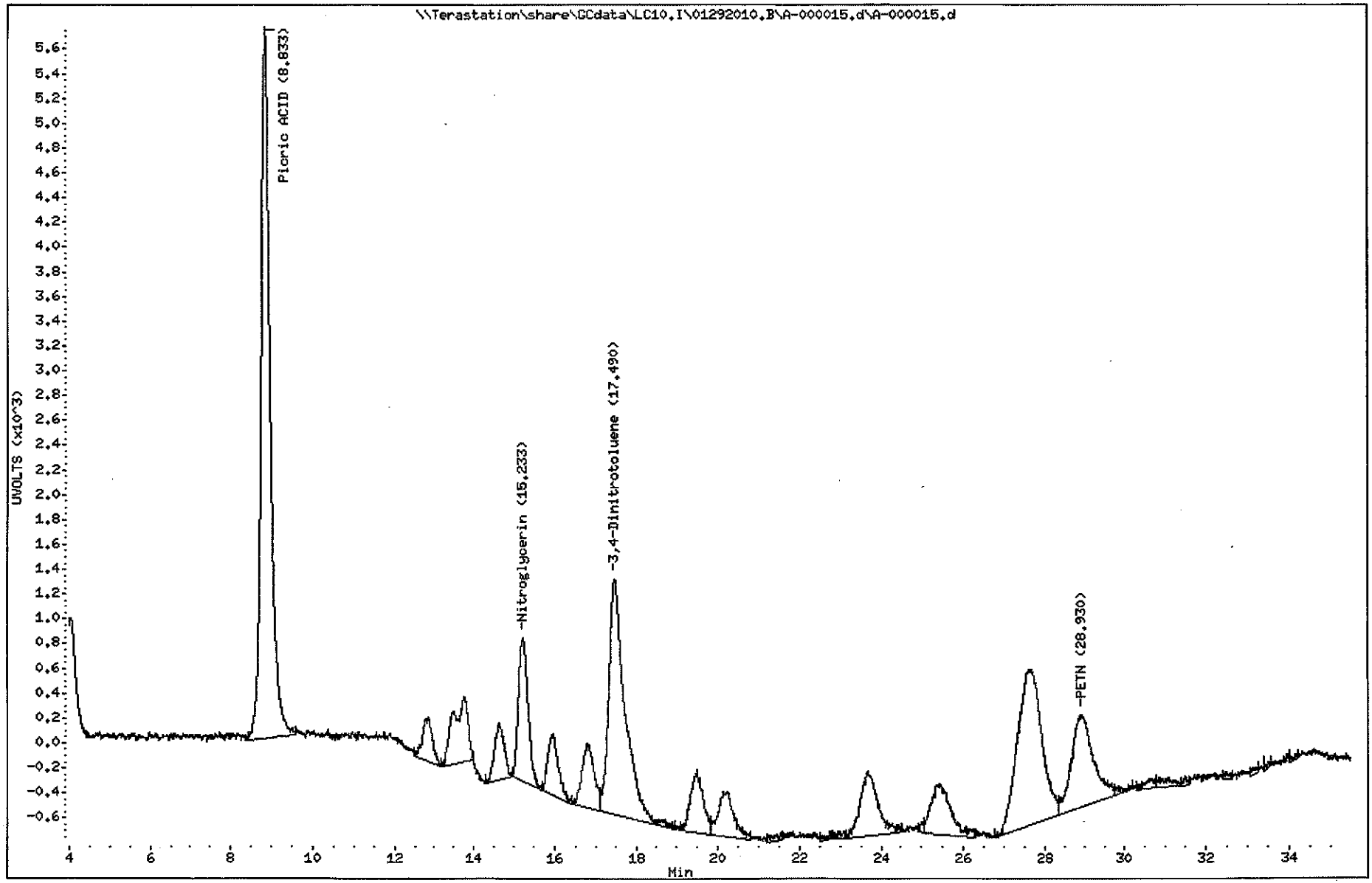
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
8.833	91295	5744	0.063	36.99		5 Picric ACID
12.843	6512	353	0.054	2.26		
13.503	13728	427	0.031	2.74		
14.623	7740	462	0.060	2.96		
15.233	19282	1155	0.060	7.41		11 Nitroglycerin
15.963	8531	492	0.058	3.15		
16.810	11084	519	0.047	3.33		
17.490	52521	1899	0.036	12.18	$	1 3,4-Dinitrotoluene
19.490	10801	510	0.047	3.27		
20.237	9740	362	0.037	2.32		
21.283	725	53	0.073	0.34		
22.760	552	61	0.111	0.39		
22.947	628	56	0.089	0.35		
23.673	15505	522	0.034	3.34		
24.433	272	62	0.228	0.39		
25.007	412	84	0.204	0.53		
25.433	12999	397	0.031	2.54		
27.617	52377	1259	0.024	8.07		
28.930	28274	742	0.026	4.76		20 PETN
30.080	727	45	0.062	0.28		
30.650	1235	72	0.058	0.46		
31.073	1662	72	0.043	0.46		
31.497	429	68	0.159	0.43		
32.500	416	53	0.127	0.34		

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
33.227	378	40	0.106	0.25	
33.567	325	34	0.104	0.21	
34.157	275	40	0.145	0.25	
	348425	15583		100.000	

Total unknown % height = 38.66

Data File: \\Terastation\share\GCdata\LC10.I\01292010.B\A-000015.d\A-000015.d
Date : 29-JAN-2010 21:53
Client ID:
Instrument: LC10.i
Sample Info: STD_MRL 10GCSV0074 5-20 ng/mL;2;
Volume Injected (uL): 500.0
Operator: NS
Column phase: SYNERGI HYDRORP C18
Column diameter: 4.60



8330MOD NITROGUANIDINE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2010
Data Reviewer/Date: Angye Dragotta/ March 12, 2010

SDG: A0A210493 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 - 4.1 °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?	✓			10/8/09	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: 10/3/09 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%?	✓			10/4/09 @ 0105	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: January 2010
Data Reviewer/Date: Angye Dragotta/ March 12, 2010

SDG: A0A210493 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?	✓				
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%?	✓				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?	✓				
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.		✓			

References: Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 5 and Attachment A "Data Validation Guidelines.

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2010
Data Reviewer/Date: Angye Dragotta/ March 12, 2010

SDG: A0A210493 R0
Analysis: SW846 8330M Nitroguanadine

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: FWGLL11mw-009C-1495-GW

Dissolved HPLC

Lot-Sample #...:	A0A210493-001	**Work Order #...:**	LTHWT1AD	**Matrix.....:**	WG
Date Sampled...:	01/20/10 10:10	**Date Received..:**	01/21/10		
Prep Date.....:	01/26/10	**Analysis Date..:**	01/30/10		
Prep Batch #...:	0026436				
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-1496-GW

Dissolved HPLC

Lot-Sample #...: A0A210493-002 Work Order #...: LTHW31AD Matrix.....: WG
Date Sampled...: 01/20/10 12:05 Date Received..: 01/21/10
Prep Date.....: 01/26/10 Analysis Date..: 01/30/10
Prep Batch #...: 0026436
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-1496-GW

Dissolved HPLC

Lot-Sample #...:	A0A210493-002	**Work Order #...:**	LTHW31AD	**Matrix.....:**	WG
Date Sampled...:	01/20/10 12:05	**Date Received..:**	01/21/10		
Prep Date.....:	01/26/10	**Analysis Date..:**	01/30/10		
Prep Batch #...:	0026436				
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-1496-GW

Dissolved HPLC

Lot-Sample #...:	A0A210493-002	**Work Order #...:**	LTHW31AD	**Matrix.....:**	WG
Date Sampled...:	01/20/10 12:05	**Date Received..:**	01/21/10		
Prep Date.....:	01/26/10	**Analysis Date..:**	01/30/10		
Prep Batch #...:	0026436				
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-DUP1-1512-GW

Dissolved HPLC

Lot-Sample #...:	A0A210493-003	**Work Order #...:**	LTHW91AD	**Matrix.....:**	WG
Date Sampled...:	01/20/10 12:25	**Date Received..:**	01/21/10		
Prep Date.....:	01/26/10	**Analysis Date..:**	01/30/10		
Prep Batch #...:	0026436				
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-1498-GW

Dissolved HPLC

Lot-Sample #...:	A0A210493-004	**Work Order #...:**	LTHXE1AD	**Matrix.....:**	WG
Date Sampled...:	01/20/10 14:05	**Date Received..:**	01/21/10		
Prep Date.....:	01/26/10	**Analysis Date..:**	01/30/10		
Prep Batch #...:	0026436				
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-1497-GW

Dissolved HPLC

Lot-Sample #...:	A0A210493-005	**Work Order #...:**	LTHX41AD	**Matrix.....:**	WG
Date Sampled...:	01/20/10 15:01	**Date Received..:**	01/21/10		
Prep Date.....:	01/26/10	**Analysis Date..:**	01/30/10		
Prep Batch #...:	0026436				
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-007C-1502-GW

Dissolved HPLC

Lot-Sample #...:	A0A210493-006	Work Order #...:	LTHX51AD	Matrix.....:	WG
Date Sampled...:	01/20/10 16:31	Date Received..:	01/21/10		
Prep Date.....:	01/26/10	Analysis Date..:	01/30/10		
Prep Batch #...:	0026436				
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: FWGEQUIPRinse1-1513-GW

Dissolved HPLC

Lot-Sample #...:	A0A210493-007	**Work Order #...:**	LTHX81AD	**Matrix.....:**	WG
Date Sampled...:	01/20/10 17:30	**Date Received..:**	01/21/10		
Prep Date.....:	01/26/10	**Analysis Date..:**	01/30/10		
Prep Batch #...:	0026436				
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-1503-GW

Dissolved HPLC

Lot-Sample #...:	A0A210493-008	Work Order #...:	LTH0N1AD	Matrix.....:	WG
Date Sampled...:	01/20/10 10:15	Date Received..:	01/21/10		
Prep Date.....:	01/26/10	Analysis Date..:	01/30/10		
Prep Batch #...:	0026436				
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-DUP2-1511-GW

Dissolved HPLC

Lot-Sample #...:	A0A210493-009	**Work Order #...:**	LTH031AD	**Matrix.....:**	WG
Date Sampled...:	01/20/10 11:02	**Date Received..:**	01/21/10		
Prep Date.....:	01/26/10	**Analysis Date..:**	01/30/10		
Prep Batch #...:	0026436				
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-1505-GW

Dissolved HPLC

Lot-Sample #...:	A0A210493-010	**Work Order #...:**	LTH071AD	**Matrix.....:**	WG
Date Sampled...:	01/20/10 12:54	**Date Received..:**	01/21/10		
Prep Date.....:	01/26/10	**Analysis Date..:**	01/30/10		
Prep Batch #...:	0026436				
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-1501-GW

Dissolved HPLC

Lot-Sample #...:	A0A210493-011	**Work Order #...:**	LTH1A1AD	**Matrix.....:**	WG
Date Sampled...:	01/20/10 14:00	**Date Received..:**	01/21/10		
Prep Date.....:	01/26/10	**Analysis Date..:**	02/02/10		
Prep Batch #...:	0026436				
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-1500-GW

Dissolved HPLC

Lot-Sample #...:	A0A210493-012	**Work Order #...:**	LTH1D1AH	**Matrix.....:**	WG
Date Sampled...:	01/20/10 15:20	**Date Received..:**	01/21/10		
Prep Date.....:	01/26/10	**Analysis Date..:**	02/02/10		
Prep Batch #...:	0026436				
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-1504-GW

Dissolved HPLC

Lot-Sample #...:	A0A210493-013	**Work Order #...:**	LTH8R1AD	**Matrix.....:**	WG
Date Sampled...:	01/21/10 09:20	**Date Received..:**	01/21/10		
Prep Date.....:	01/26/10	**Analysis Date..:**	02/02/10		
Prep Batch #...:	0026436				
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: FWGEQUIPRinse2-1514-GW

Dissolved HPLC

Lot-Sample #...:	A0A210493-014	**Work Order #...:**	LTH821AD	**Matrix.....:**	WG
Date Sampled...:	01/21/10 10:22	**Date Received..:**	01/21/10		
Prep Date.....:	01/26/10	**Analysis Date..:**	02/02/10		
Prep Batch #...:	0026436				
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-1499-GW

Dissolved HPLC

Lot-Sample #...:	A0A210493-015	**Work Order #...:**	LTH881AH	**Matrix.....:**	WG
Date Sampled...:	01/21/10 09:15	**Date Received..:**	01/21/10		
Prep Date.....:	01/26/10	**Analysis Date..:**	02/02/10		
Prep Batch #...:	0026436				
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 #...: A0A210493 Work Order #...: LTRNT1AA Matrix.....: WATER
MB Lot-Sample #: G0A260000-436
Prep Date.....: 01/26/10
Analysis Date..: 01/30/10 Prep Batch #...: 0026436
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 #...: A0A210493 **Work Order #...:** LTRNT1AC **Matrix.....:** WATER
LCS Lot-Sample#: G0A260000-436
Prep Date.....: 01/26/10 **Analysis Date..:** 01/30/10
Prep Batch #...: 0026436
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 #...:	A0A210493	**Work Order #...:**	LTH1D1AJ-MS	**Matrix.....:**	WG
MS Lot-Sample #:	A0A210493-012		LTH1D1AK-MSD		
Date Sampled...:	01/20/10 15:20	**Date Received..:**	01/21/10		
Prep Date.....:	01/26/10	**Analysis Date..:**	02/02/10		
Prep Batch #...:	0026436				
Dilution Factor:	1				

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Nitroguanidine	**100**	**(73 - 117)**			**SW846 8330 (Modified**
	97	**(73 - 117)**	**2.7**	**(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 #...:	A0A210493	**Work Order #...:**	LTH881AJ-MS **Matrix.....:** WG
MS Lot-Sample #:	A0A210493-015		LTH881AK-MSD
Date Sampled...:	01/21/10 09:15	**Date Received..:**	01/21/10
Prep Date.....:	01/26/10	**Analysis Date..:**	02/02/10
Prep Batch #...:	0026436		
Dilution Factor:	1		

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Nitroguanidine	**101**	**(73 - 117)**			**SW846 8330 (Modified**
	102	**(73 - 117)**	**1.1**	**(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: January 2010
Data Reviewer/Date: Angye Dragotta/ March 12, 2010

SDG: A0A210493 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 - 4.1 °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 1/28/10 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: January 2010
Data Reviewer/Date: Angye Dragotta/ March 12, 2010

SDG: A0A210493 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?	✓				
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.	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?	✓				
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: January 2010
Data Reviewer/Date: Angye Dragotta/ March 12, 2010

SDG: A0A210493 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: FWGLL11mw-009C-1495-GW

General Chemistry

Lot-Sample #...: A0A210493-001 **Work Order #...:** LTHWT **Matrix.....:** WG
Date Sampled...: 01/20/10 10:10 **Date Received..:** 01/21/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	01/26-01/28/10	0026201

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-001C-1496-GW

General Chemistry

Lot-Sample #...: A0A210493-002 **Work Order #...:** LTHW3 **Matrix.....:** WG
Date Sampled...: 01/20/10 12:05 **Date Received..:** 01/21/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	01/26-01/28/10	0026201

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-DUP1-1512-GW

General Chemistry

Lot-Sample #...: A0A210493-003 **Work Order #...:** LTHW9 **Matrix.....:** WG
Date Sampled...: 01/20/10 12:25 **Date Received..:** 01/21/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	01/26-01/28/10	0026201

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-003C-1498-GW

General Chemistry

Lot-Sample #...: A0A210493-004 **Work Order #...:** LTHXE **Matrix.....:** WG
Date Sampled...: 01/20/10 14:05 **Date Received..:** 01/21/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	01/26-01/28/10	0026201

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-002C-1497-GW

General Chemistry

Lot-Sample #...: A0A210493-005 Work Order #...: LTHX4 Matrix.....: WG
Date Sampled...: 01/20/10 15:01 Date Received..: 01/21/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	01/26-01/28/10	0026201

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-007C-1502-GW

General Chemistry

Lot-Sample #...: A0A210493-006 **Work Order #...:** LTHX5 **Matrix.....:** WG
Date Sampled...: 01/20/10 16:31 **Date Received..:** 01/21/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	01/26-01/28/10	0026201

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRinse1-1513-GW

General Chemistry

Lot-Sample #...: A0A210493-007 Work Order #...: LTHX8 Matrix.....: WG
Date Sampled...: 01/20/10 17:30 Date Received..: 01/21/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	01/26-01/28/10	0026201

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-008C-1503-GW

General Chemistry

Lot-Sample #...: A0A210493-008 **Work Order #...:** LTH0N **Matrix.....:** WG
Date Sampled...: 01/20/10 10:15 **Date Received..:** 01/21/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	01/26-01/28/10	0026201

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-DUP2-1511-GW

General Chemistry

Lot-Sample #...: A0A210493-009 **Work Order #...:** LTH03 **Matrix.....:** WG
Date Sampled...: 01/20/10 11:02 **Date Received..:** 01/21/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	01/26-01/28/10	0026201

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-010C-1505-GW

General Chemistry

Lot-Sample #...: A0A210493-010 **Work Order #...:** LTH07 **Matrix.....:** WG
Date Sampled...: 01/20/10 12:54 **Date Received..:** 01/21/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	01/26-01/28/10	0026201

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-006C-1501-GW

General Chemistry

Lot-Sample #...: A0A210493-011 **Work Order #...:** LTH1A **Matrix.....:** WG
Date Sampled...: 01/20/10 14:00 **Date Received..:** 01/21/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	01/26-01/28/10	0026201

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-005C-1500-GW

General Chemistry

Lot-Sample #...: A0A210493-012 **Work Order #...:** LTH1D **Matrix.....:** WG
Date Sampled...: 01/20/10 15:20 **Date Received..:** 01/21/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	01/26-01/28/10	0026201

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-009C-1504-GW

General Chemistry

Lot-Sample #...: A0A210493-013 **Work Order #...:** LTH8R **Matrix.....:** WG
Date Sampled...: 01/21/10 09:20 **Date Received..:** 01/21/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	01/26-01/28/10	0026201

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRinse2-1514-GW

General Chemistry

Lot-Sample #...: A0A210493-014 **Work Order #...:** LTH82 **Matrix.....:** WG
Date Sampled...: 01/21/10 10:22 **Date Received..:** 01/21/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	01/26-01/28/10	0026201

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-004C-1499-GW

General Chemistry

Lot-Sample #...: A0A210493-015 **Work Order #...:** LTH88 **Matrix.....:** WG
Date Sampled...: 01/21/10 09:15 **Date Received..:** 01/21/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	MCAWW 353.2	01/26-01/28/10	0026201

Dilution Factor: 1 MDL.....: 0.12

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A0A210493 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		Work Order #: LTQPJ1AA		MB Lot-Sample #:	G0A260000-201	
	ND	0.50	mg/L	MCAWW 353.2	01/26-01/28/10	0026201
		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 #...: A0A210493 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		Work Order #: LTQPJ1AC	LCS Lot-Sample#: G0A260000-201		
	82	(26 - 144)	MCAWW 353.2	01/26-01/28/10	0026201
		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 #...: A0A210493 **Matrix.....:** WG
Date Sampled...: 01/21/10 09:15 **Date Received..:** 01/21/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		WO#: LTH1D1AF-MS/LTH1D1AG-MSD				MS Lot-Sample #: A0A210493-012	
	83	(26 - 144)			MCAWW 353.2	01/26-01/28/10	0026201
	81	(26 - 144)	1.7	(0-45)	MCAWW 353.2	01/26-01/28/10	0026201
		Dilution Factor: 1					
Nitrocellulose		WO#: LTH881AF-MS/LTH881AG-MSD				MS Lot-Sample #: A0A210493-015	
	87	(26 - 144)			MCAWW 353.2	01/26-01/28/10	0026201
	82	(26 - 144)	5.7	(0-45)	MCAWW 353.2	01/26-01/28/10	0026201
		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
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: A0A210493										
8330	FWGASYmw-001C-1496-GW	AQ	N							
				2-Amino-4,6-dinitrotoluene	0.098	0.098U		UJ	ug/L	Pj
8330	FWGASYmw-002C-1497-GW	AQ	N							
				2-Amino-4,6-dinitrotoluene	0.10	0.10U		UJ	ug/L	Pj
8330	FWGASYmw-003C-1498-GW	AQ	N							
				2-Amino-4,6-dinitrotoluene	0.099	0.099U		UJ	ug/L	Pj
8330	FWGASYmw-004C-1499-GW	AQ	N							
				2-Amino-4,6-dinitrotoluene	0.099	0.099U		UJ	ug/L	Pj
8330	FWGASYmw-005C-1500-GW	AQ	N							
				2,6-Dinitrotoluene	0.10	0.060J		J	ug/L	L
				2-Amino-4,6-dinitrotoluene	0.10	0.10U		UJ	ug/L	Pj
8330	FWGASYmw-006C-1501-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.10	0.032J B		JB	ug/L	L,F
				2-Amino-4,6-dinitrotoluene	0.10	0.10U		UJ	ug/L	Pj
8330	FWGASYmw-007C-1502-GW	AQ	N							
				2-Amino-4,6-dinitrotoluene	0.10	0.10U		UJ	ug/L	Pj
8330	FWGASYmw-008C-1503-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.10	0.033J B		JB	ug/L	L,P,F
				2-Amino-4,6-dinitrotoluene	0.10	0.10U		UJ	ug/L	Pj
				3-Nitrotoluene	0.52	0.16J		J	ug/L	L,P
8330	FWGASYmw-009C-1504-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.099	0.033J B		JB	ug/L	L,F
				2-Amino-4,6-dinitrotoluene	0.099	0.099U		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: A0A210493										
8330	FWGASYmw-010C-1505-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.10	0.044J B		JB	ug/L	L,F
				2-Amino-4,6-dinitrotoluene	0.10	0.10U		UJ	ug/L	Pj
8330	FWGASYmw-DUP1-1512-GW	AQ	FD							
				1,3,5-Trinitrobenzene	0.099	0.032J B		JB	ug/L	L,F
				2-Amino-4,6-dinitrotoluene	0.099	0.099U		UJ	ug/L	Pj
8330	FWGASYmw-DUP2-1511-GW	AQ	FD							
				1,3,5-Trinitrobenzene	0.099	0.045J B		JB	ug/L	L,F
				2-Amino-4,6-dinitrotoluene	0.099	0.099U		UJ	ug/L	Pj
8330	FWGEQUIPRinse1-1513-GW	AQ	EB							
				2-Amino-4,6-dinitrotoluene	0.098	0.098U		UJ	ug/L	Pj
8330	FWGEQUIPRinse2-1514-GW	AQ	EB							
				2-Amino-4,6-dinitrotoluene	0.11	0.11U		UJ	ug/L	Pj
				4-Amino-2,6-Dinitrotoluene	0.11	0.11U		UJ	ug/L	Pj
8330	FWGLL11mw-009C-1495-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.10	0.036J B		JB	ug/L	L,F
				2-Amino-4,6-dinitrotoluene	0.10	0.10U		UJ	ug/L	Pj
				Nitrobenzene	0.10	0.064J		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-1496-GW **Lab Report Batch :** A0A210493 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0A210493002

Reviewed By / Date : Angye Dragotta 3/10/2010 **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**															
2-Amino-4,6-dinitrotoluene	0.098		ug/L	U	YES	UJ															Pj
4-Amino-2,6-Dinitrotoluene	0.098		ug/L	U	YES	~~UJ~~ NQ*		CASO	3/17/10												Pj

NQ* No Qualification

Project Number and Name: 030240.0006 - RVAAP (OH) **Library Used:** Ravenna GW

ADR 8.1 Report Date: 3/17/2010 14:10

* 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-1497-GW **Lab Report Batch :** A0A210493 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0A210493005

Reviewed By / Date : Angye Dragotta 3/10/2010 **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**														
2-Amino-4,6-dinitrotoluene	0.10		ug/L	U	YES	UJ															Pj
4-Amino-2,6-Dinitrotoluene	0.10		ug/L	U	YES	~~UJ~~ NQ															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-003C-1498-GW **Lab Report Batch :** A0A210493 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0A210493004

Reviewed By / Date : Angye Dragotta 3/10/2010 **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: 0.99**															
2-Amino-4,6-dinitrotoluene	0.099		ug/L	U	YES	UJ															Pj
4-Amino-2,6-Dinitrotoluene	0.099		ug/L	U	YES	~~UJ~~	NQ														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-004C-1499-GW **Lab Report Batch :** A0A210493 **Lab ID :** TALCAN

Sample Date : 01/21/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0A210493015

Reviewed By / Date : Angye Dragotta 3/10/2010 **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: 0.99**															
2-Amino-4,6-dinitrotoluene	0.099		ug/L	U	YES	UJ															Pj
4-Amino-2,6-Dinitrotoluene	0.099		ug/L	U	YES	~~UJ~~ NQ															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-005C-1500-GW **Lab Report Batch :** A0A210493 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0A210493012

Reviewed By / Date : Angye Dragotta 3/10/2010 **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: 1.04**															
2,6-Dinitrotoluene	0.060		ug/L	J	YES	J								J							L
2-Amino-4,6-dinitrotoluene	0.10		ug/L	U	YES	UJ															Pj
4-Amino-2,6-Dinitrotoluene	0.10		ug/L	U	YES	~~UJ~~ ND															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-006C-1501-GW **Lab Report Batch :** A0A210493 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0A210493011

Reviewed By / Date : Angye Dragotta 3/10/2010 **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	0.032		ug/L	J B	YES	~~UJ~~ JB			J B					J							L,F
2-Amino-4,6-dinitrotoluene	0.10		ug/L	U	YES	UJ															Pj
4-Amino-2,6-Dinitrotoluene	0.10		ug/L	U	YES	~~UJ~~	NQ														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-007C-1502-GW **Lab Report Batch :** A0A210493 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0A210493006

Reviewed By / Date : Angye Dragotta 3/10/2010 **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: 1.02**															
2-Amino-4,6-dinitrotoluene	0.10		ug/L	U	YES	UJ															Pj
4-Amino-2,6-Dinitrotoluene	0.10		ug/L	U	YES	~~UJ~~	NQ														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-008C-1503-GW **Lab Report Batch :** A0A210493 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0A210493008

Reviewed By / Date : Angye Dragotta 3/10/2010 **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	0.033		ug/L	J B	YES	~~UJ~~ JB			JB					J							L,P,F
2-Amino-4,6-dinitrotoluene	0.10		ug/L	U	YES	UJ															Pj
3-Nitrotoluene	0.16		ug/L	J	YES	J								J							L,P
4-Amino-2,6-Dinitrotoluene	0.10		ug/L	U	YES	~~UJ~~ NQ															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-009C-1504-GW **Lab Report Batch :** A0A210493 **Lab ID :** TALCAN

Sample Date : 01/21/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0A210493013

Reviewed By / Date : Angye Dragotta 3/10/2010 **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: 0.99**														
1,3,5-Trinitrobenzene	0.033		ug/L	J B	YES	~~UJ~~ B			J B					J							L,F
2-Amino-4,6-dinitrotoluene	0.099		ug/L	U	YES	UJ															Pj
4-Amino-2,6-Dinitrotoluene	0.099		ug/L	U	YES	~~UJ~~ NQ															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-010C-1505-GW **Lab Report Batch :** A0A210493 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0A210493010

Reviewed By / Date : Angye Dragotta 3/10/2010 **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~~ J			J B					J							L,F
2-Amino-4,6-dinitrotoluene	0.10		ug/L	U	YES	UJ															Pj
4-Amino-2,6-Dinitrotoluene	0.10		ug/L	U	YES	~~UJ~~ NQ															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-DUP1-1512-GW **Lab Report Batch :** A0A210493 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0A210493003

Reviewed By / Date : Angye Dragotta 3/10/2010 **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: 0.99**														
1,3,5-Trinitrobenzene	0.032		ug/L	J B	YES	~~UJ~~ J B			J B					J							L,F
2-Amino-4,6-dinitrotoluene	0.099		ug/L	U	YES	UJ																Pj
4-Amino-2,6-Dinitrotoluene	0.099		ug/L	U	YES	~~UJ~~ NQ																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-DUP2-1511-GW **Lab Report Batch :** A0A210493 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0A210493009

Reviewed By / Date : Angye Dragotta 3/10/2010 **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: 0.99**															
1,3,5-Trinitrobenzene	0.045		ug/L	J B	YES	~~UJ~~ JB			YB					J							L,F
2-Amino-4,6-dinitrotoluene	0.099		ug/L	U	YES	UJ															Pj
4-Amino-2,6-Dinitrotoluene	0.099		ug/L	U	YES	~~UJ~~ NQ															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 : FWGEQUIPRinse1-1513-GW **Lab Report Batch :** A0A210493 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0A210493007

Reviewed By / Date : Angye Dragotta 3/10/2010 **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**															
2-Amino-4,6-dinitrotoluene	0.098		ug/L	U	YES	UJ															Pj
4-Amino-2,6-Dinitrotoluene	0.098		ug/L	U	YES	~~UJ~~ NQ															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 : FWGEQUIPRinse2-1514-GW **Lab Report Batch :** A0A210493 **Lab ID :** TALCAN

Sample Date : 01/21/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0A210493014

Reviewed By / Date : Angye Dragotta 3/10/2010 **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**															
2-Amino-4,6-dinitrotoluene	0.11		ug/L	U	YES	UJ															Pj
4-Amino-2,6-Dinitrotoluene	0.11		ug/L	U	YES	UJ NQ															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-1495-GW **Lab Report Batch :** A0A210493 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0A210493001

Reviewed By / Date : Angye Dragotta 3/10/2010 **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	0.036		ug/L	J B	YES	~~UJ~~ J B			J B					J							L,F
2-Amino-4,6-dinitrotoluene	0.10		ug/L	U	YES	UJ															Pj
4-Amino-2,6-Dinitrotoluene	0.10		ug/L	U	YES	~~UJ~~ NQ															Pj
Nitrobenzene	0.064		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: A0A210493 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGASYmw-001C-1496-	A0A210493002	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
FWGASYmw-002C-1497-	A0A210493005	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
FWGASYmw-003C-1498-	A0A210493004	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
FWGASYmw-004C-1499-	A0A210493015	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
FWGASYmw-005C-1500-	A0A210493012	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
FWGASYmw-006C-1501-	A0A210493011	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
FWGASYmw-007C-1502-	A0A210493006	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-1503-	A0A210493008	8330	AQ	2-Nitrotoluene	U	0.52	0.21	ug/L
				4-Nitrotoluene	U	0.52	0.21	ug/L
FWGASYmw-009C-1504-	A0A210493013	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
FWGASYmw-010C-1505-	A0A210493010	8330	AQ	2-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: **030240.0006 - 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: A0A210493 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGASYmw-010C-1505-	A0A210493010	8330	AQ	3-Nitrotoluene	U	0.52	0.21	ug/L
				4-Nitrotoluene	U	0.52	0.21	ug/L
FWGASYmw-DUP1-1512-	A0A210493003	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
FWGASYmw-DUP2-1511-	A0A210493009	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
FWGEQUIPRinse1-1513-	A0A210493007	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
FWGEQUIPRinse2-1514-	A0A210493014	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
FWGLL11mw-009C-1495-	A0A210493001	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: **030240.0006 - RVAAP (OH)**

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A0A210493 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGASYmw-005C-1500-	A0A210493012	8330	AQ	2,6-Dinitrotoluene	J	0.060	0.10	ug/L
FWGASYmw-006C-1501-	A0A210493011			1,3,5-Trinitrobenzene	J B	0.032	0.10	ug/L
FWGASYmw-008C-1503-	A0A210493008			1,3,5-Trinitrobenzene	J B	0.033	0.10	ug/L
				3-Nitrotoluene	J	0.16	0.52	ug/L
FWGASYmw-009C-1504-	A0A210493013			1,3,5-Trinitrobenzene	J B	0.033	0.099	ug/L
FWGASYmw-010C-1505-	A0A210493010			1,3,5-Trinitrobenzene	J B	0.044	0.10	ug/L
FWGASYmw-DUP1-1512-	A0A210493003			1,3,5-Trinitrobenzene	J B	0.032	0.099	ug/L
FWGASYmw-DUP2-1511-	A0A210493009			1,3,5-Trinitrobenzene	J B	0.045	0.099	ug/L
FWGLL11mw-009C-1495-	A0A210493001			1,3,5-Trinitrobenzene	J B	0.036	0.10	ug/L
				Nitrobenzene	J	0.064	0.10	ug/L

QC Outlier Report: Field Duplicates (Non-qualified Outliers)

Lab Report Batch: A0A210493 **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	FWGASYmw-001	DL	0.098	U	FWGASYmw-DU	DL	0.032	J B	200.0	30	ug/L
8330	AQ	1,3,5-Trinitrobenzene	FWGASYmw-008	DL	0.033	J B	FWGASYmw-DU	DL	0.045	J B	30.8	30	ug/L
	AQ	3-Nitrotoluene		DL	0.16	J		DL	0.50	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: ***030240.0006 - RVAAP (OH)***

Method Blank Outlier Report

Lab Reporting Batch : A0A210493 **Lab ID:** TALCAN

Analysis Method : 8330 **Analysis Date :** 01/30/2010

Preparation Type : 3535 **Preparation Date :** 01/26/2010

Method Blank Lab Sample ID : G0A260000085B **Preparation Batch :** 0026085

1,3,5-Trinitrobenzene	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	0.052	0.10	ug/L	J	

1,3,5-Trinitrobenzene	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	0.042	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
FWGASYmw-006C-1501-G	A0A210493011	1.01	0.032	J B	ug/L
FWGASYmw-008C-1503-G	A0A210493008	1.05	0.033	J B	ug/L
FWGASYmw-009C-1504-G	A0A210493013	0.99	0.033	J B	ug/L
FWGASYmw-010C-1505-G	A0A210493010	1.03	0.044	J B	ug/L
FWGASYmw-DUP1-1512-G	A0A210493003	0.99	0.032	J B	ug/L
FWGASYmw-DUP2-1511-G	A0A210493009	0.99	0.045	J B	ug/L
FWGLL11mw-009C-1495-G	A0A210493001	1.01	0.036	J B	ug/L

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: January 2010 **Date:** March 10, 2010
STL Sample Delivery Group: A0A210417 **Revision:** 0

Data Validator: Angye Dragotta/Environmental Quality Management, Inc. (EQM, Inc.)

QA/QC Summary

On January 20 and 21, 2010 the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A0A210417.

Field Sample ID	Analytes	Method
FWGLL11mw-009c-1495-GW	VOCs SVOCs Pesticides PCBs Cyanide TAL23 Metals	SW846 8260B SW846 8270C SW846 8081A SW846 8082 SW846 9012A SW846 6010B/6020/7470A
FWGASYmw-001c-1496-GW		
FWGASYmw-DUP1-1512-GW		
FWGASYmw-003c-1498-GW		
FWGASYmw-002c-1497-GW		
FWGASYmw-007c-1502-GW		
FWGEQUIPRinse1-1513-GW		
FWGASYmw-008c-1503-GW		
FWGASYmw-DUP2-1511-GW		
FWGASYmw-010c-1505-GW		
FWGASYmw-006c-1501-GW		
FWGASYmw-005c-1500-GW		
FWGASYmw-009c-1504-GW		
FWGEQUIPRinse2-1514-GW		
FWGASYmw-004c-1499-GW		
FWGLL3mw-235c-1507-GW	TAL23 Metals	SW846 6010B/6020/7470A
FWGLL11mw-009c-1495-GF	TAL23 Metals (Filtered)	SW846 6010B/6020/7470A
FWGASYmw-001c-1496-GF		
FWGASYmw-DUP1-1512-GF		
FWGASYmw-003c-1498-GF		
FWGASYmw-002c-1497-GF		
FWGASYmw-007c-1502-GF		
FWGASYmw-008c-1503-GF		
FWGASYmw-DUP2-1511-GF		
FWGASYmw-010c-1505-GF		
FWGASYmw-006c-1501-GF		
FWGASYmw-005c-1500-GF		
FWGASYmw-009c-1504-GF		
FWGASYmw-004c-1499-GF		
FWGLL3mw-235c-1507-GF		
FWGTEAM1-Trip	VOCs	SW846 8260B
FWGTEAM2-Trip		
FWGTEAM2-Trip (1/21/10)		
FWGTEAM1-Trip 1-21-10		

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 cooler temperatures were documented as being received from 2.2°C - 4.1°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: January 2010 **Date:** March 10, 2010
STL Sample Delivery Group: A0A210417 **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.

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 10/21/09 at 1432 had acetone recover above control limits at 148%.
The closing MRL check analyzed 10/21/09 at 2203 had acetone recover below control limits at 54.8%. The acetone results were qualified as estimated, "J/UJ".

Blanks

- FWGEQUIPRinse1-1513-GW had 2-butanone detected at 3.8ug/L, acetone at 15ug/L and toluene at 0.20ug/L.
- FWGEQUIPRinse2-1514-GW had acetone detected at 4.9ug/L.
- The trip blanks collected 1/20-1/21/10 had acetone contamination detected from 2.4- 3.8ug/L.

The acetone results for samples FWGASYmw-004c-1499-GW and FWGEQUIPRINSE2-1514-GW were qualified, "B" as the results were <10x the equipment rinse and trip blank contamination. As there were no detected concentrations of the other blank contaminants, no additional qualifications were made.

Matrix Spike Recovery
For sample FWGASYmw-004c-1499-GW, the MSD recovered below control limits for acetone at 65% and for chloroethane at 68%. For sample FWGASYmw-005c-1500-GW, the MS recovered below control limits for bromomethane at 69% and for chloroethane at 67%. The MSD analyzed on sample FWGASYmw-005c-1500-GW, recovered below control limits for 2-hexanone at 69% and for acetone at 68%. No qualification was made as the LCS recovered within limits.

SVOCs- 8270C
The following QC criteria were reviewed with acceptable results:

- 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

Holding Time
Samples were re extracted for benzoic acid at 8 days, due to LCS failure in the first extraction. The benzoic acid results for samples collected 1/20/10 were qualified as estimated, "UJ"

MRL Recovery
The closing MRL analyzed 2/3/10 @ 2050 recovered below control limits for 2,4-dinitrophenol at 62%. No qualifications were made as the bracketed samples were reported for benzoic acid only.

Site: Ravenna Army Ammunition Plant
Sampling Event: January 2010 **Date:** March 10, 2010
STL Sample Delivery Group: A0A210417 **Revision:** 0

Field Duplicate RPD
For the field duplicate pair analyzed on FWGASYmw-001c-1496-GW and FWGASYmw-DUP1-1512-GW, the duplicate RPD was above control limits for bis(2-ethylhexyl)phthalate at 133%. The bis(2-ethylhexyl)phthalate result for FWGASYmw-001c-1496-GW was qualified as estimated, "J".

Matrix Spike Recovery
Parent FWGASY-004mw-1499-GW- The MS/MSD recovered below control limit for 2,4-dinitrophenol at 36% and 38% and for 3,3'-dichlorobenzidine at 41% and 43%.
Parent FWGASY-005mw-1500-GW- The MSD recovered below control limits for 2,4-dinitrophenol 42%.
No qualifications were made as the associated LCS recovered within limits and there were no other QC outliers.

Surrogate Recovery
All surrogates recovered below control limits in the method blank associated with batch 0025033. No qualifications were made as the surrogates in the field samples were within control 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
- CCV Criteria
- The method blank was free from contamination
- Equipment Rinse was free from contamination
- LCS Recoveries
- Field Duplicate Criteria
- MDL verification criteria

MRL Recovery Criteria
The MRL opening and closing MRL analyzed for the sequence beginning 1/27/10 recovered above control limits for heptachlor at 196% and 381%, respectively. No qualification was made as there were no detected heptachlor concentrations reported.

Matrix Spike Recovery
The spike analyses performed on sample FWGASY-004mw-1499-GW recovered below control limits for endosulfan I at 46% and 48%. No qualification was made as the LCS recovered within limits.

Surrogate Recoveries
The surrogate, DCB, recovered below control limits in all samples with the exception of FWGASYmw-004c-1499-GW, FWGEQUIPRinse1-1513-GW and FWGEQUIPRinse2-1514-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

Site: Ravenna Army Ammunition Plant
Sampling Event: January 2010 **Date:** March 10, 2010
STL Sample Delivery Group: A0A210417 **Revision:** 0

Surrogate Recoveries
The surrogate, DCB, recovered below control limits in all samples with the exception of FWGASYmw-004c-1499-GW, FWGASYmw-DUP1-1512-GW, FWGEQUIPRinse1-1513-GW and FWGEQUIPRinse2-1514-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
- Interference Check Sample (ICSA/ICSAB) criteria
- LCS recovery criteria
- MS/MSD recovery criteria
- MDL Verification criteria
- MRL verification criteria
- Field duplicate RPD

Blanks

- The ICB analyzed 2/1/10 had detected potassium at 152ug/L. The potassium results for FWGASYmw002c-1497-GF and FWGLL3mw-235c-1507-GF were qualified, "U", as the detected concentrations were <5x blank contamination.
- The CCBs analyzed 2/1/10 had detected barium from 0.3ug/L to 0.5ug/L, calcium from 51.6 to 56.3ug/L, cobalt from 0.5ug/L to 0.6ug/L, magnesium from 5.7ug/L to 9.4ug/L, manganese at 0.3ug/L, potassium from 146ug/L to 156ug/L and nickel at 1.4ug/L. The cobalt results for FWGASYmw-008c-1503-GF and FWGASYmw-DUP2-1511-GF were qualified, "U", as the detected concentrations were <5x blank contamination. No additional potassium qualifications other than those made for the ICB contamination were made. All other contaminants in the calibration blanks did not require qualification of the data as all detected contaminants were >5x the 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.

CCV
The CCVs analyzed on 2/1 at 0920 and 1033 had recoveries above control limits for selenium. No qualifications were made as there were no detected selenium concentrations reported for the bracketed samples.

Serial Dilution
The serial dilution performed on sample FWGASYmw-005c-1500-GF had a %D of 20.9% for potassium. No qualification was made as the matrix spike recovered within control limits.

Field Duplicate RPD
For the field duplicate pair analyzed on FWGASYmw-008c-1503-GF and FWGASYmw-DUP2-1511-GF, the duplicate RPD was above control limits for arsenic at 34.5%, cobalt at 31.6% and nickel at 30.8%. The arsenic, cobalt and nickel results for FWGASYmw-008c-1503-GF 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 criteria
- MDL Verification Data
- MRL verification criteria
- Interference Check Sample (ICSA/ICSAB) criteria
- LCS Recovery Criteria
- MS recovery criteria
- Lab Duplicate RPD

Blanks

- The thallium ICB had detected contamination at 0.26ug/L. All detected thallium concentrations were <5x the ICB contamination and were qualified, "U".
- The CCBs analyzed 1/25/2010 had detected antimony from 0.043 to 0.063ug/L, beryllium from 0.026 to 0.053 ug/L, cadmium at 0.048-0.068ug/L, iron from 11.4ug/L to 18.3ug/L and thallium from 0.32ug/L to 0.41ug/L. No additional thallium qualifications other than those made for the ICB contamination were made. The antimony results for FWGASYmw-003c-1498-GF, FWGLL3mw-235-1507-GW, FWGASYmw-008c-1503-GF, FWGASYmw-DUP2-1511-GF and FWGASYmw-010-1505-GF were qualified "U", as the detected concentration was <5x blank contamination. All other contaminants in the calibration blanks did not require qualification of the data as all detected contaminants were >5x the blank contamination.
- Iron was detected in the method blank(s) at 34ug/L and zinc at 5.0ug/. The zinc results for samples FWGASYmw-001c-1496-GF, FWGASYmw-008c-1503-GF, FWGASYmw-009c-1504-GF, FWGASYmw-010c-1505-GF, FWGASYmw-DUP1-1512-GF, FWGASYmw-DUP2-1511-GF and FWGLL3mw-235c-1507-GF were qualified, "B", as the sample results were <5x contamination. The iron results did not require qualification of the data as all detected contaminants were >5x the blank contamination.
- Thallium was detected in FWGEQUIPRinse2-1514-GW at 0.19ug/L. The thallium results for samples FWGASYmw-004c-1499-GF and FWGASYmw-009c-1504-GF were qualified, "B", as the sample results were <5x 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.

Field Duplicate RPD

For the field duplicate pair analyzed on FWGASYmw-001c-1496-GF and FWGASYmw-DUP1-1512-GF, the duplicate RPD was above control limits for thallium at 35.5%. The thallium result for FWGASYmw-001c-1496-GF was qualified as estimated, "J". For the field duplicate pair analyzed on FWGASYmw-008c-1503-GF and FWGASYmw-DUP2-1511-GF, the duplicate RPD was above control limits for aluminum at 32.2%, iron at 33% and zinc at 33.9%. The aluminum, iron and zinc results for FWGASYmw-008c-1503-GF 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.

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 Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: January 2010
STL Sample Delivery Group: A0A210417

Date: March 10, 2010
Revision: 0

Data Validator: [signature]
Date: 3/10/10

2nd Level Data Reviewer: [signature]
Date: 3/12/10

SAMPLE SUMMARY

A0A210417

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LTGAD	001	FWGLL11mw-009C-1495-GF	01/20/10	10:10
LTGAM	002	FWGLL11mw-009C-1495-GW	01/20/10	10:10
LTGA9	003	FWGTeam1-Trip	01/20/10	08:00
LTGCG	004	FWGASYmw001C-1496-GW	01/20/10	12:05
LTGCX	005	FWGASYmw001C-1496-GF	01/20/10	12:05
LTGC3	006	FWGASYmwDUP1-1512-GW	01/20/10	12:25
LTGDG	007	FWGASYmwDUP1-1512-GF	01/20/10	12:25
LTGDL	008	FWGASYmw003C-1498-GW	01/20/10	14:05
LTGDP	009	FWGASYmw003C-1498-GF	01/20/10	14:05
LTGDX	010	FWGASYmw002C-1497-GW	01/20/10	15:01
LTGD0	011	FWGASYmw002C-1497-GF	01/20/10	15:01
LTGD2	012	FWGASYmw007C-1502-GW	01/20/10	16:31
LTGD4	013	FWGASYmw007C-1502-GF	01/20/10	16:31
LTGD5	014	FWGEQUIPRinse1-1513-GW	01/20/10	17:30
LTGD8	015	FWGTeam2-Trip	01/20/10	08:00
LTGEE	016	FWGLL3mw-235C-1507-GW	01/20/10	09:20
LTGEW	017	FWGLL3mw-235C-1507-GF	01/20/10	09:20
LTGGC	018	FWGASYmw-008C-1503-GW	01/20/10	10:15
LTGGL	019	FWGASYmw-008C-1503-GF	01/20/10	10:15
LTGGT	020	FWGASYmw-DUP2-1511-GW	01/20/10	11:02
LTGG4	021	FWGASYmw-DUP2-1511-GF	01/20/10	11:02
LTGG5	022	FWGASYmw-010C-1505-GW	01/20/10	12:54
LTGG7	023	FWGASYmw-010C-1505-GF	01/20/10	12:54
LTGHD	024	FWGASYmw-006C-1501-GW	01/20/10	14:00
LTGHR	025	FWGASYmw-006C-1501-GF	01/20/10	14:00
LTGH0	026	FWGASYmw-005C-1500-GW	01/20/10	15:20
LTGJF	027	FWGASYmw-005C-1500-GF	01/20/10	15:20
LTJA8	028	FWGTrip-Team 2	01/21/10	08:00
LTJCD	029	FWGASYmw-009C-1504-GW	01/21/10	09:20
LTJCL	030	FWGASYmw-009C-1504-GF	01/21/10	09:20
LTJCN	031	FWGEQUIPRinse2-1514-GW	01/21/10	10:22
LTJDA	032	FWGASYmw-004C-1499-GW	01/21/10	09:15
LTJD2	033	FWGASYmw-004C-1499-GF	01/21/10	09:15
LTJD7	034	FWGTeam1-Trip 1-21-10	01/21/10	08:30

(Continued on next page)

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Page 2 COC 375257

TAL-4142 (0907)

Client: EQM	Project Manager: John Miller	Date: 1/20/10	Chain of Custody Number: 375258
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: 030240.0002e	Carrier/Waybill Number: N/A Lab Pickup		
Contract/Purchase Order/Quote No.: PO 14436			

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	Explosives 8330	Cyanide 9012	Metals 6010	Special Instructions/ Conditions of Receipt: Cooler ID
FWGLL11MW-009C-1495-GF	1/20/10	1010		X					1											X	405
FWGLL11MW-009C-1495-GW		1010		X			9			3	1		X	X	X	X	X	X	X		405
FWGTeam1-Trip		0800		X						2			X								E21
FWGASYMW-001C-1496-GW		1205		X			9			3	1		X	X	X	X	X	X	X		E21
FWGASYMW-001C-1496-GF		↓		X					1											X	E21
FWGASYMW-DUP1-1512-GW		1225		X			9			3	1		X	X	X	X	X	X	X		PH12
FWGASYMW-DUP1-1512-GF		↓		X					1											X	PH12
FWGASYMW-003C-1498-GW		1405		X			9			3	1		X	X	X	X	X	X	X		E120
FWGASYMW-003C-1498-GF		1405		X					1											X	E120
FWGASYMW-002C-1497-GW		1501		X			9			3	1		X	X	X	X	X	X	X		M12
FWGASYMW-002C-1497-GF		1501		X					1											X	M12

ASD 1/20/10

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)

	Date	Time		Date	Time
1. Relinquished By: [signature]	1/20/10	1730	1. Received By: [signature] R Corbell	1/20/10	1730
2. Relinquished By: [signature] R Corbell	1/20/10	1830	2. Received By: [signature]	1/21/10	800
3. Relinquished By:			3. Received By:		

Comments: Metals field filtered. All VOAs in cooler E21

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

COC #1
375258

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0907)

Client: EQM	Project Manager: John Miller	Date: 1/20/10	Chain of Custody Number: 375257
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) FN: 030240.0006	Carrier/Waybill Number: N/A Lab Pickup		
Contract/Purchase Order/Quote No.: PO 14436			

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	VOA 8260	SVOA 8270	PEST 8081	PCB 8082	Propellants	Explosive 8330	Cyanide 9010	Metals 6010 7470	Special Instructions/ Conditions of Receipt
FWGASYMW-007C-1502-GW	1/20/10	1631		X			9			3	1		X	X	X	X	X	X	X		EC9
FWGASYMW-007C-1502-GF	↓	1631		X					1											X	EC9
FWGEQUIP Rinsel-1513-GW	1/20/10	1730		X			9		1	3	1		X	X	X	X	X	X	X	X	405

ASD 1/20/10

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)

	Date	Time		Date	Time
1. Relinquished By: [signature]	1/20/10	1730	1. Received By: [signature]	1/20/10	1730
2. Relinquished By: [signature]	1/20/10	1830	2. Received By: [signature]	1/21/10	800
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

All VOAs in EU metals field filtered.

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0907)

pg 2 COC# = 375225

Client: EQM	Project Manager: John Miller	Date: 1-20-10	Chain of Custody Number: 375224
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 EQPN 030240.0006 Cal			

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 6010/6020/7470	Special Instructions/ Conditions of Receipt	Cooler ID#
FWG ~~Team~~ Team 2-Trip	1-20-10	0800		X						2			X									PH4
FWGLL3mw-235C-1507-GW	↓	0920		X					1											X	NOT FILTERED	AS6
FWGLL3mw-235C-1507-GF	↓	↓		X					1											X	FILTERED	AS6
FWGASYmw-008C-1503-GW	↓	1015		X			9			3	1		X	X	X	X	X	X	X			C8
FWGASYmw-008C-1503-GF	↓	↓		X					1											X	FILTERED	C8
FWGASYmw-DUP2-1511-GW	↓	1102		X			9			3	1		X	X	X	X	X	X	X			727
FWGASYmw-DUP2-1511-GF	↓	↓		X					1											X	FILTERED	727
FWGASYmw-010C-1505-GW	↓	1254		X			9			3	1		X	X	X	X	X	X	X			AS6
FWGASYmw-010C-1505-GF	↓	↓		X					1											X	FILTERED	AS6
FWGASYmw-006C-1501-GW	↓	1400		X									X	X	X	X	X	X	X			PH4
FWGASYmw-006C-1501-GF	↓	↓		X																X	FILTERED	PH4

Cal

Cont on pg 2

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 Persow

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	1/20/10	1730	1. Received By: [signature]	1/20/10	1730
2. Relinquished By: [signature]	1/20/10	1830	2. Received By: Matthew J. Jones TEST AMERICA	21 JAN 2010	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 PH4

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

pg1 COC # = 375224

TAL-4142 (0907)

Client: EQM	Project Manager: John Miller	Date: 1-20-10	Chain of Custody Number: 375225
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	Analysis (Attach list if more space is needed)
Project Name and Location (State): RVAAP Ravenna Ohio	Carrier/Waybill Number: Lab Pickup		
Contract/Purchase Order/Quote No.: PO 15660 EQPN30240.0006			

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 6010 6020 7470	Special Instructions/ Conditions of Receipt
FWGA54mw-005C-1500-GW	1-20-10	1520		X			27			9	3		X	X	X	X	X	X	X		Cooler 10 # (MS/MSD) STL-1, HI13, TS2
FWGA54mw-005C-1500-GF	"	"		X					3											X	(MS/MSD) STL-1, HI13, TS2

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 [X] Other Per SOW

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	1/20/10	1730	1. Received By	1/20/10	1730
2. Relinquished By	1/20/10	1930	2. Received By (TEST AMERICA)	21 JAN 2010	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 pH4 cooler

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Canton

TAL-4142 (0907)

Client: EQM	Project Manager: John Miller	Date: 1-21-10	Chain of Custody Number: 375226
Address: 1800 CARILLON BLVD	Telephone Number (Area Code)/Fax Number: 513 825 7500 (fax 7495)	Lab Number: 330-	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 15660 EQPN 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	Special Instructions/ Conditions of Receipt: Cooler ID
FWG ~~Team 2~~ Cal Trip Team 2	1-21-10	0800		X						2			X								173
FWGASYmw-009C-1504-GW	↓	0920		X			9			3	1		X	X	X	X	X	X	X		173
FWGASYmw-009C-1504-GF	↓	0920		X					1											X	Filtered. 173
FWGEQUIPRinse2-1514-GW	1-21-10	1022		X			9		1	3	1		X	X	X	X	X	X	X	X	Not Filtered S-1
~~FWGEQUIPRinse2 Cal~~																					

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/Quote

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	1/21/10	1200	1. Received By: [signature]	1/21/10	1200
2. Relinquished By: [signature]	1/21/10	1340	2. Received By: [signature]	1/21/10	1340
3. Relinquished By			3. Received By		

Comments: temps may not meet requirement if sample collection close to lab pickup time. All vocs in cooler 173.

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 1/21/2010	Chain of Custody Number: 003191
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 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	Matrix: Aqueous	Matrix: Sed.	Matrix: Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Expb 8330	Propellants	Cyanide 9012	Metals 6010 6020 7470	Special Instructions/ Conditions of Receipt: Cooler IDS
FWGASYMW-004C-1499-GW	1/21/10	0915		X			27			9	3		X	X	X	X	X	X	X		MS/MSD, C10, Clebus 757
FWGASYMW-004C-1499-GF	↓	↓		X					3											X	↓
FWGTeam1-Trip	1/21/10	0830		X						2			X								C10

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)

	Date	Time		Date	Time
1. Relinquished By: [signature]	1/21/10	1200	1. Received By: [signature] R Cabell	1/21/10	1200
2. Relinquished By: [signature] R Cabell	1/21/10	1340	2. Received By: [signature]	1/21/10	1340
3. Relinquished By			3. Received By		

Comments: Metals field filtered. All VOAS in cooler C10

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Lot Number: A0A210417

Client EGM Project RVAAP By: _____ (Signature)

Cooler Received on 1-21-10 Opened on 1-21-10

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 14 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 MJL Date 1/21/10 by TB via Verbal ☐ Voice Mail ☐ Other ☐
Concerning #14

14. CHAIN OF CUSTODY

The following discrepancies occurred:
FWEQUIPRinse1-1513-GW no CN bottle rec'd - spelt for CN

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# 082509-HNO_3; Sulfuric Acid Lot# 082509-H_2SO_4; Sodium Hydroxide Lot# 100108 -NaOH; Hydrochloric Acid Lot# 092006-HCl; Sodium Hydroxide and Zinc Acetate Lot# 100108-$(CH_3COO)_2ZN/NaOH$.* What time was preservative added to sample(s)? _____

Client ID	pH	Date	Initials
		1-21-10	CSL
1495 GF	<2		
1495 GW	>12		
1496 GF	<2		
1496 GW	>12		
1512 GF	<2		
1512 GW	>12		
1498 GF	<2		
1498 GW	>12		

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials
1497 GF	<2	1-21-10	CSL
1497 GW	>12		
1502 GF	<2		
1502 GW	>12		
1513 GW	<2, 7		
1507 GW	<2	21 JAN 2010	MAF
1507 GF	<2		
1503 GW	>12		
1503 GF	<2		
1511 GW	>12		
1511 GF	<2		
1505 GW	>12		
1505 GF	<2		
1501 GW	>12		
1501 GF	<2		
1500 GW	>12 >12 >12		
1500 GF	<2 <2 <2		

Cooler #	Temp. °C	Method	Coolant
E21	3.2	IR	Ice
PH12	2.9		
F12D	4.1		
M18	4.0		
EC9	1.9		
405	2.2		
HOSA	3.0	—	
TS2	0.8		
STL 1	1.0		
H113	1.6		
PH4	2.4		
AR60	3.2		

Discrepancies Cont'd:

727	2.2		
08	0.2		

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Lot Number: A0A210417

Client EQM
Cooler Received on 1/21/10 Project RVAAP By: [signature] (Signature)
Opened on 1/21/10
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 Lead 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)? TB 1/21/10 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# 082509-HNO_3; Sulfuric Acid Lot# 082509-H_2SO_4; Sodium Hydroxide Lot# 100108 -NaOH; Hydrochloric Acid Lot# 092006-HCl; Sodium Hydroxide and Zinc Acetate Lot# 100108-$(CH_3COO)_2ZN$/NaOH.* What time was preservative added to sample(s)? _____

Client ID	pH	Date	Initials
009C-1504	<2, >12	1/21/10	TB
EQUIPRINSC	<2, >12		
004C-1499	<2, <2, <2, >12, >12, >12		

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials

Cooler #	Temp. °C	Method	Coolant
Cletus	2.2°C	IR	wet ice
5-1	2.9°C	"	"
173	3.2°C	"	"
757	2.8°C	"	"
C16	2.7°C	"	"

Discrepancies Cont'd:

CASE NARRATIVE

A0A210417

The following report contains the analytical results for thirty water samples and four quality control samples submitted to TestAmerica North Canton by Environmental Quality Mgt., Inc. from the RVAAP (OH) Site, project number 030240.0006. The samples were received January 21, 2010, 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 February 08, 2010. 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.

All parameters were evaluated to the method detection limit and include qualified results where applicable.

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 4.1°C.

See TestAmerica's Cooler Receipt Form for additional information.

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 FWGASYmw-005C-1500-GW and FWGASYmw-004C-1499-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 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 FWGASYmw-005C-1500-GW and FWGASYmw-004C-1499-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 Method Blank associated with batch(es) 0025033 had surrogate recoveries below 50%, but above 10%. The LCS associated with batch(es) 0025033 had 0% Benzoic acid recovery. All samples were reextracted and reanalyzed. Because the samples were reextracted after holding times had expired, only the Benzoic acid results were reported from them.

CASE NARRATIVE (continued)

PESTICIDES-8081

The matrix spike/matrix spike duplicate(s) for FWGASYmw-004C-1499-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.

For sample(s) FWGLL11mw-009C-1495-GW, FWGASYmw001C-1496-GW, FWGASYmwDUP1-1512-GW, FWGASYmw003C-1498-GW, FWGASYmw002C-1497-GW, FWGASYmw007C-1502-GW, FWGASYmw-008C-1503-GW, FWGASYmw-DUP2-1511-GW, FWGASYmw-010C-1505-GW, FWGASYmw-006C-1501-GW, FWGASYmw-005C-1500-GW, and FWGASYmw-009C-1504-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%.)

POLYCHLORINATED BIPHENYLS-8082

For sample(s) FWGLL11mw-009C-1495-GW, FWGASYmw001C-1496-GW, FWGASYmw003C-1498-GW, FWGASYmw002C-1497-GW, FWGASYmw007C-1502-GW, FWGASYmw-008C-1503-GW, FWGASYmw-DUP2-1511-GW, FWGASYmw-010C-1505-GW, FWGASYmw-006C-1501-GW, FWGASYmw-005C-1500-GW (MS), FWGASYmw-009C-1504-GW, and the LCS associated with batch(es) 0025032, 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).

CASE NARRATIVE (continued)

METALS (continued)

For batch(es) 0022016, the CCV exceeded method criteria on the high side for Selenium. Since the sample(s) FWGLL11mw-009C-1495-GF, FWGASYmw002C-1497-GF, FWGASYmw007C-1502-GF, FWGEQUIPRinse1-1513-GW, FWGLL3mw-235C-1507-GW, FWGLL3mw-235C-1507-GF, FWGASYmw-008C-1503-GF, FWGASYmw-DUP2-1511-GF, FWGASYmw-010C-1505-GF, FWGASYmw-006C-1501-GF, FWGASYmw-005C-1500-GF, FWGASYmw001C-1496-GF, FWGASYmwDUP1-1512-GF and FWGASYmw003C-1498-GF result(s) was/were below the requested reporting limit the result(s) was/were accepted.

GENERAL CHEMISTRY

The matrix spike/matrix spike duplicate(s) for FWGASYmw-005C-1500-GW and FWGASYmw-004C-1499-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) 0032470 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.

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

- 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

MANUAL INTEGRATION SUMMARY

Lot A0A210417

Client ID: FWGLL11mw-009C-1495
Compound Name: Methoxychlor
Instrument ID: a2hp3.i
File Name: 023F1901.D
Inj. Date and Time: 27-JAN-2010 19:48
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: FWGASYmw002C-1497-G
Compound Name: Methoxychlor
Instrument ID: a2hp3.i
File Name: 027F2301.D
Inj. Date and Time: 27-JAN-2010 21:26
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: FWGASYmw-010C-1505-
Compound Name: Methoxychlor
Instrument ID: a2hp3.i
File Name: 035F3101.D
Inj. Date and Time: 28-JAN-2010 00:42
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: FWGASYmw-008C-1503-
Compound Name: Methoxychlor
Instrument ID: a2hp3.i
File Name: 030F2601.D
Inj. Date and Time: 27-JAN-2010 22:39
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: FWGASYmw-DUP2-1511-
Compound Name: Methoxychlor
Instrument ID: a2hp3.i
File Name: 034F3001.D
Inj. Date and Time: 28-JAN-2010 00:17
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: FWGASYmw-005C-1500-
Compound Name: Methoxychlor
Instrument ID: a2hp3.i
File Name: 037F3301.D
Inj. Date and Time: 28-JAN-2010 01:30
Manual Integration Reason: Analyte Misidentified by the Data System

Client ID: FWGASYmw-006C-1501-
Compound Name: Methoxychlor
Instrument ID: a2hp3.i
File Name: 036F3201.D
Inj. Date and Time: 28-JAN-2010 01:06
Manual Integration Reason: Analyte not Identified by the Data System

MANUAL INTEGRATION SUMMARY

Lot A0A210417 (Continued)

Client ID: FWGASYmw-009C-1504-
Compound Name: Methoxychlor
Instrument ID: a2hp3.i
File Name: 040F3601.D
Inj. Date and Time: 28-JAN-2010 02:44
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: FWGEQUIPRinse2-1514
Compound Name: Methoxychlor
Instrument ID: a2hp3.i
File Name: 041F3701.D
Inj. Date and Time: 28-JAN-2010 03:08
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: FWGASYmw-004C-1499-
Compound Name: Methoxychlor
Instrument ID: a2hp3.i
File Name: 042F3801.D
Inj. Date and Time: 28-JAN-2010 03:33
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: FWGASYmwDUP1-1512-G
Compound Name: Methoxychlor
Instrument ID: a2hp3.i
File Name: 025F2101.D
Inj. Date and Time: 27-JAN-2010 20:37
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: FWGASYmw-004C-1499-
Compound Name: Methoxychlor
Instrument ID: a2hp3.i
File Name: 043F3901.D
Inj. Date and Time: 28-JAN-2010 03:57
Manual Integration Reason: Baseline Event

Client ID: FWGASYmw-004C-1499-
Compound Name: Endosulfan sulfate
Instrument ID: a2hp3.i
File Name: 043F3901.D
Inj. Date and Time: 28-JAN-2010 03:57
Manual Integration Reason: Baseline Event

Client ID: FWGASYmw-004C-1499-
Compound Name: Endrin ketone
Instrument ID: a2hp3.i
File Name: 043F3901.D
Inj. Date and Time: 28-JAN-2010 03:57
Manual Integration Reason: Baseline Event

MANUAL INTEGRATION SUMMARY

Lot A0A210417 (Continued)

Client ID: FWGASYmw-004C-1499-
Compound Name: Heptachlor epoxide
Instrument ID: a2hp3.i
File Name: 044F4001.D
Inj. Date and Time: 28-JAN-2010 04:21
Manual Integration Reason: Baseline Event

Client ID: FWGASYmw-004C-1499-
Compound Name: gamma-Chlordane
Instrument ID: a2hp3.i
File Name: 044F4001.D
Inj. Date and Time: 28-JAN-2010 04:21
Manual Integration Reason: Baseline Event

Client ID: FWGASYmw-004C-1499-
Compound Name: alpha-Chlordane
Instrument ID: a2hp3.i
File Name: 044F4001.D
Inj. Date and Time: 28-JAN-2010 04:21
Manual Integration Reason: Baseline Event

Client ID: FWGASYmw-004C-1499-
Compound Name: Endosulfan I
Instrument ID: a2hp3.i
File Name: 044F4001.D
Inj. Date and Time: 28-JAN-2010 04:21
Manual Integration Reason: Baseline Event

Client ID: FWGASYmw-004C-1499-
Compound Name: 4,4'-DDE
Instrument ID: a2hp3.i
File Name: 044F4001.D
Inj. Date and Time: 28-JAN-2010 04:21
Manual Integration Reason: Baseline Event

Client ID: FWGASYmw-005C-1500-
Compound Name: Heptachlor epoxide
Instrument ID: a2hp3.i
File Name: 038F3401.D
Inj. Date and Time: 28-JAN-2010 01:55
Manual Integration Reason: Baseline Event

Client ID: FWGASYmw-005C-1500-
Compound Name: gamma-Chlordane
Instrument ID: a2hp3.i
File Name: 038F3401.D
Inj. Date and Time: 28-JAN-2010 01:55
Manual Integration Reason: Baseline Event

MANUAL INTEGRATION SUMMARY

Client ID: FWGASYmw-005C-1500-
Compound Name: alpha-Chlordane
Instrument ID: a2hp3.i
File Name: 038F3401.D
Inj. Date and Time: 28-JAN-2010 01:55
Manual Integration Reason: Baseline Event

Client ID: FWGASYmw-005C-1500-
Compound Name: Endosulfan I
Instrument ID: a2hp3.i
File Name: 038F3401.D
Inj. Date and Time: 28-JAN-2010 01:55
Manual Integration Reason: Baseline Event

Client ID: FWGASYmw-005C-1500-
Compound Name: 4,4'-DDE
Instrument ID: a2hp3.i
File Name: 038F3401.D
Inj. Date and Time: 28-JAN-2010 01:55
Manual Integration Reason: Baseline Event

Client ID: FWGASYmw-005C-1500-
Compound Name: Dieldrin
Instrument ID: a2hp3.i
File Name: 038F3401.D
Inj. Date and Time: 28-JAN-2010 01:55
Manual Integration Reason: Baseline Event

Client ID: FWGASYmw-005C-1500-
Compound Name: Endrin
Instrument ID: a2hp3.i
File Name: 038F3401.D
Inj. Date and Time: 28-JAN-2010 01:55
Manual Integration Reason: Baseline Event

Client ID: FWGASYmw-005C-1500-
Compound Name: 4,4'-DDD
Instrument ID: a2hp3.i
File Name: 038F3401.D
Inj. Date and Time: 28-JAN-2010 01:55
Manual Integration Reason: Baseline Event

Client ID: FWGASYmw-005C-1500-
Compound Name: Endosulfan II
Instrument ID: a2hp3.i
File Name: 038F3401.D
Inj. Date and Time: 28-JAN-2010 01:55
Manual Integration Reason: Baseline Event

MANUAL INTEGRATION SUMMARY

Lot A0A210417 (Continued)

Client ID: FWGASYmw-005C-1500-
Compound Name: 4,4'-DDT
Instrument ID: a2hp3.i
File Name: 038F3401.D
Inj. Date and Time: 28-JAN-2010 01:55
Manual Integration Reason: Baseline Event

Client ID: FWGASYmw-005C-1500-
Compound Name: Heptachlor epoxide
Instrument ID: a2hp3.i
File Name: 039F3501.D
Inj. Date and Time: 28-JAN-2010 02:19
Manual Integration Reason: Baseline Event

Client ID: FWGASYmw-005C-1500-
Compound Name: gamma-Chlordane
Instrument ID: a2hp3.i
File Name: 039F3501.D
Inj. Date and Time: 28-JAN-2010 02:19
Manual Integration Reason: Baseline Event

Client ID: FWGASYmw-005C-1500-
Compound Name: alpha-Chlordane
Instrument ID: a2hp3.i
File Name: 039F3501.D
Inj. Date and Time: 28-JAN-2010 02:19
Manual Integration Reason: Baseline Event

Client ID: FWGASYmw-005C-1500-
Compound Name: Endosulfan I
Instrument ID: a2hp3.i
File Name: 039F3501.D
Inj. Date and Time: 28-JAN-2010 02:19
Manual Integration Reason: Baseline Event

Client ID: FWGASYmw-005C-1500-
Compound Name: 4,4'-DDE
Instrument ID: a2hp3.i
File Name: 039F3501.D
Inj. Date and Time: 28-JAN-2010 02:19
Manual Integration Reason: Baseline Event

Client ID: FWGASYmw-005C-1500-
Compound Name: Dieldrin
Instrument ID: a2hp3.i
File Name: 039F3501.D
Inj. Date and Time: 28-JAN-2010 02:19
Manual Integration Reason: Baseline Event

MANUAL INTEGRATION SUMMARY

Lot A0A210417 (Continued)

Client ID: FWGASYmw-005C-1500-
Compound Name: Endrin
Instrument ID: a2hp3.i
File Name: 039F3501.D
Inj. Date and Time: 28-JAN-2010 02:19
Manual Integration Reason: Baseline Event

Client ID: FWGASYmw-005C-1500-
Compound Name: 4,4'-DDD
Instrument ID: a2hp3.i
File Name: 039F3501.D
Inj. Date and Time: 28-JAN-2010 02:19
Manual Integration Reason: Baseline Event

Client ID: FWGASYmw-005C-1500-
Compound Name: Endosulfan II
Instrument ID: a2hp3.i
File Name: 039F3501.D
Inj. Date and Time: 28-JAN-2010 02:19
Manual Integration Reason: Baseline Event

Client ID: FWGASYmw-005C-1500-
Compound Name: 4,4'-DDT
Instrument ID: a2hp3.i
File Name: 039F3501.D
Inj. Date and Time: 28-JAN-2010 02:19
Manual Integration Reason: Baseline Event

Client ID: FWGASYmw-005C-1500-
Compound Name: Endrin aldehyde
Instrument ID: a2hp3.i
File Name: 039F3501.D
Inj. Date and Time: 28-JAN-2010 02:19
Manual Integration Reason: Baseline Event

Client ID: FWGASYmw-005C-1500-
Compound Name: Methoxychlor
Instrument ID: a2hp3.i
File Name: 039F3501.D
Inj. Date and Time: 28-JAN-2010 02:19
Manual Integration Reason: Baseline Event

Client ID: FWGASYmw-005C-1500-
Compound Name: Endosulfan sulfate
Instrument ID: a2hp3.i
File Name: 039F3501.D
Inj. Date and Time: 28-JAN-2010 02:19
Manual Integration Reason: Baseline Event

MANUAL INTEGRATION SUMMARY

Lot A0A210417 (Continued)

Client ID: FWGASYmw-005C-1500-
Compound Name: Endrin ketone
Instrument ID: a2hp3.i
File Name: 039F3501.D
Inj. Date and Time: 28-JAN-2010 02:19
Manual Integration Reason: Baseline Event

Client ID: FWGASYmw-005C-1500-
Compound Name: AROCLOR-1260
Instrument ID: a2hp13.i
File Name: 041F4101.D
Inj. Date and Time: 28-JAN-2010 17:27
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: FWGASYmw-005C-1500-
Compound Name: AROCLOR-1260
Instrument ID: a2hp13.i
File Name: 021F2101.D
Inj. Date and Time: 29-JAN-2010 13:19
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: FWGASYmw-005C-1500-
Compound Name: AROCLOR-1016
Instrument ID: a2hp13.i
File Name: 022F2201.D
Inj. Date and Time: 29-JAN-2010 13:35
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: INTRA-LAB BLANK
Compound Name: Heptachlor
Instrument ID: a2hp3.i
File Name: 031F2701.D
Inj. Date and Time: 27-JAN-2010 23:04
Manual Integration Reason: Baseline Event

Client ID: INTRA-LAB BLANK
Compound Name: Methoxychlor
Instrument ID: a2hp3.i
File Name: 031F2701.D
Inj. Date and Time: 27-JAN-2010 23:04
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: INTRA-LAB CHECK
Compound Name: Heptachlor epoxide
Instrument ID: a2hp3.i
File Name: 045F4101.D
Inj. Date and Time: 28-JAN-2010 04:46
Manual Integration Reason: Baseline Event

MANUAL INTEGRATION SUMMARY

Lot A0A210417 (Continued)

Client ID: INTRA-LAB CHECK
Compound Name: gamma-Chlordane
Instrument ID: a2hp3.i
File Name: 045F4101.D
Inj. Date and Time: 28-JAN-2010 04:46
Manual Integration Reason: Baseline Event

Client ID: INTRA-LAB CHECK
Compound Name: alpha-Chlordane
Instrument ID: a2hp3.i
File Name: 045F4101.D
Inj. Date and Time: 28-JAN-2010 04:46
Manual Integration Reason: Baseline Event

Client ID: INTRA-LAB CHECK
Compound Name: Endosulfan I
Instrument ID: a2hp3.i
File Name: 045F4101.D
Inj. Date and Time: 28-JAN-2010 04:46
Manual Integration Reason: Baseline Event

Client ID: INTRA-LAB CHECK
Compound Name: 4,4'-DDE
Instrument ID: a2hp3.i
File Name: 045F4101.D
Inj. Date and Time: 28-JAN-2010 04:46
Manual Integration Reason: Baseline Event

Client ID: INTRA-LAB CHECK
Compound Name: Dieldrin
Instrument ID: a2hp3.i
File Name: 045F4101.D
Inj. Date and Time: 28-JAN-2010 04:46
Manual Integration Reason: Baseline Event

Client ID: INTRA-LAB CHECK
Compound Name: Endrin
Instrument ID: a2hp3.i
File Name: 045F4101.D
Inj. Date and Time: 28-JAN-2010 04:46
Manual Integration Reason: Baseline Event

Client ID: INTRA-LAB CHECK
Compound Name: 4,4'-DDD
Instrument ID: a2hp3.i
File Name: 045F4101.D
Inj. Date and Time: 28-JAN-2010 04:46
Manual Integration Reason: Baseline Event

MANUAL INTEGRATION SUMMARY

Lot A0A210417 (Continued)

Client ID: INTRA-LAB CHECK
Compound Name: Endosulfan II
Instrument ID: a2hp3.i
File Name: 045F4101.D
Inj. Date and Time: 28-JAN-2010 04:46
Manual Integration Reason: Baseline Event

Client ID: INTRA-LAB CHECK
Compound Name: 4,4'-DDT
Instrument ID: a2hp3.i
File Name: 045F4101.D
Inj. Date and Time: 28-JAN-2010 04:46
Manual Integration Reason: Baseline Event

Client ID: INTRA-LAB CHECK
Compound Name: Endrin aldehyde
Instrument ID: a2hp3.i
File Name: 045F4101.D
Inj. Date and Time: 28-JAN-2010 04:46
Manual Integration Reason: Baseline Event

Client ID: INTRA-LAB CHECK
Compound Name: Methoxychlor
Instrument ID: a2hp3.i
File Name: 045F4101.D
Inj. Date and Time: 28-JAN-2010 04:46
Manual Integration Reason: Baseline Event

Client ID: INTRA-LAB CHECK
Compound Name: Endosulfan sulfate
Instrument ID: a2hp3.i
File Name: 045F4101.D
Inj. Date and Time: 28-JAN-2010 04:46
Manual Integration Reason: Baseline Event

Client ID: INTRA-LAB CHECK
Compound Name: Endrin ketone
Instrument ID: a2hp3.i
File Name: 045F4101.D
Inj. Date and Time: 28-JAN-2010 04:46
Manual Integration Reason: Baseline Event

Client ID: FWGASYmwDUP1-1512-G
Compound Name: Heptachlor
Instrument ID: a2hp3.i
File Name: 025F2101.D
Inj. Date and Time: 27-JAN-2010 20:37
Manual Integration Reason: Baseline Event

MANUAL INTEGRATION SUMMARY

Lot A0A210417 (Continued)

Client ID: INTRA-LAB BLANK
Compound Name: TCMX
Instrument ID: a2hp13.i
File Name: 011F1101.D
Inj. Date and Time: 29-JAN-2010 10:47
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: INTRA-LAB CHECK
Compound Name: AROCLOR-1260
Instrument ID: a2hp13.i
File Name: 049F4901.D
Inj. Date and Time: 28-JAN-2010 19:29
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: INTRA-LAB CHECK
Compound Name: TCMX
Instrument ID: a2hp13.i
File Name: 012F1201.D
Inj. Date and Time: 29-JAN-2010 11:02
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: INTRA-LAB CHECK
Compound Name: AROCLOR-1016
Instrument ID: a2hp13.i
File Name: 012F1201.D
Inj. Date and Time: 29-JAN-2010 11:02
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: INTRA-LAB CHECK
Compound Name: AROCLOR-1260
Instrument ID: a2hp13.i
File Name: 012F1201.D
Inj. Date and Time: 29-JAN-2010 11:02
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: INTRA-LAB CHECK
Compound Name: bis(2-Chloroethyl)ether
Instrument ID: a4hp9.i
File Name: LTN1N1AC.D
Inj. Date and Time: 28-JAN-2010 12:45
Manual Integration Reason: Poor Chromatography

Client ID: FWGASYmw001C-1496-G
Compound Name: Methoxychlor
Instrument ID: a2hp3.i
File Name: 024F2001.D
Inj. Date and Time: 27-JAN-2010 20:12
Manual Integration Reason: Analyte not Identified by the Data System

MANUAL INTEGRATION SUMMARY

Lot A0A210417 (Continued)

Client ID: FWGASYmw007C-1502-G
Compound Name: Methoxychlor
Instrument ID: a2hp3.i
File Name: 028F2401.D
Inj. Date and Time: 27-JAN-2010 21:50
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: FWGEQUIPRinse1-1513
Compound Name: Methoxychlor
Instrument ID: a2hp3.i
File Name: 029F2501.D
Inj. Date and Time: 27-JAN-2010 22:15
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: FWGEQUIPRinse1-1513
Compound Name: Heptachlor
Instrument ID: a2hp3.i
File Name: 029F2501.D
Inj. Date and Time: 27-JAN-2010 22:15
Manual Integration Reason: Baseline Event

Client ID: FWGASYmw003C-1498-G
Compound Name: Methoxychlor
Instrument ID: a2hp3.i
File Name: 026F2201.D
Inj. Date and Time: 27-JAN-2010 21:01
Manual Integration Reason: Analyte not Identified by the Data System

GCMS VOLATILE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: Jan 2010
Data Reviewer/Date: Angye Dragotta/March 8, 2010

SDG: A0A210417 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 – 4.1 °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 – 12/31/09 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, bromoform and 1,4-dichloro-2-butene 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?	✓			8/10/09 @1333	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: Jan 2010
Data Reviewer/Date: Angye Dragotta/March 8, 2010

SDG: A0A210417 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 10/21/09 at 1432 had acetone recover above control limits at 148%. The closing MRL check analyzed 10/21/09 at 2203 had acetone recover below control limits at 54.8%. The acetone results were qualified as estimated, "J/UJ".	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%?	✓			12/31/09 @ 1245	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?	✓			FWGEQUIPRinse2-1514-GW and FWGEQUIPRinse1-1513-GW	

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: Jan 2010
Data Reviewer/Date: Angye Dragotta/March 8, 2010

SDG: A0A210417 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
28. Were target analytes detected in the field blank analyses >1/2 the MRL?	✓			• FWGEQUIPRinse1-1513-GW had 2-butanone detected at 3.8ug/L, acetone at 15ug/L and toluene at 0.20ug/L. • FWGEQUIPRinse2-1514-GW had acetone detected at 4.9ug/L. • The trip blanks collected 1/20-1/21/10 had acetone contamination detected from 2.4- 3.8ug/L. The acetone results for samples FWGASYmw-004c-1499-GW and FWGEQUIPRINSE2-1514-GW were qualified, "B" as the results were <10x the equipment rinse and trip blank contamination. As there were no detected concentrations of the other blank contaminants, no additional qualifications were made.	<5/10X =B
29. Was a field duplicate analyzed?	✓			Sample FWGLL7mw-DUP1-1473-GW was the field duplicate for sample FWGLL7mw-006c-1435-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;	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?	✓			Samples FWGASYmw-004c-1499-GW and FWGASYmw-005c-1500-GW were the parent MS/MSD samples from this SDG.	
35. Were MS/MSD recoveries 70-130% and RPD values ≤20%?		✓		ADR checked section. For sample FWGASYmw-004c-1499-GW, the MSD recovered below control limits for acetone at 65% and for chloroethane at 68%. For sample FWGASYmw-005c-1500-GW, the MS recovered below control limits for bromomethane at 69% and for chloroethane at 67%. The MSD analyzed on sample FWGASYmw-005c-1500-GW, recovered below control limits for 2-hexanone at 69% and for acetone at 68%. No qualification was made 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

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: Jan 2010
Data Reviewer/Date: Angye Dragotta/March 8, 2010

SDG: A0A210417 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.	✓			MS/MSD outliers.	

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: FWGLL11mw-009C-1495-GW

GC/MS Volatiles

Lot-Sample #...: A0A210417-002 **Work Order #...:** LTGAM1AA **Matrix.....:** WG
Date Sampled...: 01/20/10 10:10 **Date Received..:** 01/21/10
Prep Date.....: 01/28/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0033168
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-1495-GW

GC/MS Volatiles

Lot-Sample #...: A0A210417-002 **Work Order #...:** LTGAM1AA **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	90	(50 - 150)
1,2-Dichloroethane-d4	86	(50 - 150)
Toluene-d8	91	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTeam1-Trip

GC/MS Volatiles

Lot-Sample #...: A0A210417-003 **Work Order #...:** LTGA91AA **Matrix.....:** WQ
Date Sampled...: 01/20/10 08:00 **Date Received..:** 01/21/10
Prep Date.....: 01/28/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0033168
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 #...: A0A210417-003 **Work Order #...:** LTGA91AA **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	90	(50 - 150)
1,2-Dichloroethane-d4	86	(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: FWGASYmw001C-1496-GW

GC/MS Volatiles

Lot-Sample #...: A0A210417-004 **Work Order #...:** LTGCG1AA **Matrix.....:** WG
Date Sampled...: 01/20/10 12:05 **Date Received..:** 01/21/10
Prep Date.....: 01/28/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0033168
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: FWGASYmw001C-1496-GW

GC/MS Volatiles

Lot-Sample #...: A0A210417-004 **Work Order #...:** LTGCG1AA **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	87	(50 - 150)
Toluene-d8	88	(50 - 150)
4-Bromofluorobenzene	86	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmwDUP1-1512-GW

GC/MS Volatiles

Lot-Sample #...: A0A210417-006 **Work Order #...:** LTGC31AA **Matrix.....:** WG
Date Sampled...: 01/20/10 12:25 **Date Received..:** 01/21/10
Prep Date.....: 01/28/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0033168
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: FWGASYmwDUP1-1512-GW

GC/MS Volatiles

Lot-Sample #...: A0A210417-006 **Work Order #...:** LTGC31AA **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	90	(50 - 150)
Toluene-d8	89	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw003C-1498-GW

GC/MS Volatiles

Lot-Sample #...: A0A210417-008 **Work Order #...:** LTGDL1AA **Matrix.....:** WG
Date Sampled...: 01/20/10 14:05 **Date Received..:** 01/21/10
Prep Date.....: 01/28/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0033168
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: FWGASYmw003C-1498-GW

GC/MS Volatiles

Lot-Sample #...: A0A210417-008 **Work Order #...:** LTGDL1AA **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	88	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw002C-1497-GW

GC/MS Volatiles

Lot-Sample #...: A0A210417-010 **Work Order #...:** LTGDX1AA **Matrix.....:** WG
Date Sampled...: 01/20/10 15:01 **Date Received..:** 01/21/10
Prep Date.....: 01/28/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0033168
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: FWGASYmw002C-1497-GW

GC/MS Volatiles

Lot-Sample #...: A0A210417-010 **Work Order #...:** LTGDX1AA **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	89	(50 - 150)
Toluene-d8	88	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw007C-1502-GW

GC/MS Volatiles

Lot-Sample #...: A0A210417-012 **Work Order #...:** LTGD21AA **Matrix.....:** WG
Date Sampled...: 01/20/10 16:31 **Date Received..:** 01/21/10
Prep Date.....: 01/28/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0033168
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: FWGASYmw007C-1502-GW

GC/MS Volatiles

Lot-Sample #...: A0A210417-012 **Work Order #...:** LTGD21AA **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	90	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRinse1-1513-GW

GC/MS Volatiles

Lot-Sample #...: A0A210417-014 **Work Order #...:** LTGD51AA **Matrix.....:** WQ
Date Sampled...: 01/20/10 17:30 **Date Received..:** 01/21/10
Prep Date.....: 01/28/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0033168
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	**15**	**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	**3.8 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	**0.20 J**	**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: FWGEQUIPRinse1-1513-GW

GC/MS Volatiles

Lot-Sample #...: A0A210417-014 **Work Order #...:** LTGD51AA **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	88	(50 - 150)
Toluene-d8	89	(50 - 150)
4-Bromofluorobenzene	87	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTeam2-Trip

GC/MS Volatiles

Lot-Sample #...: A0A210417-015 **Work Order #...:** LTGD81AA **Matrix.....:** WQ
Date Sampled...: 01/20/10 08:00 **Date Received..:** 01/21/10
Prep Date.....: 01/28/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0033168
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	**3.4 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: FWGTeam2-Trip

GC/MS Volatiles

Lot-Sample #...: A0A210417-015 **Work Order #...:** LTGD81AA **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	89	(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-1503-GW

GC/MS Volatiles

Lot-Sample #...: A0A210417-018 **Work Order #...:** LTGGC1AA **Matrix.....:** WG
Date Sampled...: 01/20/10 10:15 **Date Received..:** 01/21/10
Prep Date.....: 01/28/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0033168
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-1503-GW

GC/MS Volatiles

Lot-Sample #...: A0A210417-018 **Work Order #...:** LTGGC1AA **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	89	(50 - 150)
Toluene-d8	88	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-DUP2-1511-GW

GC/MS Volatiles

Lot-Sample #...: A0A210417-020 **Work Order #...:** LTGGT1AA **Matrix.....:** WG
Date Sampled...: 01/20/10 11:02 **Date Received..:** 01/21/10
Prep Date.....: 01/28/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0033168
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-DUP2-1511-GW

GC/MS Volatiles

Lot-Sample #...: A0A210417-020 Work Order #...: LTGGT1AA 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	93	(50 - 150)
Toluene-d8	89	(50 - 150)
4-Bromofluorobenzene	87	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-010C-1505-GW

GC/MS Volatiles

Lot-Sample #...: A0A210417-022 **Work Order #...:** LTGG51AA **Matrix.....:** WG
Date Sampled...: 01/20/10 12:54 **Date Received..:** 01/21/10
Prep Date.....: 01/28/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0033168
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-1505-GW

GC/MS Volatiles

Lot-Sample #...: A0A210417-022 **Work Order #...:** LTGG51AA **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	90	(50 - 150)
Toluene-d8	89	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-006C-1501-GW

GC/MS Volatiles

Lot-Sample #...: A0A210417-024 **Work Order #...:** LTGHD1AA **Matrix.....:** WG
Date Sampled...: 01/20/10 14:00 **Date Received..:** 01/21/10
Prep Date.....: 01/28/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0033168
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-1501-GW

GC/MS Volatiles

Lot-Sample #...: A0A210417-024 **Work Order #...:** LTGHD1AA **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	91	(50 - 150)
Toluene-d8	89	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-005C-1500-GW

GC/MS Volatiles

Lot-Sample #...: A0A210417-026 **Work Order #...:** LTGH01AA **Matrix.....:** WG
Date Sampled...: 01/20/10 15:20 **Date Received..:** 01/21/10
Prep Date.....: 01/28/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0033168
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-1500-GW

GC/MS Volatiles

Lot-Sample #...: A0A210417-026 **Work Order #...:** LTGH01AA **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	86	(50 - 150)
Toluene-d8	88	(50 - 150)
4-Bromofluorobenzene	87	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTrip-Team 2

GC/MS Volatiles

Lot-Sample #...: A0A210417-028 **Work Order #...:** LTJA81AA **Matrix.....:** WQ
Date Sampled...: 01/21/10 08:00 **Date Received..:** 01/21/10
Prep Date.....: 01/28/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0033168
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	**3.8 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: FWGTrip-Team 2

GC/MS Volatiles

Lot-Sample #...: A0A210417-028 **Work Order #...:** LTJA81AA **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	88	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-009C-1504-GW

GC/MS Volatiles

Lot-Sample #...: A0A210417-029 **Work Order #...:** LTJCD1AA **Matrix.....:** WG
Date Sampled...: 01/21/10 09:20 **Date Received..:** 01/21/10
Prep Date.....: 01/28/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0033168
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-1504-GW

GC/MS Volatiles

Lot-Sample #...: A0A210417-029 **Work Order #...:** LTJCD1AA **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	87	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRinse2-1514-GW

GC/MS Volatiles

Lot-Sample #...: A0A210417-031 **Work Order #...:** LTJCN1AA **Matrix.....:** WQ
Date Sampled...: 01/21/10 10:22 **Date Received..:** 01/21/10
Prep Date.....: 01/28/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0033168
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	**4.9 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: FWGEQUIPRinse2-1514-GW

GC/MS Volatiles

Lot-Sample #...: A0A210417-031 **Work Order #...:** LTJCN1AA **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	97	(50 - 150)
1,2-Dichloroethane-d4	91	(50 - 150)
Toluene-d8	89	(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-004C-1499-GW

GC/MS Volatiles

Lot-Sample #...: A0A210417-032 **Work Order #...:** LTJDA1AA **Matrix.....:** WG
Date Sampled...: 01/21/10 09:15 **Date Received..:** 01/21/10
Prep Date.....: 01/28/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0033168
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: FWGASYmw-004C-1499-GW

GC/MS Volatiles

Lot-Sample #...: A0A210417-032 **Work Order #...:** LTJDA1AA **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	89	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTeam1-Trip 1-21-10

GC/MS Volatiles

Lot-Sample #...: A0A210417-034 **Work Order #...:** LTJD71AA **Matrix.....:** WQ
Date Sampled...: 01/21/10 08:30 **Date Received..:** 01/21/10
Prep Date.....: 01/28/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0033168
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	**3.4 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 1-21-10

GC/MS Volatiles

Lot-Sample #...: A0A210417-034 **Work Order #...:** LTJD71AA **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	95	(50 - 150)
Toluene-d8	88	(50 - 150)
4-Bromofluorobenzene	86	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A0A210417 **Work Order #...:** LT3NM1AA **Matrix.....:** WATER
MB Lot-Sample #: A0B020000-168

Prep Date.....: 01/28/10 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 01/28/10 **Prep Batch #...:** 0033168
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 #...: A0A210417 **Work Order #...:** LT3NM1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	92	(50 - 150)
1,2-Dichloroethane-d4	88	(50 - 150)
Toluene-d8	89	(50 - 150)
4-Bromofluorobenzene	89	(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 #...: A0A210417 Work Order #...: LT3NM1AC Matrix.....: WATER
LCS Lot-Sample#: A0B020000-168
Prep Date.....: 01/28/10 Analysis Date..: 01/28/10
Prep Batch #...: 0033168
Dilution Factor: 1 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
cis-1,2-Dichloroethene	103	(73 - 133)	SW846 8260B
trans-1,2-Dichloroethene	108	(75 - 134)	SW846 8260B
1,2-Dibromoethane	97	(75 - 127)	SW846 8260B
Bromochloromethane	105	(75 - 127)	SW846 8260B
m-Xylene & p-Xylene	104	(75 - 122)	SW846 8260B
o-Xylene	106	(75 - 118)	SW846 8260B
Chloromethane	91	(58 - 135)	SW846 8260B
Bromomethane	87	(35 - 153)	SW846 8260B
Vinyl chloride	88	(73 - 134)	SW846 8260B
Chloroethane	74	(72 - 129)	SW846 8260B
Methylene chloride	103	(69 - 118)	SW846 8260B
Acetone	82	(51 - 157)	SW846 8260B
Carbon disulfide	107	(74 - 123)	SW846 8260B
1,1-Dichloroethene	111	(75 - 125)	SW846 8260B
1,1-Dichloroethane	102	(75 - 133)	SW846 8260B
1,2-Dichloroethene (total)	105	(85 - 111)	SW846 8260B
Chloroform	99	(74 - 127)	SW846 8260B
1,2-Dichloroethane	95	(67 - 132)	SW846 8260B
2-Butanone	89	(45 - 150)	SW846 8260B
1,1,1-Trichloroethane	102	(70 - 127)	SW846 8260B
Carbon tetrachloride	105	(71 - 132)	SW846 8260B
Bromodichloromethane	96	(70 - 130)	SW846 8260B
1,2-Dichloropropane	95	(75 - 127)	SW846 8260B
cis-1,3-Dichloropropene	98	(73 - 132)	SW846 8260B
Trichloroethene	98	(67 - 128)	SW846 8260B
Dibromochloromethane	103	(74 - 145)	SW846 8260B
1,1,2-Trichloroethane	95	(75 - 136)	SW846 8260B
Benzene	101	(75 - 126)	SW846 8260B
trans-1,3-Dichloropropene	101	(74 - 131)	SW846 8260B
Bromoform	108	(72 - 136)	SW846 8260B
4-Methyl-2-pentanone	84	(59 - 150)	SW846 8260B
2-Hexanone	91	(53 - 139)	SW846 8260B

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0A210417 **Work Order #...:** LT3NM1AC **Matrix.....:** WATER
LCS Lot-Sample#: A0B020000-168

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Tetrachloroethene	**104**	**(75 - 129)**	**SW846 8260B**
1,1,2,2-Tetrachloroethane	**93**	**(68 - 129)**	**SW846 8260B**
Toluene	**101**	**(75 - 125)**	**SW846 8260B**
Chlorobenzene	**101**	**(75 - 127)**	**SW846 8260B**
Ethylbenzene	**102**	**(75 - 120)**	**SW846 8260B**
Styrene	**102**	**(75 - 130)**	**SW846 8260B**
Xylenes (total)	**105**	**(90 - 114)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	92	(50 - 150)
1,2-Dichloroethane-d4	84	(50 - 150)
Toluene-d8	95	(50 - 150)
4-Bromofluorobenzene	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

GC/MS Volatiles

Client Lot #...: A0A210417 Work Order #...: LTGH01AC-MS Matrix.....: WG
MS Lot-Sample #: A0A210417-026 LTGH01AD-MSD
Date Sampled...: 01/20/10 15:20 Date Received..: 01/21/10
Prep Date.....: 01/28/10 Analysis Date..: 01/28/10
Prep Batch #...: 0033168
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	97	(70 - 130)			SW846 8260B
	100	(70 - 130)	3.2	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	100	(70 - 130)			SW846 8260B
	104	(70 - 130)	3.5	(0-30)	SW846 8260B
1,2-Dibromoethane	90	(70 - 130)			SW846 8260B
	93	(70 - 130)	2.4	(0-30)	SW846 8260B
Bromochloromethane	96	(70 - 130)			SW846 8260B
	96	(70 - 130)	0.01	(0-30)	SW846 8260B
m-Xylene & p-Xylene	99	(70 - 130)			SW846 8260B
	100	(70 - 130)	0.82	(0-30)	SW846 8260B
o-Xylene	99	(70 - 130)			SW846 8260B
	102	(70 - 130)	2.9	(0-30)	SW846 8260B
Chloromethane	88	(70 - 130)			SW846 8260B
	91	(70 - 130)	2.9	(0-30)	SW846 8260B
Bromomethane	69 a	(70 - 130)			SW846 8260B
	86	(70 - 130)	22	(0-30)	SW846 8260B
Vinyl chloride	87	(70 - 130)			SW846 8260B
	88	(70 - 130)	0.17	(0-30)	SW846 8260B
Chloroethane	67 a	(70 - 130)			SW846 8260B
	75	(70 - 130)	11	(0-30)	SW846 8260B
Methylene chloride	93	(70 - 130)			SW846 8260B
	98	(70 - 130)	5.1	(0-30)	SW846 8260B
Acetone	72	(70 - 130)			SW846 8260B
	68 a	(70 - 130)	6.4	(0-30)	SW846 8260B
Carbon disulfide	103	(70 - 130)			SW846 8260B
	108	(70 - 130)	5.5	(0-30)	SW846 8260B
1,1-Dichloroethene	108	(70 - 130)			SW846 8260B
	114	(70 - 130)	5.4	(0-30)	SW846 8260B
1,1-Dichloroethane	95	(70 - 130)			SW846 8260B
	99	(70 - 130)	3.9	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	99	(70 - 130)			SW846 8260B
	102	(70 - 130)	3.3	(0-30)	SW846 8260B
Chloroform	93	(70 - 130)			SW846 8260B
	97	(70 - 130)	3.6	(0-30)	SW846 8260B
1,2-Dichloroethane	91	(70 - 130)			SW846 8260B
	91	(70 - 130)	0.46	(0-30)	SW846 8260B
2-Butanone	81	(70 - 130)			SW846 8260B
	76	(70 - 130)	6.9	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0A210417 Work Order #...: LTGH01AC-MS Matrix.....: WG
MS Lot-Sample #: A0A210417-026 LTGH01AD-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1,1-Trichloroethane	97	(70 - 130)			SW846 8260B
	102	(70 - 130)	5.0	(0-30)	SW846 8260B
Carbon tetrachloride	102	(70 - 130)			SW846 8260B
	108	(70 - 130)	6.2	(0-30)	SW846 8260B
Bromodichloromethane	92	(70 - 130)			SW846 8260B
	97	(70 - 130)	4.6	(0-30)	SW846 8260B
1,2-Dichloropropane	91	(70 - 130)			SW846 8260B
	93	(70 - 130)	2.4	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	88	(70 - 130)			SW846 8260B
	90	(70 - 130)	1.6	(0-30)	SW846 8260B
Trichloroethene	96	(70 - 130)			SW846 8260B
	100	(70 - 130)	4.4	(0-30)	SW846 8260B
Dibromochloromethane	93	(70 - 130)			SW846 8260B
	94	(70 - 130)	1.1	(0-30)	SW846 8260B
1,1,2-Trichloroethane	91	(70 - 130)			SW846 8260B
	93	(70 - 130)	2.1	(0-30)	SW846 8260B
Benzene	96	(70 - 130)			SW846 8260B
	99	(70 - 130)	3.3	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	93	(70 - 130)			SW846 8260B
	96	(70 - 130)	2.7	(0-30)	SW846 8260B
Bromoform	96	(70 - 130)			SW846 8260B
	95	(70 - 130)	0.73	(0-30)	SW846 8260B
4-Methyl-2-pentanone	74	(70 - 130)			SW846 8260B
	72	(70 - 130)	3.3	(0-30)	SW846 8260B
2-Hexanone	76	(70 - 130)			SW846 8260B
	69 a	(70 - 130)	9.2	(0-30)	SW846 8260B
Tetrachloroethene	101	(70 - 130)			SW846 8260B
	105	(70 - 130)	4.0	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	89	(70 - 130)			SW846 8260B
	92	(70 - 130)	4.0	(0-30)	SW846 8260B
Toluene	96	(70 - 130)			SW846 8260B
	101	(70 - 130)	5.0	(0-30)	SW846 8260B
Chlorobenzene	94	(70 - 130)			SW846 8260B
	97	(70 - 130)	2.6	(0-30)	SW846 8260B
Ethylbenzene	98	(70 - 130)			SW846 8260B
	99	(70 - 130)	1.0	(0-30)	SW846 8260B
Styrene	93	(70 - 130)			SW846 8260B
	95	(70 - 130)	1.9	(0-30)	SW846 8260B
Xylenes (total)	99	(70 - 130)			SW846 8260B
	101	(70 - 130)	1.5	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0A210417 **Work Order #...:** LTGH01AC-MS **Matrix.....:** WG
MS Lot-Sample #: A0A210417-026 LTGH01AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	92	(50 - 150)
	92	(50 - 150)
1,2-Dichloroethane-d4	84	(50 - 150)
	86	(50 - 150)
Toluene-d8	93	(50 - 150)
	96	(50 - 150)
4-Bromofluorobenzene	95	(50 - 150)
	93	(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 #...: A0A210417 Work Order #...: LTJDA1AC-MS Matrix.....: WG
MS Lot-Sample #: A0A210417-032 LTJDA1AD-MSD
Date Sampled...: 01/21/10 09:15 Date Received..: 01/21/10
Prep Date.....: 01/28/10 Analysis Date..: 01/28/10
Prep Batch #...: 0033168
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	98	(70 - 130)			SW846 8260B
	98	(70 - 130)	0.33	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	103	(70 - 130)			SW846 8260B
	100	(70 - 130)	3.5	(0-30)	SW846 8260B
1,2-Dibromoethane	94	(70 - 130)			SW846 8260B
	92	(70 - 130)	1.5	(0-30)	SW846 8260B
Bromochloromethane	98	(70 - 130)			SW846 8260B
	98	(70 - 130)	0.27	(0-30)	SW846 8260B
m-Xylene & p-Xylene	97	(70 - 130)			SW846 8260B
	99	(70 - 130)	1.9	(0-30)	SW846 8260B
o-Xylene	98	(70 - 130)			SW846 8260B
	100	(70 - 130)	1.7	(0-30)	SW846 8260B
Chloromethane	95	(70 - 130)			SW846 8260B
	94	(70 - 130)	0.62	(0-30)	SW846 8260B
Bromomethane	81	(70 - 130)			SW846 8260B
	73	(70 - 130)	10	(0-30)	SW846 8260B
Vinyl chloride	89	(70 - 130)			SW846 8260B
	91	(70 - 130)	3.1	(0-30)	SW846 8260B
Chloroethane	73	(70 - 130)			SW846 8260B
	68 a	(70 - 130)	6.9	(0-30)	SW846 8260B
Methylene chloride	98	(70 - 130)			SW846 8260B
	98	(70 - 130)	0.75	(0-30)	SW846 8260B
Acetone	74	(70 - 130)			SW846 8260B
	65 a	(70 - 130)	11	(0-30)	SW846 8260B
Carbon disulfide	104	(70 - 130)			SW846 8260B
	103	(70 - 130)	1.6	(0-30)	SW846 8260B
1,1-Dichloroethene	112	(70 - 130)			SW846 8260B
	107	(70 - 130)	4.6	(0-30)	SW846 8260B
1,1-Dichloroethane	100	(70 - 130)			SW846 8260B
	99	(70 - 130)	0.95	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	101	(70 - 130)			SW846 8260B
	99	(70 - 130)	2.0	(0-30)	SW846 8260B
Chloroform	99	(70 - 130)			SW846 8260B
	98	(70 - 130)	1.6	(0-30)	SW846 8260B
1,2-Dichloroethane	95	(70 - 130)			SW846 8260B
	95	(70 - 130)	0.31	(0-30)	SW846 8260B
2-Butanone	81	(70 - 130)			SW846 8260B
	83	(70 - 130)	1.8	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0A210417 Work Order #...: LTJDA1AC-MS Matrix.....: WG
MS Lot-Sample #: A0A210417-032 LTJDA1AD-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1,1-Trichloroethane	100	(70 - 130)			SW846 8260B
	100	(70 - 130)	0.04	(0-30)	SW846 8260B
Carbon tetrachloride	99	(70 - 130)			SW846 8260B
	102	(70 - 130)	2.6	(0-30)	SW846 8260B
Bromodichloromethane	96	(70 - 130)			SW846 8260B
	94	(70 - 130)	1.9	(0-30)	SW846 8260B
1,2-Dichloropropane	95	(70 - 130)			SW846 8260B
	96	(70 - 130)	0.76	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	85	(70 - 130)			SW846 8260B
	86	(70 - 130)	0.71	(0-30)	SW846 8260B
Trichloroethene	95	(70 - 130)			SW846 8260B
	97	(70 - 130)	2.2	(0-30)	SW846 8260B
Dibromochloromethane	97	(70 - 130)			SW846 8260B
	96	(70 - 130)	1.0	(0-30)	SW846 8260B
1,1,2-Trichloroethane	95	(70 - 130)			SW846 8260B
	94	(70 - 130)	1.4	(0-30)	SW846 8260B
Benzene	99	(70 - 130)			SW846 8260B
	99	(70 - 130)	0.05	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	92	(70 - 130)			SW846 8260B
	91	(70 - 130)	0.62	(0-30)	SW846 8260B
Bromoform	97	(70 - 130)			SW846 8260B
	95	(70 - 130)	2.4	(0-30)	SW846 8260B
4-Methyl-2-pentanone	80	(70 - 130)			SW846 8260B
	79	(70 - 130)	1.0	(0-30)	SW846 8260B
2-Hexanone	83	(70 - 130)			SW846 8260B
	80	(70 - 130)	3.2	(0-30)	SW846 8260B
Tetrachloroethene	96	(70 - 130)			SW846 8260B
	99	(70 - 130)	3.6	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	91	(70 - 130)			SW846 8260B
	92	(70 - 130)	1.1	(0-30)	SW846 8260B
Toluene	97	(70 - 130)			SW846 8260B
	98	(70 - 130)	1.3	(0-30)	SW846 8260B
Chlorobenzene	96	(70 - 130)			SW846 8260B
	97	(70 - 130)	1.2	(0-30)	SW846 8260B
Ethylbenzene	95	(70 - 130)			SW846 8260B
	97	(70 - 130)	1.4	(0-30)	SW846 8260B
Styrene	94	(70 - 130)			SW846 8260B
	93	(70 - 130)	1.6	(0-30)	SW846 8260B
Xylenes (total)	97	(70 - 130)			SW846 8260B
	99	(70 - 130)	1.8	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0A210417 **Work Order #...:** LTJDA1AC-MS **Matrix.....:** WG
MS Lot-Sample #: A0A210417-032 LTJDA1AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	91	(50 - 150)
	93	(50 - 150)
1,2-Dichloroethane-d4	88	(50 - 150)
	89	(50 - 150)
Toluene-d8	93	(50 - 150)
	94	(50 - 150)
4-Bromofluorobenzene	96	(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.

GCMS SEMIVOLATILE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: January 2010
Data Reviewer/Date: Angye Dragotta/ March 9, 2010

SDG: A0A210417 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 – 4.1 °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)?		✓		Samples were re extracted for benzoic acid at 8 days, due to LCS failure in the first extraction. The benzoic acid results for samples collected 1/20/10 were qualified as estimated, "UJ"	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?	✓			A4HP9-1/28/10, 2/3/10 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: January 2010
Data Reviewer/Date: Angye Dragotta/ March 9, 2010

SDG: A0A210417 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?	✓			1/28/10-Benzoic acid, naphthalene, acenaphthene, 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. 1/28/10-Benzoic acid, naphthalene, acenaphthene, acenaphthylene, 2,4-dinitrophenol, 4,6-dinitro-2-methylphenol, phenanthrene and hexachlorobenzene 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 analyzed 2/3/10 @ 2050 recovered below control limits for 2,4-dinitrophenol at 62%. No qualifications were made as the bracketed samples were reported for benzoic acid only.	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%?	✓			1/28/10 @ 1147, 2/3/10 @ 1329	LCG Table 2 >130%=J; 50-70%=J/UJ; <50%=J/R
20. Was a CCV analyzed every 12 hours?			✓	No CCVs were required as the samples were analyzed directly after the ICV.	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: January 2010
Data Reviewer/Date: Angye Dragotta/ March 9, 2010

SDG: A0A210417 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. B	LCG Table 2 <5/10x blank = B
29. Was a field blank collected and analyzed?	✓				
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?	✓				
32. Were the field duplicate RPDs ≤30%?	✓			Checked by ADR. Only detected sample results were evaluated. For the field duplicate pair analyzed on FWGASYmw-001c-1496-GW and FWGASYmw-DUP1-1512-GW, the duplicate RPD was above control limits for bis(2-ethylhexyl)phthalate at 133%. The bis(2-ethylhexyl)phthalate result for FWGASYmw-001c-1496-GW was qualified as estimated, "J".	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 FWGASY-004mw-1499-GW and FWGASY-005mw-1500-GW were the parent MS/MSD samples from this SDG.	
37. Were MS/MSD recoveries 45-135% and RPD value ≤40%?		✓		Parent FWGASY-004mw-1499-GW- The MS/MSD recovered below control limit for 2,4-dinitrophenol at 36% and 38% and for 3,3'-dichlorobenzidine at 41% and 43%. Parent FWGASY-005mw-1500-GW- The MSD recovered below control limits	LCG Table 2 Pj

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: January 2010
Data Reviewer/Date: Angye Dragotta/ March 9, 2010

SDG: A0A210417 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
				for 2,4-dinitrophenol 42%. No qualifications were made as the associated LCS recovered within limits and there were no other QC outliers.	
38. Were surrogate recoveries within 50-150%?		✓		All surrogates recovered below control limits in the method blank associated with batch 0025033. No qualifications were made as the surrogates in the field samples were within control limits.	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 *(All analytes if CCCs not included in standard)*

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	

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: FWGLL11mw-009C-1495-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-002 **Work Order #...:** LTGAM1AC **Matrix.....:** WG
Date Sampled...: 01/20/10 10:10 **Date Received..:** 01/21/10
Prep Date.....: 01/25/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0025033
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
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
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-009C-1495-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-002 **Work Order #...:** LTGAM1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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-1495-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-002 **Work Order #...:** LTGAM1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	73	(50 - 150)
2-Fluorobiphenyl	66	(50 - 150)
Terphenyl-d14	82	(50 - 150)
Phenol-d5	76	(50 - 150)
2-Fluorophenol	74	(50 - 150)
2,4,6-Tribromophenol	83	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-009C-1495-GW

GC/MS Semivolatiles

Lot-Sample #...:	A0A210417-002	**Work Order #...:**	LTGAM2AC	**Matrix.....:**	WG
Date Sampled...:	01/20/10 10:10	**Date Received..:**	01/21/10		
Prep Date.....:	01/28/10	**Analysis Date..:**	02/03/10		
Prep Batch #...:	0028246				
Dilution Factor:	1	**Initial Wgt/Vol:**	1050 mL	**Final Wgt/Vol..:**	2 mL
		Method.....:	SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzoic acid	ND	10	ug/L	10

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	82	(50 - 150)
2-Fluorobiphenyl	71	(50 - 150)
Terphenyl-d14	75	(50 - 150)
Phenol-d5	72	(50 - 150)
2-Fluorophenol	71	(50 - 150)
2,4,6-Tribromophenol	83	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw001C-1496-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-004 **Work Order #...:** LTGCG1AC **Matrix.....:** WG
Date Sampled...: 01/20/10 12:05 **Date Received..:** 01/21/10
Prep Date.....: 01/25/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0025033
Dilution Factor: 1 **Initial Wgt/Vol:** 1020 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
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**	**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

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw001C-1496-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-004 **Work Order #...:** LTGCG1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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: FWGASYmw001C-1496-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-004 **Work Order #...:** LTGCG1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	72	(50 - 150)
2-Fluorobiphenyl	64	(50 - 150)
Terphenyl-d14	77	(50 - 150)
Phenol-d5	70	(50 - 150)
2-Fluorophenol	70	(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: FWGASYmw001C-1496-GW

GC/MS Semivolatiles

Lot-Sample #...:	A0A210417-004	**Work Order #...:**	LTGCG2AC	**Matrix.....:**	WG
Date Sampled...:	01/20/10 12:05	**Date Received..:**	01/21/10		
Prep Date.....:	01/28/10	**Analysis Date..:**	02/03/10		
Prep Batch #...:	0028246				
Dilution Factor:	1	**Initial Wgt/Vol:**	1040 mL	**Final Wgt/Vol..:**	2 mL
		Method.....:	SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzoic acid	ND	10	ug/L	10

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	82	(50 - 150)
2-Fluorobiphenyl	71	(50 - 150)
Terphenyl-d14	84	(50 - 150)
Phenol-d5	80	(50 - 150)
2-Fluorophenol	78	(50 - 150)
2,4,6-Tribromophenol	87	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmwDUP1-1512-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-006 **Work Order #...:** LTGC31AC **Matrix.....:** WG
Date Sampled...: 01/20/10 12:25 **Date Received..:** 01/21/10
Prep Date.....: 01/25/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0025033
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
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	**5.0 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
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmwDUP1-1512-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-006 **Work Order #...:** LTGC31AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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: FWGASYmwDUP1-1512-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-006 **Work Order #...:** LTGC31AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	66	(50 - 150)
2-Fluorobiphenyl	60	(50 - 150)
Terphenyl-d14	75	(50 - 150)
Phenol-d5	68	(50 - 150)
2-Fluorophenol	68	(50 - 150)
2,4,6-Tribromophenol	73	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmwDUP1-1512-GW

GC/MS Semivolatiles

Lot-Sample #...:	A0A210417-006	**Work Order #...:**	LTGC32AC	**Matrix.....:**	WG
Date Sampled...:	01/20/10 12:25	**Date Received..:**	01/21/10		
Prep Date.....:	01/28/10	**Analysis Date..:**	02/03/10		
Prep Batch #...:	0028246				
Dilution Factor:	1	**Initial Wgt/Vol:**	1020 mL	**Final Wgt/Vol..:**	2 mL
		Method.....:	SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzoic acid	ND	10	ug/L	10

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	81	(50 - 150)
2-Fluorobiphenyl	70	(50 - 150)
Terphenyl-d14	88	(50 - 150)
Phenol-d5	77	(50 - 150)
2-Fluorophenol	75	(50 - 150)
2,4,6-Tribromophenol	83	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw003C-1498-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-008 **Work Order #...:** LTGDL1AC **Matrix.....:** WG
Date Sampled...: 01/20/10 14:05 **Date Received..:** 01/21/10
Prep Date.....: 01/25/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0025033
Dilution Factor: 1 **Initial Wgt/Vol:** 1020 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
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
4,6-Dinitro- 2-methylphenol	ND	5.0	ug/L	2.4

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw003C-1498-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-008 **Work Order #...:** LTGDL1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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: FWGASYmw003C-1498-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-008 **Work Order #...:** LTGDL1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	76	(50 - 150)
2-Fluorobiphenyl	67	(50 - 150)
Terphenyl-d14	75	(50 - 150)
Phenol-d5	77	(50 - 150)
2-Fluorophenol	79	(50 - 150)
2,4,6-Tribromophenol	83	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw003C-1498-GW

GC/MS Semivolatiles

Lot-Sample #...:	A0A210417-008	**Work Order #...:**	LTGDL2AC	**Matrix.....:**	WG
Date Sampled...:	01/20/10 14:05	**Date Received..:**	01/21/10		
Prep Date.....:	01/28/10	**Analysis Date..:**	02/03/10		
Prep Batch #...:	0028246				
Dilution Factor:	1	**Initial Wgt/Vol:**	1020 mL	**Final Wgt/Vol..:**	2 mL
		Method.....:	SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzoic acid	ND	10	ug/L	10

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	86	(50 - 150)
2-Fluorobiphenyl	72	(50 - 150)
Terphenyl-d14	90	(50 - 150)
Phenol-d5	81	(50 - 150)
2-Fluorophenol	78	(50 - 150)
2,4,6-Tribromophenol	85	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw002C-1497-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-010 **Work Order #...:** LTGDX1AC **Matrix.....:** WG
Date Sampled...: 01/20/10 15:01 **Date Received..:** 01/21/10
Prep Date.....: 01/25/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0025033
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
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	**0.97 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
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw002C-1497-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-010 **Work Order #...:** LTGDX1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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: FWGASYmw002C-1497-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-010 Work Order #...: LTGDX1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	72	(50 - 150)
2-Fluorobiphenyl	63	(50 - 150)
Terphenyl-d14	79	(50 - 150)
Phenol-d5	74	(50 - 150)
2-Fluorophenol	72	(50 - 150)
2,4,6-Tribromophenol	76	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw002C-1497-GW

GC/MS Semivolatiles

Lot-Sample #...:	A0A210417-010	**Work Order #...:**	LTGDX2AC	**Matrix.....:**	WG
Date Sampled...:	01/20/10 15:01	**Date Received..:**	01/21/10		
Prep Date.....:	01/28/10	**Analysis Date..:**	02/03/10		
Prep Batch #...:	0028246				
Dilution Factor:	1	**Initial Wgt/Vol:**	1050 mL	**Final Wgt/Vol..:**	2 mL
		Method.....:	SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzoic acid	ND	10	ug/L	10

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	78	(50 - 150)
2-Fluorobiphenyl	66	(50 - 150)
Terphenyl-d14	78	(50 - 150)
Phenol-d5	73	(50 - 150)
2-Fluorophenol	74	(50 - 150)
2,4,6-Tribromophenol	77	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw007C-1502-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-012 **Work Order #...:** LTGD21AC **Matrix.....:** WG
Date Sampled...: 01/20/10 16:31 **Date Received..:** 01/21/10
Prep Date.....: 01/25/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0025033
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
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
4,6-Dinitro- 2-methylphenol	ND	5.0	ug/L	2.4

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw007C-1502-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-012 **Work Order #...:** LTGD21AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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: FWGASYmw007C-1502-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-012 **Work Order #...:** LTGD21AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	65	(50 - 150)
2-Fluorobiphenyl	58	(50 - 150)
Terphenyl-d14	60	(50 - 150)
Phenol-d5	65	(50 - 150)
2-Fluorophenol	65	(50 - 150)
2,4,6-Tribromophenol	69	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw007C-1502-GW

GC/MS Semivolatiles

Lot-Sample #...:	A0A210417-012	**Work Order #...:**	LTGD22AC	**Matrix.....:**	WG
Date Sampled...:	01/20/10 16:31	**Date Received..:**	01/21/10		
Prep Date.....:	01/28/10	**Analysis Date..:**	02/03/10		
Prep Batch #...:	0028246				
Dilution Factor:	1	**Initial Wgt/Vol:**	1050 mL	**Final Wgt/Vol..:**	2 mL
		Method.....:	SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzoic acid	ND	10	ug/L	10

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	81	(50 - 150)
2-Fluorobiphenyl	68	(50 - 150)
Terphenyl-d14	68	(50 - 150)
Phenol-d5	78	(50 - 150)
2-Fluorophenol	78	(50 - 150)
2,4,6-Tribromophenol	83	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRinse1-1513-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-014 **Work Order #...:** LTGD51AC **Matrix.....:** WQ
Date Sampled...: 01/20/10 17:30 **Date Received..:** 01/21/10
Prep Date.....: 01/25/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0025033
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
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
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRinse1-1513-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-014 **Work Order #...:** LTGD51AC **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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: FWGEQUIPRinse1-1513-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-014 **Work Order #...:** LTGD51AC **Matrix.....:** WQ

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	66	(50 - 150)
2-Fluorobiphenyl	60	(50 - 150)
Terphenyl-d14	76	(50 - 150)
Phenol-d5	67	(50 - 150)
2-Fluorophenol	69	(50 - 150)
2,4,6-Tribromophenol	61	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRinse1-1513-GW

GC/MS Semivolatiles

Lot-Sample #...:	A0A210417-014	**Work Order #...:**	LTGD52AC	**Matrix.....:**	WQ
Date Sampled...:	01/20/10 17:30	**Date Received..:**	01/21/10		
Prep Date.....:	01/28/10	**Analysis Date..:**	02/03/10		
Prep Batch #...:	0028246				
Dilution Factor:	1	**Initial Wgt/Vol:**	990 mL	**Final Wgt/Vol..:**	2 mL
		Method.....:	SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzoic acid	ND	10	ug/L	10

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	78	(50 - 150)
2-Fluorobiphenyl	65	(50 - 150)
Terphenyl-d14	86	(50 - 150)
Phenol-d5	74	(50 - 150)
2-Fluorophenol	73	(50 - 150)
2,4,6-Tribromophenol	77	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-008C-1503-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-018 **Work Order #...:** LTGGC1AC **Matrix.....:** WG
Date Sampled...: 01/20/10 10:15 **Date Received..:** 01/21/10
Prep Date.....: 01/25/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0025033
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
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
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-008C-1503-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-018 **Work Order #...:** LTGGC1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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	**1.1**	**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-1503-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-018 **Work Order #...:** LTGGC1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	63	(50 - 150)
2-Fluorobiphenyl	57	(50 - 150)
Terphenyl-d14	55	(50 - 150)
Phenol-d5	64	(50 - 150)
2-Fluorophenol	69	(50 - 150)
2,4,6-Tribromophenol	68	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-008C-1503-GW

GC/MS Semivolatiles

Lot-Sample #...:	A0A210417-018	**Work Order #...:**	LTGGC2AC	**Matrix.....:**	WG
Date Sampled...:	01/20/10 10:15	**Date Received..:**	01/21/10		
Prep Date.....:	01/28/10	**Analysis Date..:**	02/03/10		
Prep Batch #...:	0028246				
Dilution Factor:	1	**Initial Wgt/Vol:**	920 mL	**Final Wgt/Vol..:**	2 mL
		Method.....:	SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzoic acid	ND	10	ug/L	10

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	81	(50 - 150)
2-Fluorobiphenyl	72	(50 - 150)
Terphenyl-d14	88	(50 - 150)
Phenol-d5	76	(50 - 150)
2-Fluorophenol	74	(50 - 150)
2,4,6-Tribromophenol	85	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-DUP2-1511-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-020 **Work Order #...:** LTGGT1AC **Matrix.....:** WG
Date Sampled...: 01/20/10 11:02 **Date Received..:** 01/21/10
Prep Date.....: 01/25/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0025033
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
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
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-DUP2-1511-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-020 Work Order #...: LTGGT1AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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	**1.1**	**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-DUP2-1511-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-020 **Work Order #...:** LTGGT1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	68	(50 - 150)
2-Fluorobiphenyl	61	(50 - 150)
Terphenyl-d14	67	(50 - 150)
Phenol-d5	73	(50 - 150)
2-Fluorophenol	70	(50 - 150)
2,4,6-Tribromophenol	78	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-DUP2-1511-GW

GC/MS Semivolatiles

Lot-Sample #...:	A0A210417-020	**Work Order #...:**	LTGGT2AC	**Matrix.....:**	WG
Date Sampled...:	01/20/10 11:02	**Date Received..:**	01/21/10		
Prep Date.....:	01/28/10	**Analysis Date..:**	02/03/10		
Prep Batch #...:	0028246				
Dilution Factor:	1	**Initial Wgt/Vol:**	960 mL	**Final Wgt/Vol..:**	2 mL
		Method.....:	SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzoic acid	ND	10	ug/L	10

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	85	(50 - 150)
2-Fluorobiphenyl	73	(50 - 150)
Terphenyl-d14	80	(50 - 150)
Phenol-d5	81	(50 - 150)
2-Fluorophenol	81	(50 - 150)
2,4,6-Tribromophenol	92	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-010C-1505-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-022 **Work Order #...:** LTGG51AC **Matrix.....:** WG
Date Sampled...: 01/20/10 12:54 **Date Received..:** 01/21/10
Prep Date.....: 01/25/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0025033
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
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**	**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

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-010C-1505-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-022 **Work Order #...:** LTGG51AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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-010C-1505-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-022 **Work Order #...:** LTGG51AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	66	(50 - 150)
2-Fluorobiphenyl	58	(50 - 150)
Terphenyl-d14	64	(50 - 150)
Phenol-d5	65	(50 - 150)
2-Fluorophenol	67	(50 - 150)
2,4,6-Tribromophenol	73	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-010C-1505-GW

GC/MS Semivolatiles

Lot-Sample #...:	A0A210417-022	**Work Order #...:**	LTGG52AC	**Matrix.....:**	WG
Date Sampled...:	01/20/10 12:54	**Date Received..:**	01/21/10		
Prep Date.....:	01/28/10	**Analysis Date..:**	02/03/10		
Prep Batch #...:	0028246				
Dilution Factor:	1	**Initial Wgt/Vol:**	970 mL	**Final Wgt/Vol..:**	2 mL
		Method.....:	SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzoic acid	ND	10	ug/L	10

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	79	(50 - 150)
2-Fluorobiphenyl	67	(50 - 150)
Terphenyl-d14	76	(50 - 150)
Phenol-d5	75	(50 - 150)
2-Fluorophenol	76	(50 - 150)
2,4,6-Tribromophenol	78	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-006C-1501-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-024	**Work Order #...:** LTGHD1AC	**Matrix.....:** WG	
Date Sampled...: 01/20/10 14:00	**Date Received..:** 01/21/10		
Prep Date.....: 01/25/10	**Analysis Date..:** 01/28/10		
Prep Batch #...: 0025033			
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
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**	**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

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-006C-1501-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-024 Work Order #...: LTGHD1AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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-006C-1501-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-024 **Work Order #...:** LTGHD1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	70	(50 - 150)
2-Fluorobiphenyl	62	(50 - 150)
Terphenyl-d14	80	(50 - 150)
Phenol-d5	73	(50 - 150)
2-Fluorophenol	70	(50 - 150)
2,4,6-Tribromophenol	76	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-006C-1501-GW

GC/MS Semivolatiles

Lot-Sample #...:	A0A210417-024	**Work Order #...:**	LTGHD2AC	**Matrix.....:**	WG
Date Sampled...:	01/20/10 14:00	**Date Received..:**	01/21/10		
Prep Date.....:	01/28/10	**Analysis Date..:**	02/03/10		
Prep Batch #...:	0028246				
Dilution Factor:	1	**Initial Wgt/Vol:**	950 mL	**Final Wgt/Vol..:**	2 mL
		Method.....:	SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzoic acid	ND	10	ug/L	10

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	81	(50 - 150)
2-Fluorobiphenyl	70	(50 - 150)
Terphenyl-d14	84	(50 - 150)
Phenol-d5	77	(50 - 150)
2-Fluorophenol	78	(50 - 150)
2,4,6-Tribromophenol	83	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-005C-1500-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-026 **Work Order #...:** LTGH01AE **Matrix.....:** WG
Date Sampled...: 01/20/10 15:20 **Date Received..:** 01/21/10
Prep Date.....: 01/25/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0025033
Dilution Factor: 1 **Initial Wgt/Vol:** 880 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
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**	**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

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-005C-1500-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-026 **Work Order #...:** LTGH01AE **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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-1500-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-026 **Work Order #...:** LTGH01AE **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	68	(50 - 150)
2-Fluorobiphenyl	60	(50 - 150)
Terphenyl-d14	65	(50 - 150)
Phenol-d5	71	(50 - 150)
2-Fluorophenol	70	(50 - 150)
2,4,6-Tribromophenol	77	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-005C-1500-GW

GC/MS Semivolatiles

Lot-Sample #...:	A0A210417-026	**Work Order #...:**	LTGH02AE	**Matrix.....:**	WG
Date Sampled...:	01/20/10 15:20	**Date Received..:**	01/21/10		
Prep Date.....:	01/28/10	**Analysis Date..:**	02/03/10		
Prep Batch #...:	0028246				
Dilution Factor:	1	**Initial Wgt/Vol:**	1050 mL	**Final Wgt/Vol..:**	2 mL
		Method.....:	SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzoic acid	ND	10	ug/L	10

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	76	(50 - 150)
2-Fluorobiphenyl	68	(50 - 150)
Terphenyl-d14	84	(50 - 150)
Phenol-d5	71	(50 - 150)
2-Fluorophenol	73	(50 - 150)
2,4,6-Tribromophenol	81	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-009C-1504-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-029 **Work Order #...:** LTJCD1AC **Matrix.....:** WG
Date Sampled...: 01/21/10 09:20 **Date Received..:** 01/21/10
Prep Date.....: 01/25/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0025033
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
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**	**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

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-009C-1504-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-029 Work Order #...: LTJCD1AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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-1504-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-029 **Work Order #...:** LTJCD1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	67	(50 - 150)
2-Fluorobiphenyl	60	(50 - 150)
Terphenyl-d14	65	(50 - 150)
Phenol-d5	69	(50 - 150)
2-Fluorophenol	72	(50 - 150)
2,4,6-Tribromophenol	72	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-009C-1504-GW

GC/MS Semivolatiles

Lot-Sample #...:	A0A210417-029	**Work Order #...:**	LTJCD2AC	**Matrix.....:**	WG
Date Sampled...:	01/21/10 09:20	**Date Received..:**	01/21/10		
Prep Date.....:	01/28/10	**Analysis Date..:**	02/03/10		
Prep Batch #...:	0028246				
Dilution Factor:	1	**Initial Wgt/Vol:**	1030 mL	**Final Wgt/Vol..:**	2 mL
		Method.....:	SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzoic acid	ND	10	ug/L	10

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	83	(50 - 150)
2-Fluorobiphenyl	71	(50 - 150)
Terphenyl-d14	85	(50 - 150)
Phenol-d5	79	(50 - 150)
2-Fluorophenol	79	(50 - 150)
2,4,6-Tribromophenol	85	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRinse2-1514-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-031 **Work Order #...:** LTJCN1AC **Matrix.....:** WQ
Date Sampled...: 01/21/10 10:22 **Date Received..:** 01/21/10
Prep Date.....: 01/25/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0025033
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
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
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRinse2-1514-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-031 **Work Order #...:** LTJCN1AC **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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: FWGEQUIPRinse2-1514-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-031 **Work Order #...:** LTJCN1AC **Matrix.....:** WQ

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	66	(50 - 150)
2-Fluorobiphenyl	60	(50 - 150)
Terphenyl-d14	75	(50 - 150)
Phenol-d5	66	(50 - 150)
2-Fluorophenol	64	(50 - 150)
2,4,6-Tribromophenol	63	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRinse2-1514-GW

GC/MS Semivolatiles

Lot-Sample #...:	A0A210417-031	**Work Order #...:**	LTJCN2AC	**Matrix.....:**	WQ
Date Sampled...:	01/21/10 10:22	**Date Received..:**	01/21/10		
Prep Date.....:	01/28/10	**Analysis Date..:**	02/03/10		
Prep Batch #...:	0028246				
Dilution Factor:	1	**Initial Wgt/Vol:**	930 mL	**Final Wgt/Vol..:**	2 mL
		Method.....:	SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzoic acid	ND	10	ug/L	10

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	79	(50 - 150)
2-Fluorobiphenyl	68	(50 - 150)
Terphenyl-d14	83	(50 - 150)
Phenol-d5	74	(50 - 150)
2-Fluorophenol	74	(50 - 150)
2,4,6-Tribromophenol	74	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-004C-1499-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-032 **Work Order #...:** LTJDA1AE **Matrix.....:** WG
Date Sampled...: 01/21/10 09:15 **Date Received..:** 01/21/10
Prep Date.....: 01/25/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0025033
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
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	**0.90 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
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-004C-1499-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-032 Work Order #...: LTJDA1AE Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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-1499-GW

GC/MS Semivolatiles

Lot-Sample #...: A0A210417-032 **Work Order #...:** LTJDA1AE **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	73	(50 - 150)
2-Fluorobiphenyl	66	(50 - 150)
Terphenyl-d14	78	(50 - 150)
Phenol-d5	72	(50 - 150)
2-Fluorophenol	76	(50 - 150)
2,4,6-Tribromophenol	77	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-004C-1499-GW

GC/MS Semivolatiles

Lot-Sample #...:	A0A210417-032	**Work Order #...:**	LTJDA2AE	**Matrix.....:**	WG
Date Sampled...:	01/21/10 09:15	**Date Received..:**	01/21/10		
Prep Date.....:	01/28/10	**Analysis Date..:**	02/03/10		
Prep Batch #...:	0028246				
Dilution Factor:	1	**Initial Wgt/Vol:**	1050 mL	**Final Wgt/Vol..:**	2 mL
		Method.....:	SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzoic acid	ND	10	ug/L	10

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	81	(50 - 150)
2-Fluorobiphenyl	70	(50 - 150)
Terphenyl-d14	90	(50 - 150)
Phenol-d5	77	(50 - 150)
2-Fluorophenol	76	(50 - 150)
2,4,6-Tribromophenol	85	(50 - 150)

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A0A210417 **Work Order #...:** LTN1N1AA **Matrix.....:** WATER
MB Lot-Sample #: A0A250000-033

Prep Date.....: 01/25/10 **Final Wgt/Vol..:** 2 mL
Analysis Date..: 01/28/10 **Prep Batch #...:** 0025033
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
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
2,2'-oxybis (1-Chloropropane)	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
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 #...: A0A210417 **Work Order #...:** LTN1N1AA **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
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
Dibenz(a,h)anthracene	ND	0.20	ug/L	SW846 8270C
Carbazole	ND	1.0	ug/L	SW846 8270C
4-Methylphenol	ND	1.0	ug/L	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	19 *	(50 - 150)
2-Fluorobiphenyl	18 *	(50 - 150)
Terphenyl-d14	26 *	(50 - 150)
Phenol-d5	19 *	(50 - 150)
2-Fluorophenol	20 *	(50 - 150)
2,4,6-Tribromophenol	17 *	(50 - 150)

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A0A210417 Work Order #...: LTN1N1AA Matrix.....: WATER

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

* Surrogate recovery is outside stated control limits.

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A0A210417 **Work Order #...:** LTWTD1AA **Matrix.....:** WATER
MB Lot-Sample #: A0A280000-246

Prep Date.....: 01/28/10 **Final Wgt/Vol..:** 2 mL
Analysis Date..: 02/03/10 **Prep Batch #...:** 0028246
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzoic acid	ND	10	ug/L	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	82	(50 - 150)
2-Fluorobiphenyl	71	(50 - 150)
Terphenyl-d14	93	(50 - 150)
Phenol-d5	75	(50 - 150)
2-Fluorophenol	73	(50 - 150)
2,4,6-Tribromophenol	78	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0A210417 Work Order #...: LTN1N1AC Matrix.....: WATER
LCS Lot-Sample#: A0A250000-033
Prep Date.....: 01/25/10 Analysis Date..: 01/28/10
Prep Batch #...: 0025033
Dilution Factor: 1 Final Wgt/Vol..: 2 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Naphthalene	73	(30 - 119)	SW846 8270C
Nitrobenzene	76	(31 - 115)	SW846 8270C
N-Nitrosodiphenylamine	70	(35 - 124)	SW846 8270C
Phenanthrene	66	(45 - 117)	SW846 8270C
Indeno(1,2,3-cd)pyrene	69	(37 - 130)	SW846 8270C
Di-n-butyl phthalate	72	(46 - 123)	SW846 8270C
Hexachlorocyclopenta-diene	48	(30 - 115)	SW846 8270C
Benzyl alcohol	76	(29 - 115)	SW846 8270C
1,2,4-Trichloro-benzene	59	(30 - 120)	SW846 8270C
Acenaphthene	74	(31 - 120)	SW846 8270C
2,4-Dinitrotoluene	74	(34 - 151)	SW846 8270C
Pyrene	65	(35 - 139)	SW846 8270C
N-Nitrosodi-n-propyl-amine	78	(30 - 132)	SW846 8270C
1,4-Dichlorobenzene	57	(30 - 115)	SW846 8270C
Pentachlorophenol	61	(30 - 150)	SW846 8270C
Phenol	74	(30 - 115)	SW846 8270C
2-Chlorophenol	72	(30 - 120)	SW846 8270C
4-Chloro-3-methylphenol	74	(31 - 121)	SW846 8270C
4-Nitrophenol	71	(30 - 138)	SW846 8270C
1,2-Dichlorobenzene	61	(30 - 120)	SW846 8270C
1,3-Dichlorobenzene	54	(30 - 120)	SW846 8270C
2,4,5-Trichloro-phenol	73	(36 - 135)	SW846 8270C
4-Methylphenol	74	(31 - 115)	SW846 8270C
4-Nitroaniline	76	(30 - 140)	SW846 8270C
Acenaphthylene	70	(37 - 115)	SW846 8270C
Anthracene	66	(45 - 118)	SW846 8270C
Benzo(a)anthracene	64	(43 - 138)	SW846 8270C
Benzo(a)pyrene	61	(38 - 144)	SW846 8270C
Benzo(b)fluoranthene	68	(31 - 146)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0A210417 Work Order #...: LTN1N1AC Matrix.....: WATER
LCS Lot-Sample#: A0A250000-033

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Benzo(ghi)perylene	71	(35 - 129)	SW846 8270C
Benzo(k)fluoranthene	73	(40 - 127)	SW846 8270C
bis(2-Chloroethoxy) methane	74	(30 - 115)	SW846 8270C
bis(2-Chloroethyl)- ether	76	(30 - 115)	SW846 8270C
bis(2-Chloroisopropyl) ether	75	(50 - 150)	SW846 8270C
bis(2-Ethylhexyl) phthalate	69	(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	67	(31 - 120)	SW846 8270C
2,4-Dinitrophenol	31	(29 - 146)	SW846 8270C
2,6-Dinitrotoluene	76	(43 - 122)	SW846 8270C
2-Chloronaphthalene	65	(35 - 115)	SW846 8270C
2-Methylnaphthalene	80	(32 - 115)	SW846 8270C
2-Methylphenol	72	(30 - 116)	SW846 8270C
2-Nitroaniline	77	(36 - 140)	SW846 8270C
2-Nitrophenol	76	(33 - 115)	SW846 8270C
3,3'-Dichlorobenzidine	56	(30 - 160)	SW846 8270C
3-Nitroaniline	74	(30 - 138)	SW846 8270C
4,6-Dinitro- 2-methylphenol	55	(42 - 144)	SW846 8270C
4-Bromophenyl phenyl ether	68	(43 - 118)	SW846 8270C
4-Chloroaniline	69	(30 - 133)	SW846 8270C
4-Chlorophenyl phenyl ether	70	(40 - 115)	SW846 8270C
Butyl benzyl phthalate	70	(37 - 136)	SW846 8270C
Carbazole	70	(49 - 126)	SW846 8270C
Chrysene	66	(42 - 142)	SW846 8270C
Dibenz(a,h)anthracene	72	(38 - 130)	SW846 8270C
Dibenzofuran	71	(40 - 115)	SW846 8270C
Diethyl phthalate	74	(43 - 132)	SW846 8270C
Dimethyl phthalate	74	(42 - 116)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0A210417 **Work Order #...:** LTN1N1AC **Matrix.....:** WATER
LCS Lot-Sample#: A0A250000-033

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Di-n-octyl phthalate	**68**	**(36 - 151)**	**SW846 8270C**
Fluoranthene	**71**	**(47 - 132)**	**SW846 8270C**
Fluorene	**68**	**(41 - 115)**	**SW846 8270C**
Hexachlorobenzene	**64**	**(42 - 123)**	**SW846 8270C**
Hexachlorobutadiene	**50**	**(30 - 120)**	**SW846 8270C**
Hexachloroethane	**50**	**(30 - 120)**	**SW846 8270C**
Isophorone	**74**	**(33 - 115)**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	75	(50 - 150)
2-Fluorobiphenyl	68	(50 - 150)
Terphenyl-d14	79	(50 - 150)
Phenol-d5	74	(50 - 150)
2-Fluorophenol	72	(50 - 150)
2,4,6-Tribromophenol	78	(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 #...: A0A210417 **Work Order #...:** LTWTD1AC **Matrix.....:** WATER
LCS Lot-Sample#: A0A280000-246
Prep Date.....: 01/28/10 **Analysis Date..:** 02/03/10
Prep Batch #...: 0028246
Dilution Factor: 1 **Final Wgt/Vol..:** 2 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Benzoic acid	**35**	**(30 - 136)**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	84	(50 - 150)
2-Fluorobiphenyl	73	(50 - 150)
Terphenyl-d14	87	(50 - 150)
Phenol-d5	80	(50 - 150)
2-Fluorophenol	80	(50 - 150)
2,4,6-Tribromophenol	83	(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 #...: A0A210417 Work Order #...: LTGH01AX-MS Matrix.....: WG
MS Lot-Sample #: A0A210417-026 LTGH01A0-MSD
Date Sampled...: 01/20/10 15:20 Date Received..: 01/21/10
Prep Date.....: 01/25/10 Analysis Date..: 01/28/10
Prep Batch #...: 0025033
Dilution Factor: 1 Initial Wgt/Vol: 480 mL Final Wgt/Vol..: 2 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,2,4-Trichloro-benzene	58	(45 - 135)			SW846 8270C
	60	(45 - 135)	2.9	(0-40)	SW846 8270C
Acenaphthene	71	(45 - 135)			SW846 8270C
	72	(45 - 135)	1.8	(0-40)	SW846 8270C
2,4-Dinitrotoluene	77	(45 - 135)			SW846 8270C
	78	(45 - 135)	1.3	(0-40)	SW846 8270C
Pyrene	62	(45 - 135)			SW846 8270C
	65	(45 - 135)	4.3	(0-40)	SW846 8270C
N-Nitrosodi-n-propyl-amine	78	(45 - 135)			SW846 8270C
	77	(45 - 135)	1.2	(0-40)	SW846 8270C
1,4-Dichlorobenzene	61	(45 - 135)			SW846 8270C
	61	(45 - 135)	1.1	(0-40)	SW846 8270C
Pentachlorophenol	68	(45 - 135)			SW846 8270C
	68	(45 - 135)	0.24	(0-40)	SW846 8270C
Phenol	79	(45 - 135)			SW846 8270C
	78	(45 - 135)	1.1	(0-40)	SW846 8270C
2-Chlorophenol	77	(45 - 135)			SW846 8270C
	76	(45 - 135)	1.0	(0-40)	SW846 8270C
4-Chloro-3-methylphenol	80	(45 - 135)			SW846 8270C
	79	(45 - 135)	1.3	(0-40)	SW846 8270C
4-Nitrophenol	76	(45 - 135)			SW846 8270C
	78	(45 - 135)	2.6	(0-40)	SW846 8270C
Acenaphthylene	70	(45 - 135)			SW846 8270C
	69	(45 - 135)	1.2	(0-40)	SW846 8270C
Anthracene	62	(45 - 135)			SW846 8270C
	63	(45 - 135)	2.0	(0-40)	SW846 8270C
Benzo(a)anthracene	62	(45 - 135)			SW846 8270C
	65	(45 - 135)	5.2	(0-40)	SW846 8270C
Benzo(b)fluoranthene	65	(45 - 135)			SW846 8270C
	71	(45 - 135)	9.3	(0-40)	SW846 8270C
Benzo(k)fluoranthene	64	(45 - 135)			SW846 8270C
	67	(45 - 135)	3.6	(0-40)	SW846 8270C
Benzo(ghi)perylene	68	(45 - 135)			SW846 8270C
	70	(45 - 135)	3.4	(0-40)	SW846 8270C
Benzo(a)pyrene	58	(45 - 135)			SW846 8270C
	60	(45 - 135)	3.4	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0A210417 **Work Order #...:** LTGH01AX-MS **Matrix.....:** WG
MS Lot-Sample #: A0A210417-026 LTGH01A0-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
bis(2-Chloroethoxy) methane	76	(45 - 135)			SW846 8270C
	75	(45 - 135)	1.7	(0-40)	SW846 8270C
bis(2-Chloroethyl)-ether	71	(45 - 135)			SW846 8270C
	71	(45 - 135)	0.26	(0-40)	SW846 8270C
bis(2-Chloroisopropyl) ether	76	(45 - 135)			SW846 8270C
	76	(45 - 135)	0.87	(0-40)	SW846 8270C
bis(2-Ethylhexyl) phthalate	71	(45 - 135)			SW846 8270C
	74	(45 - 135)	4.9	(0-40)	SW846 8270C
4-Bromophenyl phenyl ether	65	(45 - 135)			SW846 8270C
	67	(45 - 135)	1.9	(0-40)	SW846 8270C
Butyl benzyl phthalate	70	(45 - 135)			SW846 8270C
	73	(45 - 135)	4.0	(0-40)	SW846 8270C
Carbazole	69	(45 - 135)			SW846 8270C
	71	(45 - 135)	2.6	(0-40)	SW846 8270C
4-Chloroaniline	68	(45 - 135)			SW846 8270C
	67	(45 - 135)	0.49	(0-40)	SW846 8270C
2-Chloronaphthalene	64	(45 - 135)			SW846 8270C
	66	(45 - 135)	3.0	(0-40)	SW846 8270C
4-Chlorophenyl phenyl ether	68	(45 - 135)			SW846 8270C
	70	(45 - 135)	2.8	(0-40)	SW846 8270C
Chrysene	58	(45 - 135)			SW846 8270C
	61	(45 - 135)	5.0	(0-40)	SW846 8270C
Dibenz(a,h)anthracene	72	(45 - 135)			SW846 8270C
	74	(45 - 135)	3.5	(0-40)	SW846 8270C
Dibenzofuran	69	(45 - 135)			SW846 8270C
	70	(45 - 135)	2.0	(0-40)	SW846 8270C
Di-n-butyl phthalate	72	(45 - 135)			SW846 8270C
	74	(45 - 135)	2.6	(0-40)	SW846 8270C
1,2-Dichlorobenzene	62	(45 - 135)			SW846 8270C
	62	(45 - 135)	0.63	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0A210417 **Work Order #...:** LTGH01AX-MS **Matrix.....:** WG
MS Lot-Sample #: A0A210417-026 LTGH01A0-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3-Dichlorobenzene	58	(45 - 135)			SW846 8270C
	57	(45 - 135)	1.0	(0-40)	SW846 8270C
3,3'-Dichlorobenzidine	55	(45 - 135)			SW846 8270C
	54	(45 - 135)	2.2	(0-40)	SW846 8270C
2,4-Dichlorophenol	78	(45 - 135)			SW846 8270C
	77	(45 - 135)	1.5	(0-40)	SW846 8270C
Diethyl phthalate	75	(45 - 135)			SW846 8270C
	75	(45 - 135)	0.15	(0-40)	SW846 8270C
2,4-Dimethylphenol	71	(45 - 135)			SW846 8270C
	72	(45 - 135)	0.53	(0-40)	SW846 8270C
Dimethyl phthalate	75	(45 - 135)			SW846 8270C
	75	(45 - 135)	0.30	(0-40)	SW846 8270C
4,6-Dinitro-2-methylphenol	64	(45 - 135)			SW846 8270C
	67	(45 - 135)	4.9	(0-40)	SW846 8270C
2,4-Dinitrophenol	46	(45 - 135)			SW846 8270C
	42 a	(45 - 135)	8.1	(0-40)	SW846 8270C
2,6-Dinitrotoluene	79	(45 - 135)			SW846 8270C
	78	(45 - 135)	0.33	(0-40)	SW846 8270C
Di-n-octyl phthalate	73	(45 - 135)			SW846 8270C
	76	(45 - 135)	3.1	(0-40)	SW846 8270C
Fluoranthene	67	(45 - 135)			SW846 8270C
	72	(45 - 135)	6.0	(0-40)	SW846 8270C
Fluorene	66	(45 - 135)			SW846 8270C
	67	(45 - 135)	1.7	(0-40)	SW846 8270C
Hexachlorobenzene	60	(45 - 135)			SW846 8270C
	62	(45 - 135)	2.9	(0-40)	SW846 8270C
Hexachlorobutadiene	47	(45 - 135)			SW846 8270C
	50	(45 - 135)	4.5	(0-40)	SW846 8270C
Hexachlorocyclopentadiene	47	(45 - 135)			SW846 8270C
	45	(45 - 135)	4.1	(0-40)	SW846 8270C
Hexachloroethane	49	(45 - 135)			SW846 8270C
	50	(45 - 135)	0.25	(0-40)	SW846 8270C
Indeno(1,2,3-cd)pyrene	70	(45 - 135)			SW846 8270C
	72	(45 - 135)	3.4	(0-40)	SW846 8270C
Isophorone	76	(45 - 135)			SW846 8270C
	75	(45 - 135)	1.1	(0-40)	SW846 8270C
2-Methylnaphthalene	80	(45 - 135)			SW846 8270C
	82	(45 - 135)	1.5	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0A210417 **Work Order #...:** LTGH01AX-MS **Matrix.....:** WG
MS Lot-Sample #: A0A210417-026 LTGH01A0-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Methylphenol	77	(45 - 135)			SW846 8270C
	76	(45 - 135)	2.1	(0-40)	SW846 8270C
4-Methylphenol	76	(45 - 135)			SW846 8270C
	75	(45 - 135)	0.88	(0-40)	SW846 8270C
Naphthalene	75	(45 - 135)			SW846 8270C
	74	(45 - 135)	1.3	(0-40)	SW846 8270C
2-Nitroaniline	79	(45 - 135)			SW846 8270C
	79	(45 - 135)	0.82	(0-40)	SW846 8270C
3-Nitroaniline	77	(45 - 135)			SW846 8270C
	76	(45 - 135)	1.3	(0-50)	SW846 8270C
4-Nitroaniline	79	(45 - 135)			SW846 8270C
	75	(45 - 135)	5.3	(0-40)	SW846 8270C
Nitrobenzene	77	(45 - 135)			SW846 8270C
	76	(45 - 135)	1.2	(0-40)	SW846 8270C
2-Nitrophenol	83	(45 - 135)			SW846 8270C
	82	(45 - 135)	1.7	(0-40)	SW846 8270C
N-Nitrosodiphenylamine	68	(45 - 135)			SW846 8270C
	68	(45 - 135)	0.61	(0-40)	SW846 8270C
Phenanthrene	63	(45 - 135)			SW846 8270C
	65	(45 - 135)	3.2	(0-40)	SW846 8270C
2,4,5-Trichloro-phenol	77	(45 - 135)			SW846 8270C
	75	(45 - 135)	2.4	(0-40)	SW846 8270C
2,4,6-Trichloro-phenol	78	(45 - 135)			SW846 8270C
	75	(45 - 135)	4.8	(0-40)	SW846 8270C
Benzyl alcohol	81	(45 - 135)			SW846 8270C
	79	(45 - 135)	3.2	(0-40)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	75	(50 - 150)
	76	(50 - 150)
2-Fluorobiphenyl	66	(50 - 150)
	67	(50 - 150)
Terphenyl-d14	77	(50 - 150)
	79	(50 - 150)
Phenol-d5	80	(50 - 150)
	79	(50 - 150)

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0A210417 **Work Order #...:** LTGH01AX-MS **Matrix.....:** WG
MS Lot-Sample #: A0A210417-026 LTGH01A0-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	81	(50 - 150)
	80	(50 - 150)
2,4,6-Tribromophenol	85	(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

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0A210417 Work Order #...: LTJDA1AF-MS Matrix.....: WG
MS Lot-Sample #: A0A210417-032 LTJDA1AG-MSD
Date Sampled...: 01/21/10 09:15 Date Received..: 01/21/10
Prep Date.....: 01/25/10 Analysis Date..: 01/28/10
Prep Batch #...: 0025033
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	62	(45 - 135)			SW846 8270C
	68	(45 - 135)	8.8	(0-40)	SW846 8270C
Acenaphthene	73	(45 - 135)			SW846 8270C
	81	(45 - 135)	11	(0-40)	SW846 8270C
2,4-Dinitrotoluene	77	(45 - 135)			SW846 8270C
	80	(45 - 135)	4.7	(0-40)	SW846 8270C
Pyrene	66	(45 - 135)			SW846 8270C
	72	(45 - 135)	8.2	(0-40)	SW846 8270C
N-Nitrosodi-n-propyl-amine	79	(45 - 135)			SW846 8270C
	85	(45 - 135)	7.4	(0-40)	SW846 8270C
1,4-Dichlorobenzene	65	(45 - 135)			SW846 8270C
	71	(45 - 135)	9.2	(0-40)	SW846 8270C
Pentachlorophenol	66	(45 - 135)			SW846 8270C
	67	(45 - 135)	1.8	(0-40)	SW846 8270C
Phenol	79	(45 - 135)			SW846 8270C
	84	(45 - 135)	7.0	(0-40)	SW846 8270C
2-Chlorophenol	77	(45 - 135)			SW846 8270C
	81	(45 - 135)	4.8	(0-40)	SW846 8270C
4-Chloro-3-methylphenol	78	(45 - 135)			SW846 8270C
	83	(45 - 135)	6.2	(0-40)	SW846 8270C
4-Nitrophenol	72	(45 - 135)			SW846 8270C
	70	(45 - 135)	3.6	(0-40)	SW846 8270C
Acenaphthylene	70	(45 - 135)			SW846 8270C
	76	(45 - 135)	9.0	(0-40)	SW846 8270C
Anthracene	65	(45 - 135)			SW846 8270C
	70	(45 - 135)	8.4	(0-40)	SW846 8270C
Benzo(a)anthracene	65	(45 - 135)			SW846 8270C
	72	(45 - 135)	9.5	(0-40)	SW846 8270C
Benzo(b)fluoranthene	73	(45 - 135)			SW846 8270C
	80	(45 - 135)	8.9	(0-40)	SW846 8270C
Benzo(k)fluoranthene	69	(45 - 135)			SW846 8270C
	76	(45 - 135)	8.8	(0-40)	SW846 8270C
Benzo(ghi)perylene	72	(45 - 135)			SW846 8270C
	77	(45 - 135)	7.1	(0-40)	SW846 8270C
Benzo(a)pyrene	61	(45 - 135)			SW846 8270C
	68	(45 - 135)	10	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0A210417 **Work Order #...:** LTJDA1AF-MS **Matrix.....:** WG
MS Lot-Sample #: A0A210417-032 LTJDA1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
bis(2-Chloroethoxy) methane	74	(45 - 135)			SW846 8270C
	80	(45 - 135)	8.0	(0-40)	SW846 8270C
bis(2-Chloroethyl)-ether	72	(45 - 135)			SW846 8270C
	76	(45 - 135)	5.7	(0-40)	SW846 8270C
bis(2-Chloroisopropyl) ether	77	(45 - 135)			SW846 8270C
	82	(45 - 135)	6.3	(0-40)	SW846 8270C
bis(2-Ethylhexyl) phthalate	77	(45 - 135)			SW846 8270C
	81	(45 - 135)	4.8	(0-40)	SW846 8270C
4-Bromophenyl phenyl ether	69	(45 - 135)			SW846 8270C
	73	(45 - 135)	6.1	(0-40)	SW846 8270C
Butyl benzyl phthalate	74	(45 - 135)			SW846 8270C
	81	(45 - 135)	8.5	(0-40)	SW846 8270C
Carbazole	70	(45 - 135)			SW846 8270C
	74	(45 - 135)	5.6	(0-40)	SW846 8270C
4-Chloroaniline	65	(45 - 135)			SW846 8270C
	74	(45 - 135)	13	(0-40)	SW846 8270C
2-Chloronaphthalene	66	(45 - 135)			SW846 8270C
	72	(45 - 135)	8.7	(0-40)	SW846 8270C
4-Chlorophenyl phenyl ether	70	(45 - 135)			SW846 8270C
	77	(45 - 135)	10	(0-40)	SW846 8270C
Chrysene	65	(45 - 135)			SW846 8270C
	73	(45 - 135)	11	(0-40)	SW846 8270C
Dibenz(a,h)anthracene	75	(45 - 135)			SW846 8270C
	81	(45 - 135)	7.5	(0-40)	SW846 8270C
Dibenzofuran	71	(45 - 135)			SW846 8270C
	77	(45 - 135)	8.6	(0-40)	SW846 8270C
Di-n-butyl phthalate	74	(45 - 135)			SW846 8270C
	79	(45 - 135)	6.5	(0-40)	SW846 8270C
1,2-Dichlorobenzene	64	(45 - 135)			SW846 8270C
	69	(45 - 135)	7.4	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0A210417 **Work Order #...:** LTJDA1AF-MS **Matrix.....:** WG
MS Lot-Sample #: A0A210417-032 LTJDA1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3-Dichlorobenzene	60	(45 - 135)			SW846 8270C
	65	(45 - 135)	8.0	(0-40)	SW846 8270C
3,3'-Dichlorobenzidine	41 a	(45 - 135)			SW846 8270C
	43 a	(45 - 135)	4.0	(0-40)	SW846 8270C
2,4-Dichlorophenol	75	(45 - 135)			SW846 8270C
	83	(45 - 135)	9.9	(0-40)	SW846 8270C
Diethyl phthalate	75	(45 - 135)			SW846 8270C
	81	(45 - 135)	7.8	(0-40)	SW846 8270C
2,4-Dimethylphenol	68	(45 - 135)			SW846 8270C
	73	(45 - 135)	7.3	(0-40)	SW846 8270C
Dimethyl phthalate	74	(45 - 135)			SW846 8270C
	79	(45 - 135)	7.1	(0-40)	SW846 8270C
4,6-Dinitro-2-methylphenol	57	(45 - 135)			SW846 8270C
	60	(45 - 135)	5.2	(0-40)	SW846 8270C
2,4-Dinitrophenol	36 a	(45 - 135)			SW846 8270C
	38 a	(45 - 135)	6.0	(0-40)	SW846 8270C
2,6-Dinitrotoluene	76	(45 - 135)			SW846 8270C
	83	(45 - 135)	9.1	(0-40)	SW846 8270C
Di-n-octyl phthalate	76	(45 - 135)			SW846 8270C
	82	(45 - 135)	7.5	(0-40)	SW846 8270C
Fluoranthene	72	(45 - 135)			SW846 8270C
	77	(45 - 135)	6.2	(0-40)	SW846 8270C
Fluorene	68	(45 - 135)			SW846 8270C
	75	(45 - 135)	10	(0-40)	SW846 8270C
Hexachlorobenzene	63	(45 - 135)			SW846 8270C
	70	(45 - 135)	10	(0-40)	SW846 8270C
Hexachlorobutadiene	53	(45 - 135)			SW846 8270C
	59	(45 - 135)	10	(0-40)	SW846 8270C
Hexachlorocyclopentadiene	52	(45 - 135)			SW846 8270C
	56	(45 - 135)	7.2	(0-40)	SW846 8270C
Hexachloroethane	54	(45 - 135)			SW846 8270C
	60	(45 - 135)	11	(0-40)	SW846 8270C
Indeno(1,2,3-cd)pyrene	74	(45 - 135)			SW846 8270C
	79	(45 - 135)	7.8	(0-40)	SW846 8270C
Isophorone	74	(45 - 135)			SW846 8270C
	80	(45 - 135)	8.0	(0-40)	SW846 8270C
2-Methylnaphthalene	81	(45 - 135)			SW846 8270C
	89	(45 - 135)	9.3	(0-40)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0A210417 **Work Order #...:** LTJDA1AF-MS **Matrix.....:** WG
MS Lot-Sample #: A0A210417-032 LTJDA1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Methylphenol	77	(45 - 135)			SW846 8270C
	80	(45 - 135)	4.0	(0-40)	SW846 8270C
4-Methylphenol	76	(45 - 135)			SW846 8270C
	82	(45 - 135)	7.1	(0-40)	SW846 8270C
Naphthalene	75	(45 - 135)			SW846 8270C
	81	(45 - 135)	7.8	(0-40)	SW846 8270C
2-Nitroaniline	78	(45 - 135)			SW846 8270C
	82	(45 - 135)	5.2	(0-40)	SW846 8270C
3-Nitroaniline	73	(45 - 135)			SW846 8270C
	81	(45 - 135)	11	(0-50)	SW846 8270C
4-Nitroaniline	77	(45 - 135)			SW846 8270C
	83	(45 - 135)	6.9	(0-40)	SW846 8270C
Nitrobenzene	76	(45 - 135)			SW846 8270C
	83	(45 - 135)	8.0	(0-40)	SW846 8270C
2-Nitrophenol	78	(45 - 135)			SW846 8270C
	85	(45 - 135)	8.6	(0-40)	SW846 8270C
N-Nitrosodiphenylamine	64	(45 - 135)			SW846 8270C
	69	(45 - 135)	7.2	(0-40)	SW846 8270C
Phenanthrene	65	(45 - 135)			SW846 8270C
	72	(45 - 135)	9.5	(0-40)	SW846 8270C
2,4,5-Trichloro-phenol	75	(45 - 135)			SW846 8270C
	81	(45 - 135)	7.7	(0-40)	SW846 8270C
2,4,6-Trichloro-phenol	74	(45 - 135)			SW846 8270C
	79	(45 - 135)	6.3	(0-40)	SW846 8270C
Benzyl alcohol	79	(45 - 135)			SW846 8270C
	84	(45 - 135)	5.8	(0-40)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	73	(50 - 150)
	81	(50 - 150)
2-Fluorobiphenyl	66	(50 - 150)
	74	(50 - 150)
Terphenyl-d14	81	(50 - 150)
	87	(50 - 150)
Phenol-d5	80	(50 - 150)
	84	(50 - 150)

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0A210417 **Work Order #...:** LTJDA1AF-MS **Matrix.....:** WG
MS Lot-Sample #: A0A210417-032 LTJDA1AG-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	82	(50 - 150)
	90	(50 - 150)
2,4,6-Tribromophenol	80	(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

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0A210417 **Work Order #...:** LTGH01A1-MS **Matrix.....:** WG
MS Lot-Sample #: A0A210417-026 LTGH01A2-MSD
Date Sampled...: 01/20/10 15:20 **Date Received..:** 01/21/10
Prep Date.....: 01/28/10 **Analysis Date..:** 02/03/10
Prep Batch #...: 0028246
Dilution Factor: 1 **Initial Wgt/Vol:** 500 mL **Final Wgt/Vol..:** 2 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzoic acid	**64**	**(45 - 135)**			**SW846 8270C**
	70	**(45 - 135)**	**8.4**	**(0-40)**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	78	(50 - 150)
	80	(50 - 150)
2-Fluorobiphenyl	69	(50 - 150)
	72	(50 - 150)
Terphenyl-d14	83	(50 - 150)
	88	(50 - 150)
Phenol-d5	75	(50 - 150)
	78	(50 - 150)
2-Fluorophenol	74	(50 - 150)
	79	(50 - 150)
2,4,6-Tribromophenol	81	(50 - 150)
	88	(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 #...: A0A210417 **Work Order #...:** LTJDA1AT-MS **Matrix.....:** WG
MS Lot-Sample #: A0A210417-032 LTJDA1AU-MSD
Date Sampled...: 01/21/10 09:15 **Date Received..:** 01/21/10
Prep Date.....: 01/28/10 **Analysis Date..:** 02/03/10
Prep Batch #...: 0028246
Dilution Factor: 1 **Initial Wgt/Vol:** 525 mL **Final Wgt/Vol..:** 2 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzoic acid	**56**	**(45 - 135)**			**SW846 8270C**
	43 a	**(45 - 135)**	**26**	**(0-40)**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	80	(50 - 150)
	73	(50 - 150)
2-Fluorobiphenyl	70	(50 - 150)
	62	(50 - 150)
Terphenyl-d14	84	(50 - 150)
	75	(50 - 150)
Phenol-d5	78	(50 - 150)
	70	(50 - 150)
2-Fluorophenol	75	(50 - 150)
	69	(50 - 150)
2,4,6-Tribromophenol	84	(50 - 150)
	74	(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.

2/4

TestAmerica North Canton

Fails for 2,4-Dinitrophenol

RECOVERY REPORT

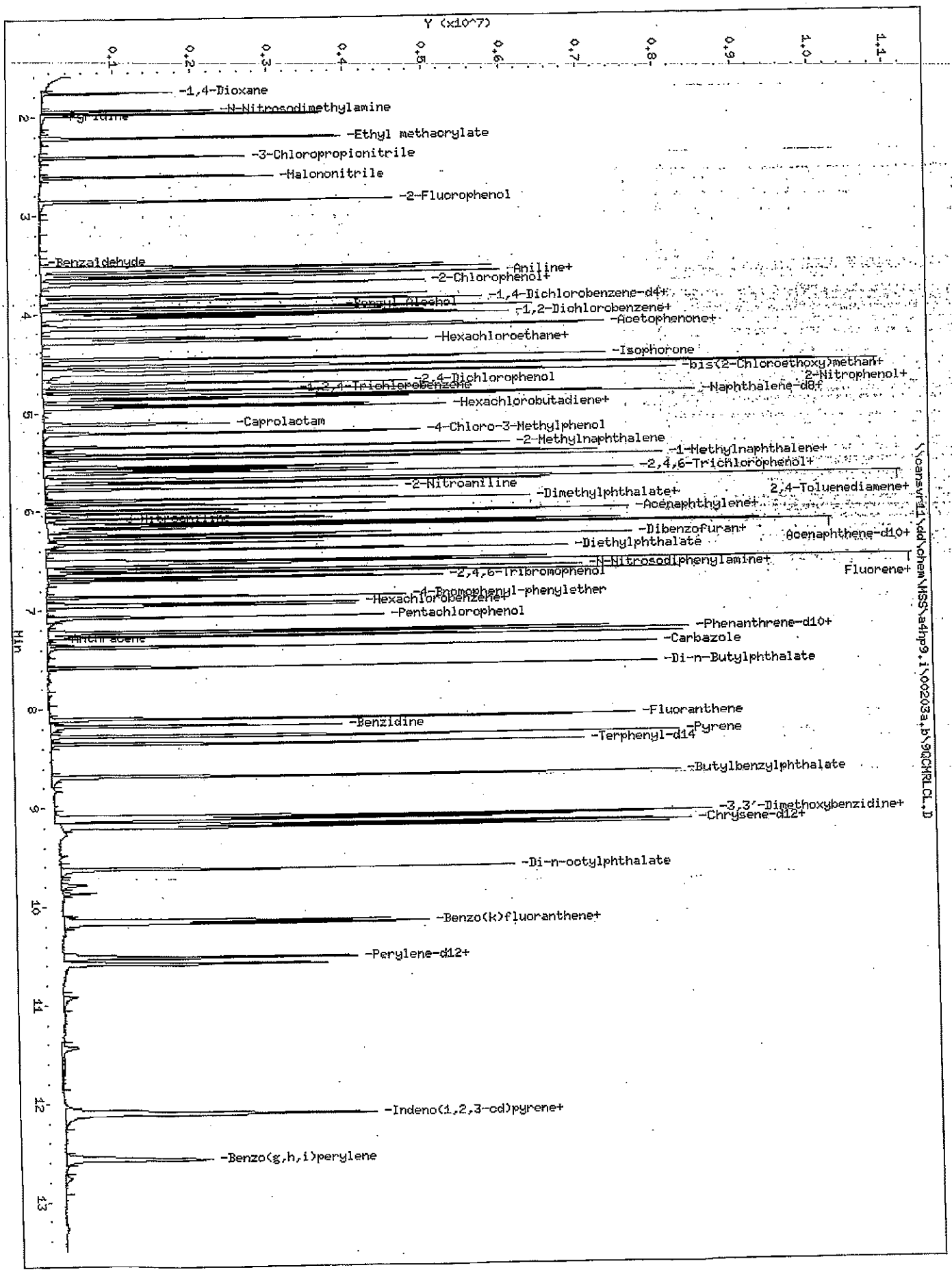
Client Name:
Sample Matrix: LIQUID
Lab Smp Id: qcmrl
Level: LOW
Data Type: MS DATA
SpikeList File: qcmrl.spk
Sublist File: qcmrl.sub
Method File: \\cansvr11\dd\chem\MSS\a4hp9.i\00203a.b\8270c-625.m
Misc Info:

Client SDG: SDGa00278
Fraction: SV

Operator: 001574
SampleType: MRL
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
82 Acenaphthene	10.000	9.2071	92.07	70-130
79 Acenaphthylene	10.000	9.3264	93.26	70-130
116 Anthracene	10.000	9.1734	91.73	70-130
136 Benzo(a)Anthracene	10.000	8.8283	88.28	70-130
141 Benzo(b)fluoranthe	10.000	8.9567	89.57	70-130
151 Benzo(g,h,i)peryle	10.000	9.1950	91.95	70-130
146 Benzo(a)pyrene	10.000	9.3565	93.57	70-130
29 Benzyl Alcohol	10.000	9.4786	94.79	70-130
44 bis(2-Chloroethoxy	10.000	9.3906	93.91	70-130
23 bis(2-Chloroethyl)	10.000	9.4668	94.67	70-130
31 bis(2-Chloroisopro	10.000	9.6066	96.07	70-130
139 bis(2-ethylhexyl)P	10.000	9.6674	96.67	70-130
106 4-Bromophenyl-phen	10.000	9.3327	93.33	70-130
131 Butylbenzylphthala	10.000	9.5200	95.20	70-130
52 4-Chloroaniline	10.000	8.9712	89.71	70-130
70 2-Chloronaphthalen	10.000	8.9217	89.22	70-130
95 4-Chlorophenyl-phe	10.000	9.4586	94.59	70-130
137 Chrysene	10.000	9.2335	92.33	70-130
150 Dibenz(a,h)anthrac	10.000	9.4987	94.99	70-130
86 Dibenzofuran	10.000	9.0857	90.86	70-130
120 Di-n-Butylphthalat	10.000	9.9587	99.59	70-130
28 1,2-Dichlorobenzen	10.000	9.6078	96.08	70-130
26 1,3-Dichlorobenzen	10.000	9.6754	96.75	70-130
27 1,4-Dichlorobenzen	10.000	9.5793	95.79	70-130
135 3,3'-Dichlorobenzi	10.000	8.9702	89.70	70-130
93 Diethylphthalate	10.000	9.2444	92.44	70-130
76 Dimethylphthalate	10.000	9.1692	91.69	70-130
87 2,4-Dinitrotoluene	10.000	9.4675	94.67	70-130
78 2,6-Dinitrotoluene	10.000	9.3971	93.97	70-130
140 Di-n-octylphthalat	10.000	9.6243	96.24	70-130
123 Fluoranthene	10.000	9.1042	91.04	70-130
94 Fluorene	10.000	9.0442	90.44	70-130
107 Hexachlorobenzene	10.000	9.9493	99.49	70-130
56 Hexachlorobutadien	10.000	9.3483	93.48	70-130
64 Hexachlorocyclopen	10.000	8.7315	87.31	70-130
34 Hexachloroethane	10.000	9.4853	94.85	70-130
149 Indeno(1,2,3-cd)py	10.000	9.2270	92.27	70-130
41 Isophorone	10.000	9.7210	97.21	70-130
63 1-Methylnaphthalen	10.000	9.0046	90.05	70-130
62 2-Methylnaphthalen	10.000	9.0663	90.66	70-130

SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
51	Naphthalene	10.000	8.9637	89.64	70-130
73	2-Nitroaniline	10.000	9.2973	92.97	70-130
81	3-Nitroaniline	10.000	9.3352	93.35	70-130
96	4-Nitroaniline	10.000	9.0567	90.57	70-130
35	Nitrobenzene	10.000	9.3851	93.85	70-130
32	N-Nitroso-di-n-pro	10.000	9.6942	96.94	70-130
99	N-Nitrosodiphenyla	10.000	9.5758	95.76	70-130
115	Phenanthrene	10.000	9.2800	92.80	70-130
125	Pyrene	10.000	8.9645	89.65	70-130
9	Pyridine	10.000	9.4990	94.99	70-130
50	1,2,4-Trichloroben	10.000	9.3682	93.68	70-130
49	Benzoic Acid	20.000	18.335	91.68	70-130
59	4-Chloro-3-Methylp	10.000	9.4898	94.90	70-130
24	2-Chlorophenol	10.000	9.5084	95.08	70-130
48	2,4-Dichlorophenol	10.000	9.1191	91.19	70-130
43	2,4-Dimethylphenol	10.000	9.4778	94.78	70-130
98	4,6-Dinitro-2-meth	10.000	7.9110	79.11	70-130
83	2,4-Dinitrophenol	20.000	12.498	62.49*	70-130
30	2-Methylphenol	10.000	9.7326	97.33	70-130
192	4-Methylphenol	10.000	9.4597	94.60	70-130
42	2-Nitrophenol	10.000	9.6777	96.78	70-130
85	4-Nitrophenol	10.000	7.2338	72.34	70-130
111	Pentachlorophenol	20.000	15.012	75.06	70-130
22	Phenol	10.000	9.3797	93.80	70-130
67	2,4,5-Trichlorophe	10.000	9.2961	92.96	70-130
66	2,4,6-Trichlorophe	10.000	9.0114	90.11	70-130
119	Carbazole	10.000	9.4281	94.28	70-130
142	Benzo(k)fluoranthe	10.000	9.1565	91.56	70-130
37	Acetophenone	10.000	9.7995	98.00	70-130
209	Benzaldehyde	10.000	10.720	107.20	70-130
210	Caprolactam	10.000	9.2095	92.09	70-130
211	1,1'-Biphenyl	10.000	9.6007	96.01	70-130
212	Atrazine	10.000	9.7132	97.13	70-130
198	1,4-Dioxane	10.000	9.4292	94.29	70-130
21	Aniline	10.000	9.4608	94.61	70-130
10	N-Nitrosodimethyla	10.000	9.4960	94.96	70-130
80	1,2-Dinitrobenzene	10.000	9.4563	94.56	70-130
91	2,3,5,6-Tetrachlor	10.000	8.9313	89.31	70-130


Y (x10^7)
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
Min
2
3
4
5
6
7
8
9
10
11
12
13
-1,4-Dioxane
-N-Nitrosodimethylamine
-Pyridine
-Ethyl methacrylate
-3-Chloropropionitrile
-Malononitrile
-2-Fluorophenol
-Benzaldehyde
-Aniline+
-2-Chlorophenol+
-1,4-Dichlorobenzene-d4+
-Benzyl Alcohol
-1,2-Dichlorobenzene+
-Acetophenone+
-Hexachloroethane+
-Isophorone
-bis(2-Chloroethoxy)methan+
-2,4-Dichlorophenol
2-Nitrophenol+
-1,2,4-Trichlorobenzene
-Naphthalene-d8+
-Hexachlorobutadiene+
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene
-1-Methylnaphthalene+
-2,4,6-Trichlorophenol+
-2-Nitroaniline
2,4-Toluenediamene+
-Dimethylphthalate+
-Acenaphthylene+
-Dibenzofuran+
Acenaphthene-d10+
-Diethylphthalate
-N-Nitrosodiphenylamine+
Fluorene+
-2,4,6-Tribromophenol
-4-Bromophenyl-phenylether
-Hexachlorobenzene+
-Pentachlorophenol
-Phenanthrene-d10+
-Anthracene
-Carbazole
-Di-n-Butylphthalate
-Fluoranthene
-Benzidine
-Pyrene
-Terphenyl-d14
-Butylbenzylphthalate
-3,3'-Dimethoxybenzidine+
-Chrysene-d12+
-Di-n-octylphthalate
-Benzo(k)fluoranthene+
-Perylene-d12+
-Indeno(1,2,3-cd)pyrene+
-Benzo(g,h,i)perylene
\\cansvr11\dd\chem\MSS\a4hp9.i\00203a.b\9QCMRLCL.D

TestAmerica North Canton

Semivolatile REPORT SW-846 Method 8270C-625

Data file : \\cansvr11\dd\chem\MSS\a4hp9.i\00203a.b\9QCMRLCL.D
Lab Smp Id: qcmrl
Inj Date : 03-FEB-2010 20:50
Operator : 001574 Inst ID: a4hp9.i
Smp Info : qcmrl,00203a.b,8270c-625,1-827042d.sub
Misc Info :
Comment :
Method : \\cansvr11\dd\chem\MSS\a4hp9.i\00203a.b\8270c-625.m
Meth Date : 04-Feb-2010 10:56 ulmann Quant Type: ISTD
Cal Date : 03-FEB-2010 10:31 Cal File: 9SMH0203.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

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)	CONCENTRATIONS FINAL (ug/L)
* 1 1,4-Dichlorobenzene-d4	152	3.866	3.865	(1.000)	450224	2.00000	
* 2 Naphthalene-d8	136	4.827	4.827	(1.000)	1948659	2.00000	
* 3 Acenaphthene-d10	164	6.125	6.130	(1.000)	1032365	2.00000	
* 4 Phenanthrene-d10	188	7.215	7.215	(1.000)	1495766	2.00000	
* 5 Chrysene-d12	240	9.176	9.197	(1.000)	1512986	2.00000	
* 6 Perylene-d12	264	10.581	10.596	(1.000)	1331655	2.00000	
9 Pyridine	79	1.985	1.979	(0.514)	1326164	2.37476	9.4990
10 N-Nitrosodimethylamine	74	1.948	1.947	(0.504)	728721	2.37399	9.4960
11 Ethyl methacrylate	69	2.226	2.225	(0.576)	1117070	2.36995	9.4798
12 3-Chloropropionitrile	54	2.418	2.417	(0.626)	471884	2.31247	9.2499
13 Malononitrile	66	2.621	2.594	(0.678)	1488342	2.40561	9.6224
209 Benzaldehyde	77	3.534	3.534	(0.914)	892263	2.68007	10.720
21 Aniline	93	3.609	3.614	(0.934)	1784192	2.36521	9.4608
22 Phenol	94	3.561	3.555	(0.921)	1444829	2.34492	9.3797
23 bis(2-Chloroethyl)ether	93	3.636	3.641	(0.941)	1154391	2.36671	9.4668
24 2-Chlorophenol	128	3.705	3.705	(0.959)	753547	2.37709	9.5084
26 1,3-Dichlorobenzene	146	3.823	3.828	(0.989)	745132	2.41886	9.6754
27 1,4-Dichlorobenzene	146	3.876	3.876	(1.003)	726301	2.39483	9.5793
28 1,2-Dichlorobenzene	146	3.999	3.999	(1.035)	706508	2.40196	9.6078
29 Benzyl Alcohol	108	3.951	3.951	(1.022)	651799	2.36965	9.4786

PESTICIDE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: January 2010
Data Reviewer/Date: Angye Dragotta/ March 9, 2010

SDG: A0A210417 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 – 4.1 °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 1/12/10 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?	✓			1/7/10 @ 1823, 1758, 1733, 1709, and 1644	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%?	✓			The MRL opening and closing MRL analyzed for the sequence beginning 1/27/10 recovered above control limits for heptachlor at 196% and 381%, respectively. No qualification was made as there were no detected heptachlor concentrations reported.	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%?	✓			1/11/10 @2154	LCG Table 4 >115%=J; 80-85%=J/UJ; <80%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: January 2010
Data Reviewer/Date: Angye Dragotta/ March 9, 2010

SDG: A0A210417 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 ≤5%? 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
19. Was a field blank collected and analyzed?	✓				
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?	✓			Samples FWGASY-004mw-1499-GW and FWGASY-005mw-1500-GW were the parent MS/MSD samples from this SDG.	
25. Were MS/MSD recoveries 50-150% and RPD ≤20%?		✓		Checked by ADR. The spike analyses performed on sample FWGASY-004mw-1499-GW recovered below control limits for endosulfan I at 46% and 48%. No qualification was made as the LCS recovered within limits.	*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 FWGASYmw-004c-1499-GW, FWGEQUIPRinse1-1513-GW and FWGEQUIPRinse2-1514-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%?	✓				QAPP Table 3-2 RPD >30=J
28. Were all positive results verified by a second column confirmation? Were the RPD's ≤ 40?			✓	.No detected concentrations were reported.	LCG Table 4 >40 RPD=J

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: January 2010
Data Reviewer/Date: Angye Dragotta/ March 9, 2010

SDG: A0A210417 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:

The second column was not evaluated as there were no detected concentrations reprted.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-009C-1495-GW

GC Semivolatiles

Lot-Sample #...: A0A210417-002 **Work Order #...:** LTGAM1AD **Matrix.....:** WG
Date Sampled...: 01/20/10 10:10 **Date Received..:** 01/21/10
Prep Date.....: 01/25/10 **Analysis Date..:** 01/27/10
Prep Batch #...: 0025031
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	74	(50 - 150)
Decachlorobiphenyl	21 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw001C-1496-GW

GC Semivolatiles

Lot-Sample #...: A0A210417-004 **Work Order #...:** LTGCG1AD **Matrix.....:** WG
Date Sampled...: 01/20/10 12:05 **Date Received..:** 01/21/10
Prep Date.....: 01/25/10 **Analysis Date..:** 01/27/10
Prep Batch #...: 0025031
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	81	(50 - 150)
Decachlorobiphenyl	33 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmwDUP1-1512-GW

GC Semivolatiles

Lot-Sample #...: A0A210417-006 **Work Order #...:** LTGC31AD **Matrix.....:** WG
Date Sampled...: 01/20/10 12:25 **Date Received..:** 01/21/10
Prep Date.....: 01/25/10 **Analysis Date..:** 01/27/10
Prep Batch #...: 0025031
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	76	(50 - 150)
Decachlorobiphenyl	47 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw003C-1498-GW

GC Semivolatiles

Lot-Sample #...: A0A210417-008 **Work Order #...:** LTGDL1AD **Matrix.....:** WG
Date Sampled...: 01/20/10 14:05 **Date Received..:** 01/21/10
Prep Date.....: 01/25/10 **Analysis Date..:** 01/27/10
Prep Batch #...: 0025031
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	76	(50 - 150)
Decachlorobiphenyl	30 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw002C-1497-GW

GC Semivolatiles

Lot-Sample #...: A0A210417-010 **Work Order #...:** LTGDX1AD **Matrix.....:** WG
Date Sampled...: 01/20/10 15:01 **Date Received..:** 01/21/10
Prep Date.....: 01/25/10 **Analysis Date..:** 01/27/10
Prep Batch #...: 0025031
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	53	(50 - 150)
Decachlorobiphenyl	18 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw007C-1502-GW

GC Semivolatiles

Lot-Sample #...: A0A210417-012 **Work Order #...:** LTGD21AD **Matrix.....:** WG
Date Sampled...: 01/20/10 16:31 **Date Received..:** 01/21/10
Prep Date.....: 01/25/10 **Analysis Date..:** 01/27/10
Prep Batch #...: 0025031
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	75	(50 - 150)
Decachlorobiphenyl	47 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRinse1-1513-GW

GC Semivolatiles

Lot-Sample #...: A0A210417-014 **Work Order #...:** LTGD51AD **Matrix.....:** WQ
Date Sampled...: 01/20/10 17:30 **Date Received..:** 01/21/10
Prep Date.....: 01/25/10 **Analysis Date..:** 01/27/10
Prep Batch #...: 0025031
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	78	(50 - 150)
Decachlorobiphenyl	69	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-008C-1503-GW

GC Semivolatiles

Lot-Sample #...: A0A210417-018 **Work Order #...:** LTGGC1AD **Matrix.....:** WG
Date Sampled...: 01/20/10 10:15 **Date Received..:** 01/21/10
Prep Date.....: 01/25/10 **Analysis Date..:** 01/27/10
Prep Batch #...: 0025031
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	66	(50 - 150)
Decachlorobiphenyl	29 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-DUP2-1511-GW

GC Semivolatiles

Lot-Sample #...: A0A210417-020 **Work Order #...:** LTGGT1AD **Matrix.....:** WG
Date Sampled...: 01/20/10 11:02 **Date Received..:** 01/21/10
Prep Date.....: 01/25/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0025031
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	66	(50 - 150)
Decachlorobiphenyl	33 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-010C-1505-GW

GC Semivolatiles

Lot-Sample #...:	A0A210417-022	**Work Order #...:**	LTGG51AD	**Matrix.....:**	WG
Date Sampled...:	01/20/10 12:54	**Date Received..:**	01/21/10		
Prep Date.....:	01/25/10	**Analysis Date..:**	01/28/10		
Prep Batch #...:	0025031				
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	73	(50 - 150)
Decachlorobiphenyl	20 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-006C-1501-GW

GC Semivolatiles

Lot-Sample #...: A0A210417-024 **Work Order #...:** LTGHD1AD **Matrix.....:** WG
Date Sampled...: 01/20/10 14:00 **Date Received..:** 01/21/10
Prep Date.....: 01/25/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0025031
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	84	(50 - 150)
Decachlorobiphenyl	35 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-005C-1500-GW

GC Semivolatiles

Lot-Sample #...:	A0A210417-026	**Work Order #...:**	LTGH01AH	**Matrix.....:**	WG
Date Sampled...:	01/20/10 15:20	**Date Received..:**	01/21/10		
Prep Date.....:	01/25/10	**Analysis Date..:**	01/28/10		
Prep Batch #...:	0025031				
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	64	(50 - 150)
Decachlorobiphenyl	24 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-009C-1504-GW

GC Semivolatiles

Lot-Sample #...: A0A210417-029 **Work Order #...:** LTJCD1AD **Matrix.....:** WG
Date Sampled...: 01/21/10 09:20 **Date Received..:** 01/21/10
Prep Date.....: 01/25/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0025031
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	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	30 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRinse2-1514-GW

GC Semivolatiles

Lot-Sample #...: A0A210417-031 **Work Order #...:** LTJCN1AD **Matrix.....:** WQ
Date Sampled...: 01/21/10 10:22 **Date Received..:** 01/21/10
Prep Date.....: 01/25/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0025031
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	78	(50 - 150)
Decachlorobiphenyl	62	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-004C-1499-GW

GC Semivolatiles

Lot-Sample #...: A0A210417-032 **Work Order #...:** LTJDA1AH **Matrix.....:** WG
Date Sampled...: 01/21/10 09:15 **Date Received..:** 01/21/10
Prep Date.....: 01/25/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0025031
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	75	(50 - 150)
Decachlorobiphenyl	52	(50 - 150)

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A0A210417 **Work Order #...:** LTN1H1AA **Matrix.....:** WATER
MB Lot-Sample #: A0A250000-031

Prep Date.....: 01/25/10 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 01/27/10 **Prep Batch #...:** 0025031
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	79	(50 - 150)
Decachlorobiphenyl	71	(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 #...: A0A210417 **Work Order #...:** LTN1H1AC **Matrix.....:** WATER
LCS Lot-Sample#: A0A250000-031
Prep Date.....: 01/25/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0025031
Dilution Factor: 2 **Final Wgt/Vol..:** 5 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
alpha-BHC	99	(44 - 137)	SW846 8081A
beta-BHC	97	(50 - 135)	SW846 8081A
delta-BHC	90	(58 - 160)	SW846 8081A
gamma-BHC (Lindane)	97	(58 - 127)	SW846 8081A
Heptachlor	97	(48 - 150)	SW846 8081A
Aldrin	94	(53 - 128)	SW846 8081A
Heptachlor epoxide	93	(50 - 127)	SW846 8081A
Endosulfan I	53	(50 - 160)	SW846 8081A
Dieldrin	94	(50 - 124)	SW846 8081A
4,4'-DDE	98	(50 - 130)	SW846 8081A
Endrin	84	(50 - 137)	SW846 8081A
Endosulfan II	58	(50 - 144)	SW846 8081A
4,4'-DDD	90	(50 - 137)	SW846 8081A
Endosulfan sulfate	84	(50 - 160)	SW846 8081A
4,4'-DDT	82	(50 - 145)	SW846 8081A
Methoxychlor	79	(50 - 160)	SW846 8081A
Endrin ketone	83	(50 - 150)	SW846 8081A
Endrin aldehyde	77	(30 - 160)	SW846 8081A
alpha-Chlordane	95	(50 - 122)	SW846 8081A
gamma-Chlordane	95	(50 - 130)	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	94	(50 - 150)
Decachlorobiphenyl	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 #...: A0A210417 Work Order #...: LTGH01AT-MS Matrix.....: WG
MS Lot-Sample #: A0A210417-026 LTGH01AU-MSD
Date Sampled...: 01/20/10 15:20 Date Received..: 01/21/10
Prep Date.....: 01/25/10 Analysis Date..: 01/28/10
Prep Batch #...: 0025031
Dilution Factor: 2 Initial Wgt/Vol: 480 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
alpha-BHC	93	(50 - 150)			SW846 8081A
	91	(50 - 150)	1.8	(0-50)	SW846 8081A
beta-BHC	92	(50 - 150)			SW846 8081A
	90	(50 - 150)	1.7	(0-50)	SW846 8081A
delta-BHC	85	(50 - 150)			SW846 8081A
	84	(50 - 150)	1.3	(0-50)	SW846 8081A
gamma-BHC (Lindane)	91	(50 - 150)			SW846 8081A
	89	(50 - 150)	2.1	(0-50)	SW846 8081A
Heptachlor	91	(50 - 150)			SW846 8081A
	92	(50 - 150)	1.1	(0-50)	SW846 8081A
Aldrin	87	(50 - 150)			SW846 8081A
	87	(50 - 150)	0.16	(0-50)	SW846 8081A
Heptachlor epoxide	90	(50 - 150)			SW846 8081A
	87	(50 - 150)	3.2	(0-50)	SW846 8081A
Endosulfan I	54	(50 - 150)			SW846 8081A
	53	(50 - 150)	3.0	(0-50)	SW846 8081A
Dieldrin	91	(50 - 150)			SW846 8081A
	87	(50 - 150)	3.7	(0-50)	SW846 8081A
4,4'-DDE	89	(50 - 150)			SW846 8081A
	89	(50 - 150)	0.43	(0-50)	SW846 8081A
Endrin	81	(50 - 150)			SW846 8081A
	79	(50 - 150)	2.0	(0-50)	SW846 8081A
Endosulfan II	57	(50 - 150)			SW846 8081A
	56	(50 - 150)	1.7	(0-50)	SW846 8081A
4,4'-DDD	85	(50 - 150)			SW846 8081A
	84	(50 - 150)	1.3	(0-50)	SW846 8081A
Endosulfan sulfate	80	(50 - 150)			SW846 8081A
	78	(50 - 150)	3.3	(0-50)	SW846 8081A
4,4'-DDT	68	(50 - 150)			SW846 8081A
	68	(50 - 150)	0.14	(0-50)	SW846 8081A
Methoxychlor	77	(50 - 150)			SW846 8081A
	74	(50 - 150)	4.8	(0-50)	SW846 8081A
Endrin ketone	79	(50 - 150)			SW846 8081A
	77	(50 - 150)	2.8	(0-50)	SW846 8081A
Endrin aldehyde	75	(50 - 150)			SW846 8081A
	72	(50 - 150)	3.8	(0-50)	SW846 8081A
alpha-Chlordane	88	(50 - 150)			SW846 8081A
	88	(50 - 150)	0.87	(0-50)	SW846 8081A
gamma-Chlordane	89	(50 - 150)			SW846 8081A
	88	(50 - 150)	1.0	(0-50)	SW846 8081A

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A0A210417 **Work Order #...:** LTGH01AT-MS **Matrix.....:** WG
MS Lot-Sample #: A0A210417-026 LTGH01AU-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	90	(50 - 150)
	90	(50 - 150)
Decachlorobiphenyl	51	(50 - 150)
	58	(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 #...: A0A210417 Work Order #...: LTJDA1AJ-MS Matrix.....: WG
MS Lot-Sample #: A0A210417-032 LTJDA1AK-MSD
Date Sampled...: 01/21/10 09:15 Date Received..: 01/21/10
Prep Date.....: 01/25/10 Analysis Date..: 01/28/10
Prep Batch #...: 0025031
Dilution Factor: 2 Initial Wgt/Vol: 525 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
alpha-BHC	86	(50 - 150)			SW846 8081A
	93	(50 - 150)	7.1	(0-50)	SW846 8081A
beta-BHC	84	(50 - 150)			SW846 8081A
	91	(50 - 150)	8.1	(0-50)	SW846 8081A
delta-BHC	77	(50 - 150)			SW846 8081A
	84	(50 - 150)	8.2	(0-50)	SW846 8081A
gamma-BHC (Lindane)	83	(50 - 150)			SW846 8081A
	89	(50 - 150)	7.1	(0-50)	SW846 8081A
Heptachlor	82	(50 - 150)			SW846 8081A
	93	(50 - 150)	13	(0-50)	SW846 8081A
Aldrin	74	(50 - 150)			SW846 8081A
	81	(50 - 150)	9.2	(0-50)	SW846 8081A
Heptachlor epoxide	80	(50 - 150)			SW846 8081A
	87	(50 - 150)	8.1	(0-50)	SW846 8081A
Endosulfan I	46 a	(50 - 150)			SW846 8081A
	48 a	(50 - 150)	4.2	(0-50)	SW846 8081A
Dieldrin	80	(50 - 150)			SW846 8081A
	84	(50 - 150)	5.2	(0-50)	SW846 8081A
4,4'-DDE	70	(50 - 150)			SW846 8081A
	76	(50 - 150)	8.7	(0-50)	SW846 8081A
Endrin	79	(50 - 150)			SW846 8081A
	87	(50 - 150)	9.7	(0-50)	SW846 8081A
Endosulfan II	51	(50 - 150)			SW846 8081A
	55	(50 - 150)	8.5	(0-50)	SW846 8081A
4,4'-DDD	74	(50 - 150)			SW846 8081A
	81	(50 - 150)	9.6	(0-50)	SW846 8081A
Endosulfan sulfate	71	(50 - 150)			SW846 8081A
	76	(50 - 150)	7.6	(0-50)	SW846 8081A
4,4'-DDT	63	(50 - 150)			SW846 8081A
	72	(50 - 150)	14	(0-50)	SW846 8081A
Methoxychlor	63	(50 - 150)			SW846 8081A
	72	(50 - 150)	14	(0-50)	SW846 8081A
Endrin ketone	70	(50 - 150)			SW846 8081A
	76	(50 - 150)	8.0	(0-50)	SW846 8081A
Endrin aldehyde	66	(50 - 150)			SW846 8081A
	71	(50 - 150)	6.9	(0-50)	SW846 8081A
alpha-Chlordane	79	(50 - 150)			SW846 8081A
	86	(50 - 150)	8.3	(0-50)	SW846 8081A
gamma-Chlordane	80	(50 - 150)			SW846 8081A
	88	(50 - 150)	9.5	(0-50)	SW846 8081A

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A0A210417 **Work Order #...:** LTJDA1AJ-MS **Matrix.....:** WG
MS Lot-Sample #: A0A210417-032 LTJDA1AK-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	80	(50 - 150)
	85	(50 - 150)
Decachlorobiphenyl	51	(50 - 150)
	73	(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.

Report Date: 28-Jan-2010 09:15

TestAmerica North Canton

RECOVERY REPORT

Client Name: Client SDG: SDGa00711
Sample Matrix: LIQUID Fraction: Pesticides
Lab Smp Id: MRL
Level: LOW Operator: 093905
Data Type: GC MULTI COMP SampleType: MRL
SpikeList File: MRL.spk Quant Type: ESTD
Sublist File: mrl.sub
Method File: \\cansvr11\dd\chem\GCS\a2hp3.i\100127-1.b\PEST3.m
Misc Info:

SPIKE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
4 alpha-BHC	0.005000	0.005496	109.91	70-130
5 gamma-BHC (Lindane	0.005000	0.005487	109.74	70-130
6 beta-BHC	0.005000	0.005991	119.83	70-130
7 delta-BHC	0.005000	0.005512	110.23	70-130
9 Heptachlor	0.005000	0.009782	195.65*	70-130
10 Aldrin	0.005000	0.005738	114.75	70-130
12 Heptachlor epoxide	0.005000	0.006071	121.43	70-130
13 gamma-Chlordane	0.005000	0.005636	112.73	70-130
14 alpha-Chlordane	0.005000	0.005748	114.97	70-130
15 Endosulfan I	0.005000	0.006073	121.46	70-130
16 4,4'-DDE	0.005000	0.005498	109.97	70-130
17 Dieldrin	0.005000	0.005728	114.55	70-130
20 Endrin	0.005000	0.005887	117.74	70-130
22 4,4'-DDD	0.005000	0.005510	110.19	70-130
23 Endosulfan II	0.005000	0.005719	114.38	70-130
24 4,4'-DDT	0.005000	0.005095	101.90	70-130
26 Endrin aldehyde	0.005000	0.005673	113.46	70-130
27 Methoxychlor	0.005000	0.005435	108.71	70-130
28 Endosulfan sulfate	0.005000	0.005420	108.41	70-130
29 Endrin ketone	0.005000	0.005418	108.37	70-130

Data File: \\cansvr11\dd\chem\GCS\a2hp3.i\100127-1.b\048F4401.D Page 1
Report Date: 28-Jan-2010 09:23

TestAmerica North Canton

RECOVERY REPORT

Client Name: Client SDG: SDGa00711
Sample Matrix: LIQUID Fraction: Pesticides
Lab Smp Id: MRL
Level: LOW Operator: 093905
Data Type: GC MULTI COMP SampleType: MRL
SpikeList File: MRL.spk Quant Type: ESTD
Sublist File: mrl.sub
Method File: \\cansvr11\dd\chem\GCS\a2hp3.i\100127-1.b\PEST3.m
Misc Info:

SPIKE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
4 alpha-BHC	0.005000	0.005776	115.53	70-130
5 gamma-BHC (Lindane	0.005000	0.005796	115.91	70-130
6 beta-BHC	0.005000	0.006119	122.37	70-130
7 delta-BHC	0.005000	0.005669	113.39	70-130
9 Heptachlor	0.005000	0.01903	380.61*	70-130
10 Aldrin	0.005000	0.005808	116.16	70-130
12 Heptachlor epoxide	0.005000	0.006101	122.03	70-130
13 gamma-Chlordane	0.005000	0.005655	113.09	70-130
14 alpha-Chlordane	0.005000	0.005754	115.08	70-130
15 Endosulfan I	0.005000	0.005968	119.36	70-130
16 4,4'-DDE	0.005000	0.005619	112.38	70-130
17 Dieldrin	0.005000	0.005876	117.52	70-130
20 Endrin	0.005000	0.005871	117.42	70-130
22 4,4'-DDD	0.005000	0.005313	106.25	70-130
23 Endosulfan II	0.005000	0.005604	112.08	70-130
24 4,4'-DDT	0.005000	0.004876	97.53	70-130
26 Endrin aldehyde	0.005000	0.005435	108.71	70-130
27 Methoxychlor	0.005000	0.005158	103.15	70-130
28 Endosulfan sulfate	0.005000	0.005146	102.93	70-130
29 Endrin ketone	0.005000	0.005487	109.74	70-130

TestAmerica North Canton

PESTICIDE 8081/608

Data file : \\cansvr11\dd\chem\GCS\a2hp3.i\100127-1.b\048F4401.D
Lab Smp Id: MRL
Inj Date : 28-JAN-2010 05:59
Operator : 093905 Inst ID: a2hp3.i
Smp Info : MRL
Misc Info :
Comment :
Method : \\cansvr11\dd\chem\GCS\a2hp3.i\100127-1.b\PEST3.m
Meth Date : 28-Jan-2010 09:23 vandorenc Quant Type: ESTD
Cal Date : 12-JAN-2010 02:24 Cal File: 030F3001.D
Als bottle: 48 QC Sample: MRL
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: mrl.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: CANPGCSV23

Concentration Formula: Amt * DF * Vt/Vo/Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (uL)
Vo	1.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO	
4 alpha-BHC					CAS #: 319-84-6			
5.832	5.833	-0.001	3323213	0.00578	0.005776			
5 gamma-BHC (Lindane)					CAS #: 58-89-9			
6.337	6.337	0.000	2987219	0.00580	0.005796			
6 beta-BHC					CAS #: 319-85-7			
6.507	6.507	0.000	1240840	0.00612	0.006119			
7 delta-BHC					CAS #: 319-86-8			
6.748	6.748	0.000	5398497	0.00567	0.005669			
9 Heptachlor					CAS #: 76-44-8			
7.087	7.064	0.023	7526799	0.01903	0.01903			(R)
10 Aldrin					CAS #: 309-00-2			
7.559	7.560	-0.001	2094632	0.00581	0.005808			

Data File: \\cansvr11\dd\chem\GCS\a2hp3.i\100127-1.b\033F2901.D Page 1
Report Date: 28-Jan-2010 09:20

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a2hp3.i Injection Date: 27-JAN-2010 23:53
Lab File ID: 033F2901.D Init. Cal. Date(s): 11-JAN-2010 22-JAN-2010
Analysis Type: Init. Cal. Times: 15:19 14:47
Lab Sample ID: AB3 G252 Quant Type: ESTD
Method: \\cansvr11\dd\chem\GCS\a2hp3.i\100127-1.b\PEST3.m

COMPOUND	RRF / AMOUNT	RF0.025	CCAL RRF0.025	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 1 Tetrachloro-m-xylene	355791581	370557240	370557240	0.000	-4.15009	15.00000	Averaged	
4 alpha-BHC	575296899	599631680	599631680	0.010	-4.22995	15.00000	Averaged	
5 gamma-BHC (Lindane)	515428008	528809280	528809280	0.010	-2.59615	15.00000	Averaged	
6 beta-BHC	202796289	208606240	208606240	0.010	-2.86492	15.00000	Averaged	
7 delta-BHC	952230715	957371480	957371480	0.010	-0.53987	15.00000	Averaged	
9 Heptachlor	395511505	447168000	447168000	0.010	-13.06068	15.00000	Averaged	
10 Aldrin	360636974	374102320	374102320	0.010	-3.73377	15.00000	Averaged	
12 Heptachlor epoxide	831393843	855624120	855624120	0.010	-2.91442	15.00000	Averaged	
13 gamma-Chlordane	290136513	287739120	287739120	0.010	0.82630	15.00000	Averaged	
14 alpha-Chlordane	295517123	297040920	297040920	0.010	-0.51564	15.00000	Averaged	
16 4,4'-DDE	306931368	309973000	309973000	0.010	-0.99098	15.00000	Averaged	
15 Endosulfan I	741954358	751079640	751079640	0.010	-1.22990	15.00000	Averaged	
17 Dieldrin	326509621	329015080	329015080	0.010	-0.76735	15.00000	Averaged	
20 Endrin	697638356	691850120	691850120	0.010	0.82969	15.00000	Averaged	
22 4,4'-DDD	275853038	259382880	259382880	0.010	5.97063	15.00000	Averaged	
23 Endosulfan II	300030123	281970200	281970200	0.010	6.01937	15.00000	Averaged	
24 4,4'-DDT	295143316	256698760	256698760	0.010	13.02572	15.00000	Averaged	
26 Endrin aldehyde	518833391	461731320	461731320	0.010	11.00586	15.00000	Averaged	
27 Methoxychlor	143769588	119776960	119776960	0.010	16.68825	15.00000	Averaged	<-
28 Endosulfan sulfate	300094154	260822080	260822080	0.010	13.08658	15.00000	Averaged	
29 Endrin ketone	628539961	559063640	559063640	0.010	11.05360	15.00000	Averaged	
$ 30 Decachlorobiphenyl	288230630	250481920	250481920	0.010	13.09670	15.00000	Averaged	

Average %D / Drift Results.

Calculated Average %D/Drift = 5.87256
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

Data File: \\cansvr11\dd\chem\GCS\a2hp3.i\100127-1.b\018F1401.D Page 1
Report Date: 28-Jan-2010 09:18

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a2hp3.i Injection Date: 27-JAN-2010 17:45
Lab File ID: 018F1401.D Init. Cal. Date(s): 11-JAN-2010 22-JAN-2010
Analysis Type: Init. Cal. Times: 15:19 14:47
Lab Sample ID: AB3 G252 Quant Type: ESTD
Method: \\cansvr11\dd\chem\GCS\a2hp3.i\100127-1.b\PEST3.m

COMPOUND	RRF / AMOUNT	RF0.025	CCAL RRF0.025	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 1 Tetrachloro-m-xylene	355791581	362397640	362397640	0.000	-1.85672	15.00000	Averaged	
4 alpha-BHC	575296899	598669920	598669920	0.010	-4.06278	15.00000	Averaged	
5 gamma-BHC (Lindane)	515428008	539522440	539522440	0.010	-4.67465	15.00000	Averaged	
6 beta-BHC	202796289	211607400	211607400	0.010	-4.34481	15.00000	Averaged	
7 delta-BHC	952230715	1.006e+09	1.006e+09	0.010	-5.60707	15.00000	Averaged	
9 Heptachlor	395511505	460411040	460411040	0.010	-16.40901	15.00000	Averaged	<-
10 Aldrin	360636974	373667520	373667520	0.010	-3.61320	15.00000	Averaged	
12 Heptachlor epoxide	831393843	881493240	881493240	0.010	-6.02595	15.00000	Averaged	
13 gamma-Chlordane	290136513	305562440	305562440	0.010	-5.31678	15.00000	Averaged	
14 alpha-Chlordane	295517123	310718600	310718600	0.010	-5.14403	15.00000	Averaged	
16 4,4'-DDE	306931368	323649400	323649400	0.010	-5.44683	15.00000	Averaged	
15 Endosulfan I	741954358	787464880	787464880	0.010	-6.13387	15.00000	Averaged	
17 Dieldrin	326509621	352663400	352663400	0.010	-8.01011	15.00000	Averaged	
20 Endrin	697638356	736384600	736384600	0.010	-5.55392	15.00000	Averaged	
22 4,4'-DDD	275853038	284334520	284334520	0.010	-3.07464	15.00000	Averaged	
23 Endosulfan II	300030123	306840120	306840120	0.010	-2.26977	15.00000	Averaged	
24 4,4'-DDT	295143316	297852040	297852040	0.010	-0.91777	15.00000	Averaged	
26 Endrin aldehyde	518833391	522762400	522762400	0.010	-0.75728	15.00000	Averaged	
27 Methoxychlor	143769588	141993960	141993960	0.010	1.23505	15.00000	Averaged	
28 Endosulfan sulfate	300094154	300965200	300965200	0.010	-0.29026	15.00000	Averaged	
29 Endrin ketone	628539961	641495640	641495640	0.010	-2.06123	15.00000	Averaged	
$ 30 Decachlorobiphenyl	288230630	272459560	272459560	0.010	5.47168	15.00000	Averaged	

Average %D / Drift Results.

Calculated Average %D/Drift = 4.46715
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

TestAmerica North Canton

PESTICIDE 8081/608

Data file : \\cansvr11\dd\chem\GCS\a2hp3.i\100127-1.b\006F0201.D
Lab Smp Id: MRL
Inj Date : 27-JAN-2010 12:49
Operator : 093905 Inst ID: a2hp3.i
Smp Info : MRL
Misc Info :
Comment :
Method : \\cansvr11\dd\chem\GCS\a2hp3.i\100127-1.b\PEST3.m
Meth Date : 28-Jan-2010 09:23 vandorenc Quant Type: ESTD
Cal Date : 12-JAN-2010 02:24 Cal File: 030F3001.D
Als bottle: 6 QC Sample: MRL
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: mrl.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: CANPGCSV23

Concentration Formula: Amt * DF * Vt/Vo/Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (uL)
Vo	1.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/L)	TARGET RANGE	RATIO
4 alpha-BHC					CAS #: 319-84-6		
5.833	5.833	0.000	3161667	0.00550	0.005496		
5 gamma-BHC (Lindane)					CAS #: 58-89-9		
6.338	6.337	0.001	2828173	0.00549	0.005487		
6 beta-BHC					CAS #: 319-85-7		
6.507	6.507	0.000	1215005	0.00599	0.005991		
7 delta-BHC					CAS #: 319-86-8		
6.747	6.748	-0.001	5248275	0.00551	0.005512		
9 Heptachlor					CAS #: 76-44-8		
7.085	7.064	0.021	3868995	0.00978	0.009782		(R)
10 Aldrin					CAS #: 309-00-2		
7.560	7.560	0.000	2069171	0.00574	0.005738		

POLYCHLORINATED BIPHENYLS DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: January 2010
Data Reviewer/Date: Angye Dragotta/March 9, 2010

SDG: A0A210417 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 – 4.2 °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 A2HP13; ICAL on 1/5/10 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?	✓			1/8/10	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%?	✓			1/5/10@ 1334	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: January 2010
Data Reviewer/Date: Angye Dragotta/March 9, 2010

SDG: A0A210417 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?	✓				
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?	✓			Samples FWGASY-004mw-1499-GW and FWGASY-005mw-1500-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 FWGASYmw-004c-1499-GW, FWGASYmw-DUP1-1512-GW, FWGEQUIPRinse1-1513-GW and FWGEQUIPRinse2-1514-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%?	✓				QAPP Table 3-2 RPD >30=J

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: January 2010
Data Reviewer/Date: Angye Dragotta/March 9, 2010

SDG: A0A210417 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?			✓	No detected concentrations were reported.	LCG Table 3 RPD>40=J
28. Were reported sample concentrations within calibration range?			✓	No detected concentrations were reported.	
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: FWGLL11mw-009C-1495-GW

GC Semivolatiles

Lot-Sample #...:	A0A210417-002	**Work Order #...:**	LTGAM1AF	**Matrix.....:**	WG
Date Sampled...:	01/20/10 10:10	**Date Received..:**	01/21/10		
Prep Date.....:	01/25/10	**Analysis Date..:**	01/28/10		
Prep Batch #...:	0025032				
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	74	(50 - 150)
Decachlorobiphenyl	24 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw001C-1496-GW

GC Semivolatiles

Lot-Sample #...: A0A210417-004 **Work Order #...:** LTGCG1AF **Matrix.....:** WG
Date Sampled...: 01/20/10 12:05 **Date Received..:** 01/21/10
Prep Date.....: 01/25/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0025032
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	77	(50 - 150)
Decachlorobiphenyl	35 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmwDUP1-1512-GW

GC Semivolatiles

Lot-Sample #...:	A0A210417-006	**Work Order #...:**	LTGC31AF	**Matrix.....:**	WG
Date Sampled...:	01/20/10 12:25	**Date Received..:**	01/21/10		
Prep Date.....:	01/25/10	**Analysis Date..:**	01/28/10		
Prep Batch #...:	0025032				
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	71	(50 - 150)
Decachlorobiphenyl	54	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw003C-1498-GW

GC Semivolatiles

Lot-Sample #...:	A0A210417-008	**Work Order #...:**	LTGDL1AF	**Matrix.....:**	WG
Date Sampled...:	01/20/10 14:05	**Date Received..:**	01/21/10		
Prep Date.....:	01/25/10	**Analysis Date..:**	01/28/10		
Prep Batch #...:	0025032				
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	72	(50 - 150)
Decachlorobiphenyl	30 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw002C-1497-GW

GC Semivolatiles

Lot-Sample #...:	A0A210417-010	**Work Order #...:**	LTGDX1AF	**Matrix.....:**	WG
Date Sampled...:	01/20/10 15:01	**Date Received..:**	01/21/10		
Prep Date.....:	01/25/10	**Analysis Date..:**	01/28/10		
Prep Batch #...:	0025032				
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	50	(50 - 150)
Decachlorobiphenyl	18 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw007C-1502-GW

GC Semivolatiles

Lot-Sample #...:	A0A210417-012	**Work Order #...:**	LTGD21AF	**Matrix.....:**	WG
Date Sampled...:	01/20/10 16:31	**Date Received..:**	01/21/10		
Prep Date.....:	01/25/10	**Analysis Date..:**	01/28/10		
Prep Batch #...:	0025032				
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	46 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRinse1-1513-GW

GC Semivolatiles

Lot-Sample #...:	A0A210417-014	**Work Order #...:**	LTGD51AF	**Matrix.....:**	WQ
Date Sampled...:	01/20/10 17:30	**Date Received..:**	01/21/10		
Prep Date.....:	01/25/10	**Analysis Date..:**	01/28/10		
Prep Batch #...:	0025032				
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	74	(50 - 150)
Decachlorobiphenyl	69	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-008C-1503-GW

GC Semivolatiles

Lot-Sample #...: A0A210417-018 **Work Order #...:** LTGGC1AF **Matrix.....:** WG
Date Sampled...: 01/20/10 10:15 **Date Received..:** 01/21/10
Prep Date.....: 01/25/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0025032
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	72	(50 - 150)
Decachlorobiphenyl	31 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-DUP2-1511-GW

GC Semivolatiles

Lot-Sample #...: A0A210417-020 **Work Order #...:** LTGGT1AF **Matrix.....:** WG
Date Sampled...: 01/20/10 11:02 **Date Received..:** 01/21/10
Prep Date.....: 01/25/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0025032
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	66	(50 - 150)
Decachlorobiphenyl	35 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-010C-1505-GW

GC Semivolatiles

Lot-Sample #...:	A0A210417-022	**Work Order #...:**	LTGG51AF	**Matrix.....:**	WG
Date Sampled...:	01/20/10 12:54	**Date Received..:**	01/21/10		
Prep Date.....:	01/25/10	**Analysis Date..:**	01/28/10		
Prep Batch #...:	0025032				
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	71	(50 - 150)
Decachlorobiphenyl	21 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-006C-1501-GW

GC Semivolatiles

Lot-Sample #...:	A0A210417-024	**Work Order #...:**	LTGHD1AF	**Matrix.....:**	WG
Date Sampled...:	01/20/10 14:00	**Date Received..:**	01/21/10		
Prep Date.....:	01/25/10	**Analysis Date..:**	01/28/10		
Prep Batch #...:	0025032				
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	77	(50 - 150)
Decachlorobiphenyl	37 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-005C-1500-GW

GC Semivolatiles

Lot-Sample #...:	A0A210417-026	**Work Order #...:**	LTGH01AP	**Matrix.....:**	WG
Date Sampled...:	01/20/10 15:20	**Date Received..:**	01/21/10		
Prep Date.....:	01/25/10	**Analysis Date..:**	01/28/10		
Prep Batch #...:	0025032				
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	72	(50 - 150)
Decachlorobiphenyl	24 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-009C-1504-GW

GC Semivolatiles

Lot-Sample #...: A0A210417-029 **Work Order #...:** LTJCD1AF **Matrix.....:** WG
Date Sampled...: 01/21/10 09:20 **Date Received..:** 01/21/10
Prep Date.....: 01/25/10 **Analysis Date..:** 01/28/10
Prep Batch #...: 0025032
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	77	(50 - 150)
Decachlorobiphenyl	29 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRinse2-1514-GW

GC Semivolatiles

Lot-Sample #...:	A0A210417-031	**Work Order #...:**	LTJCN1AF	**Matrix.....:**	WQ
Date Sampled...:	01/21/10 10:22	**Date Received..:**	01/21/10		
Prep Date.....:	01/25/10	**Analysis Date..:**	01/28/10		
Prep Batch #...:	0025032				
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	74	(50 - 150)
Decachlorobiphenyl	64	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-004C-1499-GW

GC Semivolatiles

Lot-Sample #...:	A0A210417-032	**Work Order #...:**	LTJDA1AP	**Matrix.....:**	WG
Date Sampled...:	01/21/10 09:15	**Date Received..:**	01/21/10		
Prep Date.....:	01/25/10	**Analysis Date..:**	01/28/10		
Prep Batch #...:	0025032				
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	69	(50 - 150)
Decachlorobiphenyl	54	(50 - 150)

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A0A210417 **Work Order #...:** LTN1L1AA **Matrix.....:** WATER
MB Lot-Sample #: A0A250000-032

Prep Date.....: 01/25/10 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 01/29/10 **Prep Batch #...:** 0025032
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	72	(50 - 150)
Decachlorobiphenyl	72	(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 #...: A0A210417 **Work Order #...:** LTN1L1AC **Matrix.....:** WATER
LCS Lot-Sample#: A0A250000-032
Prep Date.....: 01/25/10 **Analysis Date..:** 01/29/10
Prep Batch #...: 0025032
Dilution Factor: 2 **Final Wgt/Vol..:** 5 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Aroclor 1016	**88**	**(58 - 141)**	**SW846 8082**
Aroclor 1260	**82**	**(71 - 143)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	86	(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.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A0A210417 **Work Order #...:** LTGH01AV-MS **Matrix.....:** WG
MS Lot-Sample #: A0A210417-026 LTGH01AW-MSD
Date Sampled...: 01/20/10 15:20 **Date Received..:** 01/21/10
Prep Date.....: 01/25/10 **Analysis Date..:** 01/29/10
Prep Batch #...: 0025032
Dilution Factor: 2 **Initial Wgt/Vol:** 470 mL **Final Wgt/Vol..:** 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**80**	**(50 - 150)**			**SW846 8082**
	88	**(50 - 150)**	**9.1**	**(0-50)**	**SW846 8082**
Aroclor 1260	**56**	**(50 - 150)**			**SW846 8082**
	83	**(50 - 150)**	**38**	**(0-50)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	84	(50 - 150)
	81	(50 - 150)
Decachlorobiphenyl	46 *	(50 - 150)
	68	(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 #...: A0A210417 **Work Order #...:** LTJDA1AQ-MS **Matrix.....:** WG
MS Lot-Sample #: A0A210417-032 LTJDA1AR-MSD
Date Sampled...: 01/21/10 09:15 **Date Received..:** 01/21/10
Prep Date.....: 01/25/10 **Analysis Date..:** 01/29/10
Prep Batch #...: 0025032
Dilution Factor: 2 **Initial Wgt/Vol:** 520 mL **Final Wgt/Vol..:** 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**79**	**(50 - 150)**			**SW846 8082**
	90	**(50 - 150)**	**14**	**(0-50)**	**SW846 8082**
Aroclor 1260	**75**	**(50 - 150)**			**SW846 8082**
	85	**(50 - 150)**	**13**	**(0-50)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	86	(50 - 150)
	93	(50 - 150)
Decachlorobiphenyl	72	(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

METALS DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: January 2010
Data Reviewer/Date: Angye Dragotta / March 10, 2010

SDG: A0A210417 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. – 4.1 °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%?	✓				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 **SDG**: A0A210417 R0
Sample Event: January 2010 **Analysis**: SW846 6010B/6020
Data Reviewer/Date: Angye Dragotta / March 10, 2010

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 2/1/10 had detected potassium at 152ug/L. The potassium results for FWGASYmw002c-1497-GF and FWGLL3mw-235c-1507-GF were qualified, "U", as the detected concentrations were <5x blank contamination. ICPMS The thallium ICB had detected contamination at 0.26ug/L. All detected thallium concentrations were <5x the ICB contamination and were qualified, "U". 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%?		✓		The CCVs analyzed on 2/1 at 0920 and 1033 had recoveries above control limits for selenium. No qualifications were made as there were no detected selenium concentrations reported for the bracketed samples.	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 2/1/10 had detected barium from 0.3ug/L to 0.5ug/L, calcium from 51.6 to 56.3ug/L, cobalt from 0.5ug/L to 0.6ug/L, magnesium from 5.7ug/L to 9.4ug/L, manganese at 0.3ug/L, potassium from 146ug/L to 156ug/L and nickel at 1.4ug/L. The cobalt results for FWGASYmw-008c-1503-GF and FWGASYmw-DUP2-1511-GF were qualified, "U", as the detected concentrations were <5x blank contamination. No additional potassium qualifications other than those made for the ICB contamination were made. All other contaminants in the calibration blanks did not require qualification of the data as all detected contaminants were >5x the blank contamination. ICPMS The CCBs analyzed 1/25/2010 had detected antimony from 0.043 to 0.063ug/L, beryllium from 0.026 to 0.053 ug/L, cadmium at 0.048-0.068ug/L, iron from 11.4ug/L to 18.3ug/L and thallium from 0.32ug/L to 0.41ug/L. No additional thallium qualifications other than those made for the ICB contamination were made. The antimony results for FWGASYmw-003c-1498-GF, FWGLL3mw-235-1507-GW, FWGASYmw-008c-1503-GF, FWGASYmw-DUP2-1511-GF and FWGASYmw-010-1505-GF were qualified "U", as the detected concentration was <5x blank contamination. All other contaminants in the calibration blanks did not require qualification of the data as all detected contaminants were >5x the blank contamination.	LCG Table 7 <5x = U
18. Was an Interelement Check Standard run at the beginning of the analytical sequence?	✓				LCG Table 7

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28 **SDG**: A0A210417 R0
Sample Event: January 2010 **Analysis**: SW846 6010B/6020
Data Reviewer/Date: Angye Dragotta / March 10, 2010

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
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; ICPMS- Iron was detected in the method blank(s) at 34ug/L and zinc at 5.0ug/. The zinc results for samples FWGASYmw-001c-1496-GF, FWGASYmw-008c-1503-GF, FWGASYmw-009c-1504-GF, FWGASYmw-010c-1505-GF, FWGASYmw-DUP1-1512-GF, FWGASYmw-DUP2-1511-GF and FWGLL3mw-235c-1507-GF were qualified, "B", as the sample results were <5x contamination. The iron results did not require qualification of the data as all detected contaminants were >5x the blank contamination.	LCG Table 7 <5x = B
23. Was a field blank collected and analyzed?	✓				
24. Were target analytes reported in the field blank analyses >1/2 the MRL?		✓		ADR checked section; Thallium was detected in FWGEQUIPRinse2-1514-GW at 0.19ug/L. The thallium results for samples FWGASYmw-004c-1499-GF and FWGASYmw-009c-1504-GF were qualified, "B", as the sample results were <5x contamination.	<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?	✓				
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%?	✓			Checked by ADR. Only detected results above RL were evaluated.	LCG Table 7 >20% = J

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28 **SDG**: A0A210417 R0
Sample Event: January 2010 **Analysis**: SW846 6010B/6020
Data Reviewer/Date: Angye Dragotta / March 10, 2010

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
31. Was a Post Digestion Spike analyzed as needed? Were results within 75-125%?			✓	Not evaluated as the MS/MSD results were acceptable.	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?		✓		The serial dilution performed on sample FWGASYmw-005c-1500-GF had a %D of 20.9% for potassium. No qualification was made as the matrix spike recovered within control limits.	LCG Table 7 >10%=J
34. Was a field duplicate analyzed? Were the RPDs ± 30%?		✓		Checked by ADR. Only results where both sample results were detected above the MDL were evaluated. For the field duplicate pair analyzed on FWGASYmw-001c-1496-GF and FWGASYmw-DUP1-1512-GF, the duplicate RPD was above control limits for thallium at 35.5%. The thallium result for FWGASYmw-001c-1496-GF was qualified as estimated, "J". For the field duplicate pair analyzed on FWGASYmw-008c-1503-GF and FWGASYmw-DUP2-1511-GF, the duplicate RPD was above control limits for arsenic at 34.5%, cobalt at 31.6%, nickel at 30.8%, aluminum at 32.2%, iron at 33% and zinc at 33.9%. The arsenic, cobalt, nickel, aluminum, iron and zinc results for FWGASYmw-008c-1503-GF 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.	

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: January 2010
Data Reviewer/Date: Angye Dragotta / March 10, 2010

SDG: A0A210417 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
31. Was a Post Digestion Spike analyzed as needed? Were results within 75-125%?			✓	Not evaluated as the MS/MSD results were acceptable.	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?		✓		The serial dilution performed on sample FWGASYmw-005c-1500-GF had a %D of 20.9% for potassium. No qualification was made as the matrix spike recovered within control limits.	LCG Table 7 >10%=J
34. Was a field duplicate analyzed? Were the RPDs ± 30%?	✓			Checked by ADR. 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: January 2010
Data Reviewer/Date: Angye Dragotta/ March 10, 2010

SDG: A0A210417 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 – 4.1 °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

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: January 2010
Data Reviewer/Date: Angye Dragotta/ March 10, 2010

SDG: A0A210417 R0
Analysis: SW846 7470A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
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?	✓				
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?	✓				
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.	QAPP Table 3-2
27. Were 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: January 2010
Data Reviewer/Date: Angye Dragotta/ March 10, 2010

SDG: A0A210417 R0
Analysis: SW846 7470A

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 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: FWGLL11mw-009C-1495-GF

TOTAL Metals

Lot-Sample #...: A0A210417-001 **Matrix.....:** WG
Date Sampled...: 01/20/10 10:10 **Date Received..:** 01/21/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0022016						
Silver	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGAD1AM
		Dilution Factor: 1		Analysis Time..: 10:07	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**26.0 B**	**50.0**	**ug/L**	**SW846 6020**	**01/22-01/25/10**	**LTGAD1AA**
		Dilution Factor: 1		Analysis Time..: 17:20	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGAD1AJ
		Dilution Factor: 1		Analysis Time..: 10:07	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**76.4**	**10.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGAD1AN**
		Dilution Factor: 1		Analysis Time..: 10:07	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/22-01/25/10	LTGAD1AC
		Dilution Factor: 1		Analysis Time..: 17:20	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**85400**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGAD1AP**
		Dilution Factor: 1		Analysis Time..: 10:07	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/22-01/25/10	LTGAD1AD
		Dilution Factor: 1		Analysis Time..: 17:20	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGAD1AQ
		Dilution Factor: 1		Analysis Time..: 10:07	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGAD1AR
		Dilution Factor: 1		Analysis Time..: 10:07	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGAD1AT
		Dilution Factor: 1		Analysis Time..: 10:07	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-009C-1495-GF

TOTAL Metals

Lot-Sample #...: A0A210417-001 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	01/22-01/25/10	LTGAD1AE
		Dilution Factor: 1		Analysis Time..: 17:20	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/22-01/25/10	LTGAD1A2
		Dilution Factor: 1		Analysis Time..: 13:35	Analyst ID.....: 001637	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**905 B**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGAD1AU**
		Dilution Factor: 1		Analysis Time..: 10:07	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**27800**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGAD1AV**
		Dilution Factor: 1		Analysis Time..: 10:07	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**856**	**10.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGAD1AW**
		Dilution Factor: 1		Analysis Time..: 10:07	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**11600**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGAD1AX**
		Dilution Factor: 1		Analysis Time..: 10:07	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTGAD1A0
		Dilution Factor: 1		Analysis Time..: 10:07	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/22-02/01/10	LTGAD1AK
		Dilution Factor: 1		Analysis Time..: 10:07	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/22-01/25/10	LTGAD1AF
		Dilution Factor: 1		Analysis Time..: 17:20	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGAD1AL
		Dilution Factor: 1		Analysis Time..: 10:07	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL11mw-009C-1495-GF

TOTAL Metals

Lot-Sample #...: A0A210417-001 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.35 B**	**1.0**	**ug/L**	**SW846 6020**	**01/22-01/25/10**	**LTGAD1AH**
		Dilution Factor: 1		Analysis Time..: 17:20	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTGAD1A1
		Dilution Factor: 1		Analysis Time..: 10:07	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	01/22-01/25/10	LTGAD1AG
		Dilution Factor: 1		Analysis Time..: 17:20	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw001C-1496-GF

TOTAL Metals

Lot-Sample #...: A0A210417-005 **Matrix.....:** WG
Date Sampled...: 01/20/10 12:05 **Date Received..:** 01/21/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0022016						
Silver	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGCX1AQ
		Dilution Factor: 1		Analysis Time..: 10:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/22-01/25/10	LTGCX1AE
		Dilution Factor: 1		Analysis Time..: 17:25	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGCX1AM
		Dilution Factor: 1		Analysis Time..: 10:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**16.6**	**10.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGCX1AR**
		Dilution Factor: 1		Analysis Time..: 10:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/22-01/25/10	LTGCX1AF
		Dilution Factor: 1		Analysis Time..: 17:25	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**170000**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGCX1AT**
		Dilution Factor: 1		Analysis Time..: 10:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/22-01/25/10	LTGCX1AG
		Dilution Factor: 1		Analysis Time..: 17:25	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGCX1AU
		Dilution Factor: 1		Analysis Time..: 10:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGCX1AV
		Dilution Factor: 1		Analysis Time..: 10:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGCX1AW
		Dilution Factor: 1		Analysis Time..: 10:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw001C-1496-GF

TOTAL Metals

Lot-Sample #...: A0A210417-005 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	01/22-01/25/10	LTGCX1AH
		Dilution Factor: 1		Analysis Time..: 17:25	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/22-01/25/10	LTGCX1AD
		Dilution Factor: 1		Analysis Time..: 13:20	Analyst ID.....: 001637	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1120**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGCX1AX**
		Dilution Factor: 1		Analysis Time..: 10:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**55400**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGCX1A0**
		Dilution Factor: 1		Analysis Time..: 10:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**1140**	**10.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGCX1A1**
		Dilution Factor: 1		Analysis Time..: 10:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**7020**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGCX1A2**
		Dilution Factor: 1		Analysis Time..: 10:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTGCX1AA
		Dilution Factor: 1		Analysis Time..: 10:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/22-02/01/10	LTGCX1AN
		Dilution Factor: 1		Analysis Time..: 10:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/22-01/25/10	LTGCX1AJ
		Dilution Factor: 1		Analysis Time..: 17:25	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGCX1AP
		Dilution Factor: 1		Analysis Time..: 10:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw001C-1496-GF

TOTAL Metals

Lot-Sample #...: A0A210417-005 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.20 B**	**1.0**	**ug/L**	**SW846 6020**	**01/22-01/25/10**	**LTGCX1AL**
		Dilution Factor: 1		Analysis Time..: 17:25	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTGCX1AC
		Dilution Factor: 1		Analysis Time..: 10:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**4.7 B,J**	**10.0**	**ug/L**	**SW846 6020**	**01/22-01/25/10**	**LTGCX1AK**
		Dilution Factor: 1		Analysis Time..: 17:25	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: FWGASYmwDUP1-1512-GF

TOTAL Metals

Lot-Sample #...: A0A210417-007 **Matrix.....:** WG
Date Sampled...: 01/20/10 12:25 **Date Received..:** 01/21/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0022016						
Silver	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGDG1AQ
		Dilution Factor: 1		Analysis Time..: 10:21	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/22-01/25/10	LTGDG1AE
		Dilution Factor: 1		Analysis Time..: 17:30	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGDG1AM
		Dilution Factor: 1		Analysis Time..: 10:21	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**16.4**	**10.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGDG1AR**
		Dilution Factor: 1		Analysis Time..: 10:21	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/22-01/25/10	LTGDG1AF
		Dilution Factor: 1		Analysis Time..: 17:30	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**172000**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGDG1AT**
		Dilution Factor: 1		Analysis Time..: 10:21	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/22-01/25/10	LTGDG1AG
		Dilution Factor: 1		Analysis Time..: 17:30	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGDG1AU
		Dilution Factor: 1		Analysis Time..: 10:21	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGDG1AV
		Dilution Factor: 1		Analysis Time..: 10:21	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGDG1AW
		Dilution Factor: 1		Analysis Time..: 10:21	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmwDUP1-1512-GF

TOTAL Metals

Lot-Sample #...: A0A210417-007 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	01/22-01/25/10	LTGDG1AH
		Dilution Factor: 1		Analysis Time..: 17:30	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/22-01/25/10	LTGDG1AD
		Dilution Factor: 1		Analysis Time..: 13:14	Analyst ID.....: 001637	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1130**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGDG1AX**
		Dilution Factor: 1		Analysis Time..: 10:21	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**55900**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGDG1A0**
		Dilution Factor: 1		Analysis Time..: 10:21	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**1150**	**10.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGDG1A1**
		Dilution Factor: 1		Analysis Time..: 10:21	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**7160**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGDG1A2**
		Dilution Factor: 1		Analysis Time..: 10:21	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 972		
Nickel	**2.2 B**	**10.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGDG1AA**
		Dilution Factor: 1		Analysis Time..: 10:21	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/22-02/01/10	LTGDG1AN
		Dilution Factor: 1		Analysis Time..: 10:21	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/22-01/25/10	LTGDG1AJ
		Dilution Factor: 1		Analysis Time..: 17:30	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGDG1AP
		Dilution Factor: 1		Analysis Time..: 10:21	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmwDUP1-1512-GF

TOTAL Metals

Lot-Sample #...: A0A210417-007 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.14 B**	**1.0**	**ug/L**	**SW846 6020**	**01/22-01/25/10**	**LTGDG1AL**
		Dilution Factor: 1		Analysis Time..: 17:30	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTGDG1AC
		Dilution Factor: 1		Analysis Time..: 10:21	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**6.3 B,J**	**10.0**	**ug/L**	**SW846 6020**	**01/22-01/25/10**	**LTGDG1AK**
		Dilution Factor: 1		Analysis Time..: 17:30	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: FWGASYmw003C-1498-GF

TOTAL Metals

Lot-Sample #...: A0A210417-009 **Matrix.....:** WG
Date Sampled...: 01/20/10 14:05 **Date Received..:** 01/21/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0022016						
Silver	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGDP1AQ
		Dilution Factor: 1		Analysis Time..: 10:27	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/22-01/25/10	LTGDP1AE
		Dilution Factor: 1		Analysis Time..: 17:34	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGDP1AM
		Dilution Factor: 1		Analysis Time..: 10:27	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**18.9**	**10.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGDP1AR**
		Dilution Factor: 1		Analysis Time..: 10:27	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/22-01/25/10	LTGDP1AF
		Dilution Factor: 1		Analysis Time..: 17:34	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**175000**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGDP1AT**
		Dilution Factor: 1		Analysis Time..: 10:27	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/22-01/25/10	LTGDP1AG
		Dilution Factor: 1		Analysis Time..: 17:34	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGDP1AU
		Dilution Factor: 1		Analysis Time..: 10:27	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGDP1AV
		Dilution Factor: 1		Analysis Time..: 10:27	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGDP1AW
		Dilution Factor: 1		Analysis Time..: 10:27	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw003C-1498-GF

TOTAL Metals

Lot-Sample #...: A0A210417-009 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	01/22-01/25/10	LTGDP1AH
		Dilution Factor: 1		Analysis Time..: 17:34	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/22-01/25/10	LTGDP1AD
		Dilution Factor: 1		Analysis Time..: 13:21	Analyst ID.....: 001637	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1070**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGDP1AX**
		Dilution Factor: 1		Analysis Time..: 10:27	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**55800**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGDP1A0**
		Dilution Factor: 1		Analysis Time..: 10:27	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**45.0**	**10.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGDP1A1**
		Dilution Factor: 1		Analysis Time..: 10:27	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**29000**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGDP1A2**
		Dilution Factor: 1		Analysis Time..: 10:27	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTGDP1AA
		Dilution Factor: 1		Analysis Time..: 10:27	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/22-02/01/10	LTGDP1AN
		Dilution Factor: 1		Analysis Time..: 10:27	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	**0.16 B**	**2.0**	**ug/L**	**SW846 6020**	**01/22-01/25/10**	**LTGDP1AJ**
		Dilution Factor: 1		Analysis Time..: 17:34	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGDP1AP
		Dilution Factor: 1		Analysis Time..: 10:27	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw003C-1498-GF

TOTAL Metals

Lot-Sample #...: A0A210417-009 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/22-01/25/10	LTGDP1AL
		Dilution Factor: 1		Analysis Time..: 17:34	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTGDP1AC
		Dilution Factor: 1		Analysis Time..: 10:27	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	01/22-01/25/10	LTGDP1AK
		Dilution Factor: 1		Analysis Time..: 17:34	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw002C-1497-GF

TOTAL Metals

Lot-Sample #...: A0A210417-011 **Matrix.....:** WG
Date Sampled...: 01/20/10 15:01 **Date Received..:** 01/21/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0022016						
Silver	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGD01AQ
		Dilution Factor: 1		Analysis Time..: 10:45	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**67.3**	**50.0**	**ug/L**	**SW846 6020**	**01/22-01/25/10**	**LTGD01AE**
		Dilution Factor: 1		Analysis Time..: 17:50	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGD01AM
		Dilution Factor: 1		Analysis Time..: 10:45	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**14.7**	**10.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGD01AR**
		Dilution Factor: 1		Analysis Time..: 10:45	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/22-01/25/10	LTGD01AF
		Dilution Factor: 1		Analysis Time..: 17:50	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**96800**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGD01AT**
		Dilution Factor: 1		Analysis Time..: 10:45	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/22-01/25/10	LTGD01AG
		Dilution Factor: 1		Analysis Time..: 17:50	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGD01AU
		Dilution Factor: 1		Analysis Time..: 10:45	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGD01AV
		Dilution Factor: 1		Analysis Time..: 10:45	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGD01AW
		Dilution Factor: 1		Analysis Time..: 10:45	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw002C-1497-GF

TOTAL Metals

Lot-Sample #...: A0A210417-011 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	01/22-01/25/10	LTGD01AH
		Dilution Factor: 1		Analysis Time..: 17:50	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/22-01/25/10	LTGD01AD
		Dilution Factor: 1		Analysis Time..: 13:12	Analyst ID.....: 001637	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**634 B**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGD01AX**
		Dilution Factor: 1		Analysis Time..: 10:45	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**20000**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGD01A0**
		Dilution Factor: 1		Analysis Time..: 10:45	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**4.0 B**	**10.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGD01A1**
		Dilution Factor: 1		Analysis Time..: 10:45	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**2130**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGD01A2**
		Dilution Factor: 1		Analysis Time..: 10:45	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTGD01AA
		Dilution Factor: 1		Analysis Time..: 10:45	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/22-02/01/10	LTGD01AN
		Dilution Factor: 1		Analysis Time..: 10:45	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/22-01/25/10	LTGD01AJ
		Dilution Factor: 1		Analysis Time..: 17:50	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGD01AP
		Dilution Factor: 1		Analysis Time..: 10:45	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw002C-1497-GF

TOTAL Metals

Lot-Sample #...: A0A210417-011 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.20 B**	**1.0**	**ug/L**	**SW846 6020**	**01/22-01/25/10**	**LTGD01AL**
		Dilution Factor: 1		Analysis Time..: 17:50	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTGD01AC
		Dilution Factor: 1		Analysis Time..: 10:45	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	01/22-01/25/10	LTGD01AK
		Dilution Factor: 1		Analysis Time..: 17:50	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw007C-1502-GF

TOTAL Metals

Lot-Sample #...: A0A210417-013 **Matrix.....:** WG
Date Sampled...: 01/20/10 16:31 **Date Received..:** 01/21/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0022016						
Silver	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGD41AQ
		Dilution Factor: 1		Analysis Time..: 10:51	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/22-01/25/10	LTGD41AE
		Dilution Factor: 1		Analysis Time..: 17:55	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGD41AM
		Dilution Factor: 1		Analysis Time..: 10:51	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**18.5**	**10.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGD41AR**
		Dilution Factor: 1		Analysis Time..: 10:51	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/22-01/25/10	LTGD41AF
		Dilution Factor: 1		Analysis Time..: 17:55	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**126000**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGD41AT**
		Dilution Factor: 1		Analysis Time..: 10:51	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/22-01/25/10	LTGD41AG
		Dilution Factor: 1		Analysis Time..: 17:55	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGD41AU
		Dilution Factor: 1		Analysis Time..: 10:51	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGD41AV
		Dilution Factor: 1		Analysis Time..: 10:51	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGD41AW
		Dilution Factor: 1		Analysis Time..: 10:51	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw007C-1502-GF

TOTAL Metals

Lot-Sample #...: A0A210417-013 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	01/22-01/25/10	LTGD41AH
		Dilution Factor: 1		Analysis Time..: 17:55	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/22-01/25/10	LTGD41AD
		Dilution Factor: 1		Analysis Time..: 13:17	Analyst ID.....: 001637	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1170**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGD41AX**
		Dilution Factor: 1		Analysis Time..: 10:51	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**47300**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGD41A0**
		Dilution Factor: 1		Analysis Time..: 10:51	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**188**	**10.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGD41A1**
		Dilution Factor: 1		Analysis Time..: 10:51	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**33500**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGD41A2**
		Dilution Factor: 1		Analysis Time..: 10:51	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTGD41AA
		Dilution Factor: 1		Analysis Time..: 10:51	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/22-02/01/10	LTGD41AN
		Dilution Factor: 1		Analysis Time..: 10:51	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/22-01/25/10	LTGD41AJ
		Dilution Factor: 1		Analysis Time..: 17:55	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGD41AP
		Dilution Factor: 1		Analysis Time..: 10:51	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw007C-1502-GF

TOTAL Metals

Lot-Sample #...: A0A210417-013 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.17 B**	**1.0**	**ug/L**	**SW846 6020**	**01/22-01/25/10**	**LTGD41AL**
		Dilution Factor: 1		Analysis Time..: 17:55	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTGD41AC
		Dilution Factor: 1		Analysis Time..: 10:51	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	01/22-01/25/10	LTGD41AK
		Dilution Factor: 1		Analysis Time..: 17:55	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRinse1-1513-GW

TOTAL Metals

Lot-Sample #...: A0A210417-014 **Matrix.....:** WQ
Date Sampled...: 01/20/10 17:30 **Date Received..:** 01/21/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0022016						
Silver	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGD51AW
		Dilution Factor: 1		Analysis Time..: 10:57	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/22-01/25/10	LTGD51AK
		Dilution Factor: 1		Analysis Time..: 17:59	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGD51AT
		Dilution Factor: 1		Analysis Time..: 10:57	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	ND	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTGD51AX
		Dilution Factor: 1		Analysis Time..: 10:57	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/22-01/25/10	LTGD51AL
		Dilution Factor: 1		Analysis Time..: 17:59	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	ND	1000	ug/L	SW846 6010B	01/22-02/01/10	LTGD51A0
		Dilution Factor: 1		Analysis Time..: 10:57	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/22-01/25/10	LTGD51AM
		Dilution Factor: 1		Analysis Time..: 17:59	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGD51A1
		Dilution Factor: 1		Analysis Time..: 10:57	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGD51A2
		Dilution Factor: 1		Analysis Time..: 10:57	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGD51A3
		Dilution Factor: 1		Analysis Time..: 10:57	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRinse1-1513-GW

TOTAL Metals

Lot-Sample #...: A0A210417-014 **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	01/22-01/25/10	LTGD51AN
		Dilution Factor: 1		Analysis Time..: 17:59	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/22-01/25/10	LTGD51AJ
		Dilution Factor: 1		Analysis Time..: 13:34	Analyst ID.....: 001637	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	ND	1000	ug/L	SW846 6010B	01/22-02/01/10	LTGD51A4
		Dilution Factor: 1		Analysis Time..: 10:57	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	ND	1000	ug/L	SW846 6010B	01/22-02/01/10	LTGD51A5
		Dilution Factor: 1		Analysis Time..: 10:57	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	ND	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTGD51A6
		Dilution Factor: 1		Analysis Time..: 10:57	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	ND	1000	ug/L	SW846 6010B	01/22-02/01/10	LTGD51A7
		Dilution Factor: 1		Analysis Time..: 10:57	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTGD51AG
		Dilution Factor: 1		Analysis Time..: 10:57	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/22-02/01/10	LTGD51AU
		Dilution Factor: 1		Analysis Time..: 10:57	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/22-01/25/10	LTGD51AP
		Dilution Factor: 1		Analysis Time..: 17:59	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGD51AV
		Dilution Factor: 1		Analysis Time..: 10:57	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRinse1-1513-GW

TOTAL Metals

Lot-Sample #...: A0A210417-014 **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/22-01/25/10	LTGD51AR
		Dilution Factor: 1		Analysis Time..: 17:59	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTGD51AH
		Dilution Factor: 1		Analysis Time..: 10:57	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	01/22-01/25/10	LTGD51AQ
		Dilution Factor: 1		Analysis Time..: 17:59	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-235C-1507-GW

TOTAL Metals

Lot-Sample #...: A0A210417-016 Matrix.....: WG
Date Sampled...: 01/20/10 09:20 Date Received..: 01/21/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0022016						
Silver	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGEE1AQ
		Dilution Factor: 1		Analysis Time..: 11:03	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	5620	50.0	ug/L	SW846 6020	01/22-01/25/10	LTGEE1AE
		Dilution Factor: 1		Analysis Time..: 18:04	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	8.9	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGEE1AM
		Dilution Factor: 1		Analysis Time..: 11:03	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	32.0	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTGEE1AR
		Dilution Factor: 1		Analysis Time..: 11:03	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	0.32 B	1.0	ug/L	SW846 6020	01/22-01/25/10	LTGEE1AF
		Dilution Factor: 1		Analysis Time..: 18:04	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	33100	1000	ug/L	SW846 6010B	01/22-02/01/10	LTGEE1AT
		Dilution Factor: 1		Analysis Time..: 11:03	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	0.61	0.50	ug/L	SW846 6020	01/22-01/25/10	LTGEE1AG
		Dilution Factor: 1		Analysis Time..: 18:04	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	6.4	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGEE1AU
		Dilution Factor: 1		Analysis Time..: 11:03	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	14.5	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGEE1AV
		Dilution Factor: 1		Analysis Time..: 11:03	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	6.8	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGEE1AW
		Dilution Factor: 1		Analysis Time..: 11:03	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-235C-1507-GW

TOTAL Metals

Lot-Sample #...: A0A210417-016 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	18300 J	50.0	ug/L	SW846 6020	01/22-01/25/10	LTGEE1AH
		Dilution Factor: 1		Analysis Time..: 18:04	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	0.19 B	0.20	ug/L	SW846 7470A	01/22-01/25/10	LTGEE1AD
		Dilution Factor: 1		Analysis Time..: 13:13	Analyst ID.....: 001637	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	2110	1000	ug/L	SW846 6010B	01/22-02/01/10	LTGEE1AX
		Dilution Factor: 1		Analysis Time..: 11:03	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	15200	1000	ug/L	SW846 6010B	01/22-02/01/10	LTGEE1A0
		Dilution Factor: 1		Analysis Time..: 11:03	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	2590	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTGEE1A1
		Dilution Factor: 1		Analysis Time..: 11:03	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	7990	1000	ug/L	SW846 6010B	01/22-02/01/10	LTGEE1A2
		Dilution Factor: 1		Analysis Time..: 11:03	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 972		
Nickel	19.0	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTGEE1AA
		Dilution Factor: 1		Analysis Time..: 11:03	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	5.4	3.0	ug/L	SW846 6010B	01/22-02/01/10	LTGEE1AN
		Dilution Factor: 1		Analysis Time..: 11:03	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	0.19 B	2.0	ug/L	SW846 6020	01/22-01/25/10	LTGEE1AJ
		Dilution Factor: 1		Analysis Time..: 18:04	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGEE1AP
		Dilution Factor: 1		Analysis Time..: 11:03	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-235C-1507-GW

TOTAL Metals

Lot-Sample #...: A0A210417-016 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	0.16 B	1.0	ug/L	SW846 6020	01/22-01/25/10	LTGEE1AL
		Dilution Factor: 1		Analysis Time..: 18:04	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	8.8 B	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTGEE1AC
		Dilution Factor: 1		Analysis Time..: 11:03	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	55.3 J	10.0	ug/L	SW846 6020	01/22-01/25/10	LTGEE1AK
		Dilution Factor: 1		Analysis Time..: 18:04	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: FWGLL3mw-235C-1507-GF

TOTAL Metals

Lot-Sample #...: A0A210417-017 **Matrix.....:** WG
Date Sampled...: 01/20/10 09:20 **Date Received..:** 01/21/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0022016						
Silver	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGEW1AQ
		Dilution Factor: 1		Analysis Time..: 11:08	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/22-01/25/10	LTGEW1AE
		Dilution Factor: 1		Analysis Time..: 18:08	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGEW1AM
		Dilution Factor: 1		Analysis Time..: 11:08	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**3.3 B**	**10.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGEW1AR**
		Dilution Factor: 1		Analysis Time..: 11:08	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/22-01/25/10	LTGEW1AF
		Dilution Factor: 1		Analysis Time..: 18:08	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**38900**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGEW1AT**
		Dilution Factor: 1		Analysis Time..: 11:08	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/22-01/25/10	LTGEW1AG
		Dilution Factor: 1		Analysis Time..: 18:08	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGEW1AU
		Dilution Factor: 1		Analysis Time..: 11:08	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGEW1AV
		Dilution Factor: 1		Analysis Time..: 11:08	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGEW1AW
		Dilution Factor: 1		Analysis Time..: 11:08	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-235C-1507-GF

TOTAL Metals

Lot-Sample #...: A0A210417-017 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	01/22-01/25/10	LTGEW1AH
		Dilution Factor: 1		Analysis Time..: 18:08	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/22-01/25/10	LTGEW1AD
		Dilution Factor: 1		Analysis Time..: 13:37	Analyst ID.....: 001637	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**675 B**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGEW1AX**
		Dilution Factor: 1		Analysis Time..: 11:08	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**17200**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGEW1A0**
		Dilution Factor: 1		Analysis Time..: 11:08	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**5.8 B**	**10.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGEW1A1**
		Dilution Factor: 1		Analysis Time..: 11:08	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**9600**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGEW1A2**
		Dilution Factor: 1		Analysis Time..: 11:08	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTGEW1AA
		Dilution Factor: 1		Analysis Time..: 11:08	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/22-02/01/10	LTGEW1AN
		Dilution Factor: 1		Analysis Time..: 11:08	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/22-01/25/10	LTGEW1AJ
		Dilution Factor: 1		Analysis Time..: 18:08	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGEW1AP
		Dilution Factor: 1		Analysis Time..: 11:08	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-235C-1507-GF

TOTAL Metals

Lot-Sample #...: A0A210417-017 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/22-01/25/10	LTGEW1AL
		Dilution Factor: 1		Analysis Time..: 18:08	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTGEW1AC
		Dilution Factor: 1		Analysis Time..: 11:08	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**7.1 B,J**	**10.0**	**ug/L**	**SW846 6020**	**01/22-01/25/10**	**LTGEW1AK**
		Dilution Factor: 1		Analysis Time..: 18:08	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-008C-1503-GF

TOTAL Metals

Lot-Sample #...: A0A210417-019 **Matrix.....:** WG
Date Sampled...: 01/20/10 10:15 **Date Received..:** 01/21/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0022016						
Silver	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGGL1AQ
		Dilution Factor: 1		Analysis Time..: 11:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**1160**	**50.0**	**ug/L**	**SW846 6020**	**01/22-01/25/10**	**LTGGL1AE**
		Dilution Factor: 1		Analysis Time..: 18:13	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**10.3**	**5.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGGL1AM**
		Dilution Factor: 1		Analysis Time..: 11:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**18.8**	**10.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGGL1AR**
		Dilution Factor: 1		Analysis Time..: 11:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/22-01/25/10	LTGGL1AF
		Dilution Factor: 1		Analysis Time..: 18:13	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**167000**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGGL1AT**
		Dilution Factor: 1		Analysis Time..: 11:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/22-01/25/10	LTGGL1AG
		Dilution Factor: 1		Analysis Time..: 18:13	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**1.6 B**	**5.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGGL1AU**
		Dilution Factor: 1		Analysis Time..: 11:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	**2.1 B**	**5.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGGL1AV**
		Dilution Factor: 1		Analysis Time..: 11:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGGL1AW
		Dilution Factor: 1		Analysis Time..: 11:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-008C-1503-GF

TOTAL Metals

Lot-Sample #...: A0A210417-019 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**3210 J**	**50.0**	**ug/L**	**SW846 6020**	**01/22-01/25/10**	**LTGGL1AH**
		Dilution Factor: 1		Analysis Time..: 18:13	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/22-01/25/10	LTGGL1AD
		Dilution Factor: 1		Analysis Time..: 13:19	Analyst ID.....: 001637	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**3660**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGGL1AX**
		Dilution Factor: 1		Analysis Time..: 11:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**78100**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGGL1A0**
		Dilution Factor: 1		Analysis Time..: 11:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**64.7**	**10.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGGL1A1**
		Dilution Factor: 1		Analysis Time..: 11:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**31000**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGGL1A2**
		Dilution Factor: 1		Analysis Time..: 11:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 972		
Nickel	**4.4 B**	**10.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGGL1AA**
		Dilution Factor: 1		Analysis Time..: 11:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/22-02/01/10	LTGGL1AN
		Dilution Factor: 1		Analysis Time..: 11:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	**0.23 B**	**2.0**	**ug/L**	**SW846 6020**	**01/22-01/25/10**	**LTGGL1AJ**
		Dilution Factor: 1		Analysis Time..: 18:13	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGGL1AP
		Dilution Factor: 1		Analysis Time..: 11:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-008C-1503-GF

TOTAL Metals

Lot-Sample #...: A0A210417-019 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/22-01/25/10	LTGGL1AL
		Dilution Factor: 1		Analysis Time..: 18:13	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTGGL1AC
		Dilution Factor: 1		Analysis Time..: 11:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**11.5 J**	**10.0**	**ug/L**	**SW846 6020**	**01/22-01/25/10**	**LTGGL1AK**
		Dilution Factor: 1		Analysis Time..: 18:13	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-DUP2-1511-GF

TOTAL Metals

Lot-Sample #...: A0A210417-021 **Matrix.....:** WG
Date Sampled...: 01/20/10 11:02 **Date Received..:** 01/21/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0022016						
Silver	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGG41AQ
		Dilution Factor: 1		Analysis Time..: 11:20	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**1780**	**50.0**	**ug/L**	**SW846 6020**	**01/22-01/25/10**	**LTGG41AE**
		Dilution Factor: 1		Analysis Time..: 18:18	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**14.6**	**5.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGG41AM**
		Dilution Factor: 1		Analysis Time..: 11:20	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**21.7**	**10.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGG41AR**
		Dilution Factor: 1		Analysis Time..: 11:20	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/22-01/25/10	LTGG41AF
		Dilution Factor: 1		Analysis Time..: 18:18	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**174000**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGG41AT**
		Dilution Factor: 1		Analysis Time..: 11:20	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/22-01/25/10	LTGG41AG
		Dilution Factor: 1		Analysis Time..: 18:18	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**2.2 B**	**5.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGG41AU**
		Dilution Factor: 1		Analysis Time..: 11:20	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	**2.7 B**	**5.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGG41AV**
		Dilution Factor: 1		Analysis Time..: 11:20	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	**4.6 B**	**5.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGG41AW**
		Dilution Factor: 1		Analysis Time..: 11:20	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-DUP2-1511-GF

TOTAL Metals

Lot-Sample #...: A0A210417-021 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**4480 J**	**50.0**	**ug/L**	**SW846 6020**	**01/22-01/25/10**	**LTGG41AH**
		Dilution Factor: 1		Analysis Time..: 18:18	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/22-01/25/10	LTGG41AD
		Dilution Factor: 1		Analysis Time..: 13:38	Analyst ID.....: 001637	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**3950**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGG41AX**
		Dilution Factor: 1		Analysis Time..: 11:20	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**81800**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGG41A0**
		Dilution Factor: 1		Analysis Time..: 11:20	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**86.8**	**10.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGG41A1**
		Dilution Factor: 1		Analysis Time..: 11:20	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**32500**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGG41A2**
		Dilution Factor: 1		Analysis Time..: 11:20	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 972		
Nickel	**6.0 B**	**10.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGG41AA**
		Dilution Factor: 1		Analysis Time..: 11:20	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/22-02/01/10	LTGG41AN
		Dilution Factor: 1		Analysis Time..: 11:20	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	**0.25 B**	**2.0**	**ug/L**	**SW846 6020**	**01/22-01/25/10**	**LTGG41AJ**
		Dilution Factor: 1		Analysis Time..: 18:18	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGG41AP
		Dilution Factor: 1		Analysis Time..: 11:20	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-DUP2-1511-GF

TOTAL Metals

Lot-Sample #...: A0A210417-021 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/22-01/25/10	LTGG41AL
		Dilution Factor: 1		Analysis Time..: 18:18	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	**1.8 B**	**10.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGG41AC**
		Dilution Factor: 1		Analysis Time..: 11:20	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**16.2 J**	**10.0**	**ug/L**	**SW846 6020**	**01/22-01/25/10**	**LTGG41AK**
		Dilution Factor: 1		Analysis Time..: 18:18	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-010C-1505-GF

TOTAL Metals

Lot-Sample #...: A0A210417-023 **Matrix.....:** WG
Date Sampled...: 01/20/10 12:54 **Date Received..:** 01/21/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0022016						
Silver	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGG71AQ
		Dilution Factor: 1		Analysis Time..: 11:26	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**1160**	**50.0**	**ug/L**	**SW846 6020**	**01/22-01/25/10**	**LTGG71AE**
		Dilution Factor: 1		Analysis Time..: 18:22	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**148**	**5.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGG71AM**
		Dilution Factor: 1		Analysis Time..: 11:26	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**56.4**	**10.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGG71AR**
		Dilution Factor: 1		Analysis Time..: 11:26	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/22-01/25/10	LTGG71AF
		Dilution Factor: 1		Analysis Time..: 18:22	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**94400**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGG71AT**
		Dilution Factor: 1		Analysis Time..: 11:26	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/22-01/25/10	LTGG71AG
		Dilution Factor: 1		Analysis Time..: 18:22	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGG71AU
		Dilution Factor: 1		Analysis Time..: 11:26	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGG71AV
		Dilution Factor: 1		Analysis Time..: 11:26	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGG71AW
		Dilution Factor: 1		Analysis Time..: 11:26	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-010C-1505-GF

TOTAL Metals

Lot-Sample #...: A0A210417-023 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**6760 J**	**50.0**	**ug/L**	**SW846 6020**	**01/22-01/25/10**	**LTGG71AH**
		Dilution Factor: 1		Analysis Time..: 18:22	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/22-01/25/10	LTGG71AD
		Dilution Factor: 1		Analysis Time..: 13:16	Analyst ID.....: 001637	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**2760**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGG71AX**
		Dilution Factor: 1		Analysis Time..: 11:26	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**80300**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGG71A0**
		Dilution Factor: 1		Analysis Time..: 11:26	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**96.2**	**10.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGG71A1**
		Dilution Factor: 1		Analysis Time..: 11:26	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**43800**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGG71A2**
		Dilution Factor: 1		Analysis Time..: 11:26	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 972		
Nickel	**2.6 B**	**10.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGG71AA**
		Dilution Factor: 1		Analysis Time..: 11:26	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/22-02/01/10	LTGG71AN
		Dilution Factor: 1		Analysis Time..: 11:26	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	**0.15 B**	**2.0**	**ug/L**	**SW846 6020**	**01/22-01/25/10**	**LTGG71AJ**
		Dilution Factor: 1		Analysis Time..: 18:22	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGG71AP
		Dilution Factor: 1		Analysis Time..: 11:26	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-010C-1505-GF

TOTAL Metals

Lot-Sample #...: A0A210417-023 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/22-01/25/10	LTGG71AL
		Dilution Factor: 1		Analysis Time..: 18:22	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTGG71AC
		Dilution Factor: 1		Analysis Time..: 11:26	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**12.3 J**	**10.0**	**ug/L**	**SW846 6020**	**01/22-01/25/10**	**LTGG71AK**
		Dilution Factor: 1		Analysis Time..: 18:22	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-006C-1501-GF

TOTAL Metals

Lot-Sample #...: A0A210417-025 **Matrix.....:** WG
Date Sampled...: 01/20/10 14:00 **Date Received..:** 01/21/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0022016						
Silver	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGHR1AQ
		Dilution Factor: 1		Analysis Time..: 11:32	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/22-01/25/10	LTGHR1AE
		Dilution Factor: 1		Analysis Time..: 18:27	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**16.1**	**5.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGHR1AM**
		Dilution Factor: 1		Analysis Time..: 11:32	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**14.8**	**10.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGHR1AR**
		Dilution Factor: 1		Analysis Time..: 11:32	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/22-01/25/10	LTGHR1AF
		Dilution Factor: 1		Analysis Time..: 18:27	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**116000**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGHR1AT**
		Dilution Factor: 1		Analysis Time..: 11:32	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/22-01/25/10	LTGHR1AG
		Dilution Factor: 1		Analysis Time..: 18:27	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGHR1AU
		Dilution Factor: 1		Analysis Time..: 11:32	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGHR1AV
		Dilution Factor: 1		Analysis Time..: 11:32	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGHR1AW
		Dilution Factor: 1		Analysis Time..: 11:32	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-006C-1501-GF

TOTAL Metals

Lot-Sample #...: A0A210417-025 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**1120 J**	**50.0**	**ug/L**	**SW846 6020**	**01/22-01/25/10**	**LTGHR1AH**
		Dilution Factor: 1		Analysis Time..: 18:27	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/22-01/25/10	LTGHR1AD
		Dilution Factor: 1		Analysis Time..: 13:32	Analyst ID.....: 001637	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**2860**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGHR1AX**
		Dilution Factor: 1		Analysis Time..: 11:32	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**72300**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGHR1A0**
		Dilution Factor: 1		Analysis Time..: 11:32	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**169**	**10.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGHR1A1**
		Dilution Factor: 1		Analysis Time..: 11:32	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**39900**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGHR1A2**
		Dilution Factor: 1		Analysis Time..: 11:32	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTGHR1AA
		Dilution Factor: 1		Analysis Time..: 11:32	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/22-02/01/10	LTGHR1AN
		Dilution Factor: 1		Analysis Time..: 11:32	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/22-01/25/10	LTGHR1AJ
		Dilution Factor: 1		Analysis Time..: 18:27	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGHR1AP
		Dilution Factor: 1		Analysis Time..: 11:32	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-006C-1501-GF

TOTAL Metals

Lot-Sample #...: A0A210417-025 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/22-01/25/10	LTGHR1AL
		Dilution Factor: 1		Analysis Time..: 18:27	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTGHR1AC
		Dilution Factor: 1		Analysis Time..: 11:32	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	01/22-01/25/10	LTGHR1AK
		Dilution Factor: 1		Analysis Time..: 18:27	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: FWGASYmw-005C-1500-GF

TOTAL Metals

Lot-Sample #...: A0A210417-027 **Matrix.....:** WG
Date Sampled...: 01/20/10 15:20 **Date Received..:** 01/21/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0022016						
Silver	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGJF1A6
		Dilution Factor: 1		Analysis Time..: 11:38	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/22-01/25/10	LTGJF1AH
		Dilution Factor: 1		Analysis Time..: 18:31	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGJF1A0
		Dilution Factor: 1		Analysis Time..: 11:38	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**28.5**	**10.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGJF1A8**
		Dilution Factor: 1		Analysis Time..: 11:38	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/22-01/25/10	LTGJF1AK
		Dilution Factor: 1		Analysis Time..: 18:31	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**146000**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGJF1CA**
		Dilution Factor: 1		Analysis Time..: 11:38	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/22-01/25/10	LTGJF1AM
		Dilution Factor: 1		Analysis Time..: 18:31	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGJF1CD
		Dilution Factor: 1		Analysis Time..: 11:38	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGJF1CF
		Dilution Factor: 1		Analysis Time..: 11:38	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGJF1CH
		Dilution Factor: 1		Analysis Time..: 11:38	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-005C-1500-GF

TOTAL Metals

Lot-Sample #...: A0A210417-027 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	01/22-01/25/10	LTGJF1AP
		Dilution Factor: 1		Analysis Time..: 18:31	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/22-01/25/10	LTGJF1AF
		Dilution Factor: 1		Analysis Time..: 13:02	Analyst ID.....: 001637	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1740 E**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGJF1CK**
		Dilution Factor: 1		Analysis Time..: 11:38	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**42600**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGJF1CM**
		Dilution Factor: 1		Analysis Time..: 11:38	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**207**	**10.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGJF1CP**
		Dilution Factor: 1		Analysis Time..: 11:38	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**32300**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTGJF1CR**
		Dilution Factor: 1		Analysis Time..: 11:38	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTGJF1AA
		Dilution Factor: 1		Analysis Time..: 11:38	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/22-02/01/10	LTGJF1A2
		Dilution Factor: 1		Analysis Time..: 11:38	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/22-01/25/10	LTGJF1AR
		Dilution Factor: 1		Analysis Time..: 18:31	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTGJF1A4
		Dilution Factor: 1		Analysis Time..: 11:38	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-005C-1500-GF

TOTAL Metals

Lot-Sample #...: A0A210417-027 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/22-01/25/10	LTGJF1AW
		Dilution Factor: 1		Analysis Time..: 18:31	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTGJF1AD
		Dilution Factor: 1		Analysis Time..: 11:38	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	01/22-01/25/10	LTGJF1AU
		Dilution Factor: 1		Analysis Time..: 18:31	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

E Matrix interference.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-009C-1504-GF

TOTAL Metals

Lot-Sample #...: A0A210417-030 **Matrix.....:** WG
Date Sampled...: 01/21/10 09:20 **Date Received..:** 01/21/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0022016						
Silver	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTJCL1AQ
		Dilution Factor: 1		Analysis Time..: 12:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**496**	**50.0**	**ug/L**	**SW846 6020**	**01/22-01/25/10**	**LTJCL1AE**
		Dilution Factor: 1		Analysis Time..: 19:03	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTJCL1AM
		Dilution Factor: 1		Analysis Time..: 12:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**27.1**	**10.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTJCL1AR**
		Dilution Factor: 1		Analysis Time..: 12:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/22-01/25/10	LTJCL1AF
		Dilution Factor: 1		Analysis Time..: 19:03	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**188000**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTJCL1AT**
		Dilution Factor: 1		Analysis Time..: 12:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/22-01/25/10	LTJCL1AG
		Dilution Factor: 1		Analysis Time..: 19:03	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTJCL1AU
		Dilution Factor: 1		Analysis Time..: 12:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTJCL1AV
		Dilution Factor: 1		Analysis Time..: 12:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTJCL1AW
		Dilution Factor: 1		Analysis Time..: 12:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-009C-1504-GF

TOTAL Metals

Lot-Sample #...: A0A210417-030 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**811 J**	**50.0**	**ug/L**	**SW846 6020**	**01/22-01/25/10**	**LTJCL1AH**
		Dilution Factor: 1		Analysis Time..: 19:03	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/22-01/25/10	LTJCL1AD
		Dilution Factor: 1		Analysis Time..: 13:36	Analyst ID.....: 001637	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1500**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTJCL1AX**
		Dilution Factor: 1		Analysis Time..: 12:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**69900**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTJCL1A0**
		Dilution Factor: 1		Analysis Time..: 12:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**624**	**10.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTJCL1A1**
		Dilution Factor: 1		Analysis Time..: 12:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**22500**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTJCL1A2**
		Dilution Factor: 1		Analysis Time..: 12:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTJCL1AA
		Dilution Factor: 1		Analysis Time..: 12:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/22-02/01/10	LTJCL1AN
		Dilution Factor: 1		Analysis Time..: 12:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/22-01/25/10	LTJCL1AJ
		Dilution Factor: 1		Analysis Time..: 19:03	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTJCL1AP
		Dilution Factor: 1		Analysis Time..: 12:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-009C-1504-GF

TOTAL Metals

Lot-Sample #...: A0A210417-030 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.38 B**	**1.0**	**ug/L**	**SW846 6020**	**01/22-01/25/10**	**LTJCL1AL**
		Dilution Factor: 1		Analysis Time..: 19:03	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTJCL1AC
		Dilution Factor: 1		Analysis Time..: 12:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**5.0 B,J**	**10.0**	**ug/L**	**SW846 6020**	**01/22-01/25/10**	**LTJCL1AK**
		Dilution Factor: 1		Analysis Time..: 19:03	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: FWGEQUIPRinse2-1514-GW

TOTAL Metals

Lot-Sample #...: A0A210417-031 **Matrix.....:** WQ
Date Sampled...: 01/21/10 10:22 **Date Received..:** 01/21/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0022016						
Silver	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTJCN1AW
		Dilution Factor: 1		Analysis Time..: 12:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/22-01/25/10	LTJCN1AK
		Dilution Factor: 1		Analysis Time..: 19:08	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTJCN1AT
		Dilution Factor: 1		Analysis Time..: 12:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	ND	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTJCN1AX
		Dilution Factor: 1		Analysis Time..: 12:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/22-01/25/10	LTJCN1AL
		Dilution Factor: 1		Analysis Time..: 19:08	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	ND	1000	ug/L	SW846 6010B	01/22-02/01/10	LTJCN1A0
		Dilution Factor: 1		Analysis Time..: 12:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/22-01/25/10	LTJCN1AM
		Dilution Factor: 1		Analysis Time..: 19:08	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTJCN1A1
		Dilution Factor: 1		Analysis Time..: 12:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTJCN1A2
		Dilution Factor: 1		Analysis Time..: 12:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTJCN1A3
		Dilution Factor: 1		Analysis Time..: 12:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRinse2-1514-GW

TOTAL Metals

Lot-Sample #...: A0A210417-031 **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	01/22-01/25/10	LTJCN1AN
		Dilution Factor: 1		Analysis Time..: 19:08	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/22-01/25/10	LTJCN1AJ
		Dilution Factor: 1		Analysis Time..: 13:40	Analyst ID.....: 001637	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	ND	1000	ug/L	SW846 6010B	01/22-02/01/10	LTJCN1A4
		Dilution Factor: 1		Analysis Time..: 12:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	ND	1000	ug/L	SW846 6010B	01/22-02/01/10	LTJCN1A5
		Dilution Factor: 1		Analysis Time..: 12:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	ND	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTJCN1A6
		Dilution Factor: 1		Analysis Time..: 12:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	ND	1000	ug/L	SW846 6010B	01/22-02/01/10	LTJCN1A7
		Dilution Factor: 1		Analysis Time..: 12:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTJCN1AG
		Dilution Factor: 1		Analysis Time..: 12:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/22-02/01/10	LTJCN1AU
		Dilution Factor: 1		Analysis Time..: 12:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/22-01/25/10	LTJCN1AP
		Dilution Factor: 1		Analysis Time..: 19:08	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTJCN1AV
		Dilution Factor: 1		Analysis Time..: 12:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRinse2-1514-GW

TOTAL Metals

Lot-Sample #...: A0A210417-031 **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.19 B**	**1.0**	**ug/L**	**SW846 6020**	**01/22-01/25/10**	**LTJCN1AR**
		Dilution Factor: 1		Analysis Time..: 19:08	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTJCN1AH
		Dilution Factor: 1		Analysis Time..: 12:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	01/22-01/25/10	LTJCN1AQ
		Dilution Factor: 1		Analysis Time..: 19:08	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-004C-1499-GF

TOTAL Metals

Lot-Sample #...: A0A210417-033 **Matrix.....:** WG
Date Sampled...: 01/21/10 09:15 **Date Received..:** 01/21/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0022016						
Silver	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTJD21A6
		Dilution Factor: 1		Analysis Time..: 12:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/22-01/25/10	LTJD21AH
		Dilution Factor: 1		Analysis Time..: 19:12	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**23.2**	**5.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTJD21A0**
		Dilution Factor: 1		Analysis Time..: 12:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**12.7**	**10.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTJD21A8**
		Dilution Factor: 1		Analysis Time..: 12:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/22-01/25/10	LTJD21AK
		Dilution Factor: 1		Analysis Time..: 19:12	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**157000**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTJD21CA**
		Dilution Factor: 1		Analysis Time..: 12:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/22-01/25/10	LTJD21AM
		Dilution Factor: 1		Analysis Time..: 19:12	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTJD21CD
		Dilution Factor: 1		Analysis Time..: 12:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTJD21CF
		Dilution Factor: 1		Analysis Time..: 12:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTJD21CH
		Dilution Factor: 1		Analysis Time..: 12:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-004C-1499-GF

TOTAL Metals

Lot-Sample #...: A0A210417-033 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**1490 J**	**50.0**	**ug/L**	**SW846 6020**	**01/22-01/25/10**	**LTJD21AP**
		Dilution Factor: 1		Analysis Time..: 19:12	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/22-01/25/10	LTJD21AF
		Dilution Factor: 1		Analysis Time..: 13:06	Analyst ID.....: 001637	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**2850**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTJD21CK**
		Dilution Factor: 1		Analysis Time..: 12:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**79600**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTJD21CM**
		Dilution Factor: 1		Analysis Time..: 12:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**211**	**10.0**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTJD21CP**
		Dilution Factor: 1		Analysis Time..: 12:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**51600**	**1000**	**ug/L**	**SW846 6010B**	**01/22-02/01/10**	**LTJD21CR**
		Dilution Factor: 1		Analysis Time..: 12:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTJD21AA
		Dilution Factor: 1		Analysis Time..: 12:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/22-02/01/10	LTJD21A2
		Dilution Factor: 1		Analysis Time..: 12:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/22-01/25/10	LTJD21AR
		Dilution Factor: 1		Analysis Time..: 19:12	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTJD21A4
		Dilution Factor: 1		Analysis Time..: 12:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-004C-1499-GF

TOTAL Metals

Lot-Sample #...: A0A210417-033 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.15 B**	**1.0**	**ug/L**	**SW846 6020**	**01/22-01/25/10**	**LTJD21AW**
		Dilution Factor: 1		Analysis Time..: 19:12	Analyst ID.....: 001637	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTJD21AD
		Dilution Factor: 1		Analysis Time..: 12:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	01/22-01/25/10	LTJD21AU
		Dilution Factor: 1		Analysis Time..: 19:12	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 #...: A0A210417 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A0A220000-016 **Prep Batch #...:** 0022016						
Aluminum	ND	50.0	ug/L	SW846 6020	01/22-01/25/10	LTKML1AA
		Dilution Factor: 1				
		Analysis Time..: 17:07		Analyst ID.....: 001637	Instrument ID..: I8	
Antimony	ND	2.0	ug/L	SW846 6020	01/22-01/25/10	LTKML1AF
		Dilution Factor: 1				
		Analysis Time..: 17:07		Analyst ID.....: 001637	Instrument ID..: I8	
Arsenic	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTKML1AJ
		Dilution Factor: 1				
		Analysis Time..: 09:55		Analyst ID.....: 002260	Instrument ID..: I5	
Barium	ND	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTKML1AN
		Dilution Factor: 1				
		Analysis Time..: 09:55		Analyst ID.....: 002260	Instrument ID..: I5	
Beryllium	ND	1.0	ug/L	SW846 6020	01/22-01/25/10	LTKML1AC
		Dilution Factor: 1				
		Analysis Time..: 17:07		Analyst ID.....: 001637	Instrument ID..: I8	
Cadmium	ND	0.50	ug/L	SW846 6020	01/22-01/25/10	LTKML1AD
		Dilution Factor: 1				
		Analysis Time..: 17:07		Analyst ID.....: 001637	Instrument ID..: I8	
Calcium	ND	1000	ug/L	SW846 6010B	01/22-02/01/10	LTKML1AP
		Dilution Factor: 1				
		Analysis Time..: 09:55		Analyst ID.....: 002260	Instrument ID..: I5	
Chromium	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTKML1AR
		Dilution Factor: 1				
		Analysis Time..: 09:55		Analyst ID.....: 002260	Instrument ID..: I5	
Cobalt	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTKML1AQ
		Dilution Factor: 1				
		Analysis Time..: 09:55		Analyst ID.....: 002260	Instrument ID..: I5	
Copper	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTKML1AT
		Dilution Factor: 1				
		Analysis Time..: 09:55		Analyst ID.....: 002260	Instrument ID..: I5	
Iron	**34.0 B**	**50.0**	**ug/L**	**SW846 6020**	**01/22-01/25/10**	**LTKML1AE**
		Dilution Factor: 1				
		Analysis Time..: 17:07		Analyst ID.....: 001637	Instrument ID..: I8	

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A0A210417 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Lead	ND	3.0	ug/L	SW846 6010B	01/22-02/01/10	LTKML1AK
		Dilution Factor: 1				
		Analysis Time..: 09:55		Analyst ID.....: 002260	Instrument ID..: I5	
Magnesium	ND	1000	ug/L	SW846 6010B	01/22-02/01/10	LTKML1AV
		Dilution Factor: 1				
		Analysis Time..: 09:55		Analyst ID.....: 002260	Instrument ID..: I5	
Manganese	ND	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTKML1AW
		Dilution Factor: 1				
		Analysis Time..: 09:55		Analyst ID.....: 002260	Instrument ID..: I5	
Mercury	ND	0.20	ug/L	SW846 7470A	01/22-01/25/10	LTKML1A2
		Dilution Factor: 1				
		Analysis Time..: 13:00		Analyst ID.....: 001637	Instrument ID..: H1	
Nickel	ND	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTKML1A0
		Dilution Factor: 1				
		Analysis Time..: 09:55		Analyst ID.....: 002260	Instrument ID..: I5	
Potassium	ND	1000	ug/L	SW846 6010B	01/22-02/01/10	LTKML1AU
		Dilution Factor: 1				
		Analysis Time..: 09:55		Analyst ID.....: 002260	Instrument ID..: I5	
Selenium	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTKML1AL
		Dilution Factor: 1				
		Analysis Time..: 15:41		Analyst ID.....: 002260	Instrument ID..: I5	
Silver	ND	5.0	ug/L	SW846 6010B	01/22-02/01/10	LTKML1AM
		Dilution Factor: 1				
		Analysis Time..: 09:55		Analyst ID.....: 002260	Instrument ID..: I5	
Sodium	ND	1000	ug/L	SW846 6010B	01/22-02/01/10	LTKML1AX
		Dilution Factor: 1				
		Analysis Time..: 09:55		Analyst ID.....: 002260	Instrument ID..: I5	
Thallium	ND	1.0	ug/L	SW846 6020	01/22-01/25/10	LTKML1AH
		Dilution Factor: 1				
		Analysis Time..: 17:07		Analyst ID.....: 001637	Instrument ID..: I8	
Vanadium	ND	10.0	ug/L	SW846 6010B	01/22-02/01/10	LTKML1A1
		Dilution Factor: 1				
		Analysis Time..: 09:55		Analyst ID.....: 002260	Instrument ID..: I5	
Zinc	**5.0 B**	**10.0**	**ug/L**	**SW846 6020**	**01/22-01/25/10**	**LTKML1AG**
		Dilution Factor: 1				
		Analysis Time..: 17:07		Analyst ID.....: 001637	Instrument ID..: I8	

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A0A210417 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 #...: A0A210417 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A0A220000-016 **Prep Batch #...:** 0022016					
Aluminum	97	(80 - 120)	SW846 6020	01/22-01/25/10	LTKML1A3
		Dilution Factor: 1	Analysis Time..: 17:12	Analyst ID.....: 001637	
		Instrument ID..: I8			
Beryllium	92	(80 - 120)	SW846 6020	01/22-01/25/10	LTKML1A4
		Dilution Factor: 1	Analysis Time..: 17:12	Analyst ID.....: 001637	
		Instrument ID..: I8			
Cadmium	104	(80 - 120)	SW846 6020	01/22-01/25/10	LTKML1A5
		Dilution Factor: 1	Analysis Time..: 17:12	Analyst ID.....: 001637	
		Instrument ID..: I8			
Iron	99	(80 - 120)	SW846 6020	01/22-01/25/10	LTKML1A6
		Dilution Factor: 1	Analysis Time..: 17:12	Analyst ID.....: 001637	
		Instrument ID..: I8			
Antimony	102	(80 - 120)	SW846 6020	01/22-01/25/10	LTKML1A7
		Dilution Factor: 1	Analysis Time..: 17:12	Analyst ID.....: 001637	
		Instrument ID..: I8			
Zinc	120	(80 - 120)	SW846 6020	01/22-01/25/10	LTKML1A8
		Dilution Factor: 1	Analysis Time..: 17:12	Analyst ID.....: 001637	
		Instrument ID..: I8			
Thallium	93	(80 - 120)	SW846 6020	01/22-01/25/10	LTKML1A9
		Dilution Factor: 1	Analysis Time..: 17:12	Analyst ID.....: 001637	
		Instrument ID..: I8			
Arsenic	91	(80 - 120)	SW846 6010B	01/22-02/01/10	LTKML1CA
		Dilution Factor: 1	Analysis Time..: 10:01	Analyst ID.....: 002260	
		Instrument ID..: I5			
Lead	90	(80 - 120)	SW846 6010B	01/22-02/01/10	LTKML1CC
		Dilution Factor: 1	Analysis Time..: 10:01	Analyst ID.....: 002260	
		Instrument ID..: I5			
Selenium	98	(80 - 120)	SW846 6010B	01/22-02/01/10	LTKML1CD
		Dilution Factor: 1	Analysis Time..: 15:47	Analyst ID.....: 002260	
		Instrument ID..: I5			

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0A210417 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Silver	86	(80 - 120)	SW846 6010B	01/22-02/01/10	LTKML1CE
		Dilution Factor: 1	Analysis Time..: 10:01	Analyst ID.....: 002260	
		Instrument ID..: I5			
Barium	90	(80 - 120)	SW846 6010B	01/22-02/01/10	LTKML1CF
		Dilution Factor: 1	Analysis Time..: 10:01	Analyst ID.....: 002260	
		Instrument ID..: I5			
Calcium	91	(80 - 120)	SW846 6010B	01/22-02/01/10	LTKML1CG
		Dilution Factor: 1	Analysis Time..: 10:01	Analyst ID.....: 002260	
		Instrument ID..: I5			
Cobalt	87	(80 - 120)	SW846 6010B	01/22-02/01/10	LTKML1CH
		Dilution Factor: 1	Analysis Time..: 10:01	Analyst ID.....: 002260	
		Instrument ID..: I5			
Chromium	93	(80 - 120)	SW846 6010B	01/22-02/01/10	LTKML1CJ
		Dilution Factor: 1	Analysis Time..: 10:01	Analyst ID.....: 002260	
		Instrument ID..: I5			
Copper	89	(80 - 120)	SW846 6010B	01/22-02/01/10	LTKML1CK
		Dilution Factor: 1	Analysis Time..: 10:01	Analyst ID.....: 002260	
		Instrument ID..: I5			
Potassium	90	(80 - 120)	SW846 6010B	01/22-02/01/10	LTKML1CL
		Dilution Factor: 1	Analysis Time..: 10:01	Analyst ID.....: 002260	
		Instrument ID..: I5			
Magnesium	91	(80 - 120)	SW846 6010B	01/22-02/01/10	LTKML1CM
		Dilution Factor: 1	Analysis Time..: 10:01	Analyst ID.....: 002260	
		Instrument ID..: I5			
Manganese	94	(80 - 120)	SW846 6010B	01/22-02/01/10	LTKML1CN
		Dilution Factor: 1	Analysis Time..: 10:01	Analyst ID.....: 002260	
		Instrument ID..: I5			
Sodium	93	(80 - 120)	SW846 6010B	01/22-02/01/10	LTKML1CP
		Dilution Factor: 1	Analysis Time..: 10:01	Analyst ID.....: 002260	
		Instrument ID..: I5			
Nickel	89	(80 - 120)	SW846 6010B	01/22-02/01/10	LTKML1CQ
		Dilution Factor: 1	Analysis Time..: 10:01	Analyst ID.....: 002260	
		Instrument ID..: I5			

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0A210417 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	90	(80 - 120)	SW846 6010B	01/22-02/01/10	LTKML1CR
		Dilution Factor: 1	Analysis Time..: 10:01	Analyst ID.....: 002260	
		Instrument ID..: I5			
Mercury	96	(80 - 120)	SW846 7470A	01/22-01/25/10	LTKML1CT
		Dilution Factor: 1	Analysis Time..: 13:01	Analyst ID.....: 001637	
		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 #...: A0A210417 **Matrix.....:** WG
Date Sampled...: 01/20/10 15:20 **Date Received..:** 01/21/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A0A210417-027 **Prep Batch #...:** 0022016					
Aluminum	99	(75 - 125)	SW846 6020	01/22-01/25/10	LTGJF1AJ
		Dilution Factor: 1	Analysis Time..: 18:31	Instrument ID..: I8	
		Analyst ID.....: 001637			
Antimony	107	(75 - 125)	SW846 6020	01/22-01/25/10	LTGJF1AT
		Dilution Factor: 1	Analysis Time..: 18:31	Instrument ID..: I8	
		Analyst ID.....: 001637			
Arsenic	103	(75 - 125)	SW846 6010B	01/22-02/01/10	LTGJF1A1
		Dilution Factor: 1	Analysis Time..: 11:38	Instrument ID..: I5	
		Analyst ID.....: 002260			
Barium	100	(75 - 125)	SW846 6010B	01/22-02/01/10	LTGJF1A9
		Dilution Factor: 1	Analysis Time..: 11:38	Instrument ID..: I5	
		Analyst ID.....: 002260			
Beryllium	95	(75 - 125)	SW846 6020	01/22-01/25/10	LTGJF1AL
		Dilution Factor: 1	Analysis Time..: 18:31	Instrument ID..: I8	
		Analyst ID.....: 001637			
Cadmium	105	(75 - 125)	SW846 6020	01/22-01/25/10	LTGJF1AN
		Dilution Factor: 1	Analysis Time..: 18:31	Instrument ID..: I8	
		Analyst ID.....: 001637			
Calcium	96	(75 - 125)	SW846 6010B	01/22-02/01/10	LTGJF1CC
		Dilution Factor: 1	Analysis Time..: 11:38	Instrument ID..: I5	
		Analyst ID.....: 002260			
Chromium	101	(75 - 125)	SW846 6010B	01/22-02/01/10	LTGJF1CG
		Dilution Factor: 1	Analysis Time..: 11:38	Instrument ID..: I5	
		Analyst ID.....: 002260			
Cobalt	96	(75 - 125)	SW846 6010B	01/22-02/01/10	LTGJF1CE
		Dilution Factor: 1	Analysis Time..: 11:38	Instrument ID..: I5	
		Analyst ID.....: 002260			
Copper	98	(75 - 125)	SW846 6010B	01/22-02/01/10	LTGJF1CJ
		Dilution Factor: 1	Analysis Time..: 11:38	Instrument ID..: I5	
		Analyst ID.....: 002260			

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0A210417 **Matrix.....:** WG
Date Sampled...: 01/20/10 15:20 **Date Received..:** 01/21/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	100	(75 - 125)	SW846 6020	01/22-01/25/10	LTGJF1AQ
		Dilution Factor: 1	Analysis Time..: 18:31	Instrument ID..: I8	
		Analyst ID.....: 001637			
Lead	99	(75 - 125)	SW846 6010B	01/22-02/01/10	LTGJF1A3
		Dilution Factor: 1	Analysis Time..: 11:38	Instrument ID..: I5	
		Analyst ID.....: 002260			
Magnesium	101	(75 - 125)	SW846 6010B	01/22-02/01/10	LTGJF1CN
		Dilution Factor: 1	Analysis Time..: 11:38	Instrument ID..: I5	
		Analyst ID.....: 002260			
Manganese	105	(75 - 125)	SW846 6010B	01/22-02/01/10	LTGJF1CQ
		Dilution Factor: 1	Analysis Time..: 11:38	Instrument ID..: I5	
		Analyst ID.....: 002260			
Mercury	107	(80 - 120)	SW846 7470A	01/22-01/25/10	LTGJF1AG
		Dilution Factor: 1	Analysis Time..: 13:02	Instrument ID..: H1	
		Analyst ID.....: 001637			
Nickel	99	(75 - 125)	SW846 6010B	01/22-02/01/10	LTGJF1AC
		Dilution Factor: 1	Analysis Time..: 11:38	Instrument ID..: I5	
		Analyst ID.....: 002260			
Potassium	102	(75 - 125)	SW846 6010B	01/22-02/01/10	LTGJF1CL
		Dilution Factor: 1	Analysis Time..: 11:38	Instrument ID..: I5	
		Analyst ID.....: 002260			
Selenium	112	(75 - 125)	SW846 6010B	01/22-02/01/10	LTGJF1A5
		Dilution Factor: 1	Analysis Time..: 11:38	Instrument ID..: I5	
		Analyst ID.....: 002260			
Silver	102	(75 - 125)	SW846 6010B	01/22-02/01/10	LTGJF1A7
		Dilution Factor: 1	Analysis Time..: 11:38	Instrument ID..: I5	
		Analyst ID.....: 002260			
Sodium	102	(75 - 125)	SW846 6010B	01/22-02/01/10	LTGJF1CT
		Dilution Factor: 1	Analysis Time..: 11:38	Instrument ID..: I5	
		Analyst ID.....: 002260			
Thallium	101	(75 - 125)	SW846 6020	01/22-01/25/10	LTGJF1AX
		Dilution Factor: 1	Analysis Time..: 18:31	Instrument ID..: I8	
		Analyst ID.....: 001637			

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0A210417 **Matrix.....:** WG
Date Sampled...: 01/20/10 15:20 **Date Received..:** 01/21/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	99	(75 - 125)	SW846 6010B	01/22-02/01/10	LTGJF1AE
		Dilution Factor: 1	Analysis Time..: 11:38	Instrument ID..: I5	
		Analyst ID.....: 002260			
Zinc	106	(75 - 125)	SW846 6020	01/22-01/25/10	LTGJF1AV
		Dilution Factor: 1	Analysis Time..: 18:31	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 #...: A0A210417 **Matrix.....:** WG
Date Sampled...: 01/21/10 09:15 **Date Received..:** 01/21/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A0A210417-033 **Prep Batch #...:** 0022016					
Aluminum	102	(75 - 125)	SW846 6020	01/22-01/25/10	LTJD21AJ
		Dilution Factor: 1	Analysis Time..: 19:12	Instrument ID..: I8	
		Analyst ID.....: 001637			
Antimony	110	(75 - 125)	SW846 6020	01/22-01/25/10	LTJD21AT
		Dilution Factor: 1	Analysis Time..: 19:12	Instrument ID..: I8	
		Analyst ID.....: 001637			
Arsenic	103	(75 - 125)	SW846 6010B	01/22-02/01/10	LTJD21A1
		Dilution Factor: 1	Analysis Time..: 12:25	Instrument ID..: I5	
		Analyst ID.....: 002260			
Barium	101	(75 - 125)	SW846 6010B	01/22-02/01/10	LTJD21A9
		Dilution Factor: 1	Analysis Time..: 12:25	Instrument ID..: I5	
		Analyst ID.....: 002260			
Beryllium	97	(75 - 125)	SW846 6020	01/22-01/25/10	LTJD21AL
		Dilution Factor: 1	Analysis Time..: 19:12	Instrument ID..: I8	
		Analyst ID.....: 001637			
Cadmium	106	(75 - 125)	SW846 6020	01/22-01/25/10	LTJD21AN
		Dilution Factor: 1	Analysis Time..: 19:12	Instrument ID..: I8	
		Analyst ID.....: 001637			
Calcium	81	(75 - 125)	SW846 6010B	01/22-02/01/10	LTJD21CC
		Dilution Factor: 1	Analysis Time..: 12:25	Instrument ID..: I5	
		Analyst ID.....: 002260			
Chromium	101	(75 - 125)	SW846 6010B	01/22-02/01/10	LTJD21CG
		Dilution Factor: 1	Analysis Time..: 12:25	Instrument ID..: I5	
		Analyst ID.....: 002260			
Cobalt	96	(75 - 125)	SW846 6010B	01/22-02/01/10	LTJD21CE
		Dilution Factor: 1	Analysis Time..: 12:25	Instrument ID..: I5	
		Analyst ID.....: 002260			
Copper	98	(75 - 125)	SW846 6010B	01/22-02/01/10	LTJD21CJ
		Dilution Factor: 1	Analysis Time..: 12:25	Instrument ID..: I5	
		Analyst ID.....: 002260			

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0A210417 **Matrix.....:** WG
Date Sampled...: 01/21/10 09:15 **Date Received..:** 01/21/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	103	(75 - 125)	SW846 6020	01/22-01/25/10	LTJD21AQ
		Dilution Factor: 1	Analysis Time..: 19:12	Instrument ID..: I8	
		Analyst ID.....: 001637			
Lead	99	(75 - 125)	SW846 6010B	01/22-02/01/10	LTJD21A3
		Dilution Factor: 1	Analysis Time..: 12:25	Instrument ID..: I5	
		Analyst ID.....: 002260			
Magnesium	94	(75 - 125)	SW846 6010B	01/22-02/01/10	LTJD21CN
		Dilution Factor: 1	Analysis Time..: 12:25	Instrument ID..: I5	
		Analyst ID.....: 002260			
Manganese	104	(75 - 125)	SW846 6010B	01/22-02/01/10	LTJD21CQ
		Dilution Factor: 1	Analysis Time..: 12:25	Instrument ID..: I5	
		Analyst ID.....: 002260			
Mercury	111	(80 - 120)	SW846 7470A	01/22-01/25/10	LTJD21AG
		Dilution Factor: 1	Analysis Time..: 13:06	Instrument ID..: H1	
		Analyst ID.....: 001637			
Nickel	100	(75 - 125)	SW846 6010B	01/22-02/01/10	LTJD21AC
		Dilution Factor: 1	Analysis Time..: 12:25	Instrument ID..: I5	
		Analyst ID.....: 002260			
Potassium	103	(75 - 125)	SW846 6010B	01/22-02/01/10	LTJD21CL
		Dilution Factor: 1	Analysis Time..: 12:25	Instrument ID..: I5	
		Analyst ID.....: 002260			
Selenium	112	(75 - 125)	SW846 6010B	01/22-02/01/10	LTJD21A5
		Dilution Factor: 1	Analysis Time..: 12:25	Instrument ID..: I5	
		Analyst ID.....: 002260			
Silver	96	(75 - 125)	SW846 6010B	01/22-02/01/10	LTJD21A7
		Dilution Factor: 1	Analysis Time..: 12:25	Instrument ID..: I5	
		Analyst ID.....: 002260			
Sodium	95	(75 - 125)	SW846 6010B	01/22-02/01/10	LTJD21CT
		Dilution Factor: 1	Analysis Time..: 12:25	Instrument ID..: I5	
		Analyst ID.....: 002260			
Thallium	103	(75 - 125)	SW846 6020	01/22-01/25/10	LTJD21AX
		Dilution Factor: 1	Analysis Time..: 19:12	Instrument ID..: I8	
		Analyst ID.....: 001637			

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0A210417 **Matrix.....:** WG
Date Sampled...: 01/21/10 09:15 **Date Received..:** 01/21/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	100	(75 - 125)	SW846 6010B	01/22-02/01/10	LTJD21AE
		Dilution Factor: 1	Analysis Time..: 12:25	Instrument ID..: I5	
		Analyst ID.....: 002260			
Zinc	109	(75 - 125)	SW846 6020	01/22-01/25/10	LTJD21AV
		Dilution Factor: 1	Analysis Time..: 19:12	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 #...: A0A210417 **Work Order #...:** LTGJF-SMP LTGJF-DUP **Matrix.....:** WG

Date Sampled...: 01/20/10 15:20 **Date Received..:** 01/21/10

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Silver						SD Lot-Sample #: A0A210417-027		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/22-02/01/10	0022016
		Dilution Factor: 1				Analysis Time..: 11:38	Analyst ID.....: 002260	
		Instrument ID..: I5						
Aluminum						SD Lot-Sample #: A0A210417-027		
	ND	ND	ug/L	0	(0-20)	SW846 6020	01/22-01/25/10	0022016
		Dilution Factor: 1				Analysis Time..: 18:31	Analyst ID.....: 001637	
		Instrument ID..: I8						
Arsenic						SD Lot-Sample #: A0A210417-027		
	ND	3.8 B	ug/L	200	(0-20)	SW846 6010B	01/22-02/01/10	0022016
		Dilution Factor: 1				Analysis Time..: 11:38	Analyst ID.....: 002260	
		Instrument ID..: I5						
Barium						SD Lot-Sample #: A0A210417-027		
	28.5	29.1	ug/L	1.9	(0-20)	SW846 6010B	01/22-02/01/10	0022016
		Dilution Factor: 1				Analysis Time..: 11:38	Analyst ID.....: 002260	
		Instrument ID..: I5						
Beryllium						SD Lot-Sample #: A0A210417-027		
	ND	ND	ug/L	0	(0-20)	SW846 6020	01/22-01/25/10	0022016
		Dilution Factor: 1				Analysis Time..: 18:31	Analyst ID.....: 001637	
		Instrument ID..: I8						
Calcium						SD Lot-Sample #: A0A210417-027		
	146000	148000	ug/L	1.4	(0-20)	SW846 6010B	01/22-02/01/10	0022016
		Dilution Factor: 1				Analysis Time..: 11:38	Analyst ID.....: 002260	
		Instrument ID..: I5						
Cadmium						SD Lot-Sample #: A0A210417-027		
	ND	ND	ug/L	0	(0-20)	SW846 6020	01/22-01/25/10	0022016
		Dilution Factor: 1				Analysis Time..: 18:31	Analyst ID.....: 001637	
		Instrument ID..: I8						
Cobalt						SD Lot-Sample #: A0A210417-027		
	ND	1.6 B	ug/L	200	(0-20)	SW846 6010B	01/22-02/01/10	0022016
		Dilution Factor: 1				Analysis Time..: 11:38	Analyst ID.....: 002260	
		Instrument ID..: I5						
Chromium						SD Lot-Sample #: A0A210417-027		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/22-02/01/10	0022016
		Dilution Factor: 1				Analysis Time..: 11:38	Analyst ID.....: 002260	
		Instrument ID..: I5						

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SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A0A210417-000 **Work Order #...:** LTGJF-SMP LTGJF-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Copper						SD Lot-Sample #: A0A210417-027		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/22-02/01/10	0022016
		Dilution Factor: 1				Analysis Time..: 11:38	Analyst ID.....: 002260	
		Instrument ID..: I5						
Iron						SD Lot-Sample #: A0A210417-027		
	ND	ND	ug/L	0	(0-20)	SW846 6020	01/22-01/25/10	0022016
		Dilution Factor: 1				Analysis Time..: 18:31	Analyst ID.....: 001637	
		Instrument ID..: I8						
Mercury						SD Lot-Sample #: A0A210417-027		
	ND	ND	ug/L	0	(0-20)	SW846 7470A	01/22-01/25/10	0022016
		Dilution Factor: 1				Analysis Time..: 13:02	Analyst ID.....: 001637	
		Instrument ID..: H1						
Potassium						SD Lot-Sample #: A0A210417-027		
	1740 E	1780	ug/L	2.4	(0-20)	SW846 6010B	01/22-02/01/10	0022016
		Dilution Factor: 1				Analysis Time..: 11:38	Analyst ID.....: 002260	
		Instrument ID..: I5						
Magnesium						SD Lot-Sample #: A0A210417-027		
	42600	43000	ug/L	0.87	(0-20)	SW846 6010B	01/22-02/01/10	0022016
		Dilution Factor: 1				Analysis Time..: 11:38	Analyst ID.....: 002260	
		Instrument ID..: I5						
Manganese						SD Lot-Sample #: A0A210417-027		
	207	211	ug/L	1.5	(0-20)	SW846 6010B	01/22-02/01/10	0022016
		Dilution Factor: 1				Analysis Time..: 11:38	Analyst ID.....: 002260	
		Instrument ID..: I5						
Sodium						SD Lot-Sample #: A0A210417-027		
	32300	33200	ug/L	2.6	(0-20)	SW846 6010B	01/22-02/01/10	0022016
		Dilution Factor: 1				Analysis Time..: 11:38	Analyst ID.....: 002260	
		Instrument ID..: I5						
Nickel						SD Lot-Sample #: A0A210417-027		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/22-02/01/10	0022016
		Dilution Factor: 1				Analysis Time..: 11:38	Analyst ID.....: 002260	
		Instrument ID..: I5						
Lead						SD Lot-Sample #: A0A210417-027		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/22-02/01/10	0022016
		Dilution Factor: 1				Analysis Time..: 11:38	Analyst ID.....: 002260	
		Instrument ID..: I5						

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SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A0A210417-000 **Work Order #...:** LTGJF-SMP LTGJF-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Antimony						SD Lot-Sample #: A0A210417-027		
	ND	ND	ug/L	0	(0-20)	SW846 6020	01/22-01/25/10	0022016
		Dilution Factor: 1				Analysis Time..: 18:31	Analyst ID.....: 001637	
		Instrument ID..: I8						
Selenium						SD Lot-Sample #: A0A210417-027		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/22-02/01/10	0022016
		Dilution Factor: 1				Analysis Time..: 11:38	Analyst ID.....: 002260	
		Instrument ID..: I5						
Thallium						SD Lot-Sample #: A0A210417-027		
	ND	0.14 B	ug/L	200	(0-20)	SW846 6020	01/22-01/25/10	0022016
		Dilution Factor: 1				Analysis Time..: 18:31	Analyst ID.....: 001637	
		Instrument ID..: I8						
Vanadium						SD Lot-Sample #: A0A210417-027		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/22-02/01/10	0022016
		Dilution Factor: 1				Analysis Time..: 11:38	Analyst ID.....: 002260	
		Instrument ID..: I5						
Zinc						SD Lot-Sample #: A0A210417-027		
	ND	3.7 B	ug/L	200	(0-20)	SW846 6020	01/22-01/25/10	0022016
		Dilution Factor: 1				Analysis Time..: 18:31	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.

E Matrix interference.

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Client Lot #...: A0A210417 **Work Order #...:** LTJD2-SMP LTJD2-DUP **Matrix.....:** WG

Date Sampled...: 01/21/10 09:15 **Date Received..:** 01/21/10

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Silver						SD Lot-Sample #: A0A210417-033		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/22-02/01/10	0022016
			Dilution Factor: 1			Analysis Time..: 12:25	Analyst ID.....: 002260	
			Instrument ID..: I5					
Aluminum						SD Lot-Sample #: A0A210417-033		
	ND	ND	ug/L	0	(0-20)	SW846 6020	01/22-01/25/10	0022016
			Dilution Factor: 1			Analysis Time..: 19:12	Analyst ID.....: 001637	
			Instrument ID..: I8					
Arsenic						SD Lot-Sample #: A0A210417-033		
	23.2	23.6	ug/L	2.0	(0-20)	SW846 6010B	01/22-02/01/10	0022016
			Dilution Factor: 1			Analysis Time..: 12:25	Analyst ID.....: 002260	
			Instrument ID..: I5					
Barium						SD Lot-Sample #: A0A210417-033		
	12.7	12.4	ug/L	2.4	(0-20)	SW846 6010B	01/22-02/01/10	0022016
			Dilution Factor: 1			Analysis Time..: 12:25	Analyst ID.....: 002260	
			Instrument ID..: I5					
Beryllium						SD Lot-Sample #: A0A210417-033		
	ND	ND	ug/L	0	(0-20)	SW846 6020	01/22-01/25/10	0022016
			Dilution Factor: 1			Analysis Time..: 19:12	Analyst ID.....: 001637	
			Instrument ID..: I8					
Calcium						SD Lot-Sample #: A0A210417-033		
	157000	154000	ug/L	1.6	(0-20)	SW846 6010B	01/22-02/01/10	0022016
			Dilution Factor: 1			Analysis Time..: 12:25	Analyst ID.....: 002260	
			Instrument ID..: I5					
Cadmium						SD Lot-Sample #: A0A210417-033		
	ND	ND	ug/L	0	(0-20)	SW846 6020	01/22-01/25/10	0022016
			Dilution Factor: 1			Analysis Time..: 19:12	Analyst ID.....: 001637	
			Instrument ID..: I8					
Cobalt						SD Lot-Sample #: A0A210417-033		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/22-02/01/10	0022016
			Dilution Factor: 1			Analysis Time..: 12:25	Analyst ID.....: 002260	
			Instrument ID..: I5					
Chromium						SD Lot-Sample #: A0A210417-033		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/22-02/01/10	0022016
			Dilution Factor: 1			Analysis Time..: 12:25	Analyst ID.....: 002260	
			Instrument ID..: I5					

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SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A0A210417-000 **Work Order #...:** LTJD2-SMP LTJD2-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Copper						SD Lot-Sample #: A0A210417-033		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/22-02/01/10	0022016
		Dilution Factor: 1				Analysis Time..: 12:25	Analyst ID.....: 002260	
		Instrument ID..: I5						
Iron						SD Lot-Sample #: A0A210417-033		
	1490 J	1520	ug/L	2.1	(0-20)	SW846 6020	01/22-01/25/10	0022016
		Dilution Factor: 1				Analysis Time..: 19:12	Analyst ID.....: 001637	
		Instrument ID..: I8						
Mercury						SD Lot-Sample #: A0A210417-033		
	ND	ND	ug/L	0	(0-20)	SW846 7470A	01/22-01/25/10	0022016
		Dilution Factor: 1				Analysis Time..: 13:06	Analyst ID.....: 001637	
		Instrument ID..: H1						
Potassium						SD Lot-Sample #: A0A210417-033		
	2850	2810	ug/L	1.6	(0-20)	SW846 6010B	01/22-02/01/10	0022016
		Dilution Factor: 1				Analysis Time..: 12:25	Analyst ID.....: 002260	
		Instrument ID..: I5						
Magnesium						SD Lot-Sample #: A0A210417-033		
	79600	78300	ug/L	1.6	(0-20)	SW846 6010B	01/22-02/01/10	0022016
		Dilution Factor: 1				Analysis Time..: 12:25	Analyst ID.....: 002260	
		Instrument ID..: I5						
Manganese						SD Lot-Sample #: A0A210417-033		
	211	208	ug/L	1.6	(0-20)	SW846 6010B	01/22-02/01/10	0022016
		Dilution Factor: 1				Analysis Time..: 12:25	Analyst ID.....: 002260	
		Instrument ID..: I5						
Sodium						SD Lot-Sample #: A0A210417-033		
	51600	51000	ug/L	1.2	(0-20)	SW846 6010B	01/22-02/01/10	0022016
		Dilution Factor: 1				Analysis Time..: 12:25	Analyst ID.....: 002260	
		Instrument ID..: I5						
Nickel						SD Lot-Sample #: A0A210417-033		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/22-02/01/10	0022016
		Dilution Factor: 1				Analysis Time..: 12:25	Analyst ID.....: 002260	
		Instrument ID..: I5						
Lead						SD Lot-Sample #: A0A210417-033		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/22-02/01/10	0022016
		Dilution Factor: 1				Analysis Time..: 12:25	Analyst ID.....: 002260	
		Instrument ID..: I5						

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SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A0A210417-000 **Work Order #...:** LTJD2-SMP LTJD2-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Antimony						SD Lot-Sample #: A0A210417-033		
	ND	ND	ug/L	0	(0-20)	SW846 6020	01/22-01/25/10	0022016
			Dilution Factor: 1			Analysis Time..: 19:12	Analyst ID.....: 001637	
			Instrument ID..: I8					
Selenium						SD Lot-Sample #: A0A210417-033		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/22-02/01/10	0022016
			Dilution Factor: 1			Analysis Time..: 12:25	Analyst ID.....: 002260	
			Instrument ID..: I5					
Thallium						SD Lot-Sample #: A0A210417-033		
	0.15 B	ND	ug/L	200	(0-20)	SW846 6020	01/22-01/25/10	0022016
			Dilution Factor: 1			Analysis Time..: 19:12	Analyst ID.....: 001637	
			Instrument ID..: I8					
Vanadium						SD Lot-Sample #: A0A210417-033		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/22-02/01/10	0022016
			Dilution Factor: 1			Analysis Time..: 12:25	Analyst ID.....: 002260	
			Instrument ID..: I5					
Zinc						SD Lot-Sample #: A0A210417-033		
	ND	ND	ug/L	0	(0-20)	SW846 6020	01/22-01/25/10	0022016
			Dilution Factor: 1			Analysis Time..: 19:12	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.

B Estimated result. Result is less than RL.

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: I50201A.ARC

Standard Source: _____ **Standard ID:** _____ Not used

Element	WL/ Mass	Report Limit	CCB 2/1/2010 9:26 AM Found	Q	CCB 2/1/2010 10:39 AM Found	Q	CCB 2/1/2010 11:50 AM Found	Q	CCB 2/1/2010 1:01 PM Found	Q	CCB 2/1/2010 2:12 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	**0.4**	**B**	**0.5**	**B**	**0.3**	**B**	**0.3**	**B**	**0.4**	**B**
Calcium	317.933	1000	**53.0**	**B**	**51.9**	**B**	**51.6**	**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	**0.6**	**B**	**0.5**	**B**	0.5	U	0.5	U
Copper	324.753	5	1.0	U	1.0	U	1.0	U	**-1.7**	**B**	**-1.6**	**B**
Lead	220.353	3	1.1	U	1.1	U	**-1.2**	**B**	1.1	U	1.1	U
Magnesium	279.078	1000	**9.4**	**B**	**8.0**	**B**	**8.7**	**B**	**5.7**	**B**	**6.5**	**B**
Manganese	257.61	10	0.1	U	**0.3**	**B**	**0.3**	**B**	0.1	U	**0.3**	**B**
Nickel	231.604	10	1.2	U	1.2	U	1.2	U	**1.4**	**B**	1.2	U
Potassium	766.491	1000	**148.0**	**B**	**156.0**	**B**	**148.0**	**B**	**146.0**	**B**	**149.0**	**B**
Selenium	196.026	5	3.6	U	**-3.7**	**B**	**-3.7**	**B**	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	**-890.0**	**B**	**-700.0**	**B**	**-530.0**	**B**	**-870.0**	**B**	**-690.0**	**B**
Vanadium	292.402	10	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U

Ba < 2.5 NQ
Ca < 245 NQ
Co < 3 ASY & 1503-GF, ASY Dup2 1511-GF,
Mg < 47 NQ
Mn < 1.5 NQ
K < 780 · No additional Qual.
Ni < 7. NQ

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: I80125A.csv

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 1/25/2010 10:49 AM Found	Q	CCB 6 1/25/2010 4:45 PM Found	Q	CCB 7 1/25/2010 5:46 PM Found	Q	CCB 8 1/25/2010 6:43 PM Found	Q	CCB 9 1/25/2010 7:44 PM Found	Q
Aluminum	27	50	2	U	2	U	2	U	2	U	2	U
Antimony	121	2	0.039	U	**0.059**	**B**	**0.061**	**B**	**0.043**	**B**	**0.063**	**B**
Beryllium	9	1	**0.011**	**B**	**0.026**	**B**	**0.041**	**B**	**0.049**	**B**	**0.053**	**B**
Cadmium	111	0.5	0.013	U	**0.048**	**B**	**0.056**	**B**	**0.055**	**B**	**0.086**	**B**
Iron	56	50	2.4	U	**11.4**	**B**	**15.6**	**B**	**15.8**	**B**	**18.3**	**B**
Thallium	205	1	**0.31**	**B**	**0.32**	**B**	**0.36**	**B**	**0.34**	**B**	**0.41**	**B**
Zinc	66	10	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U

Sb < 0.315 ASY3-GF, CL3-235-GW, ASY8-1503GF, ASYDup2-GF, ASY10-GF
Be < 0.265 NQ
Cd < 0.43 NQ
Fe < 91.5 NQ
Tl < 2.5 No additional qual.

U Result is less than the IDL
B Result is between IDL and RL

Form 3 Equivalent

TestAmerica North Canton

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: I50201A.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 2/1/2010 8:37 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	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	1.1	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	**-4.5**	**B**								
Silver	328.068	5	1.1	U								
Sodium	330.232	1000	**-780.0**	**B**								
Vanadium	292.402	10	0.8	U								

U Result is less than the IDL

B Result is between IDL and RL

Form 3 Equivalent

TestAmerica North Canton

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: I80125A.csv

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 1/25/2010 10:22 AM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Aluminum	27	50	2	U								
Antimony	121	2	0.039	U								
Beryllium	9	1	0.01	U								
Cadmium	111	0.5	0.013	U								
Iron	56	50	2.4	U								
Thallium	205	1	0.26	B								
Zinc	66	10	5.2	U								

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 Verification

Instrument: ICPST **Units:** ug/L

Chart Number: I50201A.ARC **Acceptable Range:** 90% - 110%

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	True Conc	CCV 2/1/2010 9:20 AM Found	% Rec	CCV 2/1/2010 10:33 AM Found	% Rec	CCV 2/1/2010 11:44 AM Found	% Rec	CCV 2/1/2010 12:55 PM Found	% Rec	CCV 2/1/2010 2:06 PM Found	% Rec
Arsenic	189.042	500.0	504.76	**101.0**	506.22	**101.2**	501.42	**100.3**	504.33	**100.9**	499.34	**99.9**
Barium	493.409	2000.0	2010.59	**100.5**	2007.27	**100.4**	1996.94	**99.8**	2002.95	**100.1**	1982.35	**99.1**
Calcium	317.933	50000.0	49672.69	**99.3**	49620.64	**99.2**	49200.04	**98.4**	49345.75	**98.7**	48898.47	**97.8**
Chromium	267.716	2000.0	2032.37	**101.6**	2027.12	**101.4**	2013.20	**100.7**	2020.79	**101.0**	2006.03	**100.3**
Cobalt	228.616	2000.0	1928.08	**96.4**	1926.51	**96.3**	1907.89	**95.4**	1917.80	**95.9**	1904.84	**95.2**
Copper	324.753	2000.0	1955.83	**97.8**	1953.73	**97.7**	1938.51	**96.9**	1953.25	**97.7**	1942.97	**97.1**
Lead	220.353	500.0	499.33	**99.9**	500.31	**100.1**	495.08	**99.0**	496.73	**99.3**	491.97	**98.4**
Magnesium	279.078	50000.0	50051.26	**100.1**	50051.85	**100.1**	49635.50	**99.3**	49867.27	**99.7**	49597.00	**99.2**
Manganese	257.61	2000.0	2061.47	**103.1**	2083.97	**104.2**	2078.75	**103.9**	2092.55	**104.6**	2085.66	**104.3**
Nickel	231.604	2000.0	1972.57	**98.6**	1981.70	**99.1**	1957.90	**97.9**	2005.34	**100.3**	2026.55	**101.3**
Potassium	766.491	50000.0	48767.77	**97.5**	48459.97	**96.9**	48343.86	**96.7**	48906.09	**97.8**	48522.69	**97.0**
Selenium	196.026	500.0	551.17	**110.2**	553.43	**110.7**	547.72	**109.5**	542.53	**108.5**	542.71	**108.5**
Silver	328.068	1000.0	920.36	**92.0**	921.38	**92.1**	918.24	**91.8**	929.93	**93.0**	927.72	**92.8**
Sodium	330.232	50000.0	49371.27	**98.7**	48850.03	**97.7**	48897.91	**97.8**	49496.44	**99.0**	48833.18	**97.7**
Vanadium	292.402	2000.0	2008.41	**100.4**	2001.79	**100.1**	1987.47	**99.4**	1990.23	**99.5**	1972.94	**98.6**

A0A210417	025	LTGHR	TOTAL	H1	01/25/10	13:32
	HG					
A0A210417	014	LTGD5	TOTAL	H1	01/25/10	13:34
	HG					
A0A210417	001	LTGAD	TOTAL	H1	01/25/10	13:35
	HG					
A0A210417	030	LTJCL	TOTAL	H1	01/25/10	13:36
	HG					
A0A210417	017	LTGEW	TOTAL	H1	01/25/10	13:37
	HG					
A0A210417	021	LTGG4	TOTAL	H1	01/25/10	13:38
	HG					
A0A210417	031	LTJCN	TOTAL	H1	01/25/10	13:40
	HG					
A0A220000	016	LTKML	TOTAL	I5	02/01/10	09:55
MB	*AG AS BA CA CO CR CU KX MG MN NA NI PB VX*					
A0A220000	016	LTKML	TOTAL	I5	02/01/10	10:01
LCS	*AG AS BA CA CO CR CU KX MG MN NA NI PB VX*					
A0A210417	001	LTGAD	TOTAL	I5	02/01/10	10:07
	AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX					
A0A210417	005	LTGCX	TOTAL	I5	02/01/10	10:13
	AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX					
A0A210417	007	LTGDG	TOTAL	I5	02/01/10	10:21
	AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX					
A0A210417	009	LTGDP	TOTAL	I5	02/01/10	10:27
	AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX					
A0A210417	011	LTGD0	TOTAL	I5	02/01/10	10:45
	AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX					
A0A210417	013	LTGD4	TOTAL	I5	02/01/10	10:51
	AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX					
A0A210417	014	LTGD5	TOTAL	I5	02/01/10	10:57
	AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX					

Metals Run Log
Additional Information

A0A210417 016 LTGEE TOTAL I5 02/01/10 11:03
AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0A210417 017 LTGEW TOTAL I5 02/01/10 11:08
AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0A210417 019 LTGGL TOTAL I5 02/01/10 11:14
AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0A210417 021 LTGG4 TOTAL I5 02/01/10 11:20
AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0A210417 023 LTGG7 TOTAL I5 02/01/10 11:26
AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0A210417 025 LTGHR TOTAL I5 02/01/10 11:32
AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0A210417 027 LTGJF TOTAL I5 02/01/10 11:38
AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

S J

A0A210417 027 LTGJF TOTAL I5 02/01/10 12:02
DUP *AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX*

A0A210417 027 LTGJF TOTAL I5 02/01/10 12:08
MS *AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX*

A0A210417 030 LTJCL TOTAL I5 02/01/10 12:13
AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0A210417 031 LTJCN TOTAL I5 02/01/10 12:19
AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0A210417 033 LTJD2 TOTAL I5 02/01/10 12:25
AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0A210417 033 LTJD2 TOTAL I5 02/01/10 12:37
DUP *AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX*

A0A210417 033 LTJD2 TOTAL I5 02/01/10 12:43
MS *AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX*

A0A220000 016 LTKML TOTAL I5 02/01/10 15:41
MB *SE*

A0A220000 016 LTKML TOTAL I5 02/01/10 15:47
LCS *SE*

EXECUTIVE SUMMARY - Detection Highlights

A0A210417

	PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGLL11mw-009C-1495-GF 01/20/10 10:10 001					
	Aluminum	26.0 B	50.0	ug/L	SW846 6020
U	Thallium	0.35 B	1.0	ug/L	SW846 6020
	Barium	76.4	10.0	ug/L	SW846 6010B
	Calcium	85400	1000	ug/L	SW846 6010B
	Potassium	905 B	1000	ug/L	SW846 6010B
	Magnesium	27800	1000	ug/L	SW846 6010B
	Manganese	856	10.0	ug/L	SW846 6010B
	Sodium	11600	1000	ug/L	SW846 6010B
FWGLL11mw-009C-1495-GW 01/20/10 10:10 002					
	Tetrachloroethene	3.8	1.0	ug/L	SW846 8260B
FWGTeam1-Trip 01/20/10 08:00 003					
	Acetone	2.4 J	10	ug/L	SW846 8260B
FWGASYmw001C-1496-GW 01/20/10 12:05 004					
	bis(2-Ethylhexyl) phthalate	1.0 J	10	ug/L	SW846 8270C
FWGASYmw001C-1496-GF 01/20/10 12:05 005					
U	Thallium	0.20 B	1.0	ug/L	SW846 6020
	Zinc	4.7 B,J	10.0	ug/L	SW846 6020
	Barium	16.6	10.0	ug/L	SW846 6010B
	Calcium	170000	1000	ug/L	SW846 6010B
	Potassium	1120	1000	ug/L	SW846 6010B
	Magnesium	55400	1000	ug/L	SW846 6010B
	Manganese	1140	10.0	ug/L	SW846 6010B
	Sodium	7020	1000	ug/L	SW846 6010B
FWGASYmwDUP1-1512-GW 01/20/10 12:25 006					
	bis(2-Ethylhexyl) phthalate	5.0 J	10	ug/L	SW846 8270C
FWGASYmwDUP1-1512-GF 01/20/10 12:25 007					
U	Thallium	0.14 B	1.0	ug/L	SW846 6020
	Zinc	6.3 B,J	10.0	ug/L	SW846 6020
	Barium	16.4	10.0	ug/L	SW846 6010B

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EXECUTIVE SUMMARY - Detection Highlights

A0A210417

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGASYmwDUP1-1512-GF 01/20/10 12:25	**007**			
Calcium	172000	1000	ug/L	SW846 6010B
Potassium	1130	1000	ug/L	SW846 6010B
Magnesium	55900	1000	ug/L	SW846 6010B
Manganese	1150	10.0	ug/L	SW846 6010B
Sodium	7160	1000	ug/L	SW846 6010B
Nickel	2.2 B	10.0	ug/L	SW846 6010B
FWGASYmw003C-1498-GF 01/20/10 14:05	**009**			
U Antimony	0.16 B	2.0	ug/L	SW846 6020
Barium	18.9	10.0	ug/L	SW846 6010B
Calcium	175000	1000	ug/L	SW846 6010B
Potassium	1070	1000	ug/L	SW846 6010B
Magnesium	55800	1000	ug/L	SW846 6010B
Manganese	45.0	10.0	ug/L	SW846 6010B
Sodium	29000	1000	ug/L	SW846 6010B
FWGASYmw002C-1497-GW 01/20/10 15:01	**010**			
bis(2-Ethylhexyl) phthalate	0.97 J	10	ug/L	SW846 8270C
FWGASYmw002C-1497-GF 01/20/10 15:01	**011**			
Aluminum	67.3	50.0	ug/L	SW846 6020
U Thallium	0.20 B	1.0	ug/L	SW846 6020
Barium	14.7	10.0	ug/L	SW846 6010B
Calcium	96800	1000	ug/L	SW846 6010B
U Potassium	634 B	1000	ug/L	SW846 6010B
Magnesium	20000	1000	ug/L	SW846 6010B
Manganese	4.0 B	10.0	ug/L	SW846 6010B
Sodium	2130	1000	ug/L	SW846 6010B
FWGASYmw007C-1502-GF 01/20/10 16:31	**013**			
U Thallium	0.17 B	1.0	ug/L	SW846 6020
Barium	18.5	10.0	ug/L	SW846 6010B
Calcium	126000	1000	ug/L	SW846 6010B
Potassium	1170	1000	ug/L	SW846 6010B
Magnesium	47300	1000	ug/L	SW846 6010B
Manganese	188	10.0	ug/L	SW846 6010B
Sodium	33500	1000	ug/L	SW846 6010B

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EXECUTIVE SUMMARY - Detection Highlights

A0A210417

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGEQUIPRinse1-1513-GW 01/20/10 17:30 014				
Acetone	15	10	ug/L	SW846 8260B
2-Butanone	3.8 J	10	ug/L	SW846 8260B
Toluene	0.20 J	1.0	ug/L	SW846 8260B
FWGTeam2-Trip 01/20/10 08:00 015				
Acetone	3.4 J	10	ug/L	SW846 8260B
FWGLL3mw-235C-1507-GW 01/20/10 09:20 016				
Aluminum	5620	50.0	ug/L	SW846 6020
Beryllium	0.32 B	1.0	ug/L	SW846 6020
Cadmium	0.61	0.50	ug/L	SW846 6020
Iron	18300 J	50.0	ug/L	SW846 6020
Antimony	0.19 B	2.0	ug/L	SW846 6020
Thallium	0.16 B	1.0	ug/L	SW846 6020
Zinc	55.3 J	10.0	ug/L	SW846 6020
Mercury	0.19 B	0.20	ug/L	SW846 7470A
Arsenic	8.9	5.0	ug/L	SW846 6010B
Lead	5.4	3.0	ug/L	SW846 6010B
Barium	32.0	10.0	ug/L	SW846 6010B
Calcium	33100	1000	ug/L	SW846 6010B
Cobalt	6.4	5.0	ug/L	SW846 6010B
Chromium	14.5	5.0	ug/L	SW846 6010B
Copper	6.8	5.0	ug/L	SW846 6010B
Potassium	2110	1000	ug/L	SW846 6010B
Magnesium	15200	1000	ug/L	SW846 6010B
Manganese	2590	10.0	ug/L	SW846 6010B
Sodium	7990	1000	ug/L	SW846 6010B
Nickel	19.0	10.0	ug/L	SW846 6010B
Vanadium	8.8 B	10.0	ug/L	SW846 6010B
FWGLL3mw-235C-1507-GF 01/20/10 09:20 017				
Zinc	7.1 B,J	10.0	ug/L	SW846 6020
Barium	3.3 B	10.0	ug/L	SW846 6010B
Calcium	38900	1000	ug/L	SW846 6010B
Potassium	675 B	1000	ug/L	SW846 6010B
Magnesium	17200	1000	ug/L	SW846 6010B
Manganese	5.8 B	10.0	ug/L	SW846 6010B
Sodium	9600	1000	ug/L	SW846 6010B

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EXECUTIVE SUMMARY - Detection Highlights

A0A210417

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGASYmw-008C-1503-GW 01/20/10 10:15	**018**			
Phenol	1.1	1.0	ug/L	SW846 8270C
FWGASYmw-008C-1503-GF 01/20/10 10:15	**019**			
Aluminum	1160	50.0	ug/L	SW846 6020
Iron	3210 J	50.0	ug/L	SW846 6020
Antimony	0.23 B	2.0	ug/L	SW846 6020
Zinc	11.5 J	10.0	ug/L	SW846 6020
Arsenic	10.3	5.0	ug/L	SW846 6010B
Barium	18.8	10.0	ug/L	SW846 6010B
Calcium	167000	1000	ug/L	SW846 6010B
Cobalt	1.6 B	5.0	ug/L	SW846 6010B
Chromium	2.1 B	5.0	ug/L	SW846 6010B
Potassium	3660	1000	ug/L	SW846 6010B
Magnesium	78100	1000	ug/L	SW846 6010B
Manganese	64.7	10.0	ug/L	SW846 6010B
Sodium	31000	1000	ug/L	SW846 6010B
Nickel	4.4 B	10.0	ug/L	SW846 6010B
FWGASYmw-DUP2-1511-GW 01/20/10 11:02	**020**			
Phenol	1.1	1.0	ug/L	SW846 8270C
FWGASYmw-DUP2-1511-GF 01/20/10 11:02	**021**			
Aluminum	1780	50.0	ug/L	SW846 6020
Iron	4480 J	50.0	ug/L	SW846 6020
Antimony	0.25 B	2.0	ug/L	SW846 6020
Zinc	16.2 J	10.0	ug/L	SW846 6020
Arsenic	14.6	5.0	ug/L	SW846 6010B
Barium	21.7	10.0	ug/L	SW846 6010B
Calcium	174000	1000	ug/L	SW846 6010B
Cobalt	2.2 B	5.0	ug/L	SW846 6010B
Chromium	2.7 B	5.0	ug/L	SW846 6010B
Copper	4.6 B	5.0	ug/L	SW846 6010B
Potassium	3950	1000	ug/L	SW846 6010B
Magnesium	81800	1000	ug/L	SW846 6010B
Manganese	86.8	10.0	ug/L	SW846 6010B
Sodium	32500	1000	ug/L	SW846 6010B
Nickel	6.0 B	10.0	ug/L	SW846 6010B
Vanadium	1.8 B	10.0	ug/L	SW846 6010B

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EXECUTIVE SUMMARY - Detection Highlights

A0A210417

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGASYmw-010C-1505-GW 01/20/10 12:54	**022**			
bis(2-Ethylhexyl) phthalate	1.2 J	10	ug/L	SW846 8270C
FWGASYmw-010C-1505-GF 01/20/10 12:54	**023**			
Aluminum	1160	50.0	ug/L	SW846 6020
Iron	6760 J	50.0	ug/L	SW846 6020
Antimony	0.15 B	2.0	ug/L	SW846 6020
Zinc	12.3 J	10.0	ug/L	SW846 6020
Arsenic	148	5.0	ug/L	SW846 6010B
Barium	56.4	10.0	ug/L	SW846 6010B
Calcium	94400	1000	ug/L	SW846 6010B
Potassium	2760	1000	ug/L	SW846 6010B
Magnesium	80300	1000	ug/L	SW846 6010B
Manganese	96.2	10.0	ug/L	SW846 6010B
Sodium	43800	1000	ug/L	SW846 6010B
Nickel	2.6 B	10.0	ug/L	SW846 6010B
FWGASYmw-006C-1501-GW 01/20/10 14:00	**024**			
bis(2-Ethylhexyl) phthalate	1.1 J	10	ug/L	SW846 8270C
FWGASYmw-006C-1501-GF 01/20/10 14:00	**025**			
Iron	1120 J	50.0	ug/L	SW846 6020
Arsenic	16.1	5.0	ug/L	SW846 6010B
Barium	14.8	10.0	ug/L	SW846 6010B
Calcium	116000	1000	ug/L	SW846 6010B
Potassium	2860	1000	ug/L	SW846 6010B
Magnesium	72300	1000	ug/L	SW846 6010B
Manganese	169	10.0	ug/L	SW846 6010B
Sodium	39900	1000	ug/L	SW846 6010B
FWGASYmw-005C-1500-GW 01/20/10 15:20	**026**			
bis(2-Ethylhexyl) phthalate	1.0 J	10	ug/L	SW846 8270C

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A0A210417

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGASYmw-005C-1500-GF 01/20/10 15:20 027				
Barium	28.5	10.0	ug/L	SW846 6010B
Calcium	146000	1000	ug/L	SW846 6010B
Potassium	1740 E	1000	ug/L	SW846 6010B
Magnesium	42600	1000	ug/L	SW846 6010B
Manganese	207	10.0	ug/L	SW846 6010B
Sodium	32300	1000	ug/L	SW846 6010B
FWGTrip-Team 2 01/21/10 08:00 028				
Acetone	3.8 J	10	ug/L	SW846 8260B
FWGASYmw-009C-1504-GW 01/21/10 09:20 029				
bis(2-Ethylhexyl) phthalate	0.95 J	10	ug/L	SW846 8270C
FWGASYmw-009C-1504-GF 01/21/10 09:20 030				
Aluminum	496	50.0	ug/L	SW846 6020
Iron	811 J	50.0	ug/L	SW846 6020
U Thallium	0.38 B	1.0	ug/L	SW846 6020
Zinc	5.0 B,J	10.0	ug/L	SW846 6020
Barium	27.1	10.0	ug/L	SW846 6010B
Calcium	188000	1000	ug/L	SW846 6010B
Potassium	1500	1000	ug/L	SW846 6010B
Magnesium	69900	1000	ug/L	SW846 6010B
Manganese	624	10.0	ug/L	SW846 6010B
Sodium	22500	1000	ug/L	SW846 6010B
FWGEQUIPRinse2-1514-GW 01/21/10 10:22 031				
U Thallium	0.19 B	1.0	ug/L	SW846 6020
Acetone	4.9 J	10	ug/L	SW846 8260B
FWGASYmw-004C-1499-GW 01/21/10 09:15 032				
bis(2-Ethylhexyl) phthalate	0.90 J	10	ug/L	SW846 8270C
Acetone	1.2 J	10	ug/L	SW846 8260B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A0A210417

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGASYmw-004C-1499-GF 01/21/10 09:15	**033**			
Iron	1490 J	50.0	ug/L	SW846 6020
Thallium	0.15 B	1.0	ug/L	SW846 6020
Arsenic	23.2	5.0	ug/L	SW846 6010B
Barium	12.7	10.0	ug/L	SW846 6010B
Calcium	157000	1000	ug/L	SW846 6010B
Potassium	2850	1000	ug/L	SW846 6010B
Magnesium	79600	1000	ug/L	SW846 6010B
Manganese	211	10.0	ug/L	SW846 6010B
Sodium	51600	1000	ug/L	SW846 6010B
FWGTeam1-Trip 1-21-10 01/21/10 08:30	**034**			
Acetone	3.4 J	10	ug/L	SW846 8260B

TestAmerica North Canton

Metals Data Reporting Form

Serial Dilution RPD Report

Serial Dilution Sample ID: LTGJFL

Original Sample ID: LTGJF **Client ID:** FWGASYmw-005C-1500-GF

Matrix: Water **Units:** ug/L **Prep Date:** 1/22/2010 **Prep Batch:** 0022016

Weight: NA **Volume:** NA **Percent Moisture:** NA

Element	WL/ Mass	OS Conc	Q	Serial Dilution Conc	Q	Percent Diff	OS DF	Ser Dil DF	Instr	OS Anal Date	OS Anal Time	Ser Dil Anal Date	Ser Dil Anal Time
Arsenic	189.042	2.9	U	15.5	B		1	5	ICPST	2/1/2010	11:38	2/1/2010	11:56
Barium	493.409	28.5		29.8	B	4.5	1	5	ICPST	2/1/2010	11:38	2/1/2010	11:56
Calcium	317.933	146000		145000		0.6	1	5	ICPST	2/1/2010	11:38	2/1/2010	11:56
Chromium	267.716	1.1	U	5.5	U		1	5	ICPST	2/1/2010	11:38	2/1/2010	11:56
Cobalt	228.616	1.3	B	2.2	U		1	5	ICPST	2/1/2010	11:38	2/1/2010	11:56
Copper	324.753	0.99	U	5.0	U		1	5	ICPST	2/1/2010	11:38	2/1/2010	11:56
Lead	220.353	1.1	U	5.5	U		1	5	ICPST	2/1/2010	11:38	2/1/2010	11:56
Magnesium	279.078	42600		42200		1.1	1	5	ICPST	2/1/2010	11:38	2/1/2010	11:56
Manganese	257.61	207		209		0.5	1	5	ICPST	2/1/2010	11:38	2/1/2010	11:56
Nickel	231.604	1.2	U	6.0	U		1	5	ICPST	2/1/2010	11:38	2/1/2010	11:56
Potassium	766.491	1740		2100	B E	20.9	1	5	ICPST	2/1/2010	11:38	2/1/2010	11:56
Selenium	196.026	3.6	U	18.0	U		1	5	ICPST	2/1/2010	11:38	2/1/2010	11:56
Silver	328.068	1.1	U	5.5	U		1	5	ICPST	2/1/2010	11:38	2/1/2010	11:56
Sodium	330.232	32300		31800		1.5	1	5	ICPST	2/1/2010	11:38	2/1/2010	11:56
Vanadium	292.402	0.76	U	3.8	U		1	5	ICPST	2/1/2010	11:38	2/1/2010	11:56

Comments:

E Serial dilution percent difference not within limits

U Result is less than the IDL

B Result is between IDL and RL

Form 9 Equivalent

GENERAL CHEMISTRY DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: January 2010
Data Reviewer/Date: Angye Dragotta/March 8, 2010

SDG: A0A210417 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 – 4.1 °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: January 2010
Data Reviewer/Date: Angye Dragotta/March 8, 2010

SDG: A0A210417 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?	✓				
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?	✓			Samples FWGASYmw-004c-1499-GW and FWGASYmw-005c-1500-GW were the parent MS/MSD samples from this SDG.	
26. Were MS recoveries 80-120%?		✓		Checked by ADR. For sample FWGASYmw-004c-1499-GW, the MS recovered below limits at 74%. For sample FWGASYmw-005c-1500-GW, the MS recovered below limits at 73% the MSD at 79%. All cyanide results were qualified as estimated, "UJ".	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: January 2010
Data Reviewer/Date: Angye Dragotta/March 8, 2010

SDG: A0A210417 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: FWGLL11mw-009C-1495-GW

General Chemistry

Lot-Sample #...: A0A210417-002 **Work Order #...:** LTGAM **Matrix.....:** WG
Date Sampled...: 01/20/10 10:10 **Date Received..:** 01/21/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/28/10	0028438

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw001C-1496-GW

General Chemistry

Lot-Sample #...: A0A210417-004 **Work Order #...:** LTGCG **Matrix.....:** WG
Date Sampled...: 01/20/10 12:05 **Date Received..:** 01/21/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/28/10	0028438

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmwDUP1-1512-GW

General Chemistry

Lot-Sample #...: A0A210417-006 **Work Order #...:** LTGC3 **Matrix.....:** WG
Date Sampled...: 01/20/10 12:25 **Date Received..:** 01/21/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/28/10	0028438

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw003C-1498-GW

General Chemistry

Lot-Sample #...: A0A210417-008 **Work Order #...:** LTGDL **Matrix.....:** WG
Date Sampled...: 01/20/10 14:05 **Date Received..:** 01/21/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/28/10	0028438

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw002C-1497-GW

General Chemistry

Lot-Sample #...: A0A210417-010 **Work Order #...:** LTGDX **Matrix.....:** WG
Date Sampled...: 01/20/10 15:01 **Date Received..:** 01/21/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/28/10	0028438

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw007C-1502-GW

General Chemistry

Lot-Sample #...: A0A210417-012 **Work Order #...:** LTGD2 **Matrix.....:** WG
Date Sampled...: 01/20/10 16:31 **Date Received..:** 01/21/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/28/10	0028438

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRinse1-1513-GW

General Chemistry

Lot-Sample #...: A0A210417-014 **Work Order #...:** LTGD5 **Matrix.....:** WQ
Date Sampled...: 01/20/10 17:30 **Date Received..:** 01/21/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/28/10	0028438

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-008C-1503-GW

General Chemistry

Lot-Sample #...: A0A210417-018 **Work Order #...:** LTGGC **Matrix.....:** WG
Date Sampled...: 01/20/10 10:15 **Date Received..:** 01/21/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/28/10	0028438

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-DUP2-1511-GW

General Chemistry

Lot-Sample #...: A0A210417-020 **Work Order #...:** LTGGT **Matrix.....:** WG
Date Sampled...: 01/20/10 11:02 **Date Received..:** 01/21/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/28/10	0028438

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-010C-1505-GW

General Chemistry

Lot-Sample #...: A0A210417-022 **Work Order #...:** LTGG5 **Matrix.....:** WG
Date Sampled...: 01/20/10 12:54 **Date Received..:** 01/21/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/28/10	0028438

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-006C-1501-GW

General Chemistry

Lot-Sample #...: A0A210417-024 **Work Order #...:** LTGHD **Matrix.....:** WG
Date Sampled...: 01/20/10 14:00 **Date Received..:** 01/21/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/28/10	0028438

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-005C-1500-GW

General Chemistry

Lot-Sample #...: A0A210417-026 **Work Order #...:** LTGH0 **Matrix.....:** WG
Date Sampled...: 01/20/10 15:20 **Date Received..:** 01/21/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/28/10	0028438

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-009C-1504-GW

General Chemistry

Lot-Sample #...: A0A210417-029 **Work Order #...:** LTJCD **Matrix.....:** WG
Date Sampled...: 01/21/10 09:20 **Date Received..:** 01/21/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/28/10	0028438

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRinse2-1514-GW

General Chemistry

Lot-Sample #...: A0A210417-031 **Work Order #...:** LTJCN **Matrix.....:** WQ
Date Sampled...: 01/21/10 10:22 **Date Received..:** 01/21/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	02/01/10	0032470
		Dilution Factor: 1		MDL.....: 0.0050		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-004C-1499-GW

General Chemistry

Lot-Sample #...: A0A210417-032 **Work Order #...:** LTJDA **Matrix.....:** WG
Date Sampled...: 01/21/10 09:15 **Date Received..:** 01/21/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	02/01/10	0032470

Dilution Factor: 1 MDL.....: 0.0050

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A0A210417 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: LTXG11AA		MB Lot-Sample #:	A0A280000-438	
	ND	0.010	mg/L	SW846 9012A	01/28/10	0028438
		Dilution Factor: 1				
Cyanide, Total		Work Order #: LT28P1AA		MB Lot-Sample #:	A0B010000-470	
	ND	0.010	mg/L	SW846 9012A	02/01/10	0032470
		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 #...: A0A210417 **Matrix.....:** WATER
Date Sampled...: 01/19/10 09:50 **Date Received..:** 01/20/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#: LTEX01CC-MS/LTEX01CD-MSD				MS Lot-Sample #: A0A200462-007	
	71 N	(80 - 120)			SW846 9012A	02/01/10	0032470
	83	(80 - 120)	15	(0-20)	SW846 9012A	02/01/10	0032470

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.

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: A0A210417										
6010B	FWGASYmw002C-1497-GF	AQ	N							
				Manganese	10.0	4.0B		J	ug/L	L
				Potassium	1000	634B		UJ	ug/L	Cb,L
6010B	FWGASYmw-008C-1503-GF	AQ	N							
				Arsenic	5.0	10.3		J	ug/L	Pj,P
				Chromium	5.0	2.1B		J	ug/L	L
				Cobalt	5.0	1.6B		UJ	ug/L	Cb,P,L
				Nickel	10.0	4.4B		J	ug/L	L,P
6010B	FWGASYmw-010C-1505-GF	AQ	N							
				Nickel	10.0	2.6B		J	ug/L	L
6010B	FWGASYmwDUP1-1512-GF	AQ	FD							
				Nickel	10.0	2.2B		J	ug/L	L
6010B	FWGASYmw-DUP2-1511-GF	AQ	FD							
				Chromium	5.0	2.7B		J	ug/L	L
				Cobalt	5.0	2.2B		UJ	ug/L	Cb,L
				Copper	5.0	4.6B		J	ug/L	L
				Nickel	10.0	6.0B		J	ug/L	L
				Vanadium	10.0	1.8B		J	ug/L	L
6010B	FWGLL11mw-009C-1495-GF	AQ	N							
				Potassium	1000	905B		J	ug/L	L
6010B	FWGLL3mw-235C-1507-GF	AQ	N							
				Barium	10.0	3.3B		J	ug/L	L
				Manganese	10.0	5.8B		J	ug/L	L
				Potassium	1000	675B		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: A0A210417										
6010B	FWGLL3mw-235C-1507-GW	AQ	N							
				Potassium	1000	2110		U	ug/L	Cb
				Vanadium	10.0	8.8B		J	ug/L	L
6020	FWGASYmw001C-1496-GF	AQ	N							
				Thallium	1.0	0.20B		UJ	ug/L	Cb,P,L
				Zinc	10.0	4.7B J		UJ	ug/L	L,F
6020	FWGASYmw002C-1497-GF	AQ	N							
				Thallium	1.0	0.20B		UJ	ug/L	Cb,L
6020	FWGASYmw003C-1498-GF	AQ	N							
				Antimony	2.0	0.16B		UJ	ug/L	Cb,L
6020	FWGASYmw-004C-1499-GF	AQ	N							
				Thallium	1.0	0.15B		UJB	ug/L	Cb,N,L
6020	FWGASYmw007C-1502-GF	AQ	N							
				Thallium	1.0	0.17B		UJ	ug/L	Cb,L
6020	FWGASYmw-008C-1503-GF	AQ	N							
				Aluminum	50.0	1160		J	ug/L	Pj,P
				Antimony	2.0	0.23B		UJ	ug/L	Cb,L
				Iron	50.0	3210J		J	ug/L	Pj,P
				Zinc	10.0	11.5J		B	ug/L	F,P
6020	FWGASYmw-009C-1504-GF	AQ	N							
				Thallium	1.0	0.38B		UJB	ug/L	Cb,N,L
				Zinc	10.0	5.0B J		JB	ug/L	L,F
6020	FWGASYmw-010C-1505-GF	AQ	N							
				Antimony	2.0	0.15B		UJ	ug/L	Cb,L
				Zinc	10.0	12.3J		B	ug/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: A0A210417										
6020	FWGASYmwDUP1-1512-GF	AQ	FD							
				Thallium	1.0	0.14B		UJ	ug/L	Cb,L
				Zinc	10.0	6.3B J		JB	ug/L	L,F
6020	FWGASYmw-DUP2-1511-GF	AQ	FD							
				Antimony	2.0	0.25B		UJ	ug/L	Cb,L
				Zinc	10.0	16.2J		B	ug/L	F
6020	FWGEQUIPRinse2-1514-GW	AQ	EB							
				Thallium	1.0	0.19B		UJ	ug/L	Cb,L
6020	FWGLL11mw-009C-1495-GF	AQ	N							
				Aluminum	50.0	26.0B		J	ug/L	L
				Thallium	1.0	0.35B		UJ	ug/L	Cb,L
6020	FWGLL3mw-235C-1507-GF	AQ	N							
				Zinc	10.0	7.1B J		JB	ug/L	L,F
6020	FWGLL3mw-235C-1507-GW	AQ	N							
				Antimony	2.0	0.19B		UJ	ug/L	Cb,L
				Beryllium	1.0	0.32B		J	ug/L	L
				Thallium	1.0	0.16B		UJ	ug/L	Cb,L
7470A	FWGLL3mw-235C-1507-GW	AQ	N							
				Mercury	0.20	0.19B		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: A0A210417										
8081A	FWGASYmw001C-1496-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: A0A210417										
8081A	FWGASYmw002C-1497-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: A0A210417										
8081A	FWGASYmw003C-1498-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: A0A210417										
8081A	FWGASYmw-005C-1500-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: A0A210417										
8081A	FWGASYmw-006C-1501-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: A0A210417										
8081A	FWGASYmw007C-1502-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: A0A210417										
8081A	FWGASYmw-008C-1503-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: A0A210417										
8081A	FWGASYmw-009C-1504-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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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: A0A210417										
8081A	FWGASYmw-010C-1505-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: A0A210417										
8081A	FWGASYmwDUP1-1512-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

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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: A0A210417										
8081A	FWGASYmw-DUP2-1511-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

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: A0A210417										
8081A	FWGLL11mw-009C-1495-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	FWGASYmw001C-1496-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: A0A210417										
8082	FWGASYmw002C-1497-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	FWGASYmw003C-1498-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-005C-1500-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: A0A210417										
8082	FWGASYmw-006C-1501-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	FWGASYmw007C-1502-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-008C-1503-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: A0A210417										
8082	FWGASYmw-009C-1504-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-1505-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-DUP2-1511-GW	AQ	FD							
				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: A0A210417										
8082	FWGLL11mw-009C-1495-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	FWGASYmw001C-1496-GW	AQ	N							
				Acetone	10	10U		UJ	ug/L	Pj
8260B	FWGASYmw002C-1497-GW	AQ	N							
				Acetone	10	10U		UJ	ug/L	Pj
8260B	FWGASYmw003C-1498-GW	AQ	N							
				Acetone	10	10U		UJ	ug/L	Pj
8260B	FWGASYmw-004C-1499-GW	AQ	N							
				Acetone	10	1.2J		JB	ug/L	Pj,N,L,O
8260B	FWGASYmw-005C-1500-GW	AQ	N							
				Acetone	10	10U		UJ	ug/L	Pj
8260B	FWGASYmw-006C-1501-GW	AQ	N							
				Acetone	10	10U		UJ	ug/L	Pj
8260B	FWGASYmw007C-1502-GW	AQ	N							
				Acetone	10	10U		UJ	ug/L	Pj
8260B	FWGASYmw-008C-1503-GW	AQ	N							
				Acetone	10	10U		UJ	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: A0A210417										
8260B	FWGASYmw-009C-1504-GW	AQ	N							
				Acetone	10	10U		UJ	ug/L	Pj
8260B	FWGASYmw-010C-1505-GW	AQ	N							
				Acetone	10	10U		UJ	ug/L	Pj
8260B	FWGASYmwDUP1-1512-GW	AQ	FD							
				Acetone	10	10U		UJ	ug/L	Pj
8260B	FWGASYmw-DUP2-1511-GW	AQ	FD							
				Acetone	10	10U		UJ	ug/L	Pj
8260B	FWGEQUIPRinse1-1513-GW	AQ	EB							
				2-Butanone	10	3.8J		J	ug/L	L
				Acetone	10	15		JB	ug/L	Pj,O
				Toluene	1.0	0.20J		J	ug/L	L
8260B	FWGEQUIPRinse2-1514-GW	AQ	EB							
				Acetone	10	4.9J		JB	ug/L	Pj,L,O
8260B	FWGLL11mw-009C-1495-GW	AQ	N							
				Acetone	10	10U		UJ	ug/L	Pj
8260B	FWGTeam1-Trip	AQ	TB							
				Acetone	10	2.4J		J	ug/L	Pj,L
8260B	FWGTeam1-Trip 1-21-10	AQ	TB							
				Acetone	10	3.4J		J	ug/L	Pj,L
8260B	FWGTeam2-Trip	AQ	TB							
				Acetone	10	3.4J		J	ug/L	Pj,L
8260B	FWGTrip-Team 2	AQ	TB							
				Acetone	10	3.8J		J	ug/L	Pj,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: A0A210417										
8270C	FWGASYmw001C-1496-GW	AQ	N							
				Benzoic acid	10	10U		UJ	ug/L	D
				bis(2-Ethylhexyl) phthalate	10	1.0J		J	ug/L	L,P
8270C	FWGASYmw002C-1497-GW	AQ	N							
				Benzoic acid	10	10U		UJ	ug/L	D
				bis(2-Ethylhexyl) phthalate	10	0.97J		J	ug/L	L
8270C	FWGASYmw003C-1498-GW	AQ	N							
				Benzoic acid	10	10U		UJ	ug/L	D
8270C	FWGASYmw-004C-1499-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	0.90J		J	ug/L	L
8270C	FWGASYmw-005C-1500-GW	AQ	N							
				Benzoic acid	10	10U		UJ	ug/L	D
				bis(2-Ethylhexyl) phthalate	10	1.0J		J	ug/L	L
8270C	FWGASYmw-006C-1501-GW	AQ	N							
				Benzoic acid	10	10U		UJ	ug/L	D
				bis(2-Ethylhexyl) phthalate	10	1.1J		J	ug/L	L
8270C	FWGASYmw007C-1502-GW	AQ	N							
				Benzoic acid	10	10U		UJ	ug/L	D
8270C	FWGASYmw-008C-1503-GW	AQ	N							
				Benzoic acid	10	10U		UJ	ug/L	D
8270C	FWGASYmw-009C-1504-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	0.95J		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: A0A210417										
8270C	FWGASYmw-010C-1505-GW	AQ	N							
				Benzoic acid	10	10U		UJ	ug/L	D
				bis(2-Ethylhexyl) phthalate	10	1.2J		J	ug/L	L
8270C	FWGASYmwDUP1-1512-GW	AQ	FD							
				Benzoic acid	10	10U		UJ	ug/L	D
				bis(2-Ethylhexyl) phthalate	10	5.0J		J	ug/L	L
8270C	FWGASYmw-DUP2-1511-GW	AQ	FD							
				Benzoic acid	10	10U		UJ	ug/L	D
8270C	FWGEQUIPRinse1-1513-GW	AQ	EB							
				Benzoic acid	10	10U		UJ	ug/L	D
8270C	FWGLL11mw-009C-1495-GW	AQ	N							
				Benzoic acid	10	10U		UJ	ug/L	D
9012A	FWGASYmw001C-1496-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	H
9012A	FWGASYmw002C-1497-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	H
9012A	FWGASYmw003C-1498-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	H
9012A	FWGASYmw-004C-1499-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	H
9012A	FWGASYmw-005C-1500-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	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: A0A210417										
9012A	FWGASYmw-006C-1501-GW	AQ	N	Cyanide	0.010	0.010U		UJ	mg/L	H
9012A	FWGASYmw007C-1502-GW	AQ	N	Cyanide	0.010	0.010U		UJ	mg/L	H
9012A	FWGASYmw-008C-1503-GW	AQ	N	Cyanide	0.010	0.010U		UJ	mg/L	H
9012A	FWGASYmw-009C-1504-GW	AQ	N	Cyanide	0.010	0.010U		UJ	mg/L	H
9012A	FWGASYmw-010C-1505-GW	AQ	N	Cyanide	0.010	0.010U		UJ	mg/L	H
9012A	FWGASYmwDUP1-1512-GW	AQ	FD	Cyanide	0.010	0.010U		UJ	mg/L	H
9012A	FWGASYmw-DUP2-1511-GW	AQ	FD	Cyanide	0.010	0.010U		UJ	mg/L	H
9012A	FWGEQUIPRinse1-1513-GW	AQ	EB	Cyanide	0.010	0.010U		UJ	mg/L	H
9012A	FWGEQUIPRinse2-1514-GW	AQ	EB	Cyanide	0.010	0.010U		UJ	mg/L	H
9012A	FWGLL11mw-009C-1495-GW	AQ	N	Cyanide	0.010	0.010U		UJ	mg/L	H

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 : FWGASYmw001C-1496-GF **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0A210417005

Reviewed By / Date : Angye Dragotta 3/10/2010 **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	5.0		ug/L	U	YES	~~UJ~~ U															~~P~~ ~~LCS~~ 3/10/10
Analysis Method : 6020																					**Dilution: 1**
Aluminum	50.0		ug/L	U	YES	~~UJ~~ U															~~P~~
Iron	50.0		ug/L	U	YES	~~UJ~~ U															~~P~~ ~~LCS~~ 3/10/10
Thallium	0.20		ug/L	B	YES	UJ								J							Cb,P,L
Zinc	4.7		ug/L	B J	YES	~~UJ~~ JB			JB					J							L,F

Project Number and Name: 030240.0006 - RVAAP (OH) **Library Used:** Ravenna GW

ADR 8.1 Report Date: 3/10/2010 15:41

* 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 : FWGASYmw001C-1496-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A0A210417004

Reviewed By / Date : Angye Dragotta 3/10/2010 **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**															
Benzoic acid	10		ug/L	U	YES	UJ		UJ													D

* 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 : FWGASYmw001C-1496-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0A210417004

Reviewed By / Date : Angye Dragotta 3/10/2010 **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
Analysis Method : 8270C						**Dilution: 1**															

* 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 : FWGASYmw001C-1496-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0A210417004

Reviewed By / Date : Angye Dragotta 3/10/2010 **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	1.0		ug/L	J	YES	J								J							L,P
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										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 : FWGASYmw002C-1497-GF **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0A210417011

Reviewed By / Date : Angye Dragotta 3/10/2010 **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	4.0		ug/L	B	YES	J								J							L
Potassium	634		ug/L	B	YES	UJ								J							Cb,L
Analysis Method : 6020						**Dilution: 1**															
Thallium	0.20		ug/L	B	YES	UJ								J							Cb,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 : FWGASYmw002C-1497-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A0A210417010

Reviewed By / Date : Angye Dragotta 3/10/2010 **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**															
Benzoic acid	10		ug/L	U	YES	**UJ**		UJ													D

* 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 : FWGASYmw002C-1497-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0A210417010

Reviewed By / Date : Angye Dragotta 3/10/2010 **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
Analysis Method : 8270C						**Dilution: 1**															

* 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 : FWGASYmw002C-1497-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0A210417010

Reviewed By / Date : Angye Dragotta 3/10/2010 **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	0.97		ug/L	J	YES	J								J							L
Analysis Method : 9012A							**Dilution: 1**														
Cyanide	0.010		mg/L	U	YES	UJ					UJ										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 : FWGASYmw003C-1498-GF **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0A210417009

Reviewed By / Date : Angye Dragotta 3/10/2010 **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	0.16		ug/L	B	YES	UJ								J							Cb,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 : FWGASYmw003C-1498-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A0A210417008

Reviewed By / Date : Angye Dragotta 3/10/2010 **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**													
Benzoic acid	10		ug/L	U	YES	UJ		UJ													D

* 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 : FWGASYmw003C-1498-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0A210417008

Reviewed By / Date : Angye Dragotta 3/10/2010 **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
Analysis Method : 9012A						**Dilution: 1**															

* 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 : FWGASYmw003C-1498-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0A210417008

Reviewed By / Date : Angye Dragotta 3/10/2010 **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 : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										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-1499-GF **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/21/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0A210417033

Reviewed By / Date : Angye Dragotta 3/10/2010 **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**															
Thallium	0.15		ug/L	B	YES	UJ B								J		Y B					Cb,N,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-1499-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/21/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0A210417032

Reviewed By / Date : Angye Dragotta 3/10/2010 **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	UJB								J		UB					Pj,N,L,O
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	0.90		ug/L	J	YES	J								J							L
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										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-1500-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A0A210417026

Reviewed By / Date : Angye Dragotta 3/10/2010 **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**													
Benzoic acid	10		ug/L	U	YES	UJ		UJ													D

* 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-1500-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0A210417026

Reviewed By / Date : Angye Dragotta 3/10/2010 **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
Analysis Method : 8270C						**Dilution: 1**															

* 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-1500-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0A210417026

Reviewed By / Date : Angye Dragotta 3/10/2010 **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	1.0		ug/L	J	YES	J								J							L
Analysis Method : 9012A							**Dilution: 1**														
Cyanide	0.010		mg/L	U	YES	UJ					UJ										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-006C-1501-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A0A210417024

Reviewed By / Date : Angye Dragotta 3/10/2010 **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**													
Benzoic acid	10		ug/L	U	YES	UJ		UJ													D

* 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-1501-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0A210417024

Reviewed By / Date : Angye Dragotta 3/10/2010 **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
Analysis Method : 8270C						**Dilution: 1**															

* 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-1501-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0A210417024

Reviewed By / Date : Angye Dragotta 3/10/2010 **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	1.1		ug/L	J	YES	J								J							L
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										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 : FWGASYmw007C-1502-GF **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0A210417013

Reviewed By / Date : Angye Dragotta 3/10/2010 **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**															
Thallium	0.17		ug/L	B	YES	UJ								J							Cb,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 : FWGASYmw007C-1502-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A0A210417012

Reviewed By / Date : Angye Dragotta 3/10/2010 **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**															
Benzoic acid	10		ug/L	U	YES	**UJ**		UJ													D

* 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 : FWGASYmw007C-1502-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0A210417012

Reviewed By / Date : Angye Dragotta 3/10/2010 **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
Analysis Method : 9012A						**Dilution: 1**															

* 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 : FWGASYmw007C-1502-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0A210417012

Reviewed By / Date : Angye Dragotta 3/10/2010 **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 : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										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-008C-1503-GF **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0A210417019

Reviewed By / Date : Angye Dragotta 3/10/2010 **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	10.3		ug/L		YES	J															Pj,P
Chromium	2.1		ug/L	B	YES	J								J							L
Cobalt	1.6		ug/L	B	YES	UJ								J							Cb,P,L
Nickel	4.4		ug/L	B	YES	J								J							L,P
Analysis Method : 6020						**Dilution: 1**															
Aluminum	1160		ug/L		YES	J															Pj,P
Antimony	0.23		ug/L	B	YES	UJ								J							Cb,L
Iron	3210		ug/L	J	YES	J															Pj,P
Zinc	11.5		ug/L	J	YES	J B			J B												F,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 : FWGASYmw-008C-1503-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type:** RE **Sample Matrix :** AQ

Lab Sample ID: A0A210417018

Reviewed By / Date : Angye Dragotta 3/10/2010 **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**														
Benzoic acid	10		ug/L	U	YES	**UJ**		UJ													D

* 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-1503-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0A210417018

Reviewed By / Date : Angye Dragotta 3/10/2010 **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
Analysis Method : 9012A						**Dilution: 1**															

* 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-1503-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0A210417018

Reviewed By / Date : Angye Dragotta 3/10/2010 **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 : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										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-009C-1504-GF **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/21/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0A210417030

Reviewed By / Date : Angye Dragotta 3/10/2010 **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**															
Thallium	0.38		ug/L	B	YES	UJ B								J		UB					Cb,N,L
Zinc	5.0		ug/L	B J	YES	UJ UB			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 : FWGASYmw-009C-1504-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/21/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0A210417029

Reviewed By / Date : Angye Dragotta 3/10/2010 **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
Analysis Method : 8270C						**Dilution: 1**															

* 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-1504-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/21/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0A210417029

Reviewed By / Date : Angye Dragotta 3/10/2010 **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	0.95		ug/L	J	YES	J								J							L
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										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-010C-1505-GF **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0A210417023

Reviewed By / Date : Angye Dragotta 3/10/2010 **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	2.6		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Antimony	0.15		ug/L	B	YES	UJ								J							Cb,L
Zinc	12.3		ug/L	J	YES	~~J~~ UB			~~J~~ UB												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-010C-1505-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type:** RE **Sample Matrix :** AQ

Lab Sample ID: A0A210417022

Reviewed By / Date : Angye Dragotta 3/10/2010 **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**														
Benzoic acid	10		ug/L	U	YES	UJ		UJ													D

* 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-1505-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0A210417022

Reviewed By / Date : Angye Dragotta 3/10/2010 **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
Analysis Method : 8270C						**Dilution: 1**															

* 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-1505-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0A210417022

Reviewed By / Date : Angye Dragotta 3/10/2010 **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	1.2		ug/L	J	YES	J								J							L
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										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 : FWGASYmwDUP1-1512-GF **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0A210417007

Reviewed By / Date : Angye Dragotta 3/10/2010 **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	2.2		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Thallium	0.14		ug/L	B	YES	UJ								J							Cb,L
Zinc	6.3		ug/L	B J	YES	~~UJ~~ J B			/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 : FWGASYmwDUP1-1512-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A0A210417006

Reviewed By / Date : Angye Dragotta 3/10/2010 **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**													
Benzoic acid	10		ug/L	U	YES	UJ		UJ													D

* 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 : FWGASYmwDUP1-1512-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0A210417006

Reviewed By / Date : Angye Dragotta 3/10/2010 **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
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	5.0		ug/L	J	YES	J								J							L
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										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-DUP2-1511-GF **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0A210417021

Reviewed By / Date : Angye Dragotta 3/10/2010 **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**															
Chromium	2.7		ug/L	B	YES	J								J							L
Cobalt	2.2		ug/L	B	YES	UJ								J							Cb,L
Copper	4.6		ug/L	B	YES	J								J							L
Nickel	6.0		ug/L	B	YES	J								J							L
Vanadium	1.8		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Antimony	0.25		ug/L	B	YES	UJ								J							Cb,L
Zinc	16.2		ug/L	J	YES	J B			J B												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-DUP2-1511-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A0A210417020

Reviewed By / Date : Angye Dragotta 3/10/2010 **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**													
Benzoic acid	10		ug/L	U	YES	**UJ**		UJ													D

* 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-DUP2-1511-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0A210417020

Reviewed By / Date : Angye Dragotta 3/10/2010 **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
Analysis Method : 9012A						**Dilution: 1**															

* 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-DUP2-1511-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0A210417020

Reviewed By / Date : Angye Dragotta 3/10/2010 **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 : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										H

Project Number and Name: 030240.0006 - RVAAP (OH) **Library Used:** Ravenna GW

ADR 8.1 Report Date: 3/10/2010 15:41

* 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 : FWGEQUIPRinse1-1513-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A0A210417014

Reviewed By / Date : Angye Dragotta 3/10/2010 **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**															
Benzoic acid	10		ug/L	U	YES	**UJ**		UJ													D

* 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 : FWGEQUIPRinse1-1513-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0A210417014

Reviewed By / Date : Angye Dragotta 3/10/2010 **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	3.8		ug/L	J	YES	J								J							L
Acetone	15		ug/L		YES	~~UJ~~ ISB										YJB					Pj,O
Toluene	0.20		ug/L	J	YES	J								J							L
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										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 : FWGEQUIPRinse2-1514-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/21/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0A210417031

Reviewed By / Date : Angye Dragotta 3/10/2010 **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	4.9		ug/L	J	YES	~~UJ~~ J SB								J		UB					Pj,L,O
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										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 : FWGEQUIPRinse2-1514-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/21/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0A210417031

Reviewed By / Date : Angye Dragotta 3/10/2010 **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**															
Thallium	0.19		ug/L	B	YES	UJ								J							Cb,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-1495-GF **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0A210417001

Reviewed By / Date : Angye Dragotta 3/10/2010 **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	905		ug/L	B	YES	**J**								J							L
Analysis Method : 6020						**Dilution: 1**															
Aluminum	26.0		ug/L	B	YES	**J**								J							L
Thallium	0.35		ug/L	B	YES	**UJ**								J							Cb,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-1495-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A0A210417002

Reviewed By / Date : Angye Dragotta 3/10/2010 **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**															
Benzoic acid	10		ug/L	U	YES	UJ		UJ													D

* 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-1495-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0A210417002

Reviewed By / Date : Angye Dragotta 3/10/2010 **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
Analysis Method : 9012A						**Dilution: 1**															

* 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-1495-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0A210417002

Reviewed By / Date : Angye Dragotta 3/10/2010 **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 : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	**UJ**					UJ										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 : FWGLL3mw-235C-1507-GF **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0A210417017

Reviewed By / Date : Angye Dragotta 3/10/2010 **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	3.3		ug/L	B	YES	J								J							L
Manganese	5.8		ug/L	B	YES	J								J							L
Potassium	675		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Zinc	7.1		ug/L	B J	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 : FWGLL3mw-235C-1507-GW **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/20/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0A210417016

Reviewed By / Date : Angye Dragotta 3/10/2010 **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	2110		ug/L		YES	U															Cb
Vanadium	8.8		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Antimony	0.19		ug/L	B	YES	UJ								J							Cb,L
Beryllium	0.32		ug/L	B	YES	J								J							L
Thallium	0.16		ug/L	B	YES	UJ								J							Cb,L
Analysis Method : 7470A						**Dilution: 1**															
Mercury	0.19		ug/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 : FWGTeam1-Trip
Lab Report Batch : A0A210417
Lab ID : TALCAN
Sample Date : 01/20/2010
Analysis Type: RES
Sample Matrix : AQ
Lab Sample ID: A0A210417003

Reviewed By / Date : Angye Dragotta 3/10/2010
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							Pj,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 1-21-10 **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/21/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0A210417034

Reviewed By / Date : Angye Dragotta 3/10/2010 **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	3.4		ug/L	J	YES	J								J							Pj,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 : FWGTeam2-Trip
Sample Date : 01/20/2010
Lab Sample ID: A0A210417015

Lab Report Batch : A0A210417
Analysis Type: RES

Lab ID : TALCAN
Sample Matrix : AQ

Reviewed By / Date : Angye Dragotta 3/10/2010

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	3.4		ug/L	J	YES	J								J							Pj,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 : FWGTrip-Team 2 **Lab Report Batch :** A0A210417 **Lab ID :** TALCAN

Sample Date : 01/21/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0A210417028

Reviewed By / Date : Angye Dragotta 3/10/2010 **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	3.8		ug/L	J	YES	J								J							Pj,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

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 0025031 **Analysis Method :** 8081A **Analysis Date :** 01/28/2010

Preparation Batch : 0025031 **Preparation Type :** 3520C **Preparation Date :** 01/25/2010

Lab Reporting Batch : A0A210417 **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
FWGASYmw-004C-1499	A0A210417032S	AQ	Endosulfan I	46		0.00	50.00	150.00	50.00
FWGASYmw-004C-1499	A0A210417032D		Endosulfan I	48		0.00	50.00	150.00	50.00

Associated Samples: Parent sample only

Client Sample ID	Lab Sample ID
FWGASYmw-004C-1499-GW	A0A210417032
FWGASYmw-005C-1500-GW	A0A210417026

* 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: 030240.0006 - RVAAP (OH)

Surrogate Recovery Outlier Report

Lab Report Batch: A0A210417 **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
FWGASYmw001C-1496-GW	A0A210417004	8081A	1	AQ	Decachlorobiphenyl	33	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	35	50.0	150.0	10.0	All Target
FWGASYmw002C-1497-GW	A0A210417010	8081A	1	AQ	Decachlorobiphenyl	18	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	18	50.0	150.0	10.0	All Target
FWGASYmw003C-1498-GW	A0A210417008	8081A	1	AQ	Decachlorobiphenyl	30	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	30	50.0	150.0	10.0	All Target
FWGASYmw-005C-1500-GW	A0A210417026	8081A	1	AQ	Decachlorobiphenyl	24	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	24	50.0	150.0	10.0	All Target
FWGASYmw-005C-1500-GWMS	A0A210417026S	8082	2	AQ	Decachlorobiphenyl	46	50.0	150.0	10.0	All Target
FWGASYmw-006C-1501-GW	A0A210417024	8081A	1	AQ	Decachlorobiphenyl	35	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	37	50.0	150.0	10.0	All Target
FWGASYmw007C-1502-GW	A0A210417012	8081A	1	AQ	Decachlorobiphenyl	47	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	46	50.0	150.0	10.0	All Target
FWGASYmw-008C-1503-GW	A0A210417018	8081A	1	AQ	Decachlorobiphenyl	29	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	31	50.0	150.0	10.0	All Target
FWGASYmw-009C-1504-GW	A0A210417029	8081A	1	AQ	Decachlorobiphenyl	30	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	29	50.0	150.0	10.0	All Target

Surrogate Recovery Outlier Report

Lab Report Batch: A0A210417 **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-010C-1505-GW	A0A210417022	8081A	1	AQ	Decachlorobiphenyl	20	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	21	50.0	150.0	10.0	All Target
FWGASYmwDUP1-1512-GW	A0A210417006	8081A	1	AQ	Decachlorobiphenyl	47	50.0	150.0	10.0	All Target
FWGASYmw-DUP2-1511-GW	A0A210417020	8081A	1	AQ	Decachlorobiphenyl	33	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	35	50.0	150.0	10.0	All Target
FWGLL11mw-009C-1495-GW	A0A210417002	8081A	1	AQ	Decachlorobiphenyl	21	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	24	50.0	150.0	10.0	All Target

Method Blank Outlier Report

Lab Reporting Batch : A0A210417 **Lab ID:** TALCAN

Analysis Method : 6020 **Analysis Date :** 01/25/2010

Preparation Type : 3005A **Preparation Date :** 01/22/2010

Method Blank Lab Sample ID : A0A220000016B **Preparation Batch :** 0022016

Iron	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	34.0	50.0	ug/L	B	

Iron contamination found in the method blank did not qualify any samples.

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
FWGASYmw001C-1496-GF	A0A210417005	1	4.7	B J	ug/L
FWGASYmw-008C-1503-GF	A0A210417019	1	11.5	J	ug/L
FWGASYmw-009C-1504-GF	A0A210417030	1	5.0	B J	ug/L
FWGASYmw-010C-1505-GF	A0A210417023	1	12.3	J	ug/L
FWGASYmwDUP1-1512-GF	A0A210417007	1	6.3	B J	ug/L
FWGASYmw-DUP2-1511-GF	A0A210417021	1	16.2	J	ug/L
FWGLL3mw-235C-1507-GF	A0A210417017	1	7.1	B J	ug/L

QC Outlier Report: Equipment Blank

Lab Reporting Batch : A0A210417
Lab ID: TALCAN
Method/Preparation Batch : 0022016 / 0022016
Analysis Date : 01/25/2010
Client Sample ID : FWGEQUIPRinse2-1514-GW
Preparation Date : 01/22/2010
Lab Sample ID : A0A210417031
Preparation Type : 3005A

Analysis Method : 6020

Thallium	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	0.19	1.0	ug/L	B	

Thallium 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-004C-1499-GF	A0A210417033	1	0.15	B	ug/L
FWGASYmw-009C-1504-GF	A0A210417030	1	0.38	B	ug/L

2-Butanone	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	3.8	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:	15	10	ug/L		Common Contaminant

Acetone contamination found in the equipment blank did not qualify any samples.

Toluene	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	0.20	1.0	ug/L	J	Common Contaminant

Toluene contamination found in the equipment blank did not qualify any samples.

FWG EQUIP RINSE1 -1513 -GW

Acetone FWGEQUIPRinse2-1514-GW	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	4.9	10	ug/L	J	Common Contaminant

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
FWGASYmw-004C-1499-G	A0A210417032	1	1.2	J	ug/L

QC Outlier Report: Field Duplicates (Non-qualified Outliers)

Lab Report Batch: A0A210417 **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	Nickel	FWGASYmw001	ES/TO	10.0	U	FWGASYmwDUP	ES/TO	2.2	B	200.0	30	ug/L
6020	AQ	Thallium		ES/TO	0.20	B		ES/TO	0.14	B	35.3	30	ug/L
8270C	AQ	bis(2-Ethylhexyl) phthalate	FWGASYmw001	RES	1.0	J	FWGASYmwDUP	RES	5.0	J	133.3	30	ug/L
6010B	AQ	Arsenic	FWGASYmw-008	ES/TO	10.3		FWGASYmw-DU	ES/TO	14.6		34.5	30	ug/L
	AQ	Cobalt		ES/TO	1.6	B		ES/TO	2.2	B	31.6	30	ug/L
	AQ	Copper		ES/TO	5.0	U		ES/TO	4.6	B	200.0	30	ug/L
	AQ	Nickel		ES/TO	4.4	B		ES/TO	6.0	B	30.8	30	ug/L
	AQ	Vanadium		ES/TO	10.0	U		ES/TO	1.8	B	200.0	30	ug/L
6020	AQ	Aluminum		ES/TO	1160			ES/TO	1780		42.2	30	ug/L
	AQ	Iron		ES/TO	3210	J		ES/TO	4480	J	33.0	30	ug/L
	AQ	Zinc		ES/TO	11.5	J		ES/TO	16.2	J	33.9	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: ***030240.0006 - RVAAP (OH)***

QC Outlier Report: Trip Blank

Lab Reporting Batch : A0A210417
Lab ID: TALCAN
Method/Preparation Batch : 0033168 / 0033168
Analysis Date : 01/28/2010
Client Sample ID : FWGTeam1-Trip
Preparation Date : 01/28/2010
Lab Sample ID : A0A210417003
Preparation Type : 5030B

Analysis Method : 8260B

Acetone Team 1 Trip 1/20/10

	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
FWGEQUIPRinse1-1513-GW	A0A210417014	1	15		ug/L

Acetone Team 1 Trip 1/21/10

	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	3.4	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
FWGASYmw-004C-1499-G	A0A210417032	1	1.2	J	ug/L

Acetone Team 2 Trip 1/20/10

	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	3.4	10	ug/L	J	Common Contaminant

Acetone contamination found in the trip blank did not qualify any samples.

Acetone Team 2 Trip 1/21/10

	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	3.8	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
FWGEQUIPRinse2-1514-GW	A0A210417031	1	4.9	J	ug/L

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 0033168 **Analysis Method :** 8260B **Analysis Date :** 01/28/2010

Preparation Batch : 0033168 **Preparation Type :** 5030B **Preparation Date :** 01/28/2010

Lab Reporting Batch : A0A210417 **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
FWGASYmw-004C-1499	A0A210417032D	AQ	Acetone	65		0.00	70.00	130.00	30.00
			Chloroethane	68		0.00	70.00	130.00	30.00
FWGASYmw-005C-1500	A0A210417026S		Bromomethane	69		0.00	70.00	130.00	30.00
			Chloroethane	67		0.00	70.00	130.00	30.00
FWGASYmw-005C-1500	A0A210417026D		2-Hexanone	69		0.00	70.00	130.00	30.00
			Acetone	68		0.00	70.00	130.00	30.00

Associated Samples: Parent sample only

Client Sample ID	Lab Sample ID
FWGASYmw-004C-1499-GW	A0A210417032
FWGASYmw-005C-1500-GW	A0A210417026

* 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: 030240.0006 - RVAAP (OH)

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 0032470 **Analysis Method :** 9012A **Analysis Date :** 02/01/2010

Preparation Batch : 0032470 **Preparation Type :** Gen Prep **Preparation Date :** 02/01/2010

Lab Reporting Batch : A0A210417 **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
FWGASYmw-004C-1499	A0A210417032S	AQ	Cyanide	74		40.00	80.00	120.00	20.00

Associated Samples: All samples in Method Batch

Client Sample ID	Lab Sample ID
FWGASYmw-004C-1499-GW	A0A210417032
FWGEQUIPRinse2-1514-GW	A0A210417031

* 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: 030240.0006 - RVAAP (OH)

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 0028438 **Analysis Method :** 9012A **Analysis Date :** 01/28/2010

Preparation Batch : 0028438 **Preparation Type :** Gen Prep **Preparation Date :** 01/28/2010

Lab Reporting Batch : A0A210417 **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
FWGASYmw-005C-1500	A0A210417026S	AQ	Cyanide	73		40.00	80.00	120.00	20.00
FWGASYmw-005C-1500	A0A210417026D		Cyanide	79		40.00	80.00	120.00	20.00

Associated Samples: All samples in Method Batch

Client Sample ID	Lab Sample ID
FWGASYmw001C-1496-GW	A0A210417004
FWGASYmw002C-1497-GW	A0A210417010
FWGASYmw003C-1498-GW	A0A210417008
FWGASYmw-005C-1500-GW	A0A210417026
FWGASYmw-006C-1501-GW	A0A210417024
FWGASYmw007C-1502-GW	A0A210417012
FWGASYmw-008C-1503-GW	A0A210417018
FWGASYmw-009C-1504-GW	A0A210417029
FWGASYmw-010C-1505-GW	A0A210417022
FWGASYmwDUP1-1512-GW	A0A210417006
FWGASYmw-DUP2-1511-GW	A0A210417020
FWGEQUIPRinse1-1513-GW	A0A210417014
FWGLL11mw-009C-1495-GW	A0A210417002

* 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: ***030240.0006 - RVAAP (OH)***

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 0025033 **Analysis Method :** 8270C **Analysis Date :** 01/28/2010

Preparation Batch : 0025033 **Preparation Type :** 3520C **Preparation Date :** 01/25/2010

Lab Reporting Batch : A0A210417 **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
FWGASYmw-004C-1499	A0A210417032S	AQ	2,4-Dinitrophenol	36		0.00	45.00	135.00	40.00
			3,3'-Dichlorobenzidine	41		0.00	45.00	135.00	40.00
FWGASYmw-004C-1499	A0A210417032D		2,4-Dinitrophenol	38		0.00	45.00	135.00	40.00
			3,3'-Dichlorobenzidine	43		0.00	45.00	135.00	40.00
FWGASYmw-005C-1500	A0A210417026D		2,4-Dinitrophenol	42		0.00	45.00	135.00	40.00

Associated Samples: Parent sample only

Client Sample ID	Lab Sample ID
FWGASYmw-004C-1499-GW	A0A210417032
FWGASYmw-005C-1500-GW	A0A210417026

* 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: 030240.0006 - RVAAP (OH)

QC Outlier Report: Holding Times

Lab Report Batch: A0A210417

Lab ID: TALCAN

					Actual Holding Time			Criteria				Reported Dates (and Times)		
Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Prep Method	Coll To Prep	Prep To Ana	Coll To Ana	Coll To Prep	Prep To Ana	Coll To Ana	Unit of Meas	Collection Date	Preparation Date	Analysis Date
FWGASYmw001C-14	A0A210417004	8270C	AQ	3520C	8.0	6.0		7	40		Days	01/20/2010	01/28/2010	02/03/2010
FWGASYmw002C-14	A0A210417010	8270C	AQ	3520C	8.0	6.0		7	40		Days	01/20/2010	01/28/2010	02/03/2010
FWGASYmw003C-14	A0A210417008	8270C	AQ	3520C	8.0	6.0		7	40		Days	01/20/2010	01/28/2010	02/03/2010
FWGASYmw-005C-1	A0A210417026	8270C	AQ	3520C	8.0	6.0		7	40		Days	01/20/2010	01/28/2010	02/03/2010
FWGASYmw-005C-1	A0A210417026S	8270C	AQ	3520C	8.0	6.0		7	40		Days	01/20/2010	01/28/2010	02/03/2010
FWGASYmw-005C-1	A0A210417026D	8270C	AQ	3520C	8.0	6.0		7	40		Days	01/20/2010	01/28/2010	02/03/2010
FWGASYmw-006C-1	A0A210417024	8270C	AQ	3520C	8.0	6.0		7	40		Days	01/20/2010	01/28/2010	02/03/2010
FWGASYmw007C-15	A0A210417012	8270C	AQ	3520C	8.0	6.0		7	40		Days	01/20/2010	01/28/2010	02/03/2010
FWGASYmw-008C-1	A0A210417018	8270C	AQ	3520C	8.0	6.0		7	40		Days	01/20/2010	01/28/2010	02/03/2010
FWGASYmw-010C-1	A0A210417022	8270C	AQ	3520C	8.0	6.0		7	40		Days	01/20/2010	01/28/2010	02/03/2010
FWGASYmwDUP1-1	A0A210417006	8270C	AQ	3520C	8.0	6.0		7	40		Days	01/20/2010	01/28/2010	02/03/2010
FWGASYmw-DUP2-1	A0A210417020	8270C	AQ	3520C	8.0	6.0		7	40		Days	01/20/2010	01/28/2010	02/03/2010
FWGEQUIPRinse1-1	A0A210417014	8270C	AQ	3520C	8.0	6.0		7	40		Days	01/20/2010	01/28/2010	02/03/2010
FWGLL11mw-009C-1	A0A210417002	8270C	AQ	3520C	8.0	6.0		7	40		Days	01/20/2010	01/28/2010	02/03/2010

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: A0A210417 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGEQUIPRinse1-1513-	A0A210417014	6010B	AQ	Calcium	U	1000	100.00	ug/L
				Magnesium	U	1000	100.00	ug/L
				Potassium	U	1000	200.00	ug/L
				Sodium	U	1000	200.00	ug/L
FWGEQUIPRinse2-1514-	A0A210417031	6010B	AQ	Calcium	U	1000	100.00	ug/L
				Magnesium	U	1000	100.00	ug/L
				Potassium	U	1000	200.00	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: **030240.0006 - RVAAP (OH)**

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A0A210417 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGASYmw001C-1496-G	A0A210417005	6020	AQ	Thallium	B	0.20	1.0	ug/L
				Zinc	B J	4.7	10.0	ug/L
FWGASYmw001C-1496-G	A0A210417004	8270C		bis(2-Ethylhexyl) phthalate	J	1.0	10	ug/L
FWGASYmw002C-1497-G	A0A210417011	6010B		Manganese	B	4.0	10.0	ug/L
				Potassium	B	634	1000	ug/L
		6020		Thallium	B	0.20	1.0	ug/L
FWGASYmw002C-1497-G	A0A210417010	8270C		bis(2-Ethylhexyl) phthalate	J	0.97	10	ug/L
FWGASYmw003C-1498-G	A0A210417009	6020		Antimony	B	0.16	2.0	ug/L
FWGASYmw-004C-1499-	A0A210417033			Thallium	B	0.15	1.0	ug/L
FWGASYmw-004C-1499-	A0A210417032	8260B		Acetone	J	1.2	10	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J	0.90	10	ug/L
FWGASYmw-005C-1500-	A0A210417026			bis(2-Ethylhexyl) phthalate	J	1.0	10	ug/L
FWGASYmw-006C-1501-	A0A210417024			bis(2-Ethylhexyl) phthalate	J	1.1	10	ug/L
FWGASYmw007C-1502-G	A0A210417013	6020		Thallium	B	0.17	1.0	ug/L
FWGASYmw-008C-1503-	A0A210417019	6010B		Chromium	B	2.1	5.0	ug/L
				Cobalt	B	1.6	5.0	ug/L
				Nickel	B	4.4	10.0	ug/L
		6020		Antimony	B	0.23	2.0	ug/L
FWGASYmw-009C-1504-	A0A210417030			Thallium	B	0.38	1.0	ug/L
				Zinc	B J	5.0	10.0	ug/L
FWGASYmw-009C-1504-	A0A210417029	8270C		bis(2-Ethylhexyl) phthalate	J	0.95	10	ug/L
FWGASYmw-010C-1505-	A0A210417023	6010B		Nickel	B	2.6	10.0	ug/L
		6020		Antimony	B	0.15	2.0	ug/L
FWGASYmw-010C-1505-	A0A210417022	8270C		bis(2-Ethylhexyl) phthalate	J	1.2	10	ug/L
FWGASYmwDUP1-1512-	A0A210417007	6010B		Nickel	B	2.2	10.0	ug/L
		6020		Thallium	B	0.14	1.0	ug/L
				Zinc	B J	6.3	10.0	ug/L
FWGASYmwDUP1-1512-	A0A210417006	8270C		bis(2-Ethylhexyl) phthalate	J	5.0	10	ug/L
FWGASYmw-DUP2-1511-	A0A210417021	6010B		Chromium	B	2.7	5.0	ug/L
				Cobalt	B	2.2	5.0	ug/L
				Copper	B	4.6	5.0	ug/L
				Nickel	B	6.0	10.0	ug/L
				Vanadium	B	1.8	10.0	ug/L
		6020		Antimony	B	0.25	2.0	ug/L
FWGEQUIPRinse1-1513-	A0A210417014	8260B		2-Butanone	J	3.8	10	ug/L
				Toluene	J	0.20	1.0	ug/L

Project Number and Name: 030240.0006 - RVAAP (OH)

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A0A210417 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGEQUIPRinse2-1514-	A0A210417031	6020	AQ	Thallium	B	0.19	1.0	ug/L
		8260B		Acetone	J	4.9	10	ug/L
FWGLL11mw-009C-1495-	A0A210417001	6010B		Potassium	B	905	1000	ug/L
		6020		Aluminum	B	26.0	50.0	ug/L
				Thallium	B	0.35	1.0	ug/L
FWGLL3mw-235C-1507-G	A0A210417017	6010B		Barium	B	3.3	10.0	ug/L
				Manganese	B	5.8	10.0	ug/L
				Potassium	B	675	1000	ug/L
		6020		Zinc	B J	7.1	10.0	ug/L
FWGLL3mw-235C-1507-G	A0A210417016	6010B		Vanadium	B	8.8	10.0	ug/L
		6020		Antimony	B	0.19	2.0	ug/L
				Beryllium	B	0.32	1.0	ug/L
				Thallium	B	0.16	1.0	ug/L
		7470A		Mercury	B	0.19	0.20	ug/L
FWGTeam1-Trip	A0A210417003	8260B		Acetone	J	2.4	10	ug/L
FWGTeam1-Trip 1-21-10	A0A210417034			Acetone	J	3.4	10	ug/L
FWGTeam2-Trip	A0A210417015			Acetone	J	3.4	10	ug/L
FWGTrip-Team 2	A0A210417028			Acetone	J	3.8	10	ug/L

APPENDIX E

INVESTIGATIVE DERIVED WASTE CHARACTERIZATION AND DISPOSAL PLANS

Ohio EPA
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

February 18, 2010

RE: ***RAVENNA ARMY AMMUNITION PLANT***
PORTAGE/TRUMBULL COUNTIES,
DRAFT, INVESTIGATION DERIVED
WASTE AND DISPOSAL PLAN, FWGWMP,
JANUARY 2010 SAMPLING EVENT

Mr. Mark Patterson
Environmental Program Manager
Ravenna Army Ammunition Plant
Building 1037
8451 State Route 5
Ravenna, OH 44266-9297

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, January 2010 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 February 12, 2010, and is dated February 11, 2010. 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 January 2010 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/ds

cc: Eileen Mohr, Ohio EPA, NEDO, DERR
Katie Elgin, OHARNG RTLS
Glen Beckham, USACE Louisville
Mark Krivansky, AEC
John Miller, EQM
Maj. Ed Meade, OHARNG RTLS
Mark Nichter, USACE Louisville

ec: Mike Eberle, Ohio EPA, NEDO, DERR
Todd Fisher, Ohio EPA, NEDO, DERR

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DRAFT

FACILITY-WIDE GROUNDWATER MONITORING PROGRAM

INVESTIGATION-DERIVED WASTE CHARACTERIZATION AND DISPOSAL PLAN JANUARY 2010 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

February 11, 2010

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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

Investigative activities were conducted during the Facility Wide Groundwater Monitoring Program sampling events in January 2010 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 January 2010 sampling event. The purge water collected from the 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 2010-1	55 Gal. Steel	Decontamination/Rinse Water	~20-gallons	Equipment Rinse/Decontamination
EQM 2010-2	55 Gal. Steel	Purge water	~35-gallons	Load Lines 1, 3, and 11; Ramsdell Quarry; 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 January2010 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-MWPURGEJAN2010	Arsenic	0.0037 mg/L J	5.0 mg/L	No
	Barium	0.024 mg/L J	100 mg/L	No
	Flashpoint	>180°F	<140°F	No
	pH	8.0	<2 or >12.5	No
FWG-IDW-MWDECONJAN2010	Arsenic	0.015 mg/L J	5.0 mg/L	No
	Barium	0.23 mg/L J	100 mg/L	No
	Chromium	0.0066 mg/L J	5.0 mg/L	No
	Lead	0.0067 mg/L J	5.0 mg/L	No
	Flashpoint	>180°F	<140°F	No
	pH	9.9	<2 or >12.5	No
TRIP BLANK	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).

5.3 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 2010-1	Water	Maximum Concentration of Contaminants NOT exceeded	Off-Site Non-Hazardous Disposal
EQM 2010-2	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. 030240.0006

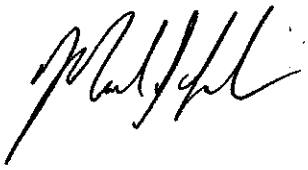
RVAAP

Lot #: A0A210571

Erik Corbin

Environmental Quality Mgt., I
1800 Carillon Blvd
Cincinnati, OH 45240

TESTAMERICA LABORATORIES, INC.



Approved for release.
Mark J. Loeb
Project Manager II
2/9/2010 12:53 PM

Mark J. Loeb
Project Manager
mark.loeb@testamericainc.com

February 8, 2010

TestAmerica Laboratories, Inc.
TestAmerica North Canton 4101 Shuffel Street NW, North Canton, OH 44720
Tel (330)497-9396 Fax (330)497-0772 www.testamericainc.com

ACCREDITED IN ACCORDANCE WITH nelac

CASE NARRATIVE

A0A210571

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 Site, project number 030240.0006. The samples were received January 21, 2010, according to documented sample acceptance procedures.

The 7.3.3 Reactive Cyanide and 7.3.4 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 February 04, 2010. 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.

All parameters were evaluated to the method detection limit and include qualified results where applicable.

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 temperature of the cooler upon sample receipt was 3.2°C.

GC/MS VOLATILES

There were no client requested Matrix Spike/Matrix Spike Duplicate (MS/MSD) samples in batch(es) 0032217. 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) 0026044. 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.

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.

EXECUTIVE SUMMARY - Detection Highlights

A0A210571

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWG-IDW-MWDECON JAN 2010 01/21/10 11:45 001				
Arsenic - TCLP	0.015 B	0.50	mg/L	SW846 6010B
Barium - TCLP	0.23 B	10.0	mg/L	SW846 6010B
Chromium - TCLP	0.0066 B	0.50	mg/L	SW846 6010B
Lead - TCLP	0.0067 B	0.50	mg/L	SW846 6010B
Flashpoint	>180		deg F	SW846 1010
pH (liquid)	9.9		No Units	SW846 9040B
FWG-IDW-MWPURGE JAN 2010 01/21/10 11:55 002				
Arsenic - TCLP	0.0037 B	0.50	mg/L	SW846 6010B
Barium - TCLP	0.024 B	10.0	mg/L	SW846 6010B
Flashpoint	>180		deg F	SW846 1010
pH (liquid)	8.0		No Units	SW846 9040B

ANALYTICAL METHODS SUMMARY

A0A210571

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

A0A210571

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LTJH7	001	FWG-IDW-MWDECON JAN 2010	01/21/10	11:45
LTJKC	002	FWG-IDW-MWPURGE JAN 2010	01/21/10	11:55
LTJKF	003	FWGIDW-Trip	01/21/10	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-MWDECON JAN 2010

TCLP GC/MS Volatiles

Lot-Sample #...: A0A210571-001 **Work Order #...:** LTJH71AA **Matrix.....:** WG
Date Sampled...: 01/21/10 11:45 **Date Received..:** 01/21/10
Leach Date.....: 01/25/10 **Prep Date.....:** 02/01/10 **Analysis Date..:** 02/01/10
Leach Batch #..: P002504 **Prep Batch #...:** 0032221
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	104	(86 - 125)
1,2-Dichloroethane-d4	103	(80 - 122)
Toluene-d8	98	(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-MWDECON JAN 2010

TCLP GC/MS Semivolatiles

Lot-Sample #...: A0A210571-001 **Work Order #...:** LTJH71AD **Matrix.....:** WG
Date Sampled...: 01/21/10 11:45 **Date Received..:** 01/21/10
Leach Date.....: 01/25/10 **Prep Date.....:** 01/26/10 **Analysis Date..:** 01/27/10
Leach Batch #..: P002502 **Prep Batch #...:** 0026044
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	41	(27 - 110)
2-Fluorobiphenyl	40	(20 - 110)
Terphenyl-d14	68	(44 - 110)
Phenol-d5	26	(10 - 110)
2-Fluorophenol	30	(10 - 110)
2,4,6-Tribromophenol	42	(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-MWDECON JAN 2010

TCLP Metals

Lot-Sample #...: A0A210571-001 **Matrix.....:** WG
Date Sampled...: 01/21/10 11:45 **Date Received..:** 01/21/10
Leach Date.....: 01/25/10 **Leach Batch #..:** P002502

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0027015						
Mercury	ND	0.0020	mg/L	SW846 7470A	01/27/10	LTJH71AN
		Dilution Factor: 1		MDL.....: 0.00012		
Arsenic	**0.015 B**	**0.50**	**mg/L**	**SW846 6010B**	**01/27-01/28/10**	**LTJH71AF**
		Dilution Factor: 1		MDL.....: 0.0032		
Barium	**0.23 B**	**10.0**	**mg/L**	**SW846 6010B**	**01/27-01/28/10**	**LTJH71AG**
		Dilution Factor: 1		MDL.....: 0.00067		
Cadmium	ND	0.10	mg/L	SW846 6010B	01/27-01/28/10	LTJH71AH
		Dilution Factor: 1		MDL.....: 0.00066		
Chromium	**0.0066 B**	**0.50**	**mg/L**	**SW846 6010B**	**01/27-01/28/10**	**LTJH71AJ**
		Dilution Factor: 1		MDL.....: 0.0022		
Lead	**0.0067 B**	**0.50**	**mg/L**	**SW846 6010B**	**01/27-01/28/10**	**LTJH71AK**
		Dilution Factor: 1		MDL.....: 0.0019		
Selenium	ND	0.25	mg/L	SW846 6010B	01/27-01/28/10	LTJH71AL
		Dilution Factor: 1		MDL.....: 0.0041		
Silver	ND	0.50	mg/L	SW846 6010B	01/27-01/28/10	LTJH71AM
		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-MWDECON JAN 2010

General Chemistry

Lot-Sample #...: A0A210571-001 Work Order #...: LTJH7 Matrix.....: WG
Date Sampled...: 01/21/10 11:45 Date Received..: 01/21/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (liquid)	9.9		No Units	SW846 9040B	01/21/10	0022057
	Dilution Factor: 1			MDL.....:		
Flashpoint	>180		deg F	SW846 1010	02/03/10	0034407
	Dilution Factor: 1			MDL.....:		

Environmental Quality Mgt., Inc.

Client Sample ID: FWG-IDW-MWPURGE JAN 2010

TCLP GC/MS Volatiles

Lot-Sample #...: A0A210571-002 **Work Order #...:** LTJKC1AA **Matrix.....:** WG
Date Sampled...: 01/21/10 11:55 **Date Received..:** 01/21/10
Leach Date.....: 01/25/10 **Prep Date.....:** 02/01/10 **Analysis Date..:** 02/01/10
Leach Batch #..: P002504 **Prep Batch #...:** 0032221
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	105	(86 - 125)
1,2-Dichloroethane-d4	100	(80 - 122)
Toluene-d8	97	(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-MWPURGE JAN 2010

TCLP GC/MS Semivolatiles

Lot-Sample #...: A0A210571-002 **Work Order #...:** LTJKC1AD **Matrix.....:** WG
Date Sampled...: 01/21/10 11:55 **Date Received..:** 01/21/10
Leach Date.....: 01/25/10 **Prep Date.....:** 01/26/10 **Analysis Date..:** 01/27/10
Leach Batch #..: P002502 **Prep Batch #...:** 0026044
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-Trichlorophenol	ND	0.020	mg/L	0.00030
2,4,6-Trichlorophenol	ND	0.020	mg/L	0.00080

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	49	(27 - 110)
2-Fluorobiphenyl	50	(20 - 110)
Terphenyl-d14	83	(44 - 110)
Phenol-d5	37	(10 - 110)
2-Fluorophenol	43	(10 - 110)
2,4,6-Tribromophenol	54	(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-MWPURGE JAN 2010

TCLP Metals

Lot-Sample #...: A0A210571-002 **Matrix.....:** WG
Date Sampled...: 01/21/10 11:55 **Date Received..:** 01/21/10
Leach Date.....: 01/25/10 **Leach Batch #..:** P002502

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0027015						
Mercury	ND	0.0020	mg/L	SW846 7470A	01/27/10	LTJKC1AN
		Dilution Factor: 1		MDL.....: 0.00012		
Arsenic	**0.0037 B**	**0.50**	**mg/L**	**SW846 6010B**	**01/27-01/28/10**	**LTJKC1AF**
		Dilution Factor: 1		MDL.....: 0.0032		
Barium	**0.024 B**	**10.0**	**mg/L**	**SW846 6010B**	**01/27-01/28/10**	**LTJKC1AG**
		Dilution Factor: 1		MDL.....: 0.00067		
Cadmium	ND	0.10	mg/L	SW846 6010B	01/27-01/28/10	LTJKC1AH
		Dilution Factor: 1		MDL.....: 0.00066		
Chromium	ND	0.50	mg/L	SW846 6010B	01/27-01/28/10	LTJKC1AJ
		Dilution Factor: 1		MDL.....: 0.0022		
Lead	ND	0.50	mg/L	SW846 6010B	01/27-01/28/10	LTJKC1AK
		Dilution Factor: 1		MDL.....: 0.0019		
Selenium	ND	0.25	mg/L	SW846 6010B	01/27-01/28/10	LTJKC1AL
		Dilution Factor: 1		MDL.....: 0.0041		
Silver	ND	0.50	mg/L	SW846 6010B	01/27-01/28/10	LTJKC1AM
		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-MWPURGE JAN 2010

General Chemistry

Lot-Sample #...: A0A210571-002 **Work Order #...:** LTJKC **Matrix.....:** WG
Date Sampled...: 01/21/10 11:55 **Date Received..:** 01/21/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (liquid)	**8.0**		**No Units**	**SW846 9040B**	**01/21/10**	**0022057**
		Dilution Factor: 1		MDL.....:		
Flashpoint	**>180**		**deg F**	**SW846 1010**	**02/03/10**	**0034407**
		Dilution Factor: 1		MDL.....:		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGIDW-Trip

GC/MS Volatiles

Lot-Sample #...: A0A210571-003 **Work Order #...:** LTJKF1AC **Matrix.....:** WQ
Date Sampled...: 01/21/10 11:00 **Date Received..:** 01/21/10
Prep Date.....: 02/01/10 **Analysis Date..:** 02/01/10
Prep Batch #...: 0032217
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	95	(78 - 115)
1,2-Dichloroethane-d4	91	(77 - 120)
Toluene-d8	88	(78 - 111)
4-Bromofluorobenzene	86	(80 - 114)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

QUALITY CONTROL SECTION

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A0A210571 **Work Order #...:** LT2EN1AA **Matrix.....:** WATER
MB Lot-Sample #: A0B010000-217

Prep Date.....: 02/01/10
Analysis Date..: 02/01/10 **Prep Batch #...:** 0032217
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	5.0	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
2-Butanone (MEK)	ND	20	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	105	(78 - 115)
1,2-Dichloroethane-d4	101	(77 - 120)
Toluene-d8	99	(78 - 111)
4-Bromofluorobenzene	95	(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 #...: A0A210571 **Work Order #...:** LT2ER1AA **Matrix.....:** WATER
MB Lot-Sample #: A0B010000-221
Leach Date.....: 01/25/10 **Prep Date.....:** 02/01/10 **Analysis Date..:** 02/01/10
Leach Batch #..: P002504 **Prep Batch #...:** 0032221
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	106	(86 - 125)
1,2-Dichloroethane-d4	103	(80 - 122)
Toluene-d8	100	(90 - 122)
4-Bromofluorobenzene	98	(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 #...: A0A210571 **Work Order #...:** LTQER1AA **Matrix.....:** WATER
MB Lot-Sample #: A0A260000-044
Leach Date.....: 01/25/10 **Prep Date.....:** 01/26/10 **Analysis Date..:** 01/27/10
Leach Batch #..: P002502 **Prep Batch #...:** 0026044
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	42	(27 - 110)
2-Fluorobiphenyl	40	(20 - 110)
Terphenyl-d14	75	(44 - 110)
Phenol-d5	33	(10 - 110)
2-Fluorophenol	38	(10 - 110)
2,4,6-Tribromophenol	57	(28 - 110)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

TCLP Metals

Client Lot #...: A0A210571 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A0A250000-056 **Prep Batch #...:** 0027015						
Leach Date.....: 01/25/10 **Leach Batch #..:** P002502						
Mercury	ND	0.0020	mg/L	SW846 7470A	01/27/10	LTN191AJ
		Dilution Factor: 1				
Arsenic	**0.0038 B**	**0.50**	**mg/L**	**SW846 6010B**	**01/27-01/28/10**	**LTN191AA**
		Dilution Factor: 1				
Barium	**0.0016 B**	**10.0**	**mg/L**	**SW846 6010B**	**01/27-01/28/10**	**LTN191AC**
		Dilution Factor: 1				
Cadmium	ND	0.10	mg/L	SW846 6010B	01/27-01/28/10	LTN191AD
		Dilution Factor: 1				
Chromium	ND	0.50	mg/L	SW846 6010B	01/27-01/28/10	LTN191AE
		Dilution Factor: 1				
Lead	ND	0.50	mg/L	SW846 6010B	01/27-01/28/10	LTN191AF
		Dilution Factor: 1				
Selenium	ND	0.25	mg/L	SW846 6010B	01/27-01/28/10	LTN191AG
		Dilution Factor: 1				
Silver	ND	0.50	mg/L	SW846 6010B	01/27-01/28/10	LTN191AH
		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 #...: A0A210571 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A0A270000-015 **Prep Batch #...:** 0027015						
Mercury	ND	0.0020	mg/L	SW846 7470A	01/27/10	LTR5L1AJ
		Dilution Factor: 1				
Arsenic	ND	0.50	mg/L	SW846 6010B	01/27-01/28/10	LTR5L1AA
		Dilution Factor: 1				
Barium	ND	10.0	mg/L	SW846 6010B	01/27-01/28/10	LTR5L1AC
		Dilution Factor: 1				
Cadmium	ND	0.10	mg/L	SW846 6010B	01/27-01/28/10	LTR5L1AD
		Dilution Factor: 1				
Chromium	ND	0.50	mg/L	SW846 6010B	01/27-01/28/10	LTR5L1AE
		Dilution Factor: 1				
Lead	ND	0.50	mg/L	SW846 6010B	01/27-01/28/10	LTR5L1AF
		Dilution Factor: 1				
Selenium	ND	0.25	mg/L	SW846 6010B	01/27-01/28/10	LTR5L1AG
		Dilution Factor: 1				
Silver	ND	0.50	mg/L	SW846 6010B	01/27-01/28/10	LTR5L1AH
		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 #...: A0A210571 **Work Order #...:** LT2EN1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A0B010000-217 LT2EN1AD-LCSD
Prep Date.....: 02/01/10 **Analysis Date..:** 02/01/10
Prep Batch #...: 0032217
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Vinyl chloride	90	(55 - 121)			SW846 8260B
	93	(55 - 121)	4.0	(0-30)	SW846 8260B
1,1-Dichloroethylene	**110**	**(65 - 119)**			**SW846 8260B**
	117	**(65 - 119)**	**5.5**	**(0-20)**	**SW846 8260B**
Chloroform	98	(87 - 119)			SW846 8260B
	103	(87 - 119)	5.6	(0-30)	SW846 8260B
1,2-Dichloroethane	95	(83 - 122)			SW846 8260B
	99	(83 - 122)	3.8	(0-30)	SW846 8260B
2-Butanone (MEK)	82	(53 - 173)			SW846 8260B
	88	(53 - 173)	7.2	(0-40)	SW846 8260B
Carbon tetrachloride	106	(81 - 126)			SW846 8260B
	109	(81 - 126)	2.6	(0-30)	SW846 8260B
Trichloroethylene	**97**	**(80 - 122)**			**SW846 8260B**
	101	**(80 - 122)**	**4.5**	**(0-20)**	**SW846 8260B**
Benzene	**98**	**(79 - 116)**			**SW846 8260B**
	103	**(79 - 116)**	**4.2**	**(0-20)**	**SW846 8260B**
Tetrachloroethylene	96	(83 - 116)			SW846 8260B
	101	(83 - 116)	5.0	(0-30)	SW846 8260B
Chlorobenzene	**95**	**(81 - 115)**			**SW846 8260B**
	100	**(81 - 115)**	**4.7**	**(0-20)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	101	(78 - 115)
	105	(78 - 115)
1,2-Dichloroethane-d4	97	(77 - 120)
	98	(77 - 120)
Toluene-d8	99	(78 - 111)
	101	(78 - 111)
4-Bromofluorobenzene	102	(80 - 114)
	105	(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 #...: A0A210571 **Work Order #...:** LT2ER1AC **Matrix.....:** WATER
LCS Lot-Sample#: A0B010000-221
Prep Date.....: 02/01/10 **Analysis Date..:** 02/01/10
Prep Batch #...: 0032221
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Benzene	**101**	**(76 - 118)**	**SW846 8260B**
2-Butanone (MEK)	87	(40 - 110)	SW846 8260B
Carbon tetrachloride	108	(71 - 124)	SW846 8260B
Chlorobenzene	**98**	**(76 - 113)**	**SW846 8260B**
Chloroform	103	(82 - 117)	SW846 8260B
1,2-Dichloroethane	99	(78 - 122)	SW846 8260B
1,1-Dichloroethylene	**115**	**(67 - 128)**	**SW846 8260B**
Tetrachloroethylene	101	(64 - 121)	SW846 8260B
Trichloroethylene	**100**	**(76 - 119)**	**SW846 8260B**
Vinyl chloride	91	(47 - 123)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	105	(86 - 124)
1,2-Dichloroethane-d4	98	(80 - 122)
Toluene-d8	102	(90 - 122)
4-Bromofluorobenzene	106	(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 #...: A0A210571 **Work Order #...:** LTQER1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A0A260000-044 LTQER1AD-LCSD
Prep Date.....: 01/26/10 **Analysis Date..:** 01/27/10
Prep Batch #...: 0026044
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
o-Cresol	71	(23 - 110)			SW846 8270C
	63	(23 - 110)	12	(0-30)	SW846 8270C
m-Cresol & p-Cresol	73	(28 - 110)			SW846 8270C
	66	(28 - 110)	11	(0-30)	SW846 8270C
1,4-Dichlorobenzene	57	(13 - 110)			SW846 8270C
	49	(13 - 110)	15	(0-30)	SW846 8270C
2,4-Dinitrotoluene	75	(45 - 119)			SW846 8270C
	80	(45 - 119)	6.4	(0-30)	SW846 8270C
Hexachlorobenzene	73	(46 - 112)			SW846 8270C
	75	(46 - 112)	3.0	(0-30)	SW846 8270C
Hexachlorobutadiene	57	(10 - 110)			SW846 8270C
	49	(10 - 110)	15	(0-30)	SW846 8270C
Hexachloroethane	52	(10 - 110)			SW846 8270C
	43	(10 - 110)	18	(0-30)	SW846 8270C
Nitrobenzene	70	(29 - 118)			SW846 8270C
	63	(29 - 118)	10	(0-30)	SW846 8270C
Pentachlorophenol	77	(10 - 116)			SW846 8270C
	80	(10 - 116)	4.0	(0-30)	SW846 8270C
Pyridine	70	(15 - 110)			SW846 8270C
	60	(15 - 110)	15	(0-30)	SW846 8270C
2,4,5-Trichlorophenol	73	(36 - 110)			SW846 8270C
	76	(36 - 110)	4.1	(0-30)	SW846 8270C
2,4,6-Trichlorophenol	71	(32 - 110)			SW846 8270C
	71	(32 - 110)	0.37	(0-30)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	64	(27 - 110)
	60	(27 - 110)
2-Fluorobiphenyl	64	(20 - 110)
	62	(20 - 110)
Terphenyl-d14	84	(44 - 110)
	85	(44 - 110)
Phenol-d5	57	(10 - 110)
	55	(10 - 110)
2-Fluorophenol	64	(10 - 110)

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0A210571 **Work Order #...:** LTQER1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A0A260000-044 LTQER1AD-LCSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
	59	(10 - 110)
2,4,6-Tribromophenol	72	(28 - 110)
	76	(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 #...: A0A210571 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A0A270000-015 **Prep Batch #...:** 0027015					
Mercury	128	(50 - 150)	SW846 7470A Dilution Factor: 1	01/27/10	LTR5L1AT
Arsenic	114	(50 - 150)	SW846 6010B Dilution Factor: 1	01/27-01/28/10	LTR5L1AK
Barium	99	(50 - 150)	SW846 6010B Dilution Factor: 1	01/27-01/28/10	LTR5L1AL
Cadmium	114	(50 - 150)	SW846 6010B Dilution Factor: 1	01/27-01/28/10	LTR5L1AM
Chromium	108	(50 - 150)	SW846 6010B Dilution Factor: 1	01/27-01/28/10	LTR5L1AN
Lead	112	(50 - 150)	SW846 6010B Dilution Factor: 1	01/27-01/28/10	LTR5L1AP
Selenium	116	(50 - 150)	SW846 6010B Dilution Factor: 1	01/27-01/28/10	LTR5L1AQ
Silver	106	(50 - 150)	SW846 6010B Dilution Factor: 1	01/27-01/28/10	LTR5L1AR

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A0A210571 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (liquid)		Work Order #: LTKX91AA	LCS Lot-Sample#: A0A220000-057		
	100	(97 - 103)	SW846 9040B	01/21/10	0022057
		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 #...: A0A210571 **Work Order #...:** LTJKC1AV-MS **Matrix.....:** WG
MS Lot-Sample #: A0A210571-002 LTJKC1AW-MSD
Date Sampled...: 01/21/10 11:55 **Date Received..:** 01/21/10
Leach Date.....: 01/25/10 **Prep Date.....:** 02/01/10 **Analysis Date..:** 02/01/10
Leach Batch #..: P002504 **Prep Batch #...:** 0032221
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**101**	**(76 - 117)**			**SW846 8260B**
	101	**(76 - 117)**	**0.0**	**(0-30)**	**SW846 8260B**
2-Butanone (MEK)	91	(37 - 110)			SW846 8260B
	91	(37 - 110)	0.32	(0-30)	SW846 8260B
Carbon tetrachloride	100	(72 - 124)			SW846 8260B
	106	(72 - 124)	6.6	(0-30)	SW846 8260B
Chlorobenzene	**97**	**(72 - 114)**			**SW846 8260B**
	99	**(72 - 114)**	**1.7**	**(0-30)**	**SW846 8260B**
Chloroform	101	(82 - 117)			SW846 8260B
	102	(82 - 117)	0.86	(0-30)	SW846 8260B
1,2-Dichloroethane	98	(80 - 120)			SW846 8260B
	98	(80 - 120)	0.20	(0-30)	SW846 8260B
1,1-Dichloroethylene	**112**	**(67 - 129)**			**SW846 8260B**
	115	**(67 - 129)**	**2.5**	**(0-30)**	**SW846 8260B**
Tetrachloroethylene	99	(60 - 119)			SW846 8260B
	102	(60 - 119)	3.3	(0-30)	SW846 8260B
Trichloroethylene	**101**	**(72 - 121)**			**SW846 8260B**
	100	**(72 - 121)**	**0.86**	**(0-30)**	**SW846 8260B**
Vinyl chloride	91	(54 - 118)			SW846 8260B
	92	(54 - 118)	1.9	(0-30)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	104	(86 - 125)
	103	(86 - 125)
1,2-Dichloroethane-d4	101	(80 - 122)
	96	(80 - 122)
Toluene-d8	101	(90 - 122)
	100	(90 - 122)
4-Bromofluorobenzene	104	(84 - 125)
	106	(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

Client Lot #...: A0A210571 **Matrix.....:** WATER
Date Sampled...: 01/22/10 12:00 **Date Received..:** 01/22/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A0A220589-001 **Prep Batch #...:** 0027015							
Leach Date.....: 01/25/10 **Leach Batch #..:** P002502							
Mercury	129	(50 - 150)			SW846 7470A	01/27/10	LTMGK1A6
	128	(50 - 150)	0.96	(0-20)	SW846 7470A	01/27/10	LTMGK1A7
		Dilution Factor: 1					
Arsenic	113	(50 - 150)			SW846 6010B	01/27-01/28/10	LTMGK1AP
	110	(50 - 150)	2.7	(0-20)	SW846 6010B	01/27-01/28/10	LTMGK1AQ
		Dilution Factor: 5					
Barium	98	(50 - 150)			SW846 6010B	01/27-01/28/10	LTMGK1AR
	95	(50 - 150)	3.2	(0-20)	SW846 6010B	01/27-01/28/10	LTMGK1AT
		Dilution Factor: 5					
Cadmium	115	(50 - 150)			SW846 6010B	01/27-01/28/10	LTMGK1AU
	112	(50 - 150)	3.0	(0-20)	SW846 6010B	01/27-01/28/10	LTMGK1AV
		Dilution Factor: 5					
Chromium	111	(50 - 150)			SW846 6010B	01/27-01/28/10	LTMGK1AW
	107	(50 - 150)	3.7	(0-20)	SW846 6010B	01/27-01/28/10	LTMGK1AX
		Dilution Factor: 5					
Lead	116	(50 - 150)			SW846 6010B	01/27-01/28/10	LTMGK1A0
	113	(50 - 150)	2.0	(0-20)	SW846 6010B	01/27-01/28/10	LTMGK1A1
		Dilution Factor: 5					
Selenium	108	(50 - 150)			SW846 6010B	01/27-01/28/10	LTMGK1A2
	108	(50 - 150)	0.24	(0-20)	SW846 6010B	01/27-01/28/10	LTMGK1A3
		Dilution Factor: 5					
Silver	104	(50 - 150)			SW846 6010B	01/27-01/28/10	LTMGK1A4
	101	(50 - 150)	2.6	(0-20)	SW846 6010B	01/27-01/28/10	LTMGK1A5
		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 #...: A0A210571 **Work Order #...:** LTJKC-SMP LTJKC-DUP **Matrix.....:** WG

Date Sampled...: 01/21/10 11:55 **Date Received..:** 01/21/10

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (liquid)						SD Lot-Sample #:	A0A210571-002	
	8.0	8.0	No Units	0.13	(0-20)	SW846 9040B	01/21/10	0022057

Dilution Factor: 1

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A0A210571 **Work Order #...:** LTJH7-SMP LTJH7-DUP **Matrix.....:** WG

Date Sampled...: 01/21/10 11:45 **Date Received..:** 01/21/10

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Flashpoint						SD Lot-Sample #: A0A210571-001		
	>180	>180	deg F	0.0	(0-20)	SW846 1010	02/03/10	0034407

Dilution Factor: 1

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A0A210571 **Work Order #...:** LTLP5-SMP LTLP5-DUP **Matrix.....:** SOLID

Date Sampled...: 01/21/10 09:30 **Date Received..:** 01/22/10

% Moisture.....: 8.4

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Flashpoint						SD Lot-Sample #: A0A220482-001		
	>180	>180	deg F	0.0	(0-20)	SW846 1010	02/03/10	0034407

Dilution Factor: 1

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____

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: D. M. Loeb.	COC No:
Address: 1800 Carillon Blvd	Telephone:	Telephone:	Telephone: 330-497-9396	1 of 1 COCs
City/State/Zip: Cinti / OH / 45240	Email:			
Phone: 513-825-7500				
Project Name: RVAAP	Method of Shipment/Carrier: N/A Lab Pickup			
Project Number: 030240.0006	Shipping/Tracking No:			
PO# 156160				

Analysis Turnaround Time (CALENDAR DAYS)
TAT if different from below _____
☐ 3 weeks
☐ 2 weeks
☑ 1 week
☐ 2 days
☐ 1 day

For lab use only
Walk-in-client ☐
Lab pickup ☐
Lab sampling ☐
Job/SDG no.

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite C Grab	Analyses: Tcl VOC	Tcl SVOC	Tcl Metals/Mercury	Reactive Cyanide	Reactive Sulfide	pH	Flashpoint	VOC			Sample Specific Notes / Special Instructions:
FWG-IDW-MW DECON Jan 2010	1/21/10	1145 ~~1130~~		X								AD 1/21/10	4	8			X	X	X	X	X	X	X				Cooler H112
FWG-IDW-MW PURGE Jan 2010		1155											8				X	X	X	X	X	X	X				↓
FWG IDW-Trip	1/21/10	1100															X	[illegible] 1/21/10						X			

1/21/10

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:
TAT 5 days

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	EQM	1/21/10 1200	[signature]	TestAmerica	1/21/10 1200
[signature]	TestAmerica	1/21/10 1340			
			Received in Laboratory by: [signature]	TA	1/21/10 1340

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TAL-0018 (1008)

TestAmerica Cooler Receipt Form/Narrative **Lot Number:** 240A21657 1
North Canton Facility

Client EQM Project RVAAP-IDW By: (Signature)
Cooler Received on 1/21/10 Opened on 1/21/10
FedEx ☐ UPS ☐ DHL ☐ FAS ☐ Stetson ☐ Client Drop Off ☒ TestAmerica Courier ☒ Other
TestAmerica Cooler # H112 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
6. Cooler temperature upon receipt 3.2 °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#* 082509-HNO_3; *Sulfuric Acid Lot#* 082509-H_2SO_4; *Sodium Hydroxide Lot#* 100108 -*NaOH; Hydrochloric Acid Lot#* 092006-*HCl; Sodium Hydroxide and Zinc Acetate Lot#* 100108-$(CH_3COO)_2ZN/NaOH$. 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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

BUFFALO DATA

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Analytical Report

SDG Number: A0A210571

Project Description(s)
Work Order RTA0951 - Reactive Cyanide / Reactive Sulfide

For:

Mark Loeb

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

Sally J Hoffman

Sally Hoffman
Project Manager
Sally.Hoffman@testamericainc.com
Wednesday, January 27, 2010

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 North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A0A210571

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A0A210571

Received: 01/22/10
Reported: 01/27/10 10:42

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 accreditation is required or available. Any exceptions to NELAP requirements are noted in this report.

SAMPLE DATA SUMMARY PACKAGE

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A0A210571

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A0A210571

Received: 01/22/10
Reported: 01/27/10 10:42

Sample Summary

Sample Identification	Lab Number	Client Matrix	Date/Time Sampled	Date/Time Received	Sample Qualifiers
FWG-IDW-MWDECON JAN 2010	RTA0951-01	Water	01/21/10 11:45	01/22/10 09:15	
FWG-IDW-MWPURGE JAN 2010	RTA0951-02	Water	01/21/10 11:55	01/22/10 09:15	

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A0A210571

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A0A210571

Received: 01/22/10
Reported: 01/27/10 10:42

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: A0A210571

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A0A210571

Received: 01/22/10
Reported: 01/27/10 10:42

Executive Summary - Detections

Analyte	Sample Result	Data Qualifiers	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
			Sampled:			Recvd:		

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A0A210571

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A0A210571

Received: 01/22/10
Reported: 01/27/10 10:42

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: FWG-IDW-MWDECON JAN 2010 (RTA0951-01 - Water)						**Sampled: 01/21/10 11:45**		**Recvd: 01/22/10 09:15**	
General Chemistry Parameters									
HCN Released From Waste	ND		10.0	mg/L	1.00	01/26/10 13:08	RJP	10A1555	Section 7.3
H2S Released From Waste	ND		10.0	mg/L	1.00	01/26/10 10:00	RJP	10A1559	Section 7.3

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A0A210571

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A0A210571

Received: 01/22/10
Reported: 01/27/10 10:42

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: FWG-IDW-MWPURGE JAN 2010 (RTA0951-02 - Water)						**Sampled: 01/21/10 11:55**		**Recvd: 01/22/10 09:15**	
General Chemistry Parameters									
HCN Released From Waste	ND		10.0	mg/L	1.00	01/26/10 13:08	RJP	10A1555	Section 7.3
H2S Released From Waste	ND		10.0	mg/L	1.00	01/26/10 10:00	RJP	10A1559	Section 7.3

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A0A210571

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A0A210571

Received: 01/22/10
Reported: 01/27/10 10:42

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	10A1559	RTA0951-01	100.00	mL	100.00	mL	01/26/10 10:00	RJP	Reactivity
Section 7.3	10A1559	RTA0951-02	100.00	mL	100.00	mL	01/26/10 10:00	RJP	Reactivity
Section 7.3	10A1555	RTA0951-01	5.00	mL	5.00	mL	01/26/10 13:08	RJP	Reactivity
Section 7.3	10A1555	RTA0951-02	5.00	mL	5.00	mL	01/26/10 13:08	RJP	Reactivity

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A0A210571

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A0A210571

Received: 01/22/10
Reported: 01/27/10 10:42

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.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverables has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Sally Hoffman
Project Manager

Wednesday, January 27, 2010

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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.

QUALITY CONTROL DATA

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A0A210571

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A0A210571

Received: 01/22/10
Reported: 01/27/10 10:42

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
General Chemistry Parameters										
Blank Analyzed: 01/26/10 (Lab Number:10A1555-BLK1, Batch: 10A1555)										
HCN Released From Waste			10.0	mg/L	ND					
LCS Analyzed: 01/26/10 (Lab Number:10A1555-BS1, Batch: 10A1555)										
HCN Released From Waste		1000	10.0	mg/L	534	53	10-100			
Duplicate Analyzed: 01/26/10 (Lab Number:10A1555-DUP1, Batch: 10A1555)										
QC Source Sample: RTA0951-01										
HCN Released From Waste	0.945		10.0	mg/L	0.955			1	20	
General Chemistry Parameters										
Blank Analyzed: 01/26/10 (Lab Number:10A1559-BLK1, Batch: 10A1559)										
H2S Released From Waste			10.0	mg/L	ND					
LCS Analyzed: 01/26/10 (Lab Number:10A1559-BS1, Batch: 10A1559)										
H2S Released From Waste		570	10.0	mg/L	140	25	10-100			
Duplicate Analyzed: 01/26/10 (Lab Number:10A1559-DUP1, Batch: 10A1559)										
QC Source Sample: RTA0951-01										
H2S Released From Waste	ND		10.0	mg/L	ND				20	

SAMPLE DATA PACKAGE

SDG NARRATIVE

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A0A210571

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A0A210571

Received: 01/22/10
Reported: 01/27/10 10:42

Sample Summary

Sample Identification	Lab Number	Client Matrix	Date/Time Sampled	Date/Time Received	Sample Qualifiers
FWG-IDW-MWDECON JAN 2010	RTA0951-01	Water	01/21/10 11:45	01/22/10 09:15	
FWG-IDW-MWPURGE JAN 2010	RTA0951-02	Water	01/21/10 11:55	01/22/10 09:15	

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A0A210571

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A0A210571

Received: 01/22/10
Reported: 01/27/10 10:42

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: A0A210571

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A0A210571

Received: 01/22/10
Reported: 01/27/10 10:42

Executive Summary - Detections

Analyte	Sample Result	Data Qualifiers	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
			Sampled:			Recvd:		

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A0A210571

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A0A210571

Received: 01/22/10
Reported: 01/27/10 10:42

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: FWG-IDW-MWPURGE JAN 2010 (RTA0951-02 - Water)						**Sampled: 01/21/10 11:55**		**Recvd: 01/22/10 09:15**	
General Chemistry Parameters									
HCN Released From Waste	ND		10.0	mg/L	1.00	01/26/10 13:08	RJP	10A1555	Section 7.3
H2S Released From Waste	ND		10.0	mg/L	1.00	01/26/10 10:00	RJP	10A1559	Section 7.3

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A0A210571

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A0A210571

Received: 01/22/10
Reported: 01/27/10 10:42

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	10A1559	RTA0951-01	100.00	mL	100.00	mL	01/26/10 10:00	RJP	Reactivity
Section 7.3	10A1559	RTA0951-02	100.00	mL	100.00	mL	01/26/10 10:00	RJP	Reactivity
Section 7.3	10A1555	RTA0951-01	5.00	mL	5.00	mL	01/26/10 13:08	RJP	Reactivity
Section 7.3	10A1555	RTA0951-02	5.00	mL	5.00	mL	01/26/10 13:08	RJP	Reactivity

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A0A210571

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A0A210571

Received: 01/22/10
Reported: 01/27/10 10:42

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.

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Sally Hoffman
Project Manager

Wednesday, January 27, 2010

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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.

CHAIN OF CUSTODY DOCUMENTS

TestAmerica Buffalo

Doc. Login/ARRF
Rev10
December 17, 2009

Work Order RS TA0951 **Storage #** D024

Shipment ID_____ **Strict Internal COC:** YES / NO
Radiation Check <0.02 mR/hr: YES / NO

Residual Chlorine Check: ☐

Client TA NORTH CANTON **Project** REACT

Pre-log RS_____

TAT 9 BD/_____CD # OF SAMPLES 2 TRIP BLANK Y/N # _____

SHIPPED BY Fedex	ATTACH SHIPPING TAGS
RECEIVED DATE / TIME:	1/22/10 09:15

COOLER TEMP 2.0 °C (<6 °C) OK NO

Cooler Custody Seal intact? YES/NO NONE SEAL # _____

If NO to cooler temp or seal, PM notified? YES _____ (PM Name)

WORKSHARE/SUB YES/NO LAB _____ Analysis _____

COMMENTS: SAMPLE TIME (ET) (CT) (MT) (PT) NONE

Sample received outside hold time _____

Condition (Issues) Yes/NO _____

Resolved at login _____ ARRF _____

Tests added from All Analyses list _____

PRESERVATION CHECKED YES___ NO X NA___ Initials _____

ARE SAMPLE DATES AND TIMES CORRECT? Initials _____

WERE ALL THE APPROPRIATE TESTS ASSIGNED? Initials _____

Temp.Cert.Loss:

TestAmerica Laboratories, Inc.

SAMPLE ANALYSIS REQUISTION

Laboratory **TestAmerica Buffalo**
10 Hazelwood Drive
Amherst, NY 14228

Lab Request SR117528

Report Package: **Expanded Deliverables**
Need Analytical Report 2010-02-04

Client Code: 14091

Project Manager: MARK J. LOEB

Sample I.D.	Work Order Number	Client Sample ID	Sampling Date	Analysis Required
A0A210571-1	LTJH7	FWG-IDW-MWDECON JAN 2010 } 2X250	2010-01-21 11:45	WATER, 7.3.3, Reactive Cyanide (Buffalo)
A0A210571-1	LTJH7	FWG-IDW-MWDECON JAN 2010 }	2010-01-21 11:45	WATER, 7.3.4, Reactive Sulfide (Buffalo)
A0A210571-2	LTJKC	FWG-IDW-MWPURGE JAN 2010 } 2X250	2010-01-21 11:55	WATER, 7.3.3, Reactive Cyanide (Buffalo)
A0A210571-2	LTJKC	FWG-IDW-MWPURGE JAN 2010 }	2010-01-21 11:55	WATER, 7.3.4, Reactive Sulfide (Buffalo)

61 of 85

23/46

Please use Client Sample ID for report

Call MARK J. LOEB 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: 1/21/10 5:00 PM

Relinquished by: _____ Date/Time: _____

Received for lab by: [signature] Date/Time: 1/22/10 0847 2.0°C

PLEASE RETURN ORIGINAL SAMPLE ANALYSIS REQUISITION

WET CHEMISTRY DATA

ANALYSES DATA PACKAGE COVER PAGE

Section 7.3

Laboratory: TestAmerica Buffalo
Client: TestAmerica North Canton

SDG: A0A210571
Project: Reactivity - IV

Client Sample Id:	Lab Sample Id:
FWG-IDW-MWDECON JAN 2010	RTA0951-01
FWG-IDW-MWPURGE JAN 2010	RTA0951-02

METHOD DETECTION AND REPORTING LIMITS

Section 7.3

Laboratory: TestAmerica Buffalo **SDG:** A0A210571

Client: TestAmerica North Canton **Project:** Reactivity - IV

Matrix: Water **Instrument:** Inst

Analyte	MDL	MRL	Units
H2S Released From Waste	0.6	10.0	mg/L
HCN Released From Waste	0.0030	10.0	mg/L

Form 1
INORGANIC ANALYSIS DATA SHEET
Section 7.3

/G-IDW-MWDECON JAN 2(

Laboratory: TestAmerica Buffalo
SDG: A0A210571
Client: TestAmerica North Canton
Project: Reactivity - IV
Matrix: Water
Laboratory ID: RTA0951-01
File ID:
Sampled: 01/21/10 11:45
Prepared: 01/26/10 13:08
Analyzed: 01/26/10 13:08
Solids: 0.00
Preparation: Reactivity
Initial/Final: 5 mL / 5 mL
Batch: 10A1555
Sequence:
Calibration:
Instrument: Inst

CAS NO.	Analyte	Concentration	Units	Dilution Factor	Q	Method
74-90-8	HCN Released From Waste	10.0	mg/L	1	U	Section 7.3

Form 1
INORGANIC ANALYSIS DATA SHEET
Section 7.3

VG-IDW-MWDECON JAN 2(

Laboratory: TestAmerica Buffalo
SDG: A0A210571
Client: TestAmerica North Canton
Project: Reactivity - IV
Matrix: Water
Laboratory ID: RTA0951-01
File ID:
Sampled: 01/21/10 11:45
Prepared: 01/26/10 10:00
Analyzed: 01/26/10 10:00
Solids: 0.00
Preparation: Reactivity
Initial/Final: 100 mL / 100 mL
Batch: 10A1559
Sequence:
Calibration:
Instrument: Inst

CAS NO.	Analyte	Concentration	Units	Dilution Factor	Q	Method
7783-06-4	H2S Released From Waste	10.0	mg/L	1	U	Section 7.3

Form 1
INORGANIC ANALYSIS DATA SHEET
Section 7.3

VG-IDW-MWPURGE JAN 2(

Laboratory: TestAmerica Buffalo
SDG: A0A210571
Client: TestAmerica North Canton
Project: Reactivity - IV
Matrix: Water
Laboratory ID: RTA0951-02
File ID:
Sampled: 01/21/10 11:55
Prepared: 01/26/10 13:08
Analyzed: 01/26/10 13:08
Solids: 0.00
Preparation: Reactivity
Initial/Final: 5 mL / 5 mL
Batch: 10A1555
Sequence:
Calibration:
Instrument: Inst

CAS NO.	Analyte	Concentration	Units	Dilution Factor	Q	Method
74-90-8	HCN Released From Waste	10.0	mg/L	1	U	Section 7.3

Form 1

INORGANIC ANALYSIS DATA SHEET

Section 7.3

VG-IDW-MWPURGE JAN 2(

Laboratory: TestAmerica Buffalo
SDG: A0A210571
Client: TestAmerica North Canton
Project: Reactivity - IV
Matrix: Water
Laboratory ID: RTA0951-02
File ID:
Sampled: 01/21/10 11:55
Prepared: 01/26/10 10:00
Analyzed: 01/26/10 10:00
Solids: 0.00
Preparation: Reactivity
Initial/Final: 100 mL / 100 mL
Batch: 10A1559
Sequence:
Calibration:
Instrument: Inst

CAS NO.	Analyte	Concentration	Units	Dilution Factor	Q	Method
7783-06-4	H2S Released From Waste	10.0	mg/L	1	U	Section 7.3

Form 1
METHOD BLANK DATA SHEET
Section 7.3

Laboratory:	TestAmerica Buffalo			SDG:	A0A210571
Client:	TestAmerica North Canton			Project:	Reactivity - IV
Matrix:	Water	Laboratory ID:	10A1555-BLK1	File ID:	
Prepared:	01/26/10 13:08	Preparation:	Reactivity	Initial/Final:	5 mL / 5 mL
Analyzed:	01/26/10 13:08	Instrument:	Inst		
Batch:	10A1555	Sequence:		Calibration:	

CAS NO.	COMPOUND	CONC. (mg/L)	Q
74-90-8	HCN Released From Waste	10.0	U

* Results outside control limits.

Form 1
METHOD BLANK DATA SHEET
Section 7.3

Laboratory:	TestAmerica Buffalo			SDG:	A0A210571
Client:	TestAmerica North Canton			Project:	Reactivity - IV
Matrix:	Water	Laboratory ID:	10A1559-BLK1	File ID:	
Prepared:	01/26/10 10:00	Preparation:	Reactivity	Initial/Final:	100 mL / 100 mL
Analyzed:	01/26/10 10:00	Instrument:	Inst		
Batch:	10A1559	Sequence:		Calibration:	

CAS NO.	COMPOUND	CONC. (mg/L)	Q
7783-06-4	H2S Released From Waste	10.0	U

* Results outside control limits.

DW-MWDECON JA

Form 6
DUPLICATES
Section 7.3

Laboratory: TestAmerica Buffalo
Client: TestAmerica North Canton
Matrix: Water
Batch: 10A1555
Preparation: Reactivity
Source Sample Name: FWG-IDW-MWDECON JAN 2010

SDG: A0A210571
Project: Reactivity - IV
Laboratory ID: 10A1555-DUP1
Lab Source ID: RTA0951-01
Initial/Final: 5 mL / 5 mL
% Solids:

ANALYTE	SAMPLE CONCENTRATION	C	DUPLICATE CONCENTRATION	C	UNITS	% RPD	Q	CONTROL LIMIT	METHOD
HCN Released From Waste	0.945		ND		mg/L			20	Section 7.3

* Values outside of QC limits.

DW-MWDECON JA

Form 6
DUPLICATES
Section 7.3

Laboratory: TestAmerica Buffalo
Client: TestAmerica North Canton
Matrix: Water
Batch: 10A1559
Preparation: Reactivity
Source Sample Name: FWG-IDW-MWDECON JAN 2010

SDG: A0A210571
Project: Reactivity - IV
Laboratory ID: 10A1559-DUP1
Lab Source ID: RTA0951-01
Initial/Final: 100 mL / 100 mL
% Solids:

ANALYTE	SAMPLE CONCENTRATION	C	DUPLICATE CONCENTRATION	C	UNITS	% RPD	Q	CONTROL LIMIT	METHOD
H2S Released From Waste	ND		ND		mg/L			20	Section 7.3

* Values outside of QC limits.

Form 7

LCS / LCS DUPLICATE RECOVERY

Section 7.3

Laboratory:	TestAmerica Buffalo	SDG:	A0A210571
Client:	TestAmerica North Canton	Project:	Reactivity - IV
Matrix:	Water	Spike standard:	RT00370
Batch:	10A1555	Laboratory ID:	10A1555-BS1
Preparation:	Reactivity	Initial/Final:	5 mL / 5 mL

COMPOUND	SPIKE ADDED	UNITS	LCS CONCENTRATION	LCS % REC. #	QCLIMITS REC.
HCN Released From Waste	1000	mg/L	534	53	10 - 100

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Form 7

LCS / LCS DUPLICATE RECOVERY

Section 7.3

Laboratory:	TestAmerica Buffalo	SDG:	A0A210571
Client:	TestAmerica North Canton	Project:	Reactivity - IV
Matrix:	Water	Spike standard:	RT00052
Batch:	10A1559	Laboratory ID:	10A1559-BS1
Preparation:	Reactivity	Initial/Final:	100 mL / 100 mL

COMPOUND	SPIKE ADDED	UNITS	LCS CONCENTRATION	LCS % REC. #	QCLIMITS REC.
H2S Released From Waste	570	mg/L	140	25	10 - 100

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Form 12
PREPARATION BATCH SUMMARY
Section 7.3

Laboratory: TestAmerica Buffalo
SDG: A0A210571
Client: TestAmerica North Canton
Project: Reactivity - IV
Batch: 10A1555 Batch Matrix: Water
Preparation: Reactivity

SAMPLE NAME	LAB SAMPLE ID	INITIAL	FINAL	DATE PREPARED	TOT/DIS
Blank	10A1555-BLK1	5.00 mL	5.00 mL	01/26/10 13:08	Total
LCS	10A1555-BS1	5.00 mL	5.00 mL	01/26/10 13:08	Total
FWG-IDW-MWDECON JAN 2(	10A1555-DUP1	5.00 mL	5.00 mL	01/26/10 13:08	Total
FWG-IDW-MWDECON JAN 2(	RTA0951-01	5.00 mL	5.00 mL	01/26/10 13:08	Total
FWG-IDW-MWPURGE JAN 2(	RTA0951-02	5.00 mL	5.00 mL	01/26/10 13:08	Total

Form 12

PREPARATION BATCH SUMMARY

Section 7.3

Laboratory: TestAmerica Buffalo SDG: A0A210571

Client: TestAmerica North Canton Project: Reactivity - IV

Batch: 10A1559 Batch Matrix: Water Preparation: Reactivity

SAMPLE NAME	LAB SAMPLE ID	INITIAL	FINAL	DATE PREPARED	TOT/DIS
Blank	10A1559-BLK1	100 mL	100 mL	01/26/10 10:00	Total
LCS	10A1559-BS1	100 mL	100 mL	01/26/10 10:00	Total
FWG-IDW-MWDECON JAN 2(	10A1559-DUP1	100 mL	100 mL	01/26/10 10:00	Total
FWG-IDW-MWDECON JAN 2(	RTA0951-01	100 mL	100 mL	01/26/10 10:00	Total
FWG-IDW-MWPURGE JAN 2(	RTA0951-02	100 mL	100 mL	01/26/10 10:00	Total

WET CHEMISTRY RAW DATA

WET CHEMISTRY BATCH SUMMARY

PARAMETER Reactive Cn- METHOD Sect 7.3 BATCH 10A1555

COMMENTS	JOB NUMBER
WC Historical confirms within Hold Time	
WC Historical NO confirm & RE outside of HT	
WC Hold Time Exceedance-Dilution required	
WC Hold Time Exceedance-Instrument Failure	
WC Holding Time Exceedance by Date	
WC Holding Time Exceedance by Hours	
WC LCS within ERA limits outside internal	
WC LCS high recovery, sample ND	
WC MBLK hit but samples > 10X blank value	
WC RPD Exceedance for MS / SD	
WC Spike Failure HIGH MS only	
WC Spike Failure LOW MS only	
WC Spike Failure MS and SD	
WC BOD HT met- Oxygen depleted-RE out HT	
WC Carbonate Alkalinity, LCS/MBLK	
WC Reactivity Qualification	
WC TDS/Conductivity ratio outside of range	
WC TOX Breakthrough- no volume for redo	
WC TOX samples were centrifuged	
Other	

DILUTION CODES	REASON
002	Sample matrix effects
003	Excessive foaming
004	High levels of non-target compounds
008	High concentration of target analytes
009	Sample turbidity
010	Sample color
011	Insufficient volume for lower dilution
012	Sample viscosity
013	other

ICAL Compliant?	YES	NO	(NA)	IF NO, Why?
LCS/CCV Compliant?	(YES)	NO	NA	IF NO, Why?
CCB Compliant?	YES	NO	(NA)	IF NO, Why?
RPD Compliant?	(YES)	NO	NA	IF NO, Why?
ERA Compliant?	YES	NO	(NA)	IF NO, Why?

NUMBER of REANALYSIS FOR THIS BATCH: Ø

Analyst RJP Date 1/26/10

Time Critical Batch Review _____ Date _____

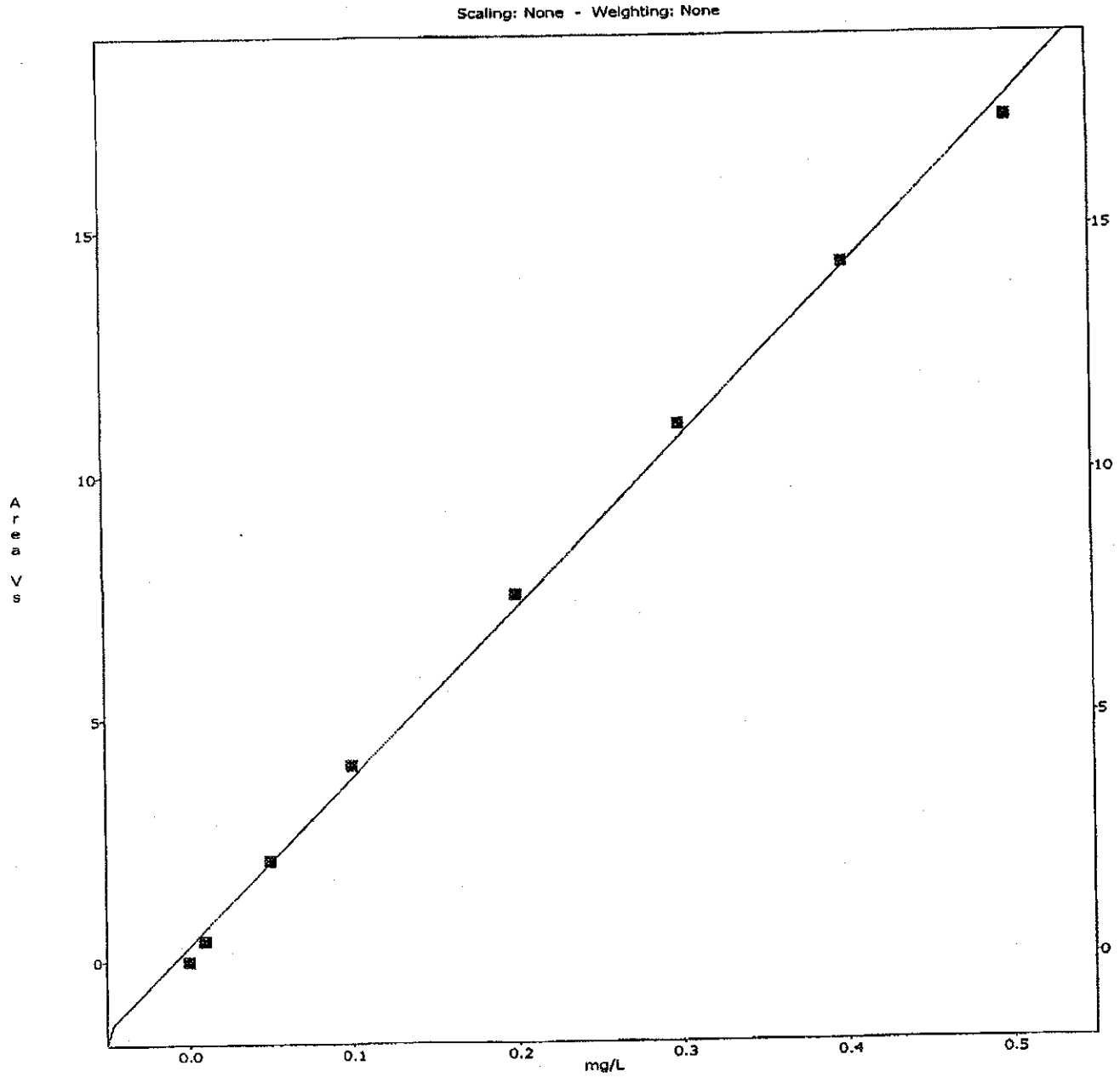
Secondary Review & Closure JM Date 1/27/10

WC Summary Rev5 / 05-2008

CYANIDE

Lvl	Area	mg/L	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Replic STD	Replic % RSD	Residual 1st Poly
1	17240462	0.50	17240462					0.0	0.0	2.5
2	14268928	0.40	14268928					0.0	0.0	-0.5
3	11001357	0.30	11001357					0.0	0.0	-2.7
4	7533274	0.20	7533274					0.0	0.0	-4.1
5	4030528	0.10	4030528					0.0	0.0	-7.4
6	2088653	0.05	2088653					0.0	0.0	-3.0
7	424512	0.01	424512					0.0	0.0	64.2
8	0	0.00	0					0.0	0.0	
9		0.00								

1st Order Poly
Conc = 2.079e-008 Area - 8.644e-003
r = 0.9991



Printed: Tuesday, January 26, 2010 - 01:29 PM

Solutions:
Cyanide 335.4/9012/335.1/4500

Potassium Phosphate Buffer	RT00611	Exp. 15 FEBRUARY 2010
Pyridine Barbituric Acid	RT00608	Exp. 15 FEBRUARY 2010
Chloramine-T	RT01054	Exp. 03 FEBRUARY 2010

MS/SD = 0.1mg/L

LCS = 0.4mg/L, 0.25mg/L

ERA D060-541	Actual = 34.4 mg/Kg Range = 13.2-55.6 mg/Kg
ERA D061-541	Actual = 60.6 mg/Kg Range = 23.3-97.9 mg/Kg
ERA P169-502	Actual = .732 mg/L QC Pals Range = .606 – .873 mg/L PT Pals Range = .459 – 1.00 mg/L
ERA P168-502	Actual = .434 mg/L QC Pals Range = .321 – .529 mg/L PT Pals Range = .246 – .626 mg/L

Curve ran 20 January 2010
50ppm INT STD = RT00450

Method - Ch. 1 (CYANIDE)

METHOD DESCRIPTION:
Created: Jul 27, 2006 9:36:25
Modified: Jan 20, 2010 8:28:19

ANALYTE DATA:
Analyte Name: CYANIDE
Concentration Units: mg/L
OPERATOR: Lachat1Direct
ACQ. TIME: Jun 26, 2010 13:07:56
DATA FILENAME: C:\OMNION\DATA\CR01261A.FDT
METHOD FILENAME: H:\LACHAT\LACHAT1\CYANIDE.MET
TRAY FILENAME: H:\LACHAT\LACHAT1\CR01260A.TRA

TRAY DESCRIPTION:
Created: Jun 26, 2010 13:05:47
Modified: Jun 26, 2010 13:19:01

Multi-Channel Table
Type: Unknowns
Channel Range: 1 to 8 -- Cup Range: 1 to 26

Cup	Sample ID	Sampling Date	Sampling Time	# of Reps	CYANIDE (mg/L)	Man Dil Factor	
1	LCS 1:50	26 Jan 2010	13:08:00	1	0.2134	1.0	533.5 = 53%
2	MBLK (10A1555-BLK1)	26 Jan 2010	13:10:23	1	-0.0086	1.0	
3	RTA0951-01	26 Jan 2010	13:11:16	1	0.0189	1.0	0.945 RPD: 1%
4	RTA0951-01MD (10A1555-DUP1)	26 Jan 2010	13:12:09	1	0.0191	1.0	0.955
5	RTA0951-02	26 Jan 2010	13:13:02	1	-0.0086	1.0	
6	RTA0985-01	26 Jan 2010	13:13:56	1	0.2524	1.0	12.62
7	RTA0985-02	26 Jan 2010	13:14:49	1	-0.0086	1.0	
8	RTA0987-01	26 Jan 2010	13:15:42	1	-0.0086	~~1.0~~ 1.0	
9	RTA1032-01	26 Jan 2010	13:16:34	1	-0.0086	1.0	
~~10~~	~~RTA1032-02~~	~~26 Jan 2010~~	~~13:17:26~~	~~1~~	~~0.5077~~	~~1.0~~	missed cup see cup # 12 RJP 1/26/10
11	RTA1033-01	26 Jan 2010	13:18:18	1	-0.0086	1.0	
12	RTA1032-02	26 Jan 2010	13:19:10	1	-0.0086	~~1.0~~ 1.0	
13	LCS 1:50	26 Jan 2010	13:20:02	1	0.2509	1.0	627.25 = 63%
14	MBLK	26 Jan 2010	13:21:31	1	-0.0086	1.0	

Method - Ch. 1 (CYANIDE)

METHOD DESCRIPTION:
Created: Jul 27, 2006 9:36:25
Modified: Jan 20, 2010 8:28:19

ANALYTE DATA:
Analyte Name: CYANIDE
Concentration Units: mg/L
OPERATOR: LachatDirect
ACQ. TIME: Jan 26, 2010 13:07:56
DATA FILENAME: C:\OMNION\DATA\CR01261A.FDT
METHOD FILENAME: H:\LACHAT\LACHAT\CYANIDE.MET
TRAY FILENAME: H:\LACHAT\LACHAT\CR01260A.TRA

TRAY DESCRIPTION:
Created: Jan 26, 2010 13:05:47
Modified: Jan 26, 2010 13:19:01

Multi-Channel Table
Type: Unknowns
Channel Range: 1 to 8 -- Cup Range: 1 to 26

Cup	Sample ID	Sampling Date	Sampling Time	# of Reps	CYANIDE (uv-s)	Man Dil Factor
1	LCS 1:50	26 Jan 2010	13:08:00	1	7713703.0000	1.0
2	MBLK	26 Jan 2010	13:10:23	1	0.0000	1.0
3	RTA0951-01	26 Jan 2010	13:11:16	1	955443.0000	1.0
4	RTA0951-01MD	26 Jan 2010	13:12:09	1	963840.0000	1.0
5	RTA0951-02	26 Jan 2010	13:13:02	1	0.0000	1.0
6	RTA0985-01	26 Jan 2010	13:13:56	1	9065946.0000	1.0
7	RTA0985-02	26 Jan 2010	13:14:49	1	0.0000	1.0
8	RTA0987-01	26 Jan 2010	13:15:42	1	0.0000	2.0
9	RTA1032-01	26 Jan 2010	13:16:34	1	0.0000	1.0
10	RTA1032-02	26 Jan 2010	13:17:26	1	17934342.0000	1.0
11	RTA1033-01	26 Jan 2010	13:18:18	1	0.0000	1.0
12	RTA1032-02	26 Jan 2010	13:19:10	1	0.0000	2.0
13	LCS 1:50	26 Jan 2010	13:20:02	1	9014157.0000	1.0
14	MBLK	26 Jan 2010	13:21:31	1	0.0000	1.0

WET CHEMISTRY BATCH SUMMARY

PARAMETER Reactive Sulfide METHOD SeCt 7.3 BATCH 10A1559

COMMENTS	JOB NUMBER
WC Historical confirms within Hold Time	
WC Historical NO confirm & RE outside of HT	
WC Hold Time Exceedance-Dilution required	
WC Hold Time Exceedance-Instrument Failure	
WC Holding Time Exceedance by Date	
WC Holding Time Exceedance by Hours	
WC LCS within ERA limits outside internal	
WC LCS high recovery, sample ND	
WC MBLK hit but samples > 10X blank value	
WC RPD Exceedance for MS / SD	
WC Spike Failure HIGH MS only	
WC Spike Failure LOW MS only	
WC Spike Failure MS and SD	
WC BOD HT met- Oxygen depleted-RE out HT	
WC Carbonate Alkalinity, LCS/MBLK	
WC Reactivity Qualification	
WC TDS/Conductivity ratio outside of range	
WC TOX Breakthrough- no volume for redo	
WC TOX samples were centrifuged	
Other	

DILUTION CODES	REASON
002	Sample matrix effects
003	Excessive foaming
004	High levels of non-target compounds
008	High concentration of target analytes
009	Sample turbidity
010	Sample color
011	Insufficient volume for lower dilution
012	Sample viscosity
013	other

ICAL Compliant?	YES	NO	(NA)	IF NO, Why?
LCS/CCV Compliant?	(YES)	NO	NA	IF NO, Why?
CCB Compliant?	YES	NO	(NA)	IF NO, Why?
RPD Compliant?	(YES)	NO	NA	IF NO, Why?
ERA Compliant?	YES	NO	(NA)	IF NO, Why?

NUMBER of REANALYSIS FOR THIS BATCH: Ø

Analyst RJP Date 1/26/10

Time Critical Batch Review _____ Date _____

Secondary Review & Closure JM Date 1/27/10

WC Summary Rev5 / 05-2008

TestAmerica Buffalo

REACTIVITY LOG

Logbook # A09-07-01

10A1559/10A1560

Date	Anal.	Job #	Sample I.D.	N_2 Flow	Sample Wt. (g)	Scrubber Vol. (ml)	Time (Min)	Total Available Sulfide: I_2 Vol. (ml)	Sample Vol. (ml)	Titrant Vol. (ml)	Final conc. H_2S (mg/kg)	Comments
1/24/10	RJP	LCS	H2S	60	10	500	30	1	100	0.3	140.35	25% 10A1559-BS1
		MBLK	BLANK					1		1	ND	10A1559-BLK1
		RTA0951	01					1		1	ND	
			01ND					1		1	ND	RPD: ND 10A1559-DUP1
			02					1		1	ND	
		RTA0985	01					1		1	ND	
			02					1		1	ND	
		RTA0987	01					1		1	ND	
		RTA1032	01					1		1	ND	
			02					1		1	ND	
		RTA1033	01					1		1	ND	
		LCS	H2S					1		0.2	140.4	
		MBLK	BLANK					1		0.3	140.35	25%
								1		1	ND	

RJP
1/24/10

Start/End Time 10:00 - 12:30 Solutions 9120211, 9120213, 9110922, 9061189, 9011745, RT00052

Reviewed By/ Date _____ N I_2= 0.025 N NaS_2O_3= 0.025

Rev. 0
/10/2007

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

END OF REPORT

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

June 17, 2010

RE: RAVENNA ARMY AMMUNITION PLANT
PORTAGE/TRUMBULL COUNTIES
DRAFT, FWGWMP JANUARY 2010
SAMPLING EVENT REPORT
RESPONSE TO OHIO EPA COMMENTS

CERTIFIED MAIL

Mr. Mark Patterson
Environmental Program Manager
Ravenna Army Ammunition Plant
Building 1037
8451 State Route 5
Ravenna, OH 44266-9297

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 January 2010 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 June 7, 2010. 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. 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/ds

cc. Eileen Mohr, Ohio EPA, DERR, NEDO
Katie Elgin, OHARNG RTLS
Maj. Ed Meade, OHARNG RTLS
Glen Beckham, USACE Louisville
Mark Krivansky, AEC
John Miller, EQM
Mark Nichter, USACE Louisville
Conni McCambridge, Ohio EPA, DERR, NEDO

ec: Mike Eberle, Ohio EPA, DERR, NEDO
Todd Fisher, Ohio EPA, DERR, NEDO

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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

May 18, 2010

RE: RAVENNA ARMY AMMUNITION PLANT, PORTAGE/TRUMBULL COUNTIES, FWGWMP, DRAFT, JANUARY 2010 SAMPLING EVENT REPORT

Mr. Mark Patterson
Installation Manager
Ravenna Army Ammunition Plant
8451 State Route 5
Ravenna, OH 44266

CERTIFIED MAIL
7009 1680 0001 9552 2070

Dear Mr. Patterson:

The Ohio Environmental Protection Agency (Ohio EPA) has received and reviewed the "Draft, Facility-Wide Ground Water Monitoring Program (FWGWMP) January 2010 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 May 3, 2010 and is dated April 30, 2010. 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 Facility-Wide Ground Water Monitoring Program (FWGWMP). Eleven wells were sampled during a two-day sampling event on January 20 and 21, 2010.

The IDW Plan, Appendix E, was approved in a February 18, 2010 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

Vicki Deppisch
Project Coordinator
Division of Emergency and Remedial Response

VD/kss

enclosure

cc: 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

OHIO EPA COMMENT RESPONSE TABLE
RVAAP – FWGWMP
Draft, FWGWMP Report on the January 2010 Sampling Event
Reviewers: Conni McCambridge, DDAGW (DGW) and Vicki Deppisch, DERR
(May 18, 2010)

No.	Location	Reviewer Comment	Reviewer Recommendation	Response
1	Section 2.1, pg. 7	The text indicated that *"...the ground water elevations from the new Sharon Conglomerate wells were evaluated and determined not to be representative of either the Homewood or the Sharon aquifers, therefore they were not used to determine the potentiometric contours."* It was unclear what criteria were used to make this determination.	Ohio EPA thought this issue had been previously resolved. Please discuss with Mark Nichter, USACE. Please provide an explanation as to how it was determined that the ground water elevations from the six new wells were not representative of the Homewood or Sharon aquifers beneath the facility. Also, explain how the ground water elevations for these wells will be utilized in the FWGWMP in the future.	
2	Section 2.2, Page 7 and Appendix C	Well purge logs reported high turbidity values (i.e., 655 NTUs in ASYmw-002 on 1/20/2010; 999 NTUs in LL3mw-235 on 1/19/2010) in several wells that utilized low-flow purging and sampling techniques. It is unclear whether these observed turbidity values are related to inadequate well development and/or well design issues.	The report did not include any reasoning for the observed elevated turbidity values or address whether the newly installed wells were adequately developed. Thus, the reason for elevated turbidity value needs to be addressed. Please provide an explanation as to how the issue of high turbidity values will be resolved to provide representative ground water samples.	

3	Section 2.2, Page 8, Line 16	The text does not indicate how ground water samples were filtered during the sampling event.	Please provide a brief discussion of the procedure(s) used to filter ground water samples during the sampling event.	
4	Section 3.1, Page 12 and Table 3-1	Table 3-1 indicates that well ASYmw-008 has a total sediment accumulation of greater than 1 foot (or greater than 10% of the screen length, 10 feet). This could be indicative of excessive silting in this well (FWGWMPP, Section 4.1, pg. 4-1).	Please provide a discussion concerning how and when this issue of excessive silting will be addressed in these wells.	
5	Section 3.2.2, Pages 19-20 and Table 3-3	Table 3-3 contains several inorganic parameters which exceeded their respective MCLs and/or Region 9 PRGs in various wells. These parameters are: arsenic, iron, and manganese.	As previously noted during reviews of earlier sampling reports, these parameters exceeded their respective MCL values and/or the Region 9 PRG values. It remains unclear what course of action will be taken to address these exceedences. Please acknowledge the exceedences and add that this issue will be addressed in the future.	

PRELIMINARY DRAFT FACILITY-WIDE GROUNDWATER MONITORING PROGRAM
(REPORT ON THE JANUARY 2010 SAMPLING EVENT)
RAVENNA ARMY AMMUNITION PLANT, RAVENNA OHIO
COMMENT RESPONSE TABLE
May 18, 2010

Comment Number	Page or Sheet	New Page or Sheet	Comment	Recommendation	Response
			Ohio EPA (V. Deppisch/C. McCambridge)		
O-1	Section 2.1, pg. 7		The text indicated that *"...the groundwater elevations from the new Sharon Conglomerate wells were evaluated and determined not to be representative of either the Homewood or the Sharon aquifers, therefore they were not used to determine the potentiometric contours."* It was unclear what criteria were used to make this determination.	Ohio EPA thought that this issue had been previously resolved. Please discuss with Mark Nichter, USACE. Please provide an explanation as to how it was determined that the groundwater elevations from the six new wells were not representative of the Homewood or Sharon aquifers beneath the facility. Also, explain how the groundwater elevations for these wells will be utilized in the FWGWMP in the future.	The following text and table will be added to Section 2. *To determine if groundwater elevations of Sharon Conglomerate wells (as determined in January 2010) are representative of the Sharon or Homewood Aquifers, the groundwater elevation data are compared as indicated on the attached table.* *As the table indicates the groundwater elevation of water in the Homewood Aquifer (well LL10mw-003) is more than 78 feet higher than the Sharon Conglomerate well (well SCFmw-1). This demonstrates that the Homewood Aquifer and Sharon Conglomerate are not representative of the same hydraulic unit. If in the same hydraulic unit, the water levels would be expected to be much the same.* *There are five Sharon Conglomerate wells that are located through the Sharon (Sandstone) Aquifer. The groundwater elevations of the five Sharon Aquifer wells are 1.28 to 24.57 feet higher than the Sharon Conglomerate groundwater elevations at the same locations. The average elevation difference is over 9 feet. Again this groundwater elevation difference indicates that the Sharon Conglomerate and the Sharon Aquifer are not the same hydraulic unit.* *It should be noted that the groundwater elevations from the deep wells are used for*

Comment Number	Page or Sheet	New Page or Sheet	Comment	Recommendation	Response
			Ohio EPA (V. Deppisch/C. McCambridge)		
					purging and sampling purposes and not necessarily for deep aquifer flow direction, however a separate potentiometric map will be produced to show flow direction for the deep wells.
O-2	Section 2.2, Page 7 and Appendix C		Well purge logs reported high turbidity values (i.e., 655 NTUs in ASYmw-002 on 1.20.2010: 999 NYUs in LL3mw-235 on 1/19/2010) in several wells that utilized low-flow purging and sampling techniques. It is unclear whether these observed turbidity values are related to inadequate well development and/or well design issues.	The report did not include any reasoning for the observed elevated turbidity values or address whether the newly installed wells were adequately developed. Thus the reason for elevated turbidity value needs to be addressed. Please provide an explanation as to how the issue of high turbidity values will be resolved to provide representative groundwater samples.	The high turbidity values in well LL3mw-235 can be attributed to low water volumes (i.e., less than 1-foot) in the well casing resulting in the well being bailed dry (this well was bailed and did not use low flow pumping because of the limited amount of water). The resultant bailing from essentially the bottom of the well casing results in more turbidity in the sample than would be seen with low-flow purging techniques. Given the low water volume in this well the turbidity readings are not unexpected. ASYmw-002 and ASYmw-010 also had elevated turbidity readings. It should be noted that high turbidity readings are not necessarily and indicator of nonrepresentative (i.e., formation) groundwater as stated in the Ohio EPA Technical Guidance Manual for groundwater ***"Turbidity**, which is the visible presence of suspended mineral and organic particles in a ground water sample, also is not an indicator of ground water chemical stabilization and does not distinguish between stagnant casing water and formation water."* For future sampling events with wells exhibiting high turbidity readings during purging activities, EQM will continue purging after the normal stabilization parameters have

Comment Number	Page or Sheet	New Page or Sheet	Comment	Recommendation	Response
			Ohio EPA (V. Deppisch/C. McCambridge)		
					reached stabilization (turbidity is not a stabilization parameter). Purging will be continued in an attempt to reach turbidity values that are within 10% of each other. This may also result in turbidity values lowering. It should be noted that groundwater samples are filtered as part of the FWGWMP sampling, thereby reducing the effect of suspended particles in the groundwater. Additionally, the data collected during the 2009 metals sampling event is to be used in support of the geochemical evaluation conducted by Shaw. A major component of this evaluation concerns trace element adsorption on suspended materials. It is anticipated that the geochemical evaluation will help to clarify how the observed high turbidity values affect the sample results.
O-3	Section 2.2, Page 8, Line 16		The text does not indicate how groundwater samples were filtered during the sampling event.	Please provide a brief discussion of the procedures used to filter groundwater samples during this event.	The following text will be added to Section 2.2: *Filtered metals samples collected through the bladder pump used an inline 0.45 micron filter emptying directly into sample bottles containing nitric acid. For the sample collected using a bailer the sample was poured from the bailer into a decontaminated holding vessel and then filtered using a hand-pump through a 0.45 micron filter into sample bottles containing nitric acid. All sampling procedures for the filtered metals were conducted in accordance with Section 4.3.5 of the Facility-Wide Sampling and Analysis Plan for Environmental Investigations at the Ravenna Army*

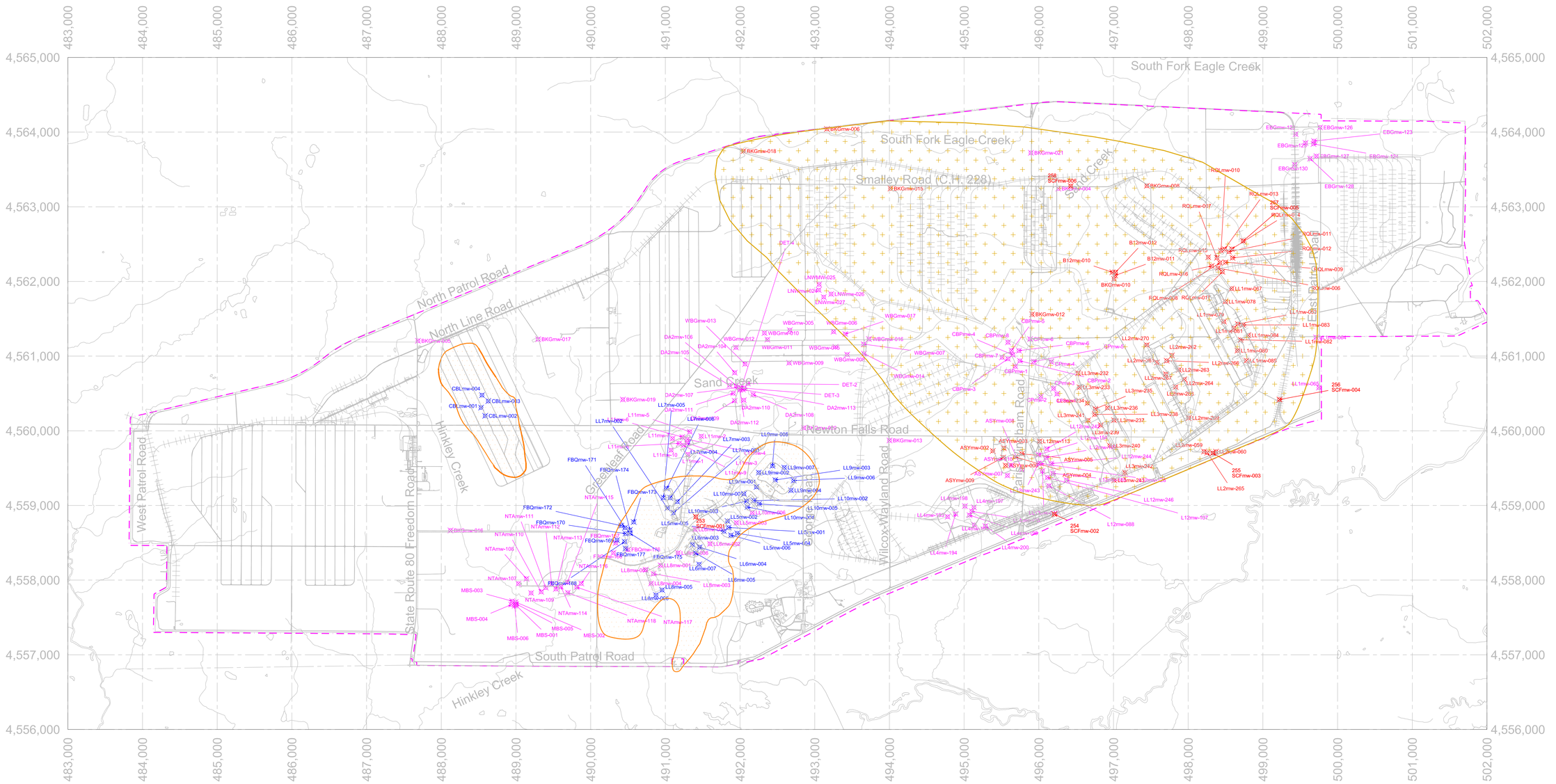
PRELIMINARY DRAFT FACILITY-WIDE GROUNDWATER MONITORING PROGRAM
(REPORT ON THE JANUARY 2010 SAMPLING EVENT)
RAVENNA ARMY AMMUNITION PLANT, RAVENNA OHIO
COMMENT RESPONSE TABLE
May 18, 2010

Comment Number	Page or Sheet	New Page or Sheet	Comment	Recommendation	Response
			Ohio EPA (V. Deppisch/C. McCambridge)		
					Ammunition Plant March 2001.
O-4	Section 3.1, Page 12 and Table 3-1		Table 3-1 indicates that well ASYmw-008 has a greater than 1-foot (or greater than 10% of the screen length, 10 feet). This could be indicative of excessive silting in this well (FWGWMPP, Section 4.1, pg. 4-1)	Please provide a discussion concerning how and when this issue of excessive silting will be addressed in these wells.	ASYmw-008 has had increasing sediment levels over the past 2 sampling events. This well has been put on the schedule for redevelopment in 2010. It will be redeveloped prior to the next sampling event for this well. We will provide the Ohio EPA 2 weeks notice prior to conducting the redevelopment activities.
O-5	Section 3.2.2, Pages 19-20 and Table 3-3		Table 3-3 contains several inorganic parameters which exceeded their respective MCLs and/or Region 9 PRGs in various wells. These parameters are arsenic, iron, and manganese.	As previously noted during reviews of earlier sampling reports theses parameters exceeded their respective MCL values and/or Region 9 PRG values. It remains unclear what course of action will be taken to address these exceedances. Please acknowledge the exceedances and add that this issue will be addressed in the future.	As stated in Section 3.2.2 of the report the facility-wide groundwater conditions are still being evaluated, including inorganic compounds exceeding the MCLs. This evaluation will 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 RVAAP's respective background values and proposed alternate screening values during the Feasibility Study.

Comparison of Groundwater Elevation, Sharon Conglomerate and Sharon and Homewood Aquifers

Well ID	Monitored Zone Groundwater Elevation (ft, msl)			Difference (ft)
	Sharon Conglomerate	Sharon Sandstone	Homewood	
SCFmw-1	1030.94	-	1109.29	+ 78.35
SCFmw-2	964.16	969.20	-	+ 5.04
SCFmw-3	948.98	950.26	-	+ 1.28
SCFmw-4	943.47	955.00 *	-	+ 11.53
SCFmw-5	947.85	952.52	-	+ 4.67
SCFmw-6	947.43	972.00 *	-	+ 24.57

All water-level elevations (ft, msl) are January 2010. Sharon Sandstone and Homewood water-level elevations are nearest well to physical location of Sharon Conglomerate Well except as noted (*). Elevation is from potentiometric map (Plate 3).
" + " indicates that Sharon Sandstone or Homewood elevation is higher



LEGEND

- UNCONSOLIDATED WELL
- HOMEWOOD MEMBER WELL
- SHARON MEMBER WELL
- PROPERTY LINE
- HOMEWOOD MEMBER
- SHARON MEMBER

0 50 1000

SCALE (METERS)

N

COORDINATE SYSTEM UTM NAD 83 ZONE 17

NOTE: THE UNCONSOLIDATED AQUIFER OVERLAYS THE HOMEWOOD AND SHARON MEMBERS, EXCEPT AS INDICATED ON PLATE 2

REV	DESCRIPTION	DATE	APPROVED
1	ADDED NOTE	12-04-08	BT
2	ADDED SFCmw-001 THRU 006	9-10-09	JM

REVISIONS

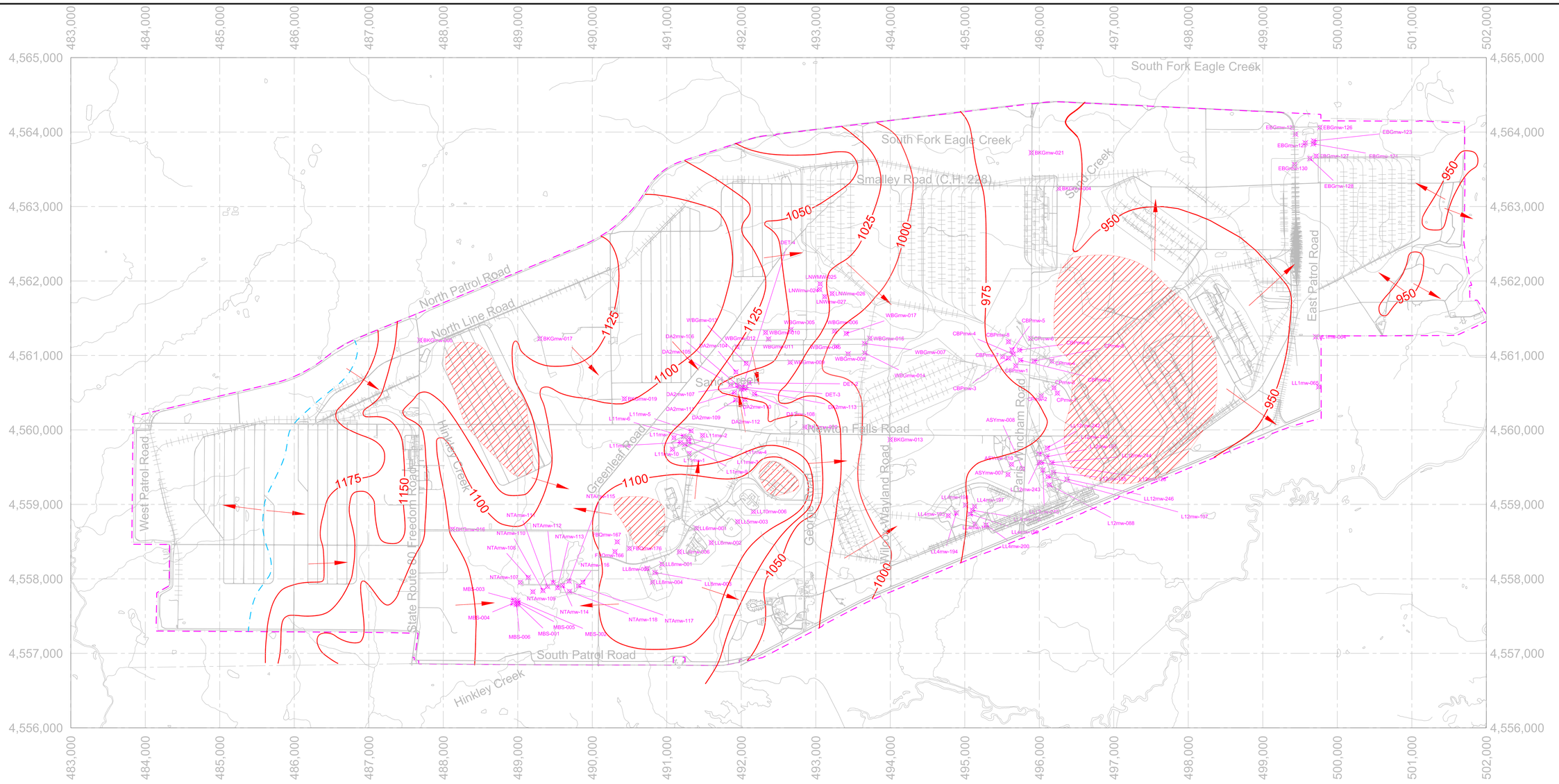
DRAWN	D.TOMO	10/22/07
CHECKED		
APPROVED		

SCALE: NONE

ENVIRONMENTAL QUALITY MANAGEMENT, INC.
1800 CARILLON BLVD.
CINCINNATI, OHIO 45240
P (513)825-7500
F (513)825-7495

MONITORING WELLS AT RVAAP

ORIGINAL SIZE	PROJECT NO.	DWG NO.	REV
E	030240.0006	PLATE 1	2



Well ID	Elevation (ft, amsl)
BKGmw-004	952.96
BKGmw-005	1140.42
BKGmw-013	976.45
BKGmw-016	1096.90
BKGmw-017	1118.74
BKGmw-019	1102.89
BKGmw-020	1047.36
BKGmw-021	957.28
LL1mw-064	931.96
LL1mw-065	931.15
LL4mw-193	976.50
LL4mw-194	975.54
LL4mw-195	971.44
LL4mw-196	970.98
LL4mw-197	970.60
LL4mw-198	973.60
LL4mw-199	969.15
LL4mw-200	969.12
LL5mw-003	1107.38
LL6mw-001	1110.32
LL6mw-002	1108.11

Well ID	Elevation (ft, amsl)
LL6mw-006	1108.67
LL8mw-001	1109.47
LL8mw-002	1105.89
LL8mw-003	1105.96
LL8mw-004	1104.46
LL10mw-006	1111.05
LL11mw-001	1091.73
L L11mw-002	1079.28
LL11mw-003	1088.40
LL11mw-004	1084.64
LL11mw-005	1072.62
LL11mw-006	1083.62
LL11mw-007	1068.40
LL11mw-008	1087.66
LL11mw-009	1089.44
LL11mw-010	1079.15
LL12mw-088	973.29
LL12mw-107	969.64
LL12mw-128	966.35
LL12mw-153	97117
LL12mw-154	969.40

Well ID	Elevation (ft, amsl)
LL12mw-182	973.47
LL12mw-184	969.52
LL12mw-185	972.32
LL12mw-187	969.53
LL12mw-188	976.53
LL12mw-242	972.01
LL12mw-243	970.76
LL12mw-244	969.65
LL12mw-245	971.16
LL12mw-246	966.62
ASYmw-007	967.80
ASYmw-008	973.63
ASYmw-010	967.54
CBPmw-001	961.81
CBPmw-002	959.87
CBPmw-003	961.93
CBPmw-004	959.79
CBPmw-005	959.06
CBPmw-006	959.16
CBPmw-007	959.92
CBPmw-008	956.90

Well ID	Elevation (ft, amsl)
CPmw-001	973.40
CPmw-002	972.16
CPmw-003	972.34
CPmw-004	970.77
CPmw-005	961.50
CPmw-006	957.38
DETmw-001B	1042.32
DETmw-002	1028.95
DETmw-003	1027.66
DETmw-004	1029.17
DA2mw-104	1051.66
DA2mw-105	1042.44
DA2mw-106	1036.04
DA2mw-107	1035.12
DA2mw-108	1026.58
DA2mw-109	1057.27
DA2mw-110	1056.17
DA2mw-111	1038.36
DA2mw-112	1030.89
DA2mw-113	1029.77
EBGmw-123	938.54
EBGmw-124	938.49

Well ID	Elevation (ft, amsl)
EBGmw-125	938.52
EBGmw-126	938.70
EBGmw-127	938.75
EBGmw-128	938.92
EBGmw-129	939.07
EBGmw-130	938.07
FBQmw-166	1103.29
FBQmw-167	1111.42
FBQmw-176	1121.46
LNWmw-024	1025.50
LNWmw-025	1024.15
LNWmw-026	1024.07
LNWmw-027	1020.08
NTAmw-107	1067.38
NTAmw-108	1067.56
NTAmw-109	1067.74
NTAmw-110	1068.23
NTAmw-111	1077.74
NTAmw-112	1069.25
NTAmw-113	1068.66
NTAmw-114	1072.60
NTAmw-115	1075.91

Well ID	Elevation (ft, amsl)
NTAmw-116	1090.10
NTAmw-117	1081.41
NTAmw-118	1072.65
WBGmw-005	1049.28
WBGmw-006	1008.22
WBGmw-007	982.76
WBGmw-008	993.84
WBGmw-009	1034.33
WBGmw-010	1061.05
WBGmw-011	1060.98
WBGmw-012	1051.60
WBGmw-013	1058.79
WBGmw-014	980.38
WBGmw-015	1000.50
WBGmw-016	979.33
WBGmw-017	998.46
MBS-001	1064.69
MBS-002	1065.11
MBS-003	1065.74
MBS-004	1065.06
MBS-005	1064.67
MBS-006	1064.63

0 50 1000

SCALE (METERS)

LEGEND

- UNCONSOLIDATED WELL
- PROPERTY LINE
- 1100 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

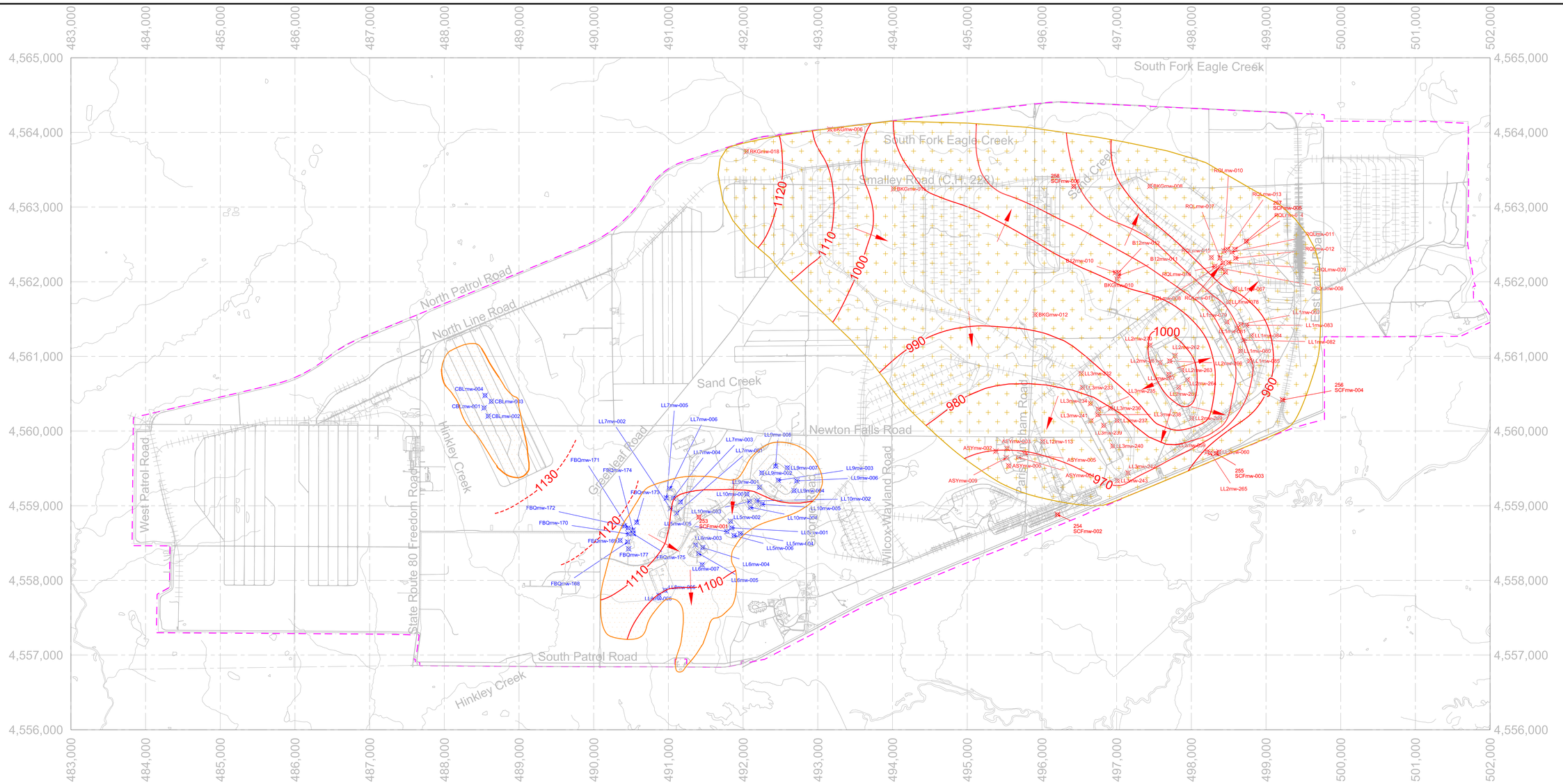
REVISIONS

DRAWN	D.TOMO	3-30-09
CHECKED	W.THOMPSON	3-30-09
APPROVED		

SCALE: NONE

POTENTIOMETRIC SURFACE OF UNCONSOLIDATED AQUIFER (JAN. 2010)

ORIGINAL SIZE	PROJECT NO.	DWG NO.	REV
E	030240.0006	PLATE 2	1



HOMEWOOD MEMBER WELLS

Well ID	Elevation (ft, amsl)
LL5mw-001	1107.42
LL5mw-002	1107.35
LL5mw-004	1107.48
LL5mw-005	1107.39
LL5mw-006	1107.39
LL6mw-003	1108.49
LL6mw-004	1107.91
LL6mw-005	1108.22
LL6mw-007	1109.63
LL7mw-001	1108.36
LL7mw-002	1112.46
LL7mw-003	1108.83
LL7mw-004	1110.93
LL7mw-005	1113.39
LL7mw-006	1113.06
LL8mw-005	1101.99
LL8mw-006	1106.69
LL9mw-001	1118.84
LL9mw-002	1116.47
LL9mw-003	1124.15
LL9mw-004	1110.08

Well ID	Elevation (ft, amsl)
LL9mw-005	1114.80
LL9mw-006	1110.52
LL9mw-007	1110.36
LL10mw-001	1107.14
LL10mw-002	1108.83
LL10mw-003	1109.29
LL10mw-004	1108.41
LL10mw-005	1109.28
CBLmw-001	1134.46
CBLmw-002	1134.23
CBLmw-003	1135.61
CBLmw-004	1135.90
FBQmw-168	1120.98
FBQmw-169	1115.64
FBQmw-170	1120.33
FBQmw-171	1121.91
FBQmw-172	1119.78
FBQmw-173	1118.98
FBQmw-174	1119.08
FBQmw-175	1119.22
FBQmw-177	1114.96

SHARON MEMBER WELLS

Well ID	Elevation (ft, amsl)
BKGmw-006	1004.45
BKGmw-008	953.56
BKGmw-010	990.63
BKGmw-012	991.27
BKGmw-015	991.15
BKGmw-018	1023.94
LL1mw-063	964.78
LL1mw-067	958.01
LL1mw-078	960.01
LL1mw-079	961.68
LL1mw-080	983.56
LL1mw-081	965.26
LL1mw-082	969.68
LL1mw-083	958.23
LL1mw-084	966.17
LL1mw-085	958.44
LL2mw-059	951.51
LL2mw-060	950.26
LL2mw-261	1004.36
LL2mw-262	1002.99
LL2mw-263	1002.95
LL2mw-264	1005.07

Well ID	Elevation (ft, amsl)
LL2mw-265	949.94
LL2mw-266	1003.84
LL2mw-267	1005.22
LL2mw-268	1002.58
LL2mw-269	994.73
LL2mw-270	1002.23
LL3mw-232	977.35
LL3mw-233	976.59
LL3mw-234	996.69
LL3mw-235	989.89
LL3mw-236	992.45
LL3mw-237	988.48
LL3mw-238	991.57
LL3mw-239	976.89
LL3mw-240	978.71
LL3mw-241	984.34
LL3mw-242	981.79
LL3mw-243	974.33
ASYmw-001	967.99
ASYmw-002	968.27
ASYmw-003	968.03
ASYmw-004	969.20

Well ID	Elevation (ft, amsl)
ASYmw-005	971.29
ASYmw-006	967.72
ASYmw-009	968.84
B12mw-010	987.33
B12mw-011	984.36
B12mw-012	982.77
RQLmw-006	957.27
RQLmw-007	956.05
RQLmw-008	956.66
RQLmw-009	957.04
RQLmw-010	953.13
RQLmw-011	951.01
RQLmw-012	952.52
RQLmw-013	952.06
RQLmw-014	950.58
RQLmw-015	956.34
RQLmw-016	958.06
RQLmw-017	958.65

SHARON CONGLOMERATE WELLS

Well ID	Elevation (ft, amsl)
SCFmw-001	1030.94
SCFmw-002	964.16
SCFmw-003	948.98
SCFmw-004	943.47
SCFmw-005	947.85
SCFmw-006	947.43

*WELLS NOT USED TO PRODUCE POTENTIOMETRIC MAP

SHARON SHALE WELLS

Well ID	Elevation (ft, amsl)
LL12mw-113	974.84
LL12mw-183	969.46
LL12mw-186	972.59
LL12mw-189	974.79

*WELLS NOT USED TO PRODUCE POTENTIOMETRIC MAP

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
F (513)825-7495

REV	DESCRIPTION	DATE	APPROVED
1	ADDED SFCmw-001 THRU 006	9-10-09	JM

REVISIONS

DRAWN	D.TOMO	3-30-09
CHECKED	W.THOMPSON	3-30-09
APPROVED		

SCALE: NONE

POTENTIOMETRIC SURFACE OF BEDROCK -HOMEWOOD AND SHARON (JAN. 2010)

ORIGINAL SIZE	PROJECT NO.	DWG NO.	REV
E	030240.0006	PLATE 3	1

491,000 492,000 493,000 494,000 495,000 496,000 497,000 498,000 499,000

4,564,000 4,563,000 4,562,000 4,561,000 4,560,000 4,559,000

South Fork Eagle Creek

Smalley Road (C.R. 228)

Sand Creek

East Patrol Road

Sand Creek

Newton Falls Road

George Road

Wilcox Wayland Road

Paris Windham Road

SCFmw-001

SCFmw-002

SCFmw-003

SCFmw-004

SCFmw-005

SCFmw-006

990

980

970

960

950

940

SHARON CONGLOMERATE WELLS

Well ID	Elevation (ft, amsl)
SCFmw-001	1030.94
SCFmw-002	964.16
SCFmw-003	948.98
SCFmw-004	943.47
SCFmw-005	947.85
SCFmw-006	947.43

0 500 1000

N

LEGEND

PROPERTY LINE

980 LINE OF EQUAL GROUNDWATER ELEVATION (ft,amsl)

990 (INTERMEDIATE DASHED)

GROUNDWATER DIRECTION

COORDINATE SYSTEM UTM NAD 83 ZONE 17

REV	DESCRIPTION	DATE	APPROVED

REVISIONS

ENVIRONMENTAL QUALITY MANAGEMENT, INC.
1800 CARILLON BLVD.
CINCINNATI, OHIO 45240
P (513)825-7500
F (513)825-7495

DRAWN	D.TOMO	6-23-10
CHECKED		
APPROVED		
SCALE:	NONE	

POTENTIOMETRIC SURFACE OF SHARON CONGLOMERATE (JAN.2010)

ORIGINAL SIZE	PROJECT NO.	DWG NO.	REV
B	030240.0006	PLATE 4	0