

## **APPENDIX C**

### **Data Quality Control Summary Report**

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**LIST OF ATTACHMENTS**

- Attachment 1. Chemical Data Usability Report
- Attachment 2. Automated Data Review Outlier Reports

## ACRONYMS AND ABBREVIATIONS

ADR	Automated Data Review
D	Absolute Difference
DoD	U.S. Department of Defense
DQA	Data Quality Assessment
FWCUG	Facility-wide Cleanup Goal
FWQAPP	Facility-wide Quality Assurance Project Plan
LCS	Laboratory Control Sample
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
Ohio EPA	Ohio Environmental Protection Agency
PAH	Polycyclic Aromatic Hydrocarbon
PBA08 SAP	Performance-Based Acquisition 2008 Supplemental Sampling and Analysis Plan Addendum No. 1
PCB	Polychlorinated Biphenyl
QA	Quality Assurance
QAPP	Quality Assurance Project Plan
QC	Quality Control
REIMS	RVAAP Environmental Information Management System
RI	Remedial Investigation
RPD	Relative Percent Difference
RVAAP	Ravenna Army Ammunition Plant
SAIC	Science Applications International Corporation
SVOC	Semi-volatile Organic Compound
TestAmerica	TestAmerica Laboratories, Inc.
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
VOC	Volatile Organic Compound

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## C.0 PROJECT QUALITY ASSURANCE SUMMARY

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### C.1 PURPOSE OF THIS REPORT

Environmental data must always be interpreted relative to its known limitations and its intended use. As can be expected in environmental media, there are areas and data points where the user needs to be cautioned relative to the quality of the project information presented. The data verification process and this data quality assessment (DQA) are performed to assist current and future data users in interpreting these data.

The purpose of this DQA report is to describe the following:

- The quality control (QC) procedures followed to ensure data generated by Leidos, formerly Science Applications International Corporation (SAIC) during the remedial investigations (RIs) at the Ravenna Army Ammunition Plant (RVAAP) meet project requirements;
- The quality of the data collected; and
- The problems encountered during the course of the study and their solutions.

A separate Chemical Data Usability Assessment has been completed by the U.S. Army Corps of Engineers (USACE) quality assurance (QA) representative (Attachment 1). This assessment discusses the overall data quality and usability of project data based on a review of this DQA and the findings of the third-party validator contracted by USACE. While there were some differences in the qualifiers assigned by Leidos and the third-party reviewer, the findings were deemed to be compatible.

This DQA report assesses the analytical information gathered during the implementation of the RI at Wet Storage Area. It documents the quality of the data utilized for the RI Report and assesses if QA/QC objectives were met. Evaluation of field and laboratory QC measures will constitute the majority of this assessment; however, references will also be directed toward those QA procedures that establish data credibility. The primary intent of this assessment is to illustrate that, except as noted, data generated for this investigation can withstand scientific scrutiny; are appropriate for their intended purpose; are technically defensible; and are of known and acceptable sensitivity, precision, and accuracy.

Multiple activities were performed to achieve the desired data quality for this project. As discussed in the RI Report, decisions were made during the initial scoping of the RI to define the quality and quantity of data required. Data quality objectives were established to guide the implementation of the field sampling and laboratory analysis [refer to the *Performance-Based Acquisition 2008 Supplemental Investigation Sampling and Analysis Plan Addendum No.1* (USACE 2009), herein referred to as the PBA08 SAP]. A QA program was established to standardize procedures and document activities [refer to the *Facility-wide Quality Assurance Project Plan for Environmental Investigations* (USACE 2001), herein referred to as the FWQAPP, and Part II of the PBA08 SAP]. This program provided a means to detect and correct any deficiencies in the process. Upon receipt by the project team, data were subjected to verification and validation review by an automated data review (ADR) process to identify and qualify problems related to the analysis. These review steps

contributed to this final DQA where data used in the investigation are identified as having met the criteria and are being utilized appropriately.

## **C.2 QUALITY ASSURANCE PROGRAM**

The FWQAPP and Part II of the PBA08 SAP were developed to guide the RI for Wet Storage Area. The purposes of these documents were to enumerate the quantity and type of samples to be taken to inspect the area of concern and define the quantity and type of QA/QC samples to be used to evaluate the quality of the data obtained. The FWQAPP established requirements for field and laboratory QC procedures. In general, field QC duplicates and QA split samples were required for each environmental sample matrix collected in the area being investigated; volatile organic compound (VOC) trip blanks were to accompany each cooler containing water samples for VOC determinations; and analytical laboratory QC duplicates, matrix spikes (MSs), laboratory control samples (LCSs), and method blanks were required for each preparation batch of 20 samples or less for each matrix and analyte.

A primary goal of the former RVAAP QA program was to ensure that the quality of results for all environmental measurements was appropriate for their intended use. To this end, the FWQAPP and standardized field procedures were compiled to guide the investigation. Through the process of readiness review, training, equipment calibration, QC implementation, and detailed documentation, the project has successfully accomplished the goals set for the QA program.

### **C.2.1 Monthly Progress Reports**

Monthly progress reports were completed by the Leidos Project Manager for the duration of the project. The monthly progress reports contained information on work completed, problems encountered, corrective actions/solutions, summary of findings, and upcoming work. These reports were issued to the USACE Louisville District Project Manager by e-mail with copies forwarded to the Ohio Environmental Protection Agency (Ohio EPA). Access to these reports can be obtained through the USACE Louisville District Project Manager.

### **C.2.2 Daily Activity Logs**

The Field Team Leader completed daily activity logs. These include information such as, but not limited to, on-site sub-tier contractors, on-site equipment, work performed summaries, QC activities, health and safety activities, problems encountered, and corrective actions.

### **C.2.3 Laboratory “Definitive” Level Data Reporting**

The Quality Assurance Project Plan (QAPP) for this project identified requirements for laboratory data reporting and identified TestAmerica Laboratories, Inc. (TestAmerica) of North Canton, Ohio (a subcontractor to White Water Associates Inc., Amasa, Michigan), as the laboratory for the project. During project execution, the TestAmerica facility in North Canton, Ohio, performed all of the analyses, except explosives and propellants, which were performed at the TestAmerica facility in



West Sacramento, California. Collected QA split samples were analyzed by USACE's contracted QA laboratory, RTI Laboratories, Inc., of Livonia, Michigan. TestAmerica and RTI Laboratories, Inc. are accredited by the U.S. Department of Defense (DoD). All analytical procedures were completed in accordance with applicable professional standards; U.S. Environmental Protection Agency (USEPA) requirements; government regulations and guidelines; the DoD Quality Systems Manual, Version 3; USACE Louisville District analytical QA guidelines; and specific project goals and requirements. USEPA "definitive" data have been reported and including the following basic information:

- Laboratory case narratives,
- Sample results (soil/sediment reported per dry weight),
- Laboratory method blank results,
- LCS results,
- Laboratory sample MS recoveries,
- Laboratory duplicate results,
- Surrogate recoveries [VOCs, semi-volatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls (PCBs), and explosives],
- Initial and continuing calibrations,
- Sample preparation dates, and
- Sample analysis dates.

This information from the laboratory, along with field information, provides the basis for subsequent data evaluation relative to sensitivity, precision, accuracy, representativeness, and completeness. These are presented in Section C.4.

### **C.3 DATA VERIFICATION**

The objective when evaluating the project data quality is to determine its usability. The evaluation is based on the interpretation of laboratory QC measures, field QC measures, and project data quality objectives. This project implemented ADR software to facilitate laboratory data review. The ADR output was reviewed by the project-designated verification staff.

#### **C.3.1 Field Data Verification**

Field-generated documents such as sampling logs, boring logs, daily health and safety summaries, daily safety inspections, equipment calibration and maintenance logs, and sample management logs were peer-reviewed on site.

#### **C.3.2 Laboratory Data Verification**

Analytical data generated for this project have been subjected to a process of automated data verification and review. The following describes this systematic process and the evaluation activities performed. Several criteria have been established against which the data were compared and from which a judgment was rendered regarding the acceptance and qualification of the data. Because it is

beyond the scope of this report to cite those criteria, the reader is directed to the following documents for specific detail:

- PBA08 SAP (USACE 2009).
- DoD – *Quality Systems Manual for Environmental Laboratories*, Version 3, January, 2006.
- USACE Louisville District, *Louisville DoD Quality Systems Manual Supplement*, Version 1, March, 2007.
- USEPA – *Contract Laboratory Program National Functional Guidelines for Organic Data Review*, EPA-540/R-99/008, October, 1999.
- USEPA – *Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, EPA-540/R-94/013, February, 1994.
- Leidos Technical Support Contractor QA Technical Procedure (TP-DM-300-7), *Data Verification and Validation*.

Upon receiving field and analytical data, verification staff performed a systematic examination of the reports, including ADR software, to ensure the content, presentation, and administrative validity of 100% of the data. Discrepancies identified during this process were recorded and documented utilizing ADR. Any discrepancies were resolved prior to database flag entry. As part of data verification, standardized laboratory electronic data deliverables were subjected to review. This technical evaluation ensured that all contract-specified requirements had been met and electronic information conformed to reported hardcopy data. Outlier reports from the ADR software review are included as Attachment 2 to this appendix. QA Program Nonconformance Report and Corrective Action systems were implemented as required.

During the verification phase of the review and evaluation process, data were subjected to a systematic technical review by examining all field and analytical QC results and laboratory documentation following USEPA functional guidelines, DoD Quality Systems Manual criteria, and Leidos internal procedures for laboratory data review. These data review guidelines define the technical review criteria, methods for evaluating the criteria, and actions to be taken resulting from the review of these criteria. The primary objectives of this phase were to assess and summarize the quality and reliability of the data for the intended use and to document factors that may affect the usability of the data. This process did not include in-depth review of raw data instrument output or recalculation of results from the primary instrument output. This data verification and analytical review process included, but was not necessarily limited to, the following parameters:

- Data completeness;
- Analytical holding times and sample preservation;
- Calibration (initial and continuing);
- Method blanks;
- Sample results verification;
- Surrogate recovery;
- LCS analysis;
- Internal standard performance;

- MS recovery;
- Duplicate analysis comparison;
- Reported detection limits;
- Compound, element, and isotope quantification;
- Reported detection levels;
- Method reporting levels; and
- Secondary dilutions.

As an end result of this phase of the review, the data were qualified based on the technical assessment of the verification criteria. Qualifiers were applied by the ADR to each field and analytical result to indicate the usability of the data for its intended purpose.

### **C.3.3 Definitions of Data Qualifiers (Flags)**

During the data verification process, all laboratory data were assigned appropriate data qualification flags and reason codes. Qualification flags are defined as follows:

- “U” Indicates the analyte was analyzed for, but not detected above, the level of the associated value.
- “J” Indicates the analyte was positively identified; however, the associated numerical value is an approximate concentration of the analyte in the sample.
- “UJ” Indicates the analyte was analyzed for, but not detected above, the associated value; however, the reported value is an estimate and demonstrates a decreased knowledge of its accuracy or precision.
- “R” Indicates the analyte value reported is unusable. The integrity of the analyte’s identification, accuracy, precision, or sensitivity has raised significant questions as to the reality of the information presented.

### **C.3.4 Data Acceptability**

A total of 42 environmental sediment, soil, and surface water samples were collected with approximately 4,300 discrete analyses (i.e., analytes) obtained, reviewed, and integrated into the assessment (these totals do not include field measurements and field descriptions). The project collected investigation samples under the direction of the sampling and analysis plan (SAP) and USACE Louisville District and produced acceptable results for 100% of the samples collected. No sediment, soil, or surface water data were rejected.

Table C-1 summarizes the targeted field QC and QA split samples collected during the investigation. Cross-references for duplicate and QA split sample pair numbers are presented on Table C-2 along with the requested parameters for each sample. Table C-3 summarizes the qualified analyses grouped by media and analyte category, and Table C-4 shows the individual results qualified during review. The majority of the estimated values were based on values observed between the laboratory method detection limits (MDLs) and project reporting levels. Values determined in this region have an inherently higher variability and need to be considered estimated at best. Also, some data were

estimated due to exceeded holding times, continuing calibrations, surrogate recovery deviations, MS/matrix spike duplicate (MSD) deviations, and a few LCS recovery failures.

**Table C-1. Number of Samples Taken at Wet Storage Area**

<b>Media</b>	<b>Environmental Samples</b>	<b>Field Duplicates</b>	<b>USACE Split Samples</b>	<b>Trip Blanks</b>	<b>Equipment Rinse Blanks<sup>a</sup></b>	<b>Source Water Blanks<sup>b</sup></b>
Sediment	4	0	0	0	2	2
Soil	34	4	4	0		
Surface Water	4	1	1	2	0	

<sup>a</sup>Equipment rinse blanks were collected at a frequency of 2 per field cycle for the entire Performance-based Acquisition 2008 (PBA08) Remedial Investigation (RI) for the 17 areas of concern (AOCs) as presented in Section 4.6 of the PBA08 Sampling and Analysis Plan (PBA08 SAP)

<sup>b</sup>Source water blanks for deionized and potable water used during equipment decontamination were evaluated for the entire PBA08 RI for the 17 AOCs as presented in Section 4.6 of the PBA08 SAP.

USACE = U.S. Army Corps of Engineers.

**Table C-2. Identification of Regular and QC Samples Taken at Wet Storage Area**

Sample ID	Laboratory SDG	Field Duplicates	USACE Split Samples	Trip Blanks <sup>a</sup>	Metals	Explosives	SVOCs	Propellants <sup>b</sup>	VOCs	Pesticides	PCBs	PAHs	Hexavalent Chromium	Total Chromium
<i>Sediment</i>														
WSASD-037-5649-SD	A0C250407	NS	NS	NS	X	X	X	X	X	X	X			
WSASD-038-5650-SD	A0C250407	NS	NS	NS	X	X	X							
WSASD-039-5651-SD	A0C250407	NS	NS	NS	X	X	X							
WSASD-040-5652-SD	A0C310489	NS	NS	NS	X	X	X							
<i>Soil</i>														
WSASB-021-5611-SO	A0C250407	NS	NS	NS	X	X						X		
WSASB-021-5612-SO	A0C250407	NS	NS	NS	X	X						X		
WSASB-021-5613-SO	A0C240542, A0C240550	WSASB-021-6201-FD	WSASB-021-6205-QA	NS	X	X						X		
WSASB-022-5615-SO	A0C250407	NS	NS	NS	X	X	X	X	X	X	X			
WSASB-022-5616-SO	A0C250407	WSASB-022-6200-FD	WSASB-022-6204-QA	NS	X	X	X	X	X	X	X			
WSASB-022-5617-SO	A0C240542, A0C240550	NS	NS	NS	X	X	X	X	X	X	X			
WSASB-023-5619-SO	A0C250407	NS	NS	NS	X	X						X		
WSASB-023-5620-SO	A0C250407	NS	NS	NS	X	X						X		
WSASB-023-5621-SO	A0C240542, A0C240550	NS	NS	NS	X	X						X		
WSASB-024-5623-SO	A0C250407	NS	NS	NS	X	X						X		
WSASB-024-5624-SO	A0C250407	WSASB-024-6203-FD	WSASB-024-6207-QA	NS	X	X						X		
WSASB-024-5625-SO	A0C240542, A0C240550	NS	NS	NS	X	X						X		
WSASB-024-5626-SO	A0C250407	NS	NS	NS	X	X						X		
WSASB-026-5629-SO	A0C250407	NS	NS	NS	X	X						X		
WSASB-026-5630-SO	A0C250407	NS	NS	NS	X	X						X		
WSASB-026-5631-SO	A0C240542, A0C240550	NS	NS	NS	X	X						X		
WSASB-026-5632-SO	A0D010524	NS	NS	NS	X	X						X		
WSASB-027-5633-SO	A0C250407	NS	NS	NS	X	X						X		

**Table C-2. Identification of Regular and QC Samples Taken at Wet Storage Area (continued)**

Sample ID	Laboratory SDG	Field Duplicates	USACE Split Samples	Trip Blanks <sup>a</sup>	Metals	Explosives	SVOCs	Propellants <sup>b</sup>	VOCs	Pesticides	PCBs	PAHs	Hexavalent Chromium	Total Chromium
WSASB-027-5634-SO	A0C250407	NS	NS	NS	X	X						X		
WSASB-027-5635-SO	A0C240542, A0C240550	NS	NS	NS	X	X						X		
WSASB-028-5637-SO	A0C250407	NS	NS	NS	X	X	X	X	X	X	X			
WSASB-028-5638-SO	A0C250407	NS	NS	NS	X	X	X	X	X	X	X			
WSASB-028-5639-SO	A0C240542, A0C240550	NS	NS	NS	X	X	X	X	X	X	X			
WSASB-028-5640-SO	A0C250407	NS	NS	NS	X	X	X	X	X	X	X			
WSASB-029-5641-SO	A0C250407	NS	NS	NS	X	X						X		
WSASB-029-5642-SO	A0C250407	NS	NS	NS	X	X						X		
WSASB-029-5643-SO	A0C240542, A0C240550	NS	NS	NS	X	X						X		
WSASS-030-5653-SO	A0C250600	NS	NS	NS									X	X
WSASS-031-5654-SO	A0C250600	NS	NS	NS									X	X
WSASS-032-5655-SO	A0C250600	NS	NS	NS									X	X
WSASS-033M-5645-SO	A0C250600	NS	NS	NS	X	X						X		
WSASS-034M-5646-SO	A0C250600	WSASS-034M-6195-FD	WSASS-034M-6194-QA	NS	X	X						X		
WSASS-035M-5648-SO	A0C250600	NS	NS	NS	X	X						X		
WSASS-036M-5647-SO	A0C250600	NS	NS	NS	X	X	X	X	X	X	X			
<i>Surface Water</i>														
WSASW-037-5656-SW	A0C250407	NS	NS	PBA08-QC-6018-TB	X	X	X	X	X	X	X			
WSASW-038-5657-SW	A0C250407	NS	NS	PBA08-QC-6018-TB	X	X	X	X	X	X	X			
WSASW-039-5658-SW	A0C250407	NS	NS	PBA08-QC-6018-TB	X	X	X	X	X	X	X			
WSASW-040-5659-SW	A0C310489	WSASW-040-6199-FD	WSASW-040-6198-QA	PBA08-QC-6021-TB	X	X	X	X	X	X	X			

<sup>a</sup>Trip blanks only accompany samples for VOCs in water

<sup>b</sup>Propellants include nitrocellulose and nitroguanidine

Equipment rinse blanks were collected at a frequency of 2 per field cycle for the entire Performance-based Acquisition 2008 (PBA08) Remedial Investigation for the 17 areas of concern as presented in Section 4.6 of the PBA08 Sampling and Analysis Plan.

ID = Identification.

NS = Not sampled.

QC = Quality control.

PAH = Polycyclic aromatic hydrocarbon.

PCB = Polychlorinated biphenyl.

SDG = Sample delivery group.

SVOC = Semi-volatile organic compound.

USACE = U.S. Army Corps of Engineers.

VOC = Volatile organic compound.

**Table C-3. Summary of Qualified Results for Samples from Wet Storage Area**

<b>Analysis Group</b>	<b>Validation Qualifier<sup>a</sup></b>	<b>Validation Reason Code<sup>b</sup></b>	<b>Number Qualified</b>	<b>Total Number of Analyses</b>	<b>Percent Qualified</b>
<i>Sediment</i>					
All Analyses	J	--	58	485	12
	UJ	--	48		9.9
	None	--	379		78
Metals	J	MS-J	15	92	16
	J	MS-J, RepLimit-J	3	92	3.3
	J	ProJudge-J	7	92	7.6
	J	RepLimit-J	14	92	15
	UJ	MS-UJ	3	92	3.3
	UJ	RepLimit-J, CalBlk-U	1	92	1.1
	None	None	49	92	53
Explosives	None	None	64	64	100
Propellants	None	None	2	2	100
SVOCs	J	RepLimit-J	18	264	6.8
	None	None	246	264	93.2
Pesticides	UJ	CCV-UJ	10	21	48
Pesticides	None	None	11	21	52
PCBs	None	None	7	7	100
VOCs	J	Surr-J, RepLimit-J	1	35	2.9
	UJ	MB-U, Surr-J, RepLimit-J	1	35	2.9
	UJ	Surr-UJ	33	35	94
<i>Soil</i>					
All Analyses	J	--	446	2,966	15
	UJ	--	484		16
	None	--	2,036		69
Metals	J	LCS-J	9	808	1.1
	J	MS-J	194	808	24
	J	MS-J, RepLimit-J	27	808	3.3
	J	ProJudge-J	42	808	5.2
	J	RepLimit-J	110	808	14
	UJ	MS-UJ	8	808	0.99
	UJ	RepLimit-J, CalBlk-U	37	808	4.6
	None	None	381	808	47
Hexavalent Chromium	J	RepLimit-J	1	3	33
	None	None	2	3	67
Explosives	J	RepLimit-J	1	560	0.18
	UJ	CCV-UJ	56	560	10
	None	None	503	560	90
Propellants	UJ	MS-UJ	1	18	5.6
	None	None	17	18	94
SVOCs	J	MS-J	26	1010	2.6
	UJ	MS-UJ	1	1010	0.1
	J	RepLimit-J	30	1010	3.0
	UJ	MB-U, RepLimit-J	1	1010	0.1
	None	None	952	1010	94

**Table C-3. Summary of Qualified Results for Samples from Wet Storage Area (continued)**

Analysis Group	Validation Qualifier <sup>a</sup>	Validation Reason Code <sup>b</sup>	Number Qualified	Total Number of Analyses	Percent Qualified
Pesticides	J	RepLimit-J	5	189	2.6
	UJ	CCV-J	1	189	0.53
	UJ	CCV-UJ	64	189	34
	UJ	MS-UJ	1	189	0.53
	None	None	118	189	62
PCBs	None	None	63	63	100
VOCs	J	Surr-J, RepLimit-J	1	315	0.32
	UJ	MB-U, Surr-J, RepLimit-J	9	315	2.9
	UJ	Surr-UJ	305	315	97
<i>Surface Water</i>					
All Analyses	J	--	29	850	3.4
	UJ	--	66		7.8
	None	--	755		89
Metals	J	RepLimit-J	26	115	23
	UJ	MB-U, RepLimit-J	3	115	2.6
	None	None	86	115	75
Explosives	None	None	80	80	100
Propellants	UJ	HT-UJ	3	10	30
	UJ	MS-UJ	2	10	20
	None	None	5	10	50
SVOCs	J	RepLimit-J	1	330	0.3
	UJ	LCS-UJ	4	330	1.2
	UJ	MB-U, RepLimit-J	6	330	1.8
	None	None	239	330	96.7
Pesticides	UJ	LCS-UJ	4	105	3.8
	UJ	Surr-UJ	21	105	20
	None	None	80	105	76
PCBs	UJ	Surr-UJ	21	35	60
	None	None	14	35	40
VOCs	J	RepLimit-J	2	175	1.1
	UJ	RepLimit-J, FldQC-U	2	175	1.1
	None	None	171	175	98

<sup>a</sup>Validation Qualifiers: J = Estimated, U = Not detected, and UJ = Not detected and reporting limit estimated.

<sup>b</sup>Validation Reason Codes: CalBlk = Calibration Blank, CCV = Continuing Calibration Verification, FldQC = Field Quality Control, HT = Holding Time, LCS = Laboratory Control Sample, MB = Method Blank, ProJudge = Professional Judgment, MS = Matrix Spike, RptLimit = Reporting Limit, and Surr = Surrogate recovery.

PCB = Polychlorinated biphenyl.

SVOC = Semi-volatile organic compound.

VOC = Volatile organic compound.

-- = No data qualifier.



**Table C-4. Detailed Listing of Qualified Results for Samples from Wet Storage Area**

Chemical	Laboratory SDG	Sample ID	Results	Reporting Limit	Laboratory Qualifier <sup>a</sup>	Validation Qualifier <sup>b</sup>	Validation Code <sup>c</sup>
<i>Metals</i>							
<b>Sediment (mg/kg)</b>							
Aluminum	A0C250407	WSASD-037-5649-SD	4,540	14.8	--	J	ProJudge-J
Aluminum	A0C250407	WSASD-038-5650-SD	4,600	11.6	--	J	ProJudge-J
Aluminum	A0C250407	WSASD-039-5651-SD	4,050	12.5	--	J	ProJudge-J
Antimony	A0C250407	WSASD-037-5649-SD	0.095	0.74	J	J	MS-J, RepLimit-J
Antimony	A0C250407	WSASD-038-5650-SD	0.58	0.58	U	UJ	MS-UJ
Antimony	A0C250407	WSASD-039-5651-SD	0.63	0.63	U	UJ	MS-UJ
Antimony	A0C310489	WSASD-040-5652-SD	0.58	0.58	U	UJ	MS-UJ
Barium	A0C250407	WSASD-037-5649-SD	78.2	1.5	--	J	MS-J
Barium	A0C250407	WSASD-039-5651-SD	56.3	1.3	--	J	MS-J
Cadmium	A0C250407	WSASD-037-5649-SD	0.15	0.30	J	J	RepLimit-J
Cadmium	A0C250407	WSASD-038-5650-SD	0.11	0.23	J	J	RepLimit-J
Cadmium	A0C310489	WSASD-040-5652-SD	0.097	0.23	J	J	RepLimit-J
Copper	A0C250407	WSASD-037-5649-SD	14.1	0.74	--	J	ProJudge-J
Copper	A0C250407	WSASD-038-5650-SD	13.2	0.58	--	J	ProJudge-J
Copper	A0C250407	WSASD-039-5651-SD	10	0.63	--	J	ProJudge-J
Copper	A0C310489	WSASD-040-5652-SD	9.3	0.58	--	J	ProJudge-J
Lead	A0C310489	WSASD-040-5652-SD	6.5	0.35	--	J	MS-J
Magnesium	A0C250407	WSASD-037-5649-SD	1,650	148	--	J	MS-J
Magnesium	A0C250407	WSASD-038-5650-SD	1,570	116	--	J	MS-J
Magnesium	A0C250407	WSASD-039-5651-SD	980	125	--	J	MS-J
Magnesium	A0C310489	WSASD-040-5652-SD	787	115	--	J	MS-J
Mercury	A0C250407	WSASD-039-5651-SD	0.045	0.13	J	J	RepLimit-J
Nickel	A0C250407	WSASD-037-5649-SD	15.5	1.5	--	J	MS-J
Nickel	A0C250407	WSASD-038-5650-SD	16.1	1.2	--	J	MS-J
Nickel	A0C250407	WSASD-039-5651-SD	27.4	1.3	--	J	MS-J
Nickel	A0C310489	WSASD-040-5652-SD	8.7	1.2	--	J	MS-J
Potassium	A0C250407	WSASD-037-5649-SD	458	148	--	J	MS-J
Potassium	A0C250407	WSASD-038-5650-SD	518	116	--	J	MS-J
Potassium	A0C250407	WSASD-039-5651-SD	417	125	--	J	MS-J

**Table C-4. Detailed Listing of Qualified Results for Samples from Wet Storage Area (continued)**

<b>Chemical</b>	<b>Laboratory SDG</b>	<b>Sample ID</b>	<b>Results</b>	<b>Reporting Limit</b>	<b>Laboratory Qualifier<sup>a</sup></b>	<b>Validation Qualifier<sup>b</sup></b>	<b>Validation Code<sup>c</sup></b>
Selenium	A0C250407	WSASD-037-5649-SD	0.68	0.74	J	J	MS-J, RepLimit-J
Selenium	A0C250407	WSASD-038-5650-SD	0.46	0.58	J	J	MS-J, RepLimit-J
Selenium	A0C250407	WSASD-039-5651-SD	0.73	0.63	--	J	MS-J
Selenium	A0C310489	WSASD-040-5652-SD	0.51	0.58	J	J	RepLimit-J
Silver	A0C250407	WSASD-037-5649-SD	0.027	0.74	J	J	RepLimit-J
Silver	A0C250407	WSASD-038-5650-SD	0.012	0.58	J	J	RepLimit-J
Silver	A0C250407	WSASD-039-5651-SD	0.017	0.63	J	J	RepLimit-J
Silver	A0C310489	WSASD-040-5652-SD	0.0030	0.58	J	UJ	RepLimit-J, CalBlk-U
Sodium	A0C250407	WSASD-037-5649-SD	35.7	148	J	J	RepLimit-J
Sodium	A0C250407	WSASD-038-5650-SD	28.8	116	J	J	RepLimit-J
Sodium	A0C250407	WSASD-039-5651-SD	23.9	125	J	J	RepLimit-J
Sodium	A0C310489	WSASD-040-5652-SD	26.0	115	J	J	RepLimit-J
Thallium	A0C250407	WSASD-038-5650-SD	0.078	0.23	J	J	RepLimit-J
Thallium	A0C250407	WSASD-039-5651-SD	0.10	0.25	J	J	RepLimit-J
<b>Soil (mg/kg)</b>							
Aluminum	A0C240550	WSASB-021-5613-SO	11,300	12.4	--	J	ProJudge-J
Aluminum	A0C240550	WSASB-022-5617-SO	6,680	12.0	--	J	ProJudge-J
Aluminum	A0C240550	WSASB-023-5621-SO	6,240	11.5	--	J	ProJudge-J
Aluminum	A0C240550	WSASB-024-5625-SO	6,800	11.9	--	J	ProJudge-J
Aluminum	A0C250407	WSASB-024-6203-FD	10,200	12.9	E	J	ProJudge-J
Aluminum	A0C240550	WSASB-026-5631-SO	10,400	13.0	E	J	ProJudge-J
Aluminum	A0C240550	WSASB-027-5635-SO	11,200	13.0	--	J	ProJudge-J
Aluminum	A0C240550	WSASB-028-5639-SO	8,580	12.1	--	J	ProJudge-J
Aluminum	A0C240550	WSASB-029-5643-SO	7,570	12.4	--	J	ProJudge-J
Aluminum	A0C250600	WSASS-033M-5645-SO	27,100	102	--	J	ProJudge-J
Aluminum	A0C250600	WSASS-034M-5646-SO	12,500	102	--	J	ProJudge-J
Aluminum	A0C250600	WSASS-034M-6195-FD	12,200	102	--	J	ProJudge-J
Aluminum	A0C250600	WSASS-035M-5648-SO	11,800	51.1	--	J	ProJudge-J
Aluminum	A0C250600	WSASS-036M-5647-SO	12,900	102	--	J	ProJudge-J
Antimony	A0C250407	WSASB-021-5611-SO	0.19	0.62	J	J	MS-J, RepLimit-J
Antimony	A0C250407	WSASB-021-5612-SO	0.084	0.62	J	J	MS-J, RepLimit-J
Antimony	A0C240550	WSASB-021-5613-SO	0.091	0.62	J	J	MS-J, RepLimit-J
Antimony	A0C250407	WSASB-021-6201-FD	0.093	0.62	J	J	MS-J, RepLimit-J
Antimony	A0C250407	WSASB-022-5615-SO	0.098	0.62	J	J	MS-J, RepLimit-J
Antimony	A0C250407	WSASB-022-5616-SO	0.087	0.62	J	J	MS-J, RepLimit-J

**Table C-4. Detailed Listing of Qualified Results for Samples from Wet Storage Area (continued)**

<b>Chemical</b>	<b>Laboratory SDG</b>	<b>Sample ID</b>	<b>Results</b>	<b>Reporting Limit</b>	<b>Laboratory Qualifier<sup>a</sup></b>	<b>Validation Qualifier<sup>b</sup></b>	<b>Validation Code<sup>c</sup></b>
Antimony	A0C240550	WSASB-022-5617-SO	0.10	0.60	J	J	MS-J, RepLimit-J
Antimony	A0C250407	WSASB-022-6200-FD	0.079	0.59	J	J	MS-J, RepLimit-J
Antimony	A0C250407	WSASB-023-5619-SO	0.081	0.62	J	J	MS-J, RepLimit-J
Antimony	A0C250407	WSASB-023-5620-SO	0.096	0.60	J	J	MS-J, RepLimit-J
Antimony	A0C240550	WSASB-023-5621-SO	0.58	0.58	U	UJ	MS-UJ
Antimony	A0C250407	WSASB-024-5623-SO	0.090	0.64	J	J	MS-J, RepLimit-J
Antimony	A0C250407	WSASB-024-5624-SO	0.083	0.64	J	J	MS-J, RepLimit-J
Antimony	A0C240550	WSASB-024-5625-SO	0.079	0.60	J	J	MS-J, RepLimit-J
Antimony	A0C250407	WSASB-024-5626-SO	0.58	0.58	U	UJ	MS-UJ
Antimony	A0C250407	WSASB-024-6203-FD	0.088	0.64	J	J	MS-J, RepLimit-J
Antimony	A0C250407	WSASB-026-5629-SO	0.68	0.68	U	UJ	MS-UJ
Antimony	A0C250407	WSASB-026-5630-SO	0.67	0.67	U	UJ	MS-UJ
Antimony	A0C240550	WSASB-026-5631-SO	0.083	0.65	J	J	MS-J, RepLimit-J
Antimony	A0D010524	WSASB-026-5632-SO	0.080	0.59	J	J	MS-J, RepLimit-J
Antimony	A0C250407	WSASB-027-5633-SO	0.079	0.62	J	J	MS-J, RepLimit-J
Antimony	A0C250407	WSASB-027-5634-SO	0.091	0.65	J	J	MS-J, RepLimit-J
Antimony	A0C240550	WSASB-027-5635-SO	0.081	0.65	J	J	MS-J, RepLimit-J
Antimony	A0C250407	WSASB-028-5637-SO	0.10	0.68	J	J	MS-J, RepLimit-J
Antimony	A0C250407	WSASB-028-5638-SO	0.62	0.62	U	UJ	MS-UJ
Antimony	A0C240550	WSASB-028-5639-SO	0.61	0.61	U	UJ	MS-UJ
Antimony	A0C250407	WSASB-028-5640-SO	0.57	0.57	U	UJ	MS-UJ
Antimony	A0C250407	WSASB-029-5641-SO	0.088	0.66	J	J	MS-J, RepLimit-J
Antimony	A0C250407	WSASB-029-5642-SO	0.080	0.62	J	J	MS-J, RepLimit-J
Antimony	A0C240550	WSASB-029-5643-SO	0.62	0.62	U	UJ	MS-UJ
Antimony	A0C250600	WSASS-033M-5645-SO	0.10	0.51	J	J	MS-J, RepLimit-J
Antimony	A0C250600	WSASS-034M-5646-SO	0.12	0.51	J	J	MS-J, RepLimit-J
Antimony	A0C250600	WSASS-034M-6195-FD	0.13	0.51	J	J	MS-J, RepLimit-J
Antimony	A0C250600	WSASS-035M-5648-SO	0.11	0.51	J	J	MS-J, RepLimit-J
Antimony	A0C250600	WSASS-036M-5647-SO	0.11	0.51	J	J	MS-J, RepLimit-J
Arsenic	A0C240550	WSASB-021-5613-SO	13.9	0.62	--	J	MS-J
Arsenic	A0C240550	WSASB-022-5617-SO	14.4	0.60	--	J	MS-J
Arsenic	A0C240550	WSASB-023-5621-SO	13.0	0.58	--	J	MS-J
Arsenic	A0C240550	WSASB-024-5625-SO	14.8	0.60	--	J	MS-J
Arsenic	A0C240550	WSASB-026-5631-SO	21.3	0.65	E	J	MS-J
Arsenic	A0D010524	WSASB-026-5632-SO	16.0	0.59	--	J	ProJudge-J

**Table C-4. Detailed Listing of Qualified Results for Samples from Wet Storage Area (continued)**

<b>Chemical</b>	<b>Laboratory SDG</b>	<b>Sample ID</b>	<b>Results</b>	<b>Reporting Limit</b>	<b>Laboratory Qualifier<sup>a</sup></b>	<b>Validation Qualifier<sup>b</sup></b>	<b>Validation Code<sup>c</sup></b>
Arsenic	A0C240550	WSASB-027-5635-SO	17.6	0.65	--	J	MS-J
Arsenic	A0C240550	WSASB-028-5639-SO	15.4	0.61	--	J	MS-J
Arsenic	A0C240550	WSASB-029-5643-SO	13.9	0.62	--	J	MS-J
Arsenic	A0C250600	WSASS-033M-5645-SO	15.5	0.51	--	J	ProJudge-J
Arsenic	A0C250600	WSASS-034M-5646-SO	14.0	0.51	--	J	ProJudge-J
Arsenic	A0C250600	WSASS-034M-6195-FD	14.4	0.51	--	J	ProJudge-J
Arsenic	A0C250600	WSASS-035M-5648-SO	13.2	0.51	--	J	ProJudge-J
Arsenic	A0C250600	WSASS-036M-5647-SO	14.8	0.51	--	J	ProJudge-J
Barium	A0C250407	WSASB-021-5611-SO	75.4	1.2	--	J	MS-J
Barium	A0C250407	WSASB-021-5612-SO	45.9	1.2	--	J	MS-J
Barium	A0C240550	WSASB-021-5613-SO	34.3	1.2	--	J	MS-J
Barium	A0C250407	WSASB-021-6201-FD	36.5	1.2	--	J	MS-J
Barium	A0C250407	WSASB-022-5615-SO	59.5	1.2	--	J	MS-J
Barium	A0C250407	WSASB-022-5616-SO	64.9	1.2	--	J	MS-J
Barium	A0C240550	WSASB-022-5617-SO	34.6	1.2	--	J	MS-J
Barium	A0C250407	WSASB-022-6200-FD	52.6	1.2	--	J	MS-J
Barium	A0C250407	WSASB-023-5619-SO	89.8	1.2	--	J	MS-J
Barium	A0C250407	WSASB-023-5620-SO	65.5	1.2	--	J	MS-J
Barium	A0C240550	WSASB-023-5621-SO	28.9	1.2	--	J	MS-J
Barium	A0C250407	WSASB-024-5623-SO	60.3	1.3	--	J	MS-J
Barium	A0C250407	WSASB-024-5624-SO	42.1	1.3	--	J	MS-J
Barium	A0C240550	WSASB-024-5625-SO	30.8	1.2	--	J	MS-J
Barium	A0C250407	WSASB-024-5626-SO	29.3	1.2	--	J	MS-J
Barium	A0C250407	WSASB-024-6203-FD	37.2	1.3	--	J	MS-J
Barium	A0C250407	WSASB-026-5629-SO	36.7	1.4	--	J	MS-J
Barium	A0C250407	WSASB-026-5630-SO	46.0	1.3	--	J	MS-J
Barium	A0C240550	WSASB-026-5631-SO	37.8	1.3	--	J	MS-J
Barium	A0D010524	WSASB-026-5632-SO	34.0	1.2	B	J	MS-J
Barium	A0C250407	WSASB-027-5633-SO	45.0	1.2	--	J	MS-J
Barium	A0C250407	WSASB-027-5634-SO	43.0	1.3	--	J	MS-J
Barium	A0C240550	WSASB-027-5635-SO	38.2	1.3	--	J	MS-J
Barium	A0C250407	WSASB-028-5637-SO	51.0	1.4	--	J	MS-J
Barium	A0C250407	WSASB-028-5638-SO	43.9	1.2	--	J	MS-J
Barium	A0C240550	WSASB-028-5639-SO	34.1	1.2	--	J	MS-J
Barium	A0C250407	WSASB-028-5640-SO	21.5	1.1	--	J	MS-J

**Table C-4. Detailed Listing of Qualified Results for Samples from Wet Storage Area (continued)**

<b>Chemical</b>	<b>Laboratory SDG</b>	<b>Sample ID</b>	<b>Results</b>	<b>Reporting Limit</b>	<b>Laboratory Qualifier<sup>a</sup></b>	<b>Validation Qualifier<sup>b</sup></b>	<b>Validation Code<sup>c</sup></b>
Barium	A0C250407	WSASB-029-5641-SO	28.5	1.3	--	J	MS-J
Barium	A0C250407	WSASB-029-5642-SO	36.4	1.2	--	J	MS-J
Barium	A0C240550	WSASB-029-5643-SO	35.9	1.2	--	J	MS-J
Cadmium	A0C250407	WSASB-021-5612-SO	0.071	0.25	J	J	RepLimit-J
Cadmium	A0C240550	WSASB-021-5613-SO	0.045	0.25	J	J	RepLimit-J
Cadmium	A0C250407	WSASB-021-6201-FD	0.049	0.25	J	J	RepLimit-J
Cadmium	A0C250407	WSASB-022-5615-SO	0.12	0.25	J	J	RepLimit-J
Cadmium	A0C250407	WSASB-022-5616-SO	0.062	0.25	J	J	RepLimit-J
Cadmium	A0C240550	WSASB-022-5617-SO	0.056	0.24	J	J	RepLimit-J
Cadmium	A0C250407	WSASB-022-6200-FD	0.052	0.24	J	J	RepLimit-J
Cadmium	A0C250407	WSASB-023-5619-SO	0.064	0.25	J	J	RepLimit-J
Cadmium	A0C250407	WSASB-023-5620-SO	0.050	0.24	J	J	RepLimit-J
Cadmium	A0C240550	WSASB-023-5621-SO	0.062	0.23	J	J	RepLimit-J
Cadmium	A0C250407	WSASB-024-5624-SO	0.046	0.26	J	UJ	RepLimit-J, CalBlk-U
Cadmium	A0C240550	WSASB-024-5625-SO	0.057	0.24	J	J	RepLimit-J
Cadmium	A0C250407	WSASB-024-5626-SO	0.067	0.23	J	J	RepLimit-J
Cadmium	A0C250407	WSASB-024-6203-FD	0.052	0.26	J	J	RepLimit-J
Cadmium	A0C250407	WSASB-026-5629-SO	0.058	0.27	J	J	RepLimit-J
Cadmium	A0C250407	WSASB-026-5630-SO	0.043	0.27	J	UJ	RepLimit-J, CalBlk-U
Cadmium	A0C240550	WSASB-026-5631-SO	0.042	0.26	J	J	RepLimit-J
Cadmium	A0D010524	WSASB-026-5632-SO	0.046	0.23	J	UJ	RepLimit-J, CalBlk-U
Cadmium	A0C250407	WSASB-027-5633-SO	0.099	0.25	J	J	RepLimit-J
Cadmium	A0C250407	WSASB-027-5634-SO	0.048	0.26	J	UJ	RepLimit-J, CalBlk-U
Cadmium	A0C240550	WSASB-027-5635-SO	0.040	0.26	J	UJ	RepLimit-J, CalBlk-U
Cadmium	A0C250407	WSASB-028-5637-SO	0.26	0.27	J	J	RepLimit-J
Cadmium	A0C250407	WSASB-028-5638-SO	0.039	0.25	J	UJ	RepLimit-J, CalBlk-U
Cadmium	A0C240550	WSASB-028-5639-SO	0.047	0.24	J	UJ	RepLimit-J, CalBlk-U
Cadmium	A0C250407	WSASB-028-5640-SO	0.052	0.23	J	J	RepLimit-J
Cadmium	A0C250407	WSASB-029-5641-SO	0.10	0.27	J	J	RepLimit-J
Cadmium	A0C250407	WSASB-029-5642-SO	0.050	0.25	J	J	RepLimit-J
Cadmium	A0C240550	WSASB-029-5643-SO	0.038	0.25	J	UJ	RepLimit-J, CalBlk-U
Cadmium	A0C250600	WSASS-033M-5645-SO	0.11	0.20	J	J	RepLimit-J
Cadmium	A0C250600	WSASS-034M-5646-SO	0.12	0.20	J	J	RepLimit-J
Cadmium	A0C250600	WSASS-034M-6195-FD	0.12	0.20	J	J	RepLimit-J
Cadmium	A0C250600	WSASS-035M-5648-SO	0.19	0.20	J	J	RepLimit-J

**Table C-4. Detailed Listing of Qualified Results for Samples from Wet Storage Area (continued)**

<b>Chemical</b>	<b>Laboratory SDG</b>	<b>Sample ID</b>	<b>Results</b>	<b>Reporting Limit</b>	<b>Laboratory Qualifier<sup>a</sup></b>	<b>Validation Qualifier<sup>b</sup></b>	<b>Validation Code<sup>c</sup></b>
Cadmium	A0C250600	WSASS-036M-5647-SO	0.11	0.20	J	J	RepLimit-J
Calcium	A0D010524	WSASB-026-5632-SO	6,530	235	--	J	MS-J
Calcium	A0C250600	WSASS-033M-5645-SO	2,080	2,040	--	J	MS-J
Calcium	A0C250600	WSASS-034M-5646-SO	1,330	204	--	J	MS-J
Calcium	A0C250600	WSASS-034M-6195-FD	1,210	204	--	J	MS-J
Calcium	A0C250600	WSASS-035M-5648-SO	2,400	1,020	--	J	MS-J
Calcium	A0C250600	WSASS-036M-5647-SO	787	204	--	J	MS-J
Chromium	A0C250407	WSASB-021-5611-SO	14.0	0.62	--	J	MS-J
Chromium	A0C250407	WSASB-021-5612-SO	15.2	0.62	--	J	MS-J
Chromium	A0C250407	WSASB-021-6201-FD	18.5	0.62	--	J	MS-J
Chromium	A0C250407	WSASB-022-5615-SO	14.0	0.62	--	J	MS-J
Chromium	A0C250407	WSASB-022-5616-SO	15.3	0.62	--	J	MS-J
Chromium	A0C250407	WSASB-022-6200-FD	15.7	0.59	--	J	MS-J
Chromium	A0C250407	WSASB-023-5619-SO	18.7	0.62	--	J	MS-J
Chromium	A0C250407	WSASB-023-5620-SO	13.8	0.60	--	J	MS-J
Chromium	A0C250407	WSASB-024-5623-SO	13.4	0.64	--	J	MS-J
Chromium	A0C250407	WSASB-024-5624-SO	19.0	0.64	--	J	MS-J
Chromium	A0C250407	WSASB-024-5626-SO	11.9	0.58	--	J	MS-J
Chromium	A0C250407	WSASB-026-5629-SO	17.0	0.68	--	J	MS-J
Chromium	A0C250407	WSASB-026-5630-SO	20.9	0.67	--	J	MS-J
Chromium	A0C250407	WSASB-027-5633-SO	15.8	0.62	--	J	MS-J
Chromium	A0C250407	WSASB-027-5634-SO	19.2	0.65	--	J	MS-J
Chromium	A0C250407	WSASB-028-5637-SO	13.3	0.68	--	J	MS-J
Chromium	A0C250407	WSASB-028-5638-SO	15.7	0.62	--	J	MS-J
Chromium	A0C250407	WSASB-028-5640-SO	10.0	0.57	--	J	MS-J
Chromium	A0C250407	WSASB-029-5641-SO	13.7	0.66	--	J	MS-J
Chromium	A0C250407	WSASB-029-5642-SO	13.7	0.62	--	J	MS-J
Cobalt	A0C240550	WSASB-021-5613-SO	14.3	0.62	--	J	MS-J
Cobalt	A0C240550	WSASB-022-5617-SO	10.3	0.60	--	J	MS-J
Cobalt	A0C240550	WSASB-023-5621-SO	8.4	0.58	--	J	MS-J
Cobalt	A0C240550	WSASB-024-5625-SO	8.7	0.60	--	J	MS-J
Cobalt	A0C240550	WSASB-026-5631-SO	15.6	0.65	--	J	MS-J
Cobalt	A0C240550	WSASB-027-5635-SO	12.8	0.65	--	J	MS-J
Cobalt	A0C240550	WSASB-028-5639-SO	11.3	0.61	--	J	MS-J
Cobalt	A0C240550	WSASB-029-5643-SO	9.0	0.62	--	J	MS-J

**Table C-4. Detailed Listing of Qualified Results for Samples from Wet Storage Area (continued)**

<b>Chemical</b>	<b>Laboratory SDG</b>	<b>Sample ID</b>	<b>Results</b>	<b>Reporting Limit</b>	<b>Laboratory Qualifier<sup>a</sup></b>	<b>Validation Qualifier<sup>b</sup></b>	<b>Validation Code<sup>c</sup></b>
Copper	A0C250407	WSASB-024-6203-FD	17.8	0.64	E	J	ProJudge-J
Iron	A0C250407	WSASB-021-5611-SO	20,200	61.6	--	J	ProJudge-J
Iron	A0C250407	WSASB-021-5612-SO	28,700	62.5	--	J	ProJudge-J
Iron	A0C250407	WSASB-021-6201-FD	32,600	61.9	--	J	ProJudge-J
Iron	A0C250407	WSASB-022-5615-SO	25,500	62.3	--	J	ProJudge-J
Iron	A0C250407	WSASB-022-5616-SO	29,300	61.8	--	J	ProJudge-J
Iron	A0C250407	WSASB-022-6200-FD	27,500	59.0	--	J	ProJudge-J
Iron	A0C250407	WSASB-023-5619-SO	30,400	62.3	--	J	ProJudge-J
Iron	A0C250407	WSASB-023-5620-SO	26,400	60.1	--	J	ProJudge-J
Iron	A0C250407	WSASB-024-5623-SO	23,600	63.8	--	J	ProJudge-J
Iron	A0C250407	WSASB-024-5624-SO	33,600	64.3	--	J	ProJudge-J
Iron	A0C250407	WSASB-024-5626-SO	22,400	58.0	--	J	ProJudge-J
Iron	A0C250407	WSASB-024-6203-FD	29,400	64.3	--	J	ProJudge-J
Iron	A0C250407	WSASB-026-5629-SO	33,600	68.1	--	J	ProJudge-J
Iron	A0C250407	WSASB-026-5630-SO	32,600	67.0	--	J	ProJudge-J
Iron	A0C250407	WSASB-027-5633-SO	24,200	62.5	E	J	ProJudge-J
Iron	A0C250407	WSASB-027-5634-SO	34,500	65.1	--	J	ProJudge-J
Iron	A0C250407	WSASB-028-5637-SO	25,700	68.3	--	J	ProJudge-J
Iron	A0C250407	WSASB-028-5638-SO	29,900	62.0	--	J	ProJudge-J
Iron	A0C250407	WSASB-028-5640-SO	20,000	57.3	--	J	ProJudge-J
Iron	A0C250407	WSASB-029-5641-SO	26,700	66.3	--	J	ProJudge-J
Iron	A0C250407	WSASB-029-5642-SO	26,700	62.3	--	J	ProJudge-J
Lead	A0C240550	WSASB-021-5613-SO	12.3	0.37	--	J	MS-J
Lead	A0C240550	WSASB-022-5617-SO	18.3	0.36	--	J	MS-J
Lead	A0C240550	WSASB-023-5621-SO	9.8	0.35	--	J	MS-J
Lead	A0C240550	WSASB-024-5625-SO	11.7	0.36	--	J	MS-J
Lead	A0C240550	WSASB-026-5631-SO	13.9	0.39	--	J	MS-J
Lead	A0C240550	WSASB-027-5635-SO	12.5	0.39	--	J	MS-J
Lead	A0C240550	WSASB-028-5639-SO	11.6	0.36	--	J	MS-J
Lead	A0C240550	WSASB-029-5643-SO	10.7	0.37	--	J	MS-J
Lead	A0C250600	WSASS-033M-5645-SO	17.2	0.31	--	J	MS-J
Lead	A0C250600	WSASS-034M-5646-SO	16.2	0.31	--	J	MS-J
Lead	A0C250600	WSASS-034M-6195-FD	16.4	0.31	--	J	MS-J
Lead	A0C250600	WSASS-035M-5648-SO	19.2	0.31	--	J	MS-J
Lead	A0C250600	WSASS-036M-5647-SO	17.4	0.31	--	J	MS-J

**Table C-4. Detailed Listing of Qualified Results for Samples from Wet Storage Area (continued)**

<b>Chemical</b>	<b>Laboratory SDG</b>	<b>Sample ID</b>	<b>Results</b>	<b>Reporting Limit</b>	<b>Laboratory Qualifier<sup>a</sup></b>	<b>Validation Qualifier<sup>b</sup></b>	<b>Validation Code<sup>c</sup></b>
Magnesium	A0C250407	WSASB-021-5611-SO	2,220	123	--	J	MS-J
Magnesium	A0C250407	WSASB-021-5612-SO	3,490	125	--	J	MS-J
Magnesium	A0C250407	WSASB-021-6201-FD	4,980	124	--	J	MS-J
Magnesium	A0C250407	WSASB-022-5615-SO	2,490	125	--	J	MS-J
Magnesium	A0C250407	WSASB-022-5616-SO	3,380	124	--	J	MS-J
Magnesium	A0C250407	WSASB-022-6200-FD	3,400	118	--	J	MS-J
Magnesium	A0C250407	WSASB-023-5619-SO	3,760	125	--	J	MS-J
Magnesium	A0C250407	WSASB-023-5620-SO	3,180	120	--	J	MS-J
Magnesium	A0C250407	WSASB-024-5623-SO	2,320	128	--	J	MS-J
Magnesium	A0C250407	WSASB-024-5624-SO	4,310	129	--	J	MS-J
Magnesium	A0C250407	WSASB-024-5626-SO	4,350	116	--	J	MS-J
Magnesium	A0C250407	WSASB-024-6203-FD	4,020	129	--	J	MS-J
Magnesium	A0C250407	WSASB-026-5629-SO	3,820	136	--	J	MS-J
Magnesium	A0C250407	WSASB-026-5630-SO	4,750	134	--	J	MS-J
Magnesium	A0D010524	WSASB-026-5632-SO	4,630	117	--	J	MS-J
Magnesium	A0C250407	WSASB-027-5633-SO	2,830	125	--	J	MS-J
Magnesium	A0C250407	WSASB-027-5634-SO	4,590	130	--	J	MS-J
Magnesium	A0C250407	WSASB-028-5637-SO	2,470	137	--	J	MS-J
Magnesium	A0C250407	WSASB-028-5638-SO	3,700	124	--	J	MS-J
Magnesium	A0C250407	WSASB-028-5640-SO	3,670	115	--	J	MS-J
Magnesium	A0C250407	WSASB-029-5641-SO	2,480	133	--	J	MS-J
Magnesium	A0C250407	WSASB-029-5642-SO	2,740	125	--	J	MS-J
Magnesium	A0C250600	WSASS-033M-5645-SO	3,130	102	--	J	MS-J
Magnesium	A0C250600	WSASS-034M-5646-SO	2,820	102	--	J	MS-J
Magnesium	A0C250600	WSASS-034M-6195-FD	2,740	102	--	J	MS-J
Magnesium	A0C250600	WSASS-035M-5648-SO	2,870	102	--	J	MS-J
Magnesium	A0C250600	WSASS-036M-5647-SO	2,950	102	--	J	MS-J
Mercury	A0C250407	WSASB-021-5611-SO	0.076	0.12	J	J	RepLimit-J
Mercury	A0C240550	WSASB-021-5613-SO	0.032	0.12	J	J	RepLimit-J
Mercury	A0C250407	WSASB-028-5638-SO	0.025	0.12	J	J	RepLimit-J
Mercury	A0C250407	WSASB-029-5641-SO	0.027	0.13	J	J	RepLimit-J
Mercury	A0C250600	WSASS-033M-5645-SO	0.018	0.10	J	J	RepLimit-J
Mercury	A0C250600	WSASS-034M-5646-SO	0.019	0.10	J	J	RepLimit-J
Mercury	A0C250600	WSASS-034M-6195-FD	0.023	0.10	J	J	RepLimit-J
Mercury	A0C250600	WSASS-035M-5648-SO	0.025	0.10	J	J	RepLimit-J



**Table C-4. Detailed Listing of Qualified Results for Samples from Wet Storage Area (continued)**

<b>Chemical</b>	<b>Laboratory SDG</b>	<b>Sample ID</b>	<b>Results</b>	<b>Reporting Limit</b>	<b>Laboratory Qualifier<sup>a</sup></b>	<b>Validation Qualifier<sup>b</sup></b>	<b>Validation Code<sup>c</sup></b>
Mercury	A0C250600	WSASS-036M-5647-SO	0.036	0.10	J	J	RepLimit-J
Nickel	A0C250407	WSASB-021-5611-SO	19.8	1.2	--	J	MS-J
Nickel	A0C250407	WSASB-021-5612-SO	30.1	1.2	--	J	MS-J
Nickel	A0C250407	WSASB-021-6201-FD	32.5	1.2	--	J	MS-J
Nickel	A0C250407	WSASB-022-5615-SO	21.1	1.2	--	J	MS-J
Nickel	A0C250407	WSASB-022-5616-SO	33.5	1.2	--	J	MS-J
Nickel	A0C250407	WSASB-022-6200-FD	28.6	1.2	--	J	MS-J
Nickel	A0C250407	WSASB-023-5619-SO	28.9	1.2	--	J	MS-J
Nickel	A0C250407	WSASB-023-5620-SO	27.3	1.2	--	J	MS-J
Nickel	A0C250407	WSASB-024-5623-SO	18.9	1.3	--	J	MS-J
Nickel	A0C250407	WSASB-024-5624-SO	31.5	1.3	--	J	MS-J
Nickel	A0C250407	WSASB-024-5626-SO	21.8	1.2	--	J	MS-J
Nickel	A0C250407	WSASB-024-6203-FD	28.9	1.3	--	J	MS-J
Nickel	A0C250407	WSASB-026-5629-SO	30.0	1.4	--	J	MS-J
Nickel	A0C250407	WSASB-026-5630-SO	32.3	1.3	--	J	MS-J
Nickel	A0C250407	WSASB-027-5633-SO	20.4	1.2	--	J	MS-J
Nickel	A0C250407	WSASB-027-5634-SO	35.0	1.3	--	J	MS-J
Nickel	A0C250407	WSASB-028-5637-SO	21.8	1.4	--	J	MS-J
Nickel	A0C250407	WSASB-028-5638-SO	29.4	1.2	--	J	MS-J
Nickel	A0C250407	WSASB-028-5640-SO	17.1	1.1	--	J	MS-J
Nickel	A0C250407	WSASB-029-5641-SO	20.0	1.3	--	J	MS-J
Nickel	A0C250407	WSASB-029-5642-SO	24.0	1.2	--	J	MS-J
Nickel	A0C250600	WSASS-033M-5645-SO	23.0	1.0	B	J	MS-J
Nickel	A0C250600	WSASS-034M-5646-SO	21.7	1.0	B	J	MS-J
Nickel	A0C250600	WSASS-034M-6195-FD	25.5	1.0	B	J	MS-J
Nickel	A0C250600	WSASS-035M-5648-SO	23.3	1.0	B	J	MS-J
Nickel	A0C250600	WSASS-036M-5647-SO	22.9	1.0	B	J	MS-J
Potassium	A0C250407	WSASB-021-5611-SO	934	123	--	J	MS-J
Potassium	A0C250407	WSASB-021-5612-SO	1,150	125	--	J	MS-J
Potassium	A0C240550	WSASB-021-5613-SO	1,760	124	--	J	MS-J
Potassium	A0C250407	WSASB-021-6201-FD	1,800	124	--	J	MS-J
Potassium	A0C250407	WSASB-022-5615-SO	1,050	125	--	J	MS-J
Potassium	A0C250407	WSASB-022-5616-SO	1,070	124	--	J	MS-J
Potassium	A0C240550	WSASB-022-5617-SO	1,260	120	--	J	MS-J
Potassium	A0C250407	WSASB-022-6200-FD	1,350	118	--	J	MS-J

**Table C-4. Detailed Listing of Qualified Results for Samples from Wet Storage Area (continued)**

<b>Chemical</b>	<b>Laboratory SDG</b>	<b>Sample ID</b>	<b>Results</b>	<b>Reporting Limit</b>	<b>Laboratory Qualifier<sup>a</sup></b>	<b>Validation Qualifier<sup>b</sup></b>	<b>Validation Code<sup>c</sup></b>
Potassium	A0C250407	WSASB-023-5619-SO	1,090	125	--	J	MS-J
Potassium	A0C250407	WSASB-023-5620-SO	867	120	--	J	MS-J
Potassium	A0C240550	WSASB-023-5621-SO	948	115	--	J	MS-J
Potassium	A0C250407	WSASB-024-5623-SO	814	128	--	J	MS-J
Potassium	A0C250407	WSASB-024-5624-SO	1,580	129	--	J	MS-J
Potassium	A0C240550	WSASB-024-5625-SO	1,100	119	--	J	MS-J
Potassium	A0C250407	WSASB-024-5626-SO	1,210	116	--	J	MS-J
Potassium	A0C250407	WSASB-024-6203-FD	1,300	129	--	J	MS-J
Potassium	A0C250407	WSASB-026-5629-SO	884	136	--	J	MS-J
Potassium	A0C250407	WSASB-026-5630-SO	1,650	134	--	J	MS-J
Potassium	A0C240550	WSASB-026-5631-SO	1,590	130	--	J	MS-J
Potassium	A0C250407	WSASB-027-5633-SO	1,080	125	--	J	MS-J
Potassium	A0C250407	WSASB-027-5634-SO	1,520	130	--	J	MS-J
Potassium	A0C240550	WSASB-027-5635-SO	1,670	130	--	J	MS-J
Potassium	A0C250407	WSASB-028-5637-SO	680	137	--	J	MS-J
Potassium	A0C250407	WSASB-028-5638-SO	963	124	--	J	MS-J
Potassium	A0C240550	WSASB-028-5639-SO	1,260	121	--	J	MS-J
Potassium	A0C250407	WSASB-028-5640-SO	1,050	115	--	J	MS-J
Potassium	A0C250407	WSASB-029-5641-SO	781	133	--	J	MS-J
Potassium	A0C250407	WSASB-029-5642-SO	846	125	--	J	MS-J
Potassium	A0C240550	WSASB-029-5643-SO	689	124	--	J	MS-J
Potassium	A0C250600	WSASS-033M-5645-SO	2,230	1,020	--	J	MS-J
Potassium	A0C250600	WSASS-034M-5646-SO	989	102	--	J	MS-J
Potassium	A0C250600	WSASS-034M-6195-FD	979	102	--	J	MS-J
Potassium	A0C250600	WSASS-035M-5648-SO	951	511	--	J	MS-J
Potassium	A0C250600	WSASS-036M-5647-SO	974	102	--	J	MS-J
Selenium	A0C240550	WSASB-021-5613-SO	1.1	0.62	--	J	LCS-J
Selenium	A0C240550	WSASB-022-5617-SO	0.91	0.60	--	J	LCS-J
Selenium	A0C240550	WSASB-023-5621-SO	0.79	0.58	--	J	LCS-J
Selenium	A0C240550	WSASB-024-5625-SO	0.84	0.60	--	J	LCS-J
Selenium	A0C250407	WSASB-024-6203-FD	1.1	0.64	--	J	MS-J
Selenium	A0C240550	WSASB-026-5631-SO	1.1	0.65	--	J	LCS-J
Selenium	A0D010524	WSASB-026-5632-SO	0.76	0.59	--	J	LCS-J
Selenium	A0C240550	WSASB-027-5635-SO	1.1	0.65	--	J	LCS-J
Selenium	A0C240550	WSASB-028-5639-SO	0.95	0.61	--	J	LCS-J

**Table C-4. Detailed Listing of Qualified Results for Samples from Wet Storage Area (continued)**

<b>Chemical</b>	<b>Laboratory SDG</b>	<b>Sample ID</b>	<b>Results</b>	<b>Reporting Limit</b>	<b>Laboratory Qualifier<sup>a</sup></b>	<b>Validation Qualifier<sup>b</sup></b>	<b>Validation Code<sup>c</sup></b>
Selenium	A0C240550	WSASB-029-5643-SO	1.0	0.62	--	J	LCS-J
Silver	A0C250407	WSASB-021-5611-SO	0.070	0.62	J	UJ	RepLimit-J, CalBlk-U
Silver	A0C250407	WSASB-021-5612-SO	0.016	0.62	J	UJ	RepLimit-J, CalBlk-U
Silver	A0C240550	WSASB-021-5613-SO	0.026	0.62	J	J	RepLimit-J
Silver	A0C250407	WSASB-021-6201-FD	0.033	0.62	J	UJ	RepLimit-J, CalBlk-U
Silver	A0C250407	WSASB-022-5615-SO	0.018	0.62	J	UJ	RepLimit-J, CalBlk-U
Silver	A0C250407	WSASB-022-5616-SO	0.014	0.62	J	UJ	RepLimit-J, CalBlk-U
Silver	A0C240550	WSASB-022-5617-SO	0.025	0.60	J	J	RepLimit-J
Silver	A0C250407	WSASB-022-6200-FD	0.013	0.59	J	UJ	RepLimit-J, CalBlk-U
Silver	A0C250407	WSASB-023-5619-SO	0.019	0.62	J	UJ	RepLimit-J, CalBlk-U
Silver	A0C250407	WSASB-023-5620-SO	0.013	0.60	J	UJ	RepLimit-J, CalBlk-U
Silver	A0C240550	WSASB-023-5621-SO	0.016	0.58	J	J	RepLimit-J
Silver	A0C250407	WSASB-024-5623-SO	0.026	0.64	J	UJ	RepLimit-J, CalBlk-U
Silver	A0C250407	WSASB-024-5624-SO	0.017	0.64	J	UJ	RepLimit-J, CalBlk-U
Silver	A0C240550	WSASB-024-5625-SO	0.018	0.60	J	UJ	RepLimit-J, CalBlk-U
Silver	A0C250407	WSASB-024-5626-SO	0.030	0.58	J	UJ	RepLimit-J, CalBlk-U
Silver	A0C250407	WSASB-024-6203-FD	0.016	0.64	J	J	RepLimit-J
Silver	A0C250407	WSASB-026-5629-SO	0.018	0.68	J	UJ	RepLimit-J, CalBlk-U
Silver	A0C250407	WSASB-026-5630-SO	0.036	0.67	J	UJ	RepLimit-J, CalBlk-U
Silver	A0C240550	WSASB-026-5631-SO	0.025	0.65	J	J	RepLimit-J
Silver	A0D010524	WSASB-026-5632-SO	0.030	0.59	J	UJ	RepLimit-J, CalBlk-U
Silver	A0C250407	WSASB-027-5633-SO	0.021	0.62	J	UJ	RepLimit-J, CalBlk-U
Silver	A0C250407	WSASB-027-5634-SO	0.019	0.65	J	UJ	RepLimit-J, CalBlk-U
Silver	A0C240550	WSASB-027-5635-SO	0.023	0.65	J	UJ	RepLimit-J, CalBlk-U
Silver	A0C250407	WSASB-028-5637-SO	0.028	0.68	J	UJ	RepLimit-J, CalBlk-U
Silver	A0C250407	WSASB-028-5638-SO	0.013	0.62	J	UJ	RepLimit-J, CalBlk-U
Silver	A0C240550	WSASB-028-5639-SO	0.017	0.61	J	UJ	RepLimit-J, CalBlk-U
Silver	A0C250407	WSASB-028-5640-SO	0.025	0.57	J	UJ	RepLimit-J, CalBlk-U
Silver	A0C250407	WSASB-029-5641-SO	0.013	0.66	J	UJ	RepLimit-J, CalBlk-U
Silver	A0C250407	WSASB-029-5642-SO	0.010	0.62	J	UJ	RepLimit-J, CalBlk-U
Silver	A0C240550	WSASB-029-5643-SO	0.0056	0.62	J	UJ	RepLimit-J, CalBlk-U
Silver	A0C250600	WSASS-033M-5645-SO	0.024	0.51	J	UJ	RepLimit-J, CalBlk-U
Silver	A0C250600	WSASS-034M-5646-SO	0.028	0.51	J	UJ	RepLimit-J, CalBlk-U
Silver	A0C250600	WSASS-034M-6195-FD	0.026	0.51	J	UJ	RepLimit-J, CalBlk-U
Silver	A0C250600	WSASS-035M-5648-SO	0.035	0.51	J	J	RepLimit-J

**Table C-4. Detailed Listing of Qualified Results for Samples from Wet Storage Area (continued)**

<b>Chemical</b>	<b>Laboratory SDG</b>	<b>Sample ID</b>	<b>Results</b>	<b>Reporting Limit</b>	<b>Laboratory Qualifier<sup>a</sup></b>	<b>Validation Qualifier<sup>b</sup></b>	<b>Validation Code<sup>c</sup></b>
Silver	A0C250600	WSASS-036M-5647-SO	0.023	0.51	J	UJ	RepLimit-J, CalBlk-U
Sodium	A0C250407	WSASB-021-5611-SO	29.7	123	J	J	RepLimit-J
Sodium	A0C250407	WSASB-021-5612-SO	49.8	125	J	J	RepLimit-J
Sodium	A0C240550	WSASB-021-5613-SO	77.4	124	J	J	RepLimit-J
Sodium	A0C250407	WSASB-021-6201-FD	74.6	124	J	J	RepLimit-J
Sodium	A0C250407	WSASB-022-5615-SO	33.0	125	J	J	RepLimit-J
Sodium	A0C250407	WSASB-022-5616-SO	44.9	124	J	J	RepLimit-J
Sodium	A0C240550	WSASB-022-5617-SO	53.6	120	J	J	RepLimit-J
Sodium	A0C250407	WSASB-022-6200-FD	50.6	118	J	J	RepLimit-J
Sodium	A0C250407	WSASB-023-5619-SO	45.1	125	J	J	RepLimit-J
Sodium	A0C250407	WSASB-023-5620-SO	42.5	120	J	J	RepLimit-J
Sodium	A0C240550	WSASB-023-5621-SO	53.2	115	J	J	RepLimit-J
Sodium	A0C250407	WSASB-024-5623-SO	35.8	128	J	J	RepLimit-J
Sodium	A0C250407	WSASB-024-5624-SO	59.2	129	J	J	RepLimit-J
Sodium	A0C240550	WSASB-024-5625-SO	50.9	119	J	J	RepLimit-J
Sodium	A0C250407	WSASB-024-5626-SO	60.3	116	J	J	RepLimit-J
Sodium	A0C250407	WSASB-024-6203-FD	62.7	129	J	J	RepLimit-J
Sodium	A0C250407	WSASB-026-5629-SO	38.6	136	J	J	RepLimit-J
Sodium	A0C250407	WSASB-026-5630-SO	62.4	134	J	J	RepLimit-J
Sodium	A0C240550	WSASB-026-5631-SO	75.2	130	J	J	RepLimit-J
Sodium	A0D010524	WSASB-026-5632-SO	59.8	117	J	J	RepLimit-J
Sodium	A0C250407	WSASB-027-5633-SO	37.7	125	J	J	RepLimit-J
Sodium	A0C250407	WSASB-027-5634-SO	59.7	130	J	J	RepLimit-J
Sodium	A0C240550	WSASB-027-5635-SO	72.5	130	J	J	RepLimit-J
Sodium	A0C250407	WSASB-028-5637-SO	29.1	137	J	J	RepLimit-J
Sodium	A0C250407	WSASB-028-5638-SO	49.8	124	J	J	RepLimit-J
Sodium	A0C240550	WSASB-028-5639-SO	54.4	121	J	J	RepLimit-J
Sodium	A0C250407	WSASB-028-5640-SO	56.6	115	J	J	RepLimit-J
Sodium	A0C250407	WSASB-029-5641-SO	32.9	133	J	J	RepLimit-J
Sodium	A0C250407	WSASB-029-5642-SO	37.2	125	J	J	RepLimit-J
Sodium	A0C240550	WSASB-029-5643-SO	32.8	124	J	J	RepLimit-J
Sodium	A0C250600	WSASS-033M-5645-SO	37.7	102	J	J	RepLimit-J
Sodium	A0C250600	WSASS-034M-5646-SO	37.2	102	J	J	RepLimit-J
Sodium	A0C250600	WSASS-034M-6195-FD	40.4	102	J	J	RepLimit-J
Sodium	A0C250600	WSASS-035M-5648-SO	44.0	102	J	J	RepLimit-J

**Table C-4. Detailed Listing of Qualified Results for Samples from Wet Storage Area (continued)**

<b>Chemical</b>	<b>Laboratory SDG</b>	<b>Sample ID</b>	<b>Results</b>	<b>Reporting Limit</b>	<b>Laboratory Qualifier<sup>a</sup></b>	<b>Validation Qualifier<sup>b</sup></b>	<b>Validation Code<sup>c</sup></b>
Sodium	A0C250600	WSASS-036M-5647-SO	35.4	102	J	J	RepLimit-J
Thallium	A0C250407	WSASB-021-5611-SO	0.18	0.25	J	J	RepLimit-J
Thallium	A0C250407	WSASB-021-5612-SO	0.17	0.25	J	J	RepLimit-J
Thallium	A0C240550	WSASB-021-5613-SO	0.18	0.25	J	J	RepLimit-J
Thallium	A0C250407	WSASB-021-6201-FD	0.18	0.25	J	J	RepLimit-J
Thallium	A0C250407	WSASB-022-5615-SO	0.14	0.25	J	J	RepLimit-J
Thallium	A0C250407	WSASB-022-5616-SO	0.17	0.25	J	J	RepLimit-J
Thallium	A0C240550	WSASB-022-5617-SO	0.12	0.24	J	J	RepLimit-J
Thallium	A0C250407	WSASB-022-6200-FD	0.15	0.24	J	J	RepLimit-J
Thallium	A0C250407	WSASB-023-5619-SO	0.18	0.25	J	J	RepLimit-J
Thallium	A0C250407	WSASB-023-5620-SO	0.17	0.24	J	J	RepLimit-J
Thallium	A0C240550	WSASB-023-5621-SO	0.12	0.23	J	J	RepLimit-J
Thallium	A0C250407	WSASB-024-5623-SO	0.15	0.26	J	J	RepLimit-J
Thallium	A0C250407	WSASB-024-5624-SO	0.17	0.26	J	J	RepLimit-J
Thallium	A0C240550	WSASB-024-5625-SO	0.14	0.24	J	J	RepLimit-J
Thallium	A0C250407	WSASB-024-5626-SO	0.12	0.23	J	J	RepLimit-J
Thallium	A0C250407	WSASB-024-6203-FD	0.17	0.26	J	J	RepLimit-J
Thallium	A0C250407	WSASB-026-5629-SO	0.17	0.27	J	J	RepLimit-J
Thallium	A0C250407	WSASB-026-5630-SO	0.22	0.27	J	J	RepLimit-J
Thallium	A0C240550	WSASB-026-5631-SO	0.17	0.26	J	J	RepLimit-J
Thallium	A0D010524	WSASB-026-5632-SO	0.15	0.23	J	J	RepLimit-J
Thallium	A0C250407	WSASB-027-5633-SO	0.16	0.25	J	J	RepLimit-J
Thallium	A0C250407	WSASB-027-5634-SO	0.20	0.26	J	J	RepLimit-J
Thallium	A0C240550	WSASB-027-5635-SO	0.19	0.26	J	J	RepLimit-J
Thallium	A0C250407	WSASB-028-5637-SO	0.13	0.27	J	J	RepLimit-J
Thallium	A0C250407	WSASB-028-5638-SO	0.17	0.25	J	J	RepLimit-J
Thallium	A0C240550	WSASB-028-5639-SO	0.15	0.24	J	J	RepLimit-J
Thallium	A0C250407	WSASB-028-5640-SO	0.10	0.23	J	J	RepLimit-J
Thallium	A0C250407	WSASB-029-5641-SO	0.15	0.27	J	J	RepLimit-J
Thallium	A0C250407	WSASB-029-5642-SO	0.16	0.25	J	J	RepLimit-J
Thallium	A0C240550	WSASB-029-5643-SO	0.12	0.25	J	J	RepLimit-J
Thallium	A0C250600	WSASS-033M-5645-SO	0.16	0.20	J	J	RepLimit-J
Thallium	A0C250600	WSASS-034M-5646-SO	0.16	0.20	J	J	RepLimit-J
Thallium	A0C250600	WSASS-034M-6195-FD	0.15	0.20	J	J	RepLimit-J
Thallium	A0C250600	WSASS-035M-5648-SO	0.15	0.20	J	J	RepLimit-J

**Table C-4. Detailed Listing of Qualified Results for Samples from Wet Storage Area (continued)**

<b>Chemical</b>	<b>Laboratory SDG</b>	<b>Sample ID</b>	<b>Results</b>	<b>Reporting Limit</b>	<b>Laboratory Qualifier<sup>a</sup></b>	<b>Validation Qualifier<sup>b</sup></b>	<b>Validation Code<sup>c</sup></b>
Thallium	A0C250600	WSASS-036M-5647-SO	0.16	0.20	J	J	RepLimit-J
Vanadium	A0C250407	WSASB-021-5611-SO	15.2	1.2	--	J	MS-J
Vanadium	A0C250407	WSASB-021-5612-SO	16.0	1.2	--	J	MS-J
Vanadium	A0C250407	WSASB-021-6201-FD	19.1	1.2	--	J	MS-J
Vanadium	A0C250407	WSASB-022-5615-SO	15.7	1.2	--	J	MS-J
Vanadium	A0C250407	WSASB-022-5616-SO	16.3	1.2	--	J	MS-J
Vanadium	A0C250407	WSASB-022-6200-FD	16.3	1.2	--	J	MS-J
Vanadium	A0C250407	WSASB-023-5619-SO	19.3	1.2	--	J	MS-J
Vanadium	A0C250407	WSASB-023-5620-SO	15.1	1.2	--	J	MS-J
Vanadium	A0C250407	WSASB-024-5623-SO	18.5	1.3	--	J	MS-J
Vanadium	A0C250407	WSASB-024-5624-SO	18.8	1.3	--	J	MS-J
Vanadium	A0C250407	WSASB-024-5626-SO	12.5	1.2	--	J	MS-J
Vanadium	A0C250407	WSASB-026-5629-SO	17.6	1.4	--	J	MS-J
Vanadium	A0C250407	WSASB-026-5630-SO	20.4	1.3	--	J	MS-J
Vanadium	A0C250407	WSASB-027-5633-SO	18.9	1.2	--	J	MS-J
Vanadium	A0C250407	WSASB-027-5634-SO	19.6	1.3	--	J	MS-J
Vanadium	A0C250407	WSASB-028-5637-SO	15.5	1.4	--	J	MS-J
Vanadium	A0C250407	WSASB-028-5638-SO	16.3	1.2	--	J	MS-J
Vanadium	A0C250407	WSASB-028-5640-SO	10.7	1.1	--	J	MS-J
Vanadium	A0C250407	WSASB-029-5641-SO	15.8	1.3	--	J	MS-J
Vanadium	A0C250407	WSASB-029-5642-SO	15.5	1.2	--	J	MS-J
Zinc	A0D010524	WSASB-026-5632-SO	53.2	4.7	B	J	MS-J
<b>Surface Water (µg/L)</b>							
Antimony	A0C250407	WSASW-038-5657-SW	0.28	5.0	J	J	RepLimit-J
Arsenic	A0C250407	WSASW-037-5656-SW	0.51	5.0	J	J	RepLimit-J
Arsenic	A0C250407	WSASW-038-5657-SW	0.58	5.0	J	J	RepLimit-J
Arsenic	A0C250407	WSASW-039-5658-SW	0.82	5.0	J	J	RepLimit-J
Arsenic	A0C310489	WSASW-040-5659-SW	0.78	5.0	J	J	RepLimit-J
Arsenic	A0C310489	WSASW-040-6199-FD	0.55	5.0	J	J	RepLimit-J
Chromium	A0C250407	WSASW-039-5658-SW	0.76	5.0	J	J	RepLimit-J
Cobalt	A0C250407	WSASW-037-5656-SW	0.16	5.0	JB	UJ	MB-U, RepLimit-J
Cobalt	A0C250407	WSASW-038-5657-SW	0.16	5.0	JB	UJ	MB-U, RepLimit-J
Cobalt	A0C250407	WSASW-039-5658-SW	0.22	5.0	JB	UJ	MB-U, RepLimit-J
Cobalt	A0C310489	WSASW-040-5659-SW	0.12	5.0	J	J	RepLimit-J
Cobalt	A0C310489	WSASW-040-6199-FD	0.12	5.0	J	J	RepLimit-J

**Table C-4. Detailed Listing of Qualified Results for Samples from Wet Storage Area (continued)**

<b>Chemical</b>	<b>Laboratory SDG</b>	<b>Sample ID</b>	<b>Results</b>	<b>Reporting Limit</b>	<b>Laboratory Qualifier<sup>a</sup></b>	<b>Validation Qualifier<sup>b</sup></b>	<b>Validation Code<sup>c</sup></b>
Copper	A0C250407	WSASW-039-5658-SW	1.8	5.0	J	J	RepLimit-J
Lead	A0C250407	WSASW-037-5656-SW	0.25	3.0	J	J	RepLimit-J
Lead	A0C250407	WSASW-038-5657-SW	0.26	3.0	J	J	RepLimit-J
Lead	A0C250407	WSASW-039-5658-SW	0.46	3.0	J	J	RepLimit-J
Lead	A0C310489	WSASW-040-5659-SW	0.27	3.0	J	J	RepLimit-J
Lead	A0C310489	WSASW-040-6199-FD	0.28	3.0	J	J	RepLimit-J
Nickel	A0C250407	WSASW-037-5656-SW	0.80	10.0	J	J	RepLimit-J
Nickel	A0C250407	WSASW-038-5657-SW	0.85	10.0	J	J	RepLimit-J
Nickel	A0C250407	WSASW-039-5658-SW	1.3	10.0	J	J	RepLimit-J
Nickel	A0C310489	WSASW-040-5659-SW	0.90	10.0	J	J	RepLimit-J
Nickel	A0C310489	WSASW-040-6199-FD	0.98	10.0	J	J	RepLimit-J
Selenium	A0C250407	WSASW-038-5657-SW	0.22	5.0	J	J	RepLimit-J
Selenium	A0C250407	WSASW-039-5658-SW	0.26	5.0	J	J	RepLimit-J
Vanadium	A0C250407	WSASW-038-5657-SW	0.63	10.0	J	J	RepLimit-J
Vanadium	A0C250407	WSASW-039-5658-SW	1.0	10.0	J	J	RepLimit-J
Vanadium	A0C310489	WSASW-040-5659-SW	0.66	10.0	J	J	RepLimit-J
Vanadium	A0C310489	WSASW-040-6199-FD	0.73	10.0	J	J	RepLimit-J
<b>Hexavalent Chromium</b>							
<b>Soil (mg/kg)</b>							
Chromium, hexavalent	A0C250600	WSASS-031-5654-SO	0.52	1.2	J	J	RepLimit-J
<b>Explosives</b>							
<b>Soil (mg/kg)</b>							
2,4-Dinitrotoluene	A0C250407	WSASB-024-5623-SO	0.25	0.25	U	UJ	CCV-UJ
2,6-Dinitrotoluene	A0C250407	WSASB-021-6201-FD	0.24	0.24	U	UJ	CCV-UJ
2,6-Dinitrotoluene	A0C250407	WSASB-022-6200-FD	0.24	0.24	U	UJ	CCV-UJ
2,6-Dinitrotoluene	A0C250407	WSASB-024-5624-SO	0.24	0.24	U	UJ	CCV-UJ
2,6-Dinitrotoluene	A0C250407	WSASB-024-5626-SO	0.25	0.25	U	UJ	CCV-UJ
2,6-Dinitrotoluene	A0C250407	WSASB-026-5629-SO	0.25	0.25	U	UJ	CCV-UJ
2,6-Dinitrotoluene	A0C250407	WSASB-026-5630-SO	0.25	0.25	U	UJ	CCV-UJ
2,6-Dinitrotoluene	A0C250407	WSASB-027-5633-SO	0.25	0.25	U	UJ	CCV-UJ
2,6-Dinitrotoluene	A0C250407	WSASB-027-5634-SO	0.24	0.24	U	UJ	CCV-UJ
2,6-Dinitrotoluene	A0C250407	WSASB-028-5637-SO	0.25	0.25	U	UJ	CCV-UJ
2,6-Dinitrotoluene	A0C250407	WSASB-028-5638-SO	0.25	0.25	U	UJ	CCV-UJ
2,6-Dinitrotoluene	A0C250407	WSASB-028-5640-SO	0.24	0.24	U	UJ	CCV-UJ
2,6-Dinitrotoluene	A0C250407	WSASB-029-5641-SO	0.25	0.25	U	UJ	CCV-UJ

**Table C-4. Detailed Listing of Qualified Results for Samples from Wet Storage Area (continued)**

<b>Chemical</b>	<b>Laboratory SDG</b>	<b>Sample ID</b>	<b>Results</b>	<b>Reporting Limit</b>	<b>Laboratory Qualifier<sup>a</sup></b>	<b>Validation Qualifier<sup>b</sup></b>	<b>Validation Code<sup>c</sup></b>
2,6-Dinitrotoluene	A0C250407	WSASB-029-5642-SO	0.23	0.23	U	UJ	CCV-UJ
2-Amino-4,6-dinitrotoluene	A0C250407	WSASB-021-6201-FD	0.24	0.24	U	UJ	CCV-UJ
2-Amino-4,6-dinitrotoluene	A0C250407	WSASB-022-6200-FD	0.24	0.24	U	UJ	CCV-UJ
2-Amino-4,6-dinitrotoluene	A0C250407	WSASB-024-5623-SO	0.25	0.25	U	UJ	CCV-UJ
2-Amino-4,6-dinitrotoluene	A0C250407	WSASB-024-5624-SO	0.24	0.24	U	UJ	CCV-UJ
2-Amino-4,6-dinitrotoluene	A0C250407	WSASB-024-5626-SO	0.25	0.25	U	UJ	CCV-UJ
2-Amino-4,6-dinitrotoluene	A0C250407	WSASB-026-5629-SO	0.25	0.25	U	UJ	CCV-UJ
2-Amino-4,6-dinitrotoluene	A0C250407	WSASB-026-5630-SO	0.25	0.25	U	UJ	CCV-UJ
2-Amino-4,6-dinitrotoluene	A0C250407	WSASB-027-5633-SO	0.25	0.25	U	UJ	CCV-UJ
2-Amino-4,6-dinitrotoluene	A0C250407	WSASB-027-5634-SO	0.24	0.24	U	UJ	CCV-UJ
2-Amino-4,6-dinitrotoluene	A0C250407	WSASB-028-5637-SO	0.25	0.25	U	UJ	CCV-UJ
2-Amino-4,6-dinitrotoluene	A0C250407	WSASB-028-5638-SO	0.25	0.25	U	UJ	CCV-UJ
2-Amino-4,6-dinitrotoluene	A0C250407	WSASB-028-5640-SO	0.24	0.24	U	UJ	CCV-UJ
2-Amino-4,6-dinitrotoluene	A0C250407	WSASB-029-5641-SO	0.25	0.25	U	UJ	CCV-UJ
2-Amino-4,6-dinitrotoluene	A0C250407	WSASB-029-5642-SO	0.23	0.23	U	UJ	CCV-UJ
4-Amino-2,6-Dinitrotoluene	A0C250407	WSASB-021-6201-FD	0.24	0.24	U	UJ	CCV-UJ
4-Amino-2,6-Dinitrotoluene	A0C250407	WSASB-022-6200-FD	0.24	0.24	U	UJ	CCV-UJ
4-Amino-2,6-Dinitrotoluene	A0C250407	WSASB-024-5623-SO	0.25	0.25	U	UJ	CCV-UJ
4-Amino-2,6-Dinitrotoluene	A0C250407	WSASB-024-5624-SO	0.24	0.24	U	UJ	CCV-UJ
4-Amino-2,6-Dinitrotoluene	A0C250407	WSASB-024-5626-SO	0.25	0.25	U	UJ	CCV-UJ
4-Amino-2,6-Dinitrotoluene	A0C250407	WSASB-026-5629-SO	0.25	0.25	U	UJ	CCV-UJ
4-Amino-2,6-Dinitrotoluene	A0C250407	WSASB-026-5630-SO	0.25	0.25	U	UJ	CCV-UJ
4-Amino-2,6-Dinitrotoluene	A0C250407	WSASB-027-5633-SO	0.25	0.25	U	UJ	CCV-UJ
4-Amino-2,6-Dinitrotoluene	A0C250407	WSASB-027-5634-SO	0.24	0.24	U	UJ	CCV-UJ
4-Amino-2,6-Dinitrotoluene	A0C250407	WSASB-028-5637-SO	0.25	0.25	U	UJ	CCV-UJ
4-Amino-2,6-Dinitrotoluene	A0C250407	WSASB-028-5638-SO	0.25	0.25	U	UJ	CCV-UJ
4-Amino-2,6-Dinitrotoluene	A0C250407	WSASB-028-5640-SO	0.24	0.24	U	UJ	CCV-UJ
4-Amino-2,6-Dinitrotoluene	A0C250407	WSASB-029-5641-SO	0.25	0.25	U	UJ	CCV-UJ
4-Amino-2,6-Dinitrotoluene	A0C250407	WSASB-029-5642-SO	0.23	0.23	U	UJ	CCV-UJ
Methyl-2,4,6-trinitrophenylnitramine (tetryl)	A0C250407	WSASB-028-5637-SO	0.026	0.25	J PG	J	RepLimit-J
Nitrobenzene	A0C250407	WSASB-021-6201-FD	0.24	0.24	U	UJ	CCV-UJ
Nitrobenzene	A0C250407	WSASB-022-6200-FD	0.24	0.24	U	UJ	CCV-UJ
Nitrobenzene	A0C250407	WSASB-024-5623-SO	0.25	0.25	U	UJ	CCV-UJ
Nitrobenzene	A0C250407	WSASB-024-5624-SO	0.24	0.24	U	UJ	CCV-UJ



**Table C-4. Detailed Listing of Qualified Results for Samples from Wet Storage Area (continued)**

<b>Chemical</b>	<b>Laboratory SDG</b>	<b>Sample ID</b>	<b>Results</b>	<b>Reporting Limit</b>	<b>Laboratory Qualifier<sup>a</sup></b>	<b>Validation Qualifier<sup>b</sup></b>	<b>Validation Code<sup>c</sup></b>
Nitrobenzene	A0C250407	WSASB-024-5626-SO	0.25	0.25	U	UJ	CCV-UJ
Nitrobenzene	A0C250407	WSASB-026-5629-SO	0.25	0.25	U	UJ	CCV-UJ
Nitrobenzene	A0C250407	WSASB-026-5630-SO	0.25	0.25	U	UJ	CCV-UJ
Nitrobenzene	A0C250407	WSASB-027-5633-SO	0.25	0.25	U	UJ	CCV-UJ
Nitrobenzene	A0C250407	WSASB-027-5634-SO	0.24	0.24	U	UJ	CCV-UJ
Nitrobenzene	A0C250407	WSASB-028-5637-SO	0.25	0.25	U	UJ	CCV-UJ
Nitrobenzene	A0C250407	WSASB-028-5638-SO	0.25	0.25	U	UJ	CCV-UJ
Nitrobenzene	A0C250407	WSASB-028-5640-SO	0.24	0.24	U	UJ	CCV-UJ
Nitrobenzene	A0C250407	WSASB-029-5641-SO	0.25	0.25	U	UJ	CCV-UJ
Nitrobenzene	A0C250407	WSASB-029-5642-SO	0.23	0.23	U	UJ	CCV-UJ
<b>Propellants</b>							
<b>Soil (mg/kg)</b>							
Nitrocellulose	A0C250407	WSASB-022-5616-SO	6.2	6.2	U	UJ	MS-UJ
<b>Surface Water (µg/L)</b>							
Nitrocellulose	A0C250407	WSASW-037-5656-SW	0.50	0.50	U	UJ	MS-UJ
Nitrocellulose	A0C250407	WSASW-039-5658-SW	0.50	0.50	U	UJ	MS-UJ
Nitroguanidine	A0C250407	WSASW-037-5656-SW	20	20	U	UJ	HT-UJ
Nitroguanidine	A0C250407	WSASW-038-5657-SW	20	20	U	UJ	HT-UJ
Nitroguanidine	A0C250407	WSASW-039-5658-SW	20	20	U	UJ	HT-UJ
<b>Polycyclic Aromatic Hydrocarbons</b>							
<b>Sediment (µg/kg)</b>							
Acenaphthylene	A0C250407	WSASD-037-5649-SD	11	74	J	J	RepLimit-J
Anthracene	A0C250407	WSASD-037-5649-SD	31	74	J	J	RepLimit-J
Benz(a)anthracene	A0C250407	WSASD-038-5650-SD	12	58	J	J	RepLimit-J
Benzo(a)pyrene	A0C250407	WSASD-038-5650-SD	12	58	J	J	RepLimit-J
Benzo(b)fluoranthene	A0C250407	WSASD-038-5650-SD	20	58	J	J	RepLimit-J
Benzo(ghi)perylene	A0C250407	WSASD-037-5649-SD	64	74	J	J	RepLimit-J
Benzo(ghi)perylene	A0C250407	WSASD-038-5650-SD	12	58	J	J	RepLimit-J
Benzo(k)fluoranthene	A0C250407	WSASD-037-5649-SD	64	74	J	J	RepLimit-J
Chrysene	A0C250407	WSASD-038-5650-SD	14	58	J	J	RepLimit-J
Fluoranthene	A0C250407	WSASD-038-5650-SD	22	58	J	J	RepLimit-J
Indeno(1,2,3-cd)pyrene	A0C250407	WSASD-037-5649-SD	57	74	J	J	RepLimit-J
Indeno(1,2,3-cd)pyrene	A0C250407	WSASD-038-5650-SD	9.0	58	J	J	RepLimit-J
Naphthalene	A0C250407	WSASD-037-5649-SD	68	74	J	J	RepLimit-J
Phenanthrene	A0C250407	WSASD-038-5650-SD	10	58	J	J	RepLimit-J

**Table C-4. Detailed Listing of Qualified Results for Samples from Wet Storage Area (continued)**

<b>Chemical</b>	<b>Laboratory SDG</b>	<b>Sample ID</b>	<b>Results</b>	<b>Reporting Limit</b>	<b>Laboratory Qualifier<sup>a</sup></b>	<b>Validation Qualifier<sup>b</sup></b>	<b>Validation Code<sup>c</sup></b>
Pyrene	A0C250407	WSASD-038-5650-SD	18	58	J	J	RepLimit-J
<b>Soil (µg/kg)</b>							
Acenaphthene	A0C250600	WSASS-033M-5645-SO	32	6.8	--	J	MS-J
Acenaphthylene	A0C250600	WSASS-033M-5645-SO	6.8	6.8	U	UJ	MS-UJ
Anthracene	A0C250407	WSASB-027-5633-SO	180	8.3	--	J	MS-J
Anthracene	A0C250600	WSASS-033M-5645-SO	51	6.8	--	J	MS-J
Anthracene	A0C250600	WSASS-036M-5647-SO	6.8	51	J	J	RepLimit-J
Benz( <i>a</i> )anthracene	A0C250407	WSASB-022-5616-SO	10	62	J	J	RepLimit-J
Benz( <i>a</i> )anthracene	A0C250407	WSASB-027-5633-SO	340	8.3	--	J	MS-J
Benz( <i>a</i> )anthracene	A0C250600	WSASS-033M-5645-SO	110	6.8	--	J	MS-J
Benz( <i>a</i> )anthracene	A0C250600	WSASS-036M-5647-SO	23	51	J	J	RepLimit-J
Benzo( <i>a</i> )pyrene	A0C250407	WSASB-027-5633-SO	300	8.3	--	J	MS-J
Benzo( <i>a</i> )pyrene	A0C250600	WSASS-033M-5645-SO	97	6.8	--	J	MS-J
Benzo( <i>a</i> )pyrene	A0C250600	WSASS-036M-5647-SO	22	51	J	J	RepLimit-J
Benzo( <i>b</i> )fluoranthene	A0C250407	WSASB-022-5616-SO	11	62	J	J	RepLimit-J
Benzo( <i>b</i> )fluoranthene	A0C250407	WSASB-022-6200-FD	8.4	59	J	J	RepLimit-J
Benzo( <i>b</i> )fluoranthene	A0C250407	WSASB-027-5633-SO	360	8.3	--	J	MS-J
Benzo( <i>b</i> )fluoranthene	A0C250600	WSASS-033M-5645-SO	130	6.8	--	J	MS-J
Benzo( <i>b</i> )fluoranthene	A0C250600	WSASS-036M-5647-SO	33	51	J	J	RepLimit-J
Benzo( <i>ghi</i> )perylene	A0C250407	WSASB-027-5633-SO	210	8.3	--	J	MS-J
Benzo( <i>ghi</i> )perylene	A0C250600	WSASS-033M-5645-SO	75	6.8	--	J	MS-J
Benzo( <i>ghi</i> )perylene	A0C250600	WSASS-036M-5647-SO	16	51	J	J	RepLimit-J
Benzo( <i>k</i> )fluoranthene	A0C250407	WSASB-027-5633-SO	190	8.3	--	J	MS-J
Benzo( <i>k</i> )fluoranthene	A0C250600	WSASS-033M-5645-SO	61	6.8	--	J	MS-J
Benzo( <i>k</i> )fluoranthene	A0C250600	WSASS-036M-5647-SO	12	51	J	J	RepLimit-J
Chrysene	A0C250407	WSASB-027-5633-SO	320	8.3	--	J	MS-J
Chrysene	A0C250600	WSASS-033M-5645-SO	120	6.8	--	J	MS-J
Chrysene	A0C250600	WSASS-036M-5647-SO	23	51	J	J	RepLimit-J
Fluoranthene	A0C250407	WSASB-022-5616-SO	19	62	J	J	RepLimit-J
Fluoranthene	A0C250407	WSASB-022-6200-FD	17	59	J	J	RepLimit-J
Fluoranthene	A0C250407	WSASB-027-5633-SO	970	8.3	--	J	MS-J
Fluoranthene	A0C250600	WSASS-033M-5645-SO	330	6.8	--	J	MS-J
Fluorene	A0C250600	WSASS-033M-5645-SO	32	6.8	--	J	MS-J
Indeno(1,2,3- <i>cd</i> )pyrene	A0C250407	WSASB-027-5633-SO	170	8.3	--	J	MS-J
Indeno(1,2,3- <i>cd</i> )pyrene	A0C250600	WSASS-033M-5645-SO	64	6.8	--	J	MS-J

**Table C-4. Detailed Listing of Qualified Results for Samples from Wet Storage Area (continued)**

<b>Chemical</b>	<b>Laboratory SDG</b>	<b>Sample ID</b>	<b>Results</b>	<b>Reporting Limit</b>	<b>Laboratory Qualifier<sup>a</sup></b>	<b>Validation Qualifier<sup>b</sup></b>	<b>Validation Code<sup>c</sup></b>
Indeno(1,2,3- <i>cd</i> )pyrene	A0C250600	WSASS-036M-5647-SO	15	51	J	J	RepLimit-J
Naphthalene	A0C250407	WSASB-022-5615-SO	39	120	J	J	RepLimit-J
Naphthalene	A0C250600	WSASS-033M-5645-SO	14	6.8	--	J	MS-J
Naphthalene	A0C250600	WSASS-036M-5647-SO	7.5	51	J	J	RepLimit-J
Phenanthrene	A0C250407	WSASB-022-5616-SO	10	62	J	J	RepLimit-J
Phenanthrene	A0C250407	WSASB-027-5633-SO	670	8.3	--	J	MS-J
Phenanthrene	A0C250600	WSASS-033M-5645-SO	240	6.8	--	J	MS-J
Phenanthrene	A0C250600	WSASS-036M-5647-SO	31	51	J	J	RepLimit-J
Pyrene	A0C250407	WSASB-022-5616-SO	15	62	J	J	RepLimit-J
Pyrene	A0C250407	WSASB-022-6200-FD	13	59	J	J	RepLimit-J
Pyrene	A0C250407	WSASB-027-5633-SO	710	8.3	--	J	MS-J
Pyrene	A0C250600	WSASS-033M-5645-SO	240	6.8	--	J	MS-J
Pyrene	A0C250600	WSASS-036M-5647-SO	37	51	J	J	RepLimit-J
Dibenz( <i>a,h</i> )anthracene	A0C250407	WSASB-028-5637-SO	240	340	J	J	RepLimit-J
Dibenz( <i>a,h</i> )anthracene	A0C250600	WSASS-033M-5645-SO	20	6.8	--	J	MS-J
<b>Semi-volatile Organic Compounds</b>							
<b>Sediment (µg/kg)</b>							
2-Methylnaphthalene	A0C250407	WSASD-037-5649-SD	80	490	J	J	RepLimit-J
2-Methylnaphthalene	A0C250407	WSASD-038-5650-SD	8.4	380	J	J	RepLimit-J
Bis(2-ethylhexyl) phthalate	A0C310489	WSASD-040-5652-SD	34	380	J	J	RepLimit-J
<b>Soil (µg/kg)</b>							
2-Methylnaphthalene	A0C250407	WSASB-022-5615-SO	22	820	J	J	RepLimit-J
2-Methylnaphthalene	A0C250600	WSASS-036M-5647-SO	9.0	340	J	J	RepLimit-J
Di-n-butyl phthalate	A0C250407	WSASB-022-5616-SO	22	410	J	J	RepLimit-J
Di-n-butyl phthalate	A0C240550	WSASB-022-5617-SO	21	400	J	J	RepLimit-J
Di-n-butyl phthalate	A0C250600	WSASS-036M-5647-SO	340	340	J B	UJ	MB-U, RepLimit-J
Dibenzofuran	A0C250407	WSASB-022-5615-SO	70	820	J	J	RepLimit-J
Dibenzofuran	A0C250407	WSASB-028-5637-SO	190	2,300	J	J	RepLimit-J
Bis(2-ethylhexyl) phthalate	A0C250407	WSASB-022-5615-SO	84	820	J	J	RepLimit-J
Bis(2-ethylhexyl) phthalate	A0C240550	WSASB-022-5617-SO	38	400	J	J	RepLimit-J
Bis(2-ethylhexyl) phthalate	A0C240550	WSASB-028-5639-SO	24	400	J	J	RepLimit-J
<b>Surface Water (µg/L)</b>							
2,4-Dinitrophenol	A0C310489	WSASW-040-5659-SW	25	25	U	UJ	LCS-UJ
2,4-Dinitrophenol	A0C310489	WSASW-040-6199-FD	25	25	U	UJ	LCS-UJ
Benzoic Acid	A0C310489	WSASW-040-5659-SW	25	25	U	UJ	LCS-UJ

**Table C-4. Detailed Listing of Qualified Results for Samples from Wet Storage Area (continued)**

<b>Chemical</b>	<b>Laboratory SDG</b>	<b>Sample ID</b>	<b>Results</b>	<b>Reporting Limit</b>	<b>Laboratory Qualifier<sup>a</sup></b>	<b>Validation Qualifier<sup>b</sup></b>	<b>Validation Code<sup>c</sup></b>
Benzoic Acid	A0C310489	WSASW-040-6199-FD	25	25	U	UJ	LCS-UJ
Di-n-butyl phthalate	A0C250407	WSASW-037-5656-SW	10	10	J B	UJ	MB-U, RepLimit-J
Di-n-butyl phthalate	A0C250407	WSASW-038-5657-SW	10	10	J B	UJ	MB-U, RepLimit-J
Di-n-butyl phthalate	A0C250407	WSASW-039-5658-SW	10	10	J B	UJ	MB-U, RepLimit-J
Bis(2-ethylhexyl) phthalate	A0C250407	WSASW-037-5656-SW	10	10	J B	UJ	MB-U, RepLimit-J
Bis(2-ethylhexyl) phthalate	A0C250407	WSASW-038-5657-SW	10	10	J B	UJ	MB-U, RepLimit-J
Bis(2-ethylhexyl) phthalate	A0C250407	WSASW-039-5658-SW	10	10	J B	UJ	MB-U, RepLimit-J
Bis(2-ethylhexyl) phthalate	A0C310489	WSASW-040-6199-FD	2.0	10	J	J	RepLimit-J
<b>Pesticides</b>							
<b>Sediment (µg/kg)</b>							
4,4'-DDD	A0C250407	WSASD-037-5649-SD	59	59	U	UJ	CCV-UJ
4,4'-DDE	A0C250407	WSASD-037-5649-SD	50	50	U	UJ	CCV-UJ
Endosulfan I	A0C250407	WSASD-037-5649-SD	50	50	U	UJ	CCV-UJ
Endrin	A0C250407	WSASD-037-5649-SD	50	50	U	UJ	CCV-UJ
Heptachlor	A0C250407	WSASD-037-5649-SD	100	100	U	UJ	CCV-UJ
Heptachlor Epoxide	A0C250407	WSASD-037-5649-SD	74	74	U	UJ	CCV-UJ
Toxaphene	A0C250407	WSASD-037-5649-SD	2,000	2,000	U	UJ	CCV-UJ
alpha-BHC	A0C250407	WSASD-037-5649-SD	74	74	U	UJ	CCV-UJ
beta-BHC	A0C250407	WSASD-037-5649-SD	100	100	U	UJ	CCV-UJ
delta-BHC	A0C250407	WSASD-037-5649-SD	120	120	U	UJ	CCV-UJ
<b>Soil (µg/kg)</b>							
4,4'-DDD	A0C250407	WSASB-022-5615-SO	25	25	U	UJ	CCV-UJ
4,4'-DDD	A0C250407	WSASB-022-5616-SO	2.5	2.5	U	UJ	CCV-UJ
4,4'-DDD	A0C250407	WSASB-022-6200-FD	2.4	2.4	U	UJ	CCV-UJ
4,4'-DDD	A0C250407	WSASB-028-5637-SO	27	27	U	UJ	CCV-UJ
4,4'-DDD	A0C250407	WSASB-028-5638-SO	2.5	2.5	U	UJ	CCV-UJ
4,4'-DDD	A0C250407	WSASB-028-5640-SO	2.3	2.3	U	UJ	CCV-UJ
4,4'-DDD	A0C250600	WSASS-036M-5647-SO	2.0	2.0	U	UJ	CCV-UJ
4,4'-DDE	A0C250407	WSASB-022-5615-SO	21	21	U	UJ	CCV-UJ
4,4'-DDE	A0C250407	WSASB-022-5616-SO	2.1	2.1	U	UJ	CCV-UJ
4,4'-DDE	A0C250407	WSASB-022-6200-FD	2.0	2.0	U	UJ	CCV-UJ
4,4'-DDE	A0C250407	WSASB-028-5637-SO	23	23	U	UJ	CCV-UJ
4,4'-DDE	A0C250407	WSASB-028-5638-SO	2.1	2.1	U	UJ	CCV-UJ
4,4'-DDE	A0C250407	WSASB-028-5640-SO	1.9	1.9	U	UJ	CCV-UJ
4,4'-DDE	A0C250600	WSASS-036M-5647-SO	0.40	1.7	J	J	RepLimit-J

**Table C-4. Detailed Listing of Qualified Results for Samples from Wet Storage Area (continued)**

<b>Chemical</b>	<b>Laboratory SDG</b>	<b>Sample ID</b>	<b>Results</b>	<b>Reporting Limit</b>	<b>Laboratory Qualifier<sup>a</sup></b>	<b>Validation Qualifier<sup>b</sup></b>	<b>Validation Code<sup>c</sup></b>
4,4'-DDT	A0C240550	WSASB-022-5617-SO	2.4	2.4	U	UJ	CCV-UJ
4,4'-DDT	A0C240550	WSASB-028-5639-SO	2.4	2.4	U	UJ	CCV-UJ
4,4'-DDT	A0C250407	WSASB-028-5640-SO	0.85	2.3	J	J	RepLimit-J
Endosulfan I	A0C250407	WSASB-022-5615-SO	21	21	U	UJ	CCV-UJ
Endosulfan I	A0C250407	WSASB-022-5616-SO	2.1	2.1	U	UJ	CCV-UJ
Endosulfan I	A0C250407	WSASB-028-5637-SO	23	23	U	UJ	CCV-UJ
Endosulfan I	A0C250407	WSASB-028-5638-SO	2.1	2.1	U	UJ	CCV-UJ
Endosulfan I	A0C250407	WSASB-028-5640-SO	1.9	1.9	U	UJ	CCV-UJ
Endosulfan Sulfate	A0C250600	WSASS-036M-5647-SO	2.6	3.1	J	J	RepLimit-J
Endrin	A0C250407	WSASB-022-5615-SO	21	21	U	UJ	CCV-UJ
Endrin	A0C250407	WSASB-022-5616-SO	2.1	2.1	U	UJ	CCV-UJ
Endrin	A0C250407	WSASB-022-6200-FD	2.0	2.0	U	UJ	CCV-UJ
Endrin	A0C250407	WSASB-028-5637-SO	23	23	U	UJ	CCV-UJ
Endrin	A0C250407	WSASB-028-5638-SO	2.1	2.1	U	UJ	CCV-UJ
Endrin	A0C250407	WSASB-028-5640-SO	1.9	1.9	U	UJ	CCV-UJ
Endrin	A0C250600	WSASS-036M-5647-SO	0.69	1.7	J	J	RepLimit-J
Endrin Aldehyde	A0C250600	WSASS-036M-5647-SO	3.1	3.1	U	UJ	CCV-J
Heptachlor	A0C250407	WSASB-022-5615-SO	44	44	U	UJ	CCV-UJ
Heptachlor	A0C250407	WSASB-022-5616-SO	4.3	4.3	U	UJ	CCV-UJ
Heptachlor	A0C250407	WSASB-022-6200-FD	4.1	4.1	U	UJ	CCV-UJ
Heptachlor	A0C250407	WSASB-028-5637-SO	48	48	U	UJ	CCV-UJ
Heptachlor	A0C250407	WSASB-028-5638-SO	4.3	4.3	U	UJ	CCV-UJ
Heptachlor	A0C250407	WSASB-028-5640-SO	4.0	4.0	U	UJ	CCV-UJ
Heptachlor	A0C250600	WSASS-036M-5647-SO	3.6	3.6	U	UJ	CCV-UJ
Heptachlor Epoxide	A0C250407	WSASB-022-5615-SO	31	31	U	UJ	CCV-UJ
Heptachlor Epoxide	A0C250407	WSASB-022-5616-SO	3.1	3.1	U	UJ	CCV-UJ
Heptachlor Epoxide	A0C250407	WSASB-028-5637-SO	34	34	U	UJ	CCV-UJ
Heptachlor Epoxide	A0C250407	WSASB-028-5638-SO	3.1	3.1	U	UJ	CCV-UJ
Heptachlor Epoxide	A0C250407	WSASB-028-5640-SO	2.9	2.9	U	UJ	CCV-UJ
Heptachlor Epoxide	A0C250600	WSASS-036M-5647-SO	2.6	2.6	U	UJ	MS-UJ
Methoxychlor	A0C240550	WSASB-022-5617-SO	6.0	6.0	U	UJ	CCV-UJ
Methoxychlor	A0C240550	WSASB-028-5639-SO	6.1	6.1	U	UJ	CCV-UJ
Toxaphene	A0C250407	WSASB-022-5615-SO	830	830	U	UJ	CCV-UJ
Toxaphene	A0C250407	WSASB-022-5616-SO	83	83	U	UJ	CCV-UJ
Toxaphene	A0C240550	WSASB-022-5617-SO	81	81	U	UJ	CCV-UJ

**Table C-4. Detailed Listing of Qualified Results for Samples from Wet Storage Area (continued)**

<b>Chemical</b>	<b>Laboratory SDG</b>	<b>Sample ID</b>	<b>Results</b>	<b>Reporting Limit</b>	<b>Laboratory Qualifier<sup>a</sup></b>	<b>Validation Qualifier<sup>b</sup></b>	<b>Validation Code<sup>c</sup></b>
Toxaphene	A0C250407	WSASB-028-5637-SO	920	920	U	UJ	CCV-UJ
Toxaphene	A0C250407	WSASB-028-5638-SO	83	83	U	UJ	CCV-UJ
Toxaphene	A0C240550	WSASB-028-5639-SO	81	81	U	UJ	CCV-UJ
Toxaphene	A0C250407	WSASB-028-5640-SO	77	77	U	UJ	CCV-UJ
alpha-BHC	A0C250407	WSASB-022-5615-SO	31	31	U	UJ	CCV-UJ
alpha-BHC	A0C250407	WSASB-022-5616-SO	3.1	3.1	U	UJ	CCV-UJ
alpha-BHC	A0C250407	WSASB-028-5637-SO	34	34	U	UJ	CCV-UJ
alpha-BHC	A0C250407	WSASB-028-5638-SO	3.1	3.1	U	UJ	CCV-UJ
alpha-BHC	A0C250407	WSASB-028-5640-SO	2.9	2.9	U	UJ	CCV-UJ
alpha-Chlordane	A0C250600	WSASS-036M-5647-SO	2.1	3.1	J	J	RepLimit-J
beta-BHC	A0C250407	WSASB-022-5615-SO	44	44	U	UJ	CCV-UJ
beta-BHC	A0C250407	WSASB-022-5616-SO	4.3	4.3	U	UJ	CCV-UJ
beta-BHC	A0C250407	WSASB-028-5637-SO	48	48	U	UJ	CCV-UJ
beta-BHC	A0C250407	WSASB-028-5638-SO	4.3	4.3	U	UJ	CCV-UJ
beta-BHC	A0C250407	WSASB-028-5640-SO	4.0	4.0	U	UJ	CCV-UJ
delta-BHC	A0C250407	WSASB-022-5615-SO	50	50	U	UJ	CCV-UJ
delta-BHC	A0C250407	WSASB-022-5616-SO	4.9	4.9	U	UJ	CCV-UJ
delta-BHC	A0C250407	WSASB-022-6200-FD	4.7	4.7	U	UJ	CCV-UJ
delta-BHC	A0C250407	WSASB-028-5637-SO	55	55	U	UJ	CCV-UJ
delta-BHC	A0C250407	WSASB-028-5638-SO	5.0	5.0	U	UJ	CCV-UJ
delta-BHC	A0C250407	WSASB-028-5640-SO	4.6	4.6	U	UJ	CCV-UJ
delta-BHC	A0C250600	WSASS-036M-5647-SO	4.1	4.1	U	UJ	CCV-UJ
<b>Surface Water (µg/L)</b>							
4,4'-DDD	A0C310489	WSASW-040-6199-FD	0.050	0.050	U	UJ	Surr-UJ
4,4'-DDE	A0C310489	WSASW-040-6199-FD	0.050	0.050	U	UJ	Surr-UJ
4,4'-DDT	A0C310489	WSASW-040-6199-FD	0.050	0.050	U	UJ	Surr-UJ
Aldrin	A0C310489	WSASW-040-6199-FD	0.050	0.050	U	UJ	Surr-UJ
Dieldrin	A0C310489	WSASW-040-6199-FD	0.050	0.050	U	UJ	Surr-UJ
Endosulfan I	A0C310489	WSASW-040-6199-FD	0.050	0.050	U	UJ	Surr-UJ
Endosulfan II	A0C310489	WSASW-040-6199-FD	0.050	0.050	U	UJ	Surr-UJ
Endosulfan Sulfate	A0C310489	WSASW-040-6199-FD	0.050	0.050	U	UJ	Surr-UJ
Endrin	A0C310489	WSASW-040-6199-FD	0.050	0.050	U	UJ	Surr-UJ
Endrin Aldehyde	A0C310489	WSASW-040-6199-FD	0.050	0.050	U	UJ	Surr-UJ
Endrin Ketone	A0C250407	WSASW-037-5656-SW	0.050	0.050	U	UJ	LCS-UJ
Endrin Ketone	A0C250407	WSASW-038-5657-SW	0.050	0.050	U	UJ	LCS-UJ

**Table C-4. Detailed Listing of Qualified Results for Samples from Wet Storage Area (continued)**

<b>Chemical</b>	<b>Laboratory SDG</b>	<b>Sample ID</b>	<b>Results</b>	<b>Reporting Limit</b>	<b>Laboratory Qualifier<sup>a</sup></b>	<b>Validation Qualifier<sup>b</sup></b>	<b>Validation Code<sup>c</sup></b>
Endrin Ketone	A0C250407	WSASW-039-5658-SW	0.050	0.050	U	UJ	LCS-UJ
Endrin Ketone	A0C310489	WSASW-040-6199-FD	0.050	0.050	U	UJ	Surr-UJ
Heptachlor	A0C310489	WSASW-040-6199-FD	0.050	0.050	U	UJ	Surr-UJ
Heptachlor Epoxide	A0C310489	WSASW-040-6199-FD	0.050	0.050	U	UJ	Surr-UJ
Methoxychlor	A0C310489	WSASW-040-6199-FD	0.10	0.10	U	UJ	Surr-UJ
Toxaphene	A0C310489	WSASW-040-6199-FD	2.0	2.0	U	UJ	Surr-UJ
alpha-BHC	A0C310489	WSASW-040-6199-FD	0.050	0.050	U	UJ	Surr-UJ
alpha-Chlordane	A0C310489	WSASW-040-6199-FD	0.050	0.050	U	UJ	Surr-UJ
beta-BHC	A0C310489	WSASW-040-6199-FD	0.050	0.050	U	UJ	Surr-UJ
delta-BHC	A0C310489	WSASW-040-6199-FD	0.050	0.050	U	UJ	Surr-UJ
gamma-BHC (lindane)	A0C250407	WSASW-038-5657-SW	0.050	0.050	U	UJ	LCS-UJ
gamma-BHC (lindane)	A0C310489	WSASW-040-6199-FD	0.050	0.050	U	UJ	Surr-UJ
gamma-Chlordane	A0C310489	WSASW-040-6199-FD	0.050	0.050	U	UJ	Surr-UJ
<b>Polychlorinated Biphenyls</b>							
<b>Surface Water (µg/L)</b>							
Aroclor 1016	A0C250407	WSASW-039-5658-SW	0.50	0.50	U	UJ	Surr-UJ
Aroclor 1016	A0C310489	WSASW-040-5659-SW	0.50	0.50	U	UJ	Surr-UJ
Aroclor 1016	A0C310489	WSASW-040-6199-FD	0.50	0.50	U	UJ	Surr-UJ
Aroclor 1221	A0C250407	WSASW-039-5658-SW	0.50	0.50	U	UJ	Surr-UJ
Aroclor 1221	A0C310489	WSASW-040-5659-SW	0.50	0.50	U	UJ	Surr-UJ
Aroclor 1221	A0C310489	WSASW-040-6199-FD	0.50	0.50	U	UJ	Surr-UJ
Aroclor 1232	A0C250407	WSASW-039-5658-SW	0.50	0.50	U	UJ	Surr-UJ
Aroclor 1232	A0C310489	WSASW-040-5659-SW	0.50	0.50	U	UJ	Surr-UJ
Aroclor 1232	A0C310489	WSASW-040-6199-FD	0.50	0.50	U	UJ	Surr-UJ
Aroclor 1242	A0C250407	WSASW-039-5658-SW	0.50	0.50	U	UJ	Surr-UJ
Aroclor 1242	A0C310489	WSASW-040-5659-SW	0.50	0.50	U	UJ	Surr-UJ
Aroclor 1242	A0C310489	WSASW-040-6199-FD	0.50	0.50	U	UJ	Surr-UJ
Aroclor 1248	A0C250407	WSASW-039-5658-SW	0.50	0.50	U	UJ	Surr-UJ
Aroclor 1248	A0C310489	WSASW-040-5659-SW	0.50	0.50	U	UJ	Surr-UJ
Aroclor 1248	A0C310489	WSASW-040-6199-FD	0.50	0.50	U	UJ	Surr-UJ
Aroclor 1254	A0C250407	WSASW-039-5658-SW	0.50	0.50	U	UJ	Surr-UJ
Aroclor 1254	A0C310489	WSASW-040-5659-SW	0.50	0.50	U	UJ	Surr-UJ
Aroclor 1254	A0C310489	WSASW-040-6199-FD	0.50	0.50	U	UJ	Surr-UJ
Aroclor 1260	A0C250407	WSASW-039-5658-SW	0.50	0.50	U	UJ	Surr-UJ
Aroclor 1260	A0C310489	WSASW-040-5659-SW	0.50	0.50	U	UJ	Surr-UJ

**Table C-4. Detailed Listing of Qualified Results for Samples from Wet Storage Area (continued)**

<b>Chemical</b>	<b>Laboratory SDG</b>	<b>Sample ID</b>	<b>Results</b>	<b>Reporting Limit</b>	<b>Laboratory Qualifier<sup>a</sup></b>	<b>Validation Qualifier<sup>b</sup></b>	<b>Validation Code<sup>c</sup></b>
Aroclor 1260	A0C310489	WSASW-040-6199-FD	0.50	0.50	U	UJ	Surr-UJ
<b><i>Volatile Organic Compounds</i></b>							
<b>Sediment (µg/kg)</b>							
1,1,1-Trichloroethane	A0C250407	WSASD-037-5649-SD	7.4	7.4	U	UJ	Surr-UJ
1,1,2,2-Tetrachloroethane	A0C250407	WSASD-037-5649-SD	7.4	7.4	U	UJ	Surr-UJ
1,1,2-Trichloroethane	A0C250407	WSASD-037-5649-SD	7.4	7.4	U	UJ	Surr-UJ
1,1-Dichloroethane	A0C250407	WSASD-037-5649-SD	7.4	7.4	U	UJ	Surr-UJ
1,1-Dichloroethene	A0C250407	WSASD-037-5649-SD	7.4	7.4	U	UJ	Surr-UJ
1,2-Dibromoethane (ethylene dibromide)	A0C250407	WSASD-037-5649-SD	7.4	7.4	U	UJ	Surr-UJ
1,2-Dichloroethane	A0C250407	WSASD-037-5649-SD	7.4	7.4	U	UJ	Surr-UJ
1,2-Dichloroethene (total)	A0C250407	WSASD-037-5649-SD	7.4	7.4	U	UJ	Surr-UJ
1,2-Dichloropropane	A0C250407	WSASD-037-5649-SD	7.4	7.4	U	UJ	Surr-UJ
2-Butanone (MEK)	A0C250407	WSASD-037-5649-SD	2.1	30	J	J	Surr-J, RepLimit-J
2-Hexanone	A0C250407	WSASD-037-5649-SD	30	30	U	UJ	Surr-UJ
4-Methyl-2-pentanone (MIBK)	A0C250407	WSASD-037-5649-SD	30	30	U	UJ	Surr-UJ
Acetone	A0C250407	WSASD-037-5649-SD	30	30	U	UJ	Surr-UJ
Benzene	A0C250407	WSASD-037-5649-SD	7.4	7.4	U	UJ	Surr-UJ
Bromochloromethane	A0C250407	WSASD-037-5649-SD	7.4	7.4	U	UJ	Surr-UJ
Bromodichloromethane	A0C250407	WSASD-037-5649-SD	7.4	7.4	U	UJ	Surr-UJ
Bromoform	A0C250407	WSASD-037-5649-SD	7.4	7.4	U	UJ	Surr-UJ
Bromomethane (methyl bromide)	A0C250407	WSASD-037-5649-SD	7.4	7.4	U	UJ	Surr-UJ
Carbon Disulfide	A0C250407	WSASD-037-5649-SD	7.4	7.4	U	UJ	Surr-UJ
Carbon Tetrachloride	A0C250407	WSASD-037-5649-SD	7.4	7.4	U	UJ	Surr-UJ
Chlorobenzene	A0C250407	WSASD-037-5649-SD	7.4	7.4	U	UJ	Surr-UJ
Chlorodibromomethane	A0C250407	WSASD-037-5649-SD	7.4	7.4	U	UJ	Surr-UJ
Chloroethane	A0C250407	WSASD-037-5649-SD	7.4	7.4	U	UJ	Surr-UJ
Chloroform	A0C250407	WSASD-037-5649-SD	7.4	7.4	U	UJ	Surr-UJ
Chloromethane	A0C250407	WSASD-037-5649-SD	7.4	7.4	U	UJ	Surr-UJ
Ethylbenzene	A0C250407	WSASD-037-5649-SD	7.4	7.4	U	UJ	Surr-UJ
Methylene Chloride	A0C250407	WSASD-037-5649-SD	7.4	7.4	J B	UJ	MB-U, Surr-J, RepLimit-J
Styrene	A0C250407	WSASD-037-5649-SD	7.4	7.4	U	UJ	Surr-UJ
Tetrachloroethene	A0C250407	WSASD-037-5649-SD	7.4	7.4	U	UJ	Surr-UJ
Toluene	A0C250407	WSASD-037-5649-SD	7.4	7.4	U	UJ	Surr-UJ



**Table C-4. Detailed Listing of Qualified Results for Samples from Wet Storage Area (continued)**

<b>Chemical</b>	<b>Laboratory SDG</b>	<b>Sample ID</b>	<b>Results</b>	<b>Reporting Limit</b>	<b>Laboratory Qualifier<sup>a</sup></b>	<b>Validation Qualifier<sup>b</sup></b>	<b>Validation Code<sup>c</sup></b>
Trichloroethene	A0C250407	WSASD-037-5649-SD	7.4	7.4	U	UJ	Surr-UJ
Vinyl Chloride	A0C250407	WSASD-037-5649-SD	7.4	7.4	U	UJ	Surr-UJ
Xylene (total)	A0C250407	WSASD-037-5649-SD	15	15	U	UJ	Surr-UJ
<i>cis</i> -1,3-Dichloropropene	A0C250407	WSASD-037-5649-SD	7.4	7.4	U	UJ	Surr-UJ
<i>trans</i> -1,3-Dichloropropene	A0C250407	WSASD-037-5649-SD	7.4	7.4	U	UJ	Surr-UJ
<b>Soil (µg/kg)</b>							
1,1,1-Trichloroethane	A0C250407	WSASB-022-5615-SO	6.2	6.2	U	UJ	Surr-UJ
1,1,1-Trichloroethane	A0C250407	WSASB-022-5616-SO	6.2	6.2	U	UJ	Surr-UJ
1,1,1-Trichloroethane	A0C240550	WSASB-022-5617-SO	6.0	6.0	U	UJ	Surr-UJ
1,1,1-Trichloroethane	A0C250407	WSASB-022-6200-FD	5.9	5.9	U	UJ	Surr-UJ
1,1,1-Trichloroethane	A0C250407	WSASB-028-5637-SO	6.8	6.8	U	UJ	Surr-UJ
1,1,1-Trichloroethane	A0C250407	WSASB-028-5638-SO	6.2	6.2	U	UJ	Surr-UJ
1,1,1-Trichloroethane	A0C240550	WSASB-028-5639-SO	6.1	6.1	U	UJ	Surr-UJ
1,1,1-Trichloroethane	A0C250407	WSASB-028-5640-SO	5.7	5.7	U	UJ	Surr-UJ
1,1,1-Trichloroethane	A0C250600	WSASS-036M-5647-SO	7.1	7.1	U	UJ	Surr-UJ
1,1,2,2-Tetrachloroethane	A0C250407	WSASB-022-5615-SO	6.2	6.2	U	UJ	Surr-UJ
1,1,2,2-Tetrachloroethane	A0C250407	WSASB-022-5616-SO	6.2	6.2	U	UJ	Surr-UJ
1,1,2,2-Tetrachloroethane	A0C240550	WSASB-022-5617-SO	6.0	6.0	U	UJ	Surr-UJ
1,1,2,2-Tetrachloroethane	A0C250407	WSASB-022-6200-FD	5.9	5.9	U	UJ	Surr-UJ
1,1,2,2-Tetrachloroethane	A0C250407	WSASB-028-5637-SO	6.8	6.8	U	UJ	Surr-UJ
1,1,2,2-Tetrachloroethane	A0C250407	WSASB-028-5638-SO	6.2	6.2	U	UJ	Surr-UJ
1,1,2,2-Tetrachloroethane	A0C240550	WSASB-028-5639-SO	6.1	6.1	U	UJ	Surr-UJ
1,1,2,2-Tetrachloroethane	A0C250407	WSASB-028-5640-SO	5.7	5.7	U	UJ	Surr-UJ
1,1,2,2-Tetrachloroethane	A0C250600	WSASS-036M-5647-SO	7.1	7.1	U	UJ	Surr-UJ
1,1,2-Trichloroethane	A0C250407	WSASB-022-5615-SO	6.2	6.2	U	UJ	Surr-UJ
1,1,2-Trichloroethane	A0C250407	WSASB-022-5616-SO	6.2	6.2	U	UJ	Surr-UJ
1,1,2-Trichloroethane	A0C240550	WSASB-022-5617-SO	6.0	6.0	U	UJ	Surr-UJ
1,1,2-Trichloroethane	A0C250407	WSASB-022-6200-FD	5.9	5.9	U	UJ	Surr-UJ
1,1,2-Trichloroethane	A0C250407	WSASB-028-5637-SO	6.8	6.8	U	UJ	Surr-UJ
1,1,2-Trichloroethane	A0C250407	WSASB-028-5638-SO	6.2	6.2	U	UJ	Surr-UJ
1,1,2-Trichloroethane	A0C240550	WSASB-028-5639-SO	6.1	6.1	U	UJ	Surr-UJ
1,1,2-Trichloroethane	A0C250407	WSASB-028-5640-SO	5.7	5.7	U	UJ	Surr-UJ
1,1,2-Trichloroethane	A0C250600	WSASS-036M-5647-SO	7.1	7.1	U	UJ	Surr-UJ
1,1-Dichloroethane	A0C250407	WSASB-022-5615-SO	6.2	6.2	U	UJ	Surr-UJ
1,1-Dichloroethane	A0C250407	WSASB-022-5616-SO	6.2	6.2	U	UJ	Surr-UJ

**Table C-4. Detailed Listing of Qualified Results for Samples from Wet Storage Area (continued)**

<b>Chemical</b>	<b>Laboratory SDG</b>	<b>Sample ID</b>	<b>Results</b>	<b>Reporting Limit</b>	<b>Laboratory Qualifier<sup>a</sup></b>	<b>Validation Qualifier<sup>b</sup></b>	<b>Validation Code<sup>c</sup></b>
1,1-Dichloroethane	A0C240550	WSASB-022-5617-SO	6.0	6.0	U	UJ	Surr-UJ
1,1-Dichloroethane	A0C250407	WSASB-022-6200-FD	5.9	5.9	U	UJ	Surr-UJ
1,1-Dichloroethane	A0C250407	WSASB-028-5637-SO	6.8	6.8	U	UJ	Surr-UJ
1,1-Dichloroethane	A0C250407	WSASB-028-5638-SO	6.2	6.2	U	UJ	Surr-UJ
1,1-Dichloroethane	A0C240550	WSASB-028-5639-SO	6.1	6.1	U	UJ	Surr-UJ
1,1-Dichloroethane	A0C250407	WSASB-028-5640-SO	5.7	5.7	U	UJ	Surr-UJ
1,1-Dichloroethane	A0C250600	WSASS-036M-5647-SO	7.1	7.1	U	UJ	Surr-UJ
1,1-Dichloroethane	A0C250407	WSASB-022-5615-SO	6.2	6.2	U	UJ	Surr-UJ
1,1-Dichloroethane	A0C250407	WSASB-022-5616-SO	6.2	6.2	U	UJ	Surr-UJ
1,1-Dichloroethane	A0C240550	WSASB-022-5617-SO	6.0	6.0	U	UJ	Surr-UJ
1,1-Dichloroethane	A0C250407	WSASB-022-6200-FD	5.9	5.9	U	UJ	Surr-UJ
1,1-Dichloroethane	A0C250407	WSASB-028-5637-SO	6.8	6.8	U	UJ	Surr-UJ
1,1-Dichloroethane	A0C250407	WSASB-028-5638-SO	6.2	6.2	U	UJ	Surr-UJ
1,1-Dichloroethane	A0C240550	WSASB-028-5639-SO	6.1	6.1	U	UJ	Surr-UJ
1,1-Dichloroethane	A0C250407	WSASB-028-5640-SO	5.7	5.7	U	UJ	Surr-UJ
1,1-Dichloroethane	A0C250600	WSASS-036M-5647-SO	7.1	7.1	U	UJ	Surr-UJ
1,2-Dibromoethane (ethylene dibromide)	A0C250407	WSASB-022-5615-SO	6.2	6.2	U	UJ	Surr-UJ
1,2-Dibromoethane (ethylene dibromide)	A0C250407	WSASB-022-5616-SO	6.2	6.2	U	UJ	Surr-UJ
1,2-Dibromoethane (ethylene dibromide)	A0C240550	WSASB-022-5617-SO	6.0	6.0	U	UJ	Surr-UJ
1,2-Dibromoethane (ethylene dibromide)	A0C250407	WSASB-022-6200-FD	5.9	5.9	U	UJ	Surr-UJ
1,2-Dibromoethane (ethylene dibromide)	A0C250407	WSASB-028-5637-SO	6.8	6.8	U	UJ	Surr-UJ
1,2-Dibromoethane (ethylene dibromide)	A0C250407	WSASB-028-5638-SO	6.2	6.2	U	UJ	Surr-UJ
1,2-Dibromoethane (ethylene dibromide)	A0C240550	WSASB-028-5639-SO	6.1	6.1	U	UJ	Surr-UJ
1,2-Dibromoethane (ethylene dibromide)	A0C250407	WSASB-028-5640-SO	5.7	5.7	U	UJ	Surr-UJ
1,2-Dibromoethane (ethylene dibromide)	A0C250600	WSASS-036M-5647-SO	7.1	7.1	U	UJ	Surr-UJ
1,2-Dichloroethane	A0C250407	WSASB-022-5615-SO	6.2	6.2	U	UJ	Surr-UJ

**Table C-4. Detailed Listing of Qualified Results for Samples from Wet Storage Area (continued)**

<b>Chemical</b>	<b>Laboratory SDG</b>	<b>Sample ID</b>	<b>Results</b>	<b>Reporting Limit</b>	<b>Laboratory Qualifier<sup>a</sup></b>	<b>Validation Qualifier<sup>b</sup></b>	<b>Validation Code<sup>c</sup></b>
1,2-Dichloroethane	A0C250407	WSASB-022-5616-SO	6.2	6.2	U	UJ	Surr-UJ
1,2-Dichloroethane	A0C240550	WSASB-022-5617-SO	6.0	6.0	U	UJ	Surr-UJ
1,2-Dichloroethane	A0C250407	WSASB-022-6200-FD	5.9	5.9	U	UJ	Surr-UJ
1,2-Dichloroethane	A0C250407	WSASB-028-5637-SO	6.8	6.8	U	UJ	Surr-UJ
1,2-Dichloroethane	A0C250407	WSASB-028-5638-SO	6.2	6.2	U	UJ	Surr-UJ
1,2-Dichloroethane	A0C240550	WSASB-028-5639-SO	6.1	6.1	U	UJ	Surr-UJ
1,2-Dichloroethane	A0C250407	WSASB-028-5640-SO	5.7	5.7	U	UJ	Surr-UJ
1,2-Dichloroethane	A0C250600	WSASS-036M-5647-SO	7.1	7.1	U	UJ	Surr-UJ
1,2-Dichloroethene (total)	A0C250407	WSASB-022-5615-SO	6.2	6.2	U	UJ	Surr-UJ
1,2-Dichloroethene (total)	A0C250407	WSASB-022-5616-SO	6.2	6.2	U	UJ	Surr-UJ
1,2-Dichloroethene (total)	A0C240550	WSASB-022-5617-SO	6.0	6.0	U	UJ	Surr-UJ
1,2-Dichloroethene (total)	A0C250407	WSASB-022-6200-FD	5.9	5.9	U	UJ	Surr-UJ
1,2-Dichloroethene (total)	A0C250407	WSASB-028-5637-SO	6.8	6.8	U	UJ	Surr-UJ
1,2-Dichloroethene (total)	A0C250407	WSASB-028-5638-SO	6.2	6.2	U	UJ	Surr-UJ
1,2-Dichloroethene (total)	A0C240550	WSASB-028-5639-SO	6.1	6.1	U	UJ	Surr-UJ
1,2-Dichloroethene (total)	A0C250407	WSASB-028-5640-SO	5.7	5.7	U	UJ	Surr-UJ
1,2-Dichloroethene (total)	A0C250600	WSASS-036M-5647-SO	7.1	7.1	U	UJ	Surr-UJ
1,2-Dichloropropane	A0C250407	WSASB-022-5615-SO	6.2	6.2	U	UJ	Surr-UJ
1,2-Dichloropropane	A0C250407	WSASB-022-5616-SO	6.2	6.2	U	UJ	Surr-UJ
1,2-Dichloropropane	A0C240550	WSASB-022-5617-SO	6.0	6.0	U	UJ	Surr-UJ
1,2-Dichloropropane	A0C250407	WSASB-022-6200-FD	5.9	5.9	U	UJ	Surr-UJ
1,2-Dichloropropane	A0C250407	WSASB-028-5637-SO	6.8	6.8	U	UJ	Surr-UJ
1,2-Dichloropropane	A0C250407	WSASB-028-5638-SO	6.2	6.2	U	UJ	Surr-UJ
1,2-Dichloropropane	A0C240550	WSASB-028-5639-SO	6.1	6.1	U	UJ	Surr-UJ
1,2-Dichloropropane	A0C250407	WSASB-028-5640-SO	5.7	5.7	U	UJ	Surr-UJ
1,2-Dichloropropane	A0C250600	WSASS-036M-5647-SO	7.1	7.1	U	UJ	Surr-UJ
2-Butanone (MEK)	A0C250407	WSASB-022-5615-SO	25	25	U	UJ	Surr-UJ
2-Butanone (MEK)	A0C250407	WSASB-022-5616-SO	25	25	U	UJ	Surr-UJ
2-Butanone (MEK)	A0C240550	WSASB-022-5617-SO	24	24	U	UJ	Surr-UJ
2-Butanone (MEK)	A0C250407	WSASB-022-6200-FD	24	24	U	UJ	Surr-UJ
2-Butanone (MEK)	A0C250407	WSASB-028-5637-SO	27	27	U	UJ	Surr-UJ
2-Butanone (MEK)	A0C250407	WSASB-028-5638-SO	25	25	U	UJ	Surr-UJ
2-Butanone (MEK)	A0C240550	WSASB-028-5639-SO	24	24	U	UJ	Surr-UJ
2-Butanone (MEK)	A0C250407	WSASB-028-5640-SO	23	23	U	UJ	Surr-UJ
2-Butanone (MEK)	A0C250600	WSASS-036M-5647-SO	29	29	U	UJ	Surr-UJ

**Table C-4. Detailed Listing of Qualified Results for Samples from Wet Storage Area (continued)**

<b>Chemical</b>	<b>Laboratory SDG</b>	<b>Sample ID</b>	<b>Results</b>	<b>Reporting Limit</b>	<b>Laboratory Qualifier<sup>a</sup></b>	<b>Validation Qualifier<sup>b</sup></b>	<b>Validation Code<sup>c</sup></b>
2-Hexanone	A0C250407	WSASB-022-5615-SO	25	25	U	UJ	Surr-UJ
2-Hexanone	A0C250407	WSASB-022-5616-SO	25	25	U	UJ	Surr-UJ
2-Hexanone	A0C240550	WSASB-022-5617-SO	24	24	U	UJ	Surr-UJ
2-Hexanone	A0C250407	WSASB-022-6200-FD	24	24	U	UJ	Surr-UJ
2-Hexanone	A0C250407	WSASB-028-5637-SO	27	27	U	UJ	Surr-UJ
2-Hexanone	A0C250407	WSASB-028-5638-SO	25	25	U	UJ	Surr-UJ
2-Hexanone	A0C240550	WSASB-028-5639-SO	24	24	U	UJ	Surr-UJ
2-Hexanone	A0C250407	WSASB-028-5640-SO	23	23	U	UJ	Surr-UJ
2-Hexanone	A0C250600	WSASS-036M-5647-SO	29	29	U	UJ	Surr-UJ
4-Methyl-2-pentanone (MIBK)	A0C250407	WSASB-022-5615-SO	25	25	U	UJ	Surr-UJ
4-Methyl-2-pentanone (MIBK)	A0C250407	WSASB-022-5616-SO	25	25	U	UJ	Surr-UJ
4-Methyl-2-pentanone (MIBK)	A0C240550	WSASB-022-5617-SO	24	24	U	UJ	Surr-UJ
4-Methyl-2-pentanone (MIBK)	A0C250407	WSASB-022-6200-FD	24	24	U	UJ	Surr-UJ
4-Methyl-2-pentanone (MIBK)	A0C250407	WSASB-028-5637-SO	27	27	U	UJ	Surr-UJ
4-Methyl-2-pentanone (MIBK)	A0C250407	WSASB-028-5638-SO	25	25	U	UJ	Surr-UJ
4-Methyl-2-pentanone (MIBK)	A0C240550	WSASB-028-5639-SO	24	24	U	UJ	Surr-UJ
4-Methyl-2-pentanone (MIBK)	A0C250407	WSASB-028-5640-SO	23	23	U	UJ	Surr-UJ
4-Methyl-2-pentanone (MIBK)	A0C250600	WSASS-036M-5647-SO	29	29	U	UJ	Surr-UJ
Acetone	A0C250407	WSASB-022-5615-SO	25	25	U	UJ	Surr-UJ
Acetone	A0C250407	WSASB-022-5616-SO	25	25	U	UJ	Surr-UJ
Acetone	A0C240550	WSASB-022-5617-SO	24	24	U	UJ	Surr-UJ
Acetone	A0C250407	WSASB-022-6200-FD	24	24	U	UJ	Surr-UJ
Acetone	A0C250407	WSASB-028-5637-SO	27	27	U	UJ	Surr-UJ
Acetone	A0C250407	WSASB-028-5638-SO	25	25	U	UJ	Surr-UJ
Acetone	A0C240550	WSASB-028-5639-SO	24	24	U	UJ	Surr-UJ
Acetone	A0C250407	WSASB-028-5640-SO	23	23	U	UJ	Surr-UJ
Acetone	A0C250600	WSASS-036M-5647-SO	29	29	U	UJ	Surr-UJ
Benzene	A0C250407	WSASB-022-5615-SO	6.2	6.2	U	UJ	Surr-UJ
Benzene	A0C250407	WSASB-022-5616-SO	6.2	6.2	U	UJ	Surr-UJ
Benzene	A0C240550	WSASB-022-5617-SO	6.0	6.0	U	UJ	Surr-UJ
Benzene	A0C250407	WSASB-022-6200-FD	5.9	5.9	U	UJ	Surr-UJ
Benzene	A0C250407	WSASB-028-5637-SO	6.8	6.8	U	UJ	Surr-UJ
Benzene	A0C250407	WSASB-028-5638-SO	6.2	6.2	U	UJ	Surr-UJ
Benzene	A0C240550	WSASB-028-5639-SO	6.1	6.1	U	UJ	Surr-UJ
Benzene	A0C250407	WSASB-028-5640-SO	5.7	5.7	U	UJ	Surr-UJ

**Table C-4. Detailed Listing of Qualified Results for Samples from Wet Storage Area (continued)**

<b>Chemical</b>	<b>Laboratory SDG</b>	<b>Sample ID</b>	<b>Results</b>	<b>Reporting Limit</b>	<b>Laboratory Qualifier<sup>a</sup></b>	<b>Validation Qualifier<sup>b</sup></b>	<b>Validation Code<sup>c</sup></b>
Benzene	A0C250600	WSASS-036M-5647-SO	7.1	7.1	U	UJ	Surr-UJ
Bromochloromethane	A0C250407	WSASB-022-5615-SO	6.2	6.2	U	UJ	Surr-UJ
Bromochloromethane	A0C250407	WSASB-022-5616-SO	6.2	6.2	U	UJ	Surr-UJ
Bromochloromethane	A0C240550	WSASB-022-5617-SO	6.0	6.0	U	UJ	Surr-UJ
Bromochloromethane	A0C250407	WSASB-022-6200-FD	5.9	5.9	U	UJ	Surr-UJ
Bromochloromethane	A0C250407	WSASB-028-5637-SO	6.8	6.8	U	UJ	Surr-UJ
Bromochloromethane	A0C250407	WSASB-028-5638-SO	6.2	6.2	U	UJ	Surr-UJ
Bromochloromethane	A0C240550	WSASB-028-5639-SO	6.1	6.1	U	UJ	Surr-UJ
Bromochloromethane	A0C250407	WSASB-028-5640-SO	5.7	5.7	U	UJ	Surr-UJ
Bromochloromethane	A0C250600	WSASS-036M-5647-SO	7.1	7.1	U	UJ	Surr-UJ
Bromodichloromethane	A0C250407	WSASB-022-5615-SO	6.2	6.2	U	UJ	Surr-UJ
Bromodichloromethane	A0C250407	WSASB-022-5616-SO	6.2	6.2	U	UJ	Surr-UJ
Bromodichloromethane	A0C240550	WSASB-022-5617-SO	6.0	6.0	U	UJ	Surr-UJ
Bromodichloromethane	A0C250407	WSASB-022-6200-FD	5.9	5.9	U	UJ	Surr-UJ
Bromodichloromethane	A0C250407	WSASB-028-5637-SO	6.8	6.8	U	UJ	Surr-UJ
Bromodichloromethane	A0C250407	WSASB-028-5638-SO	6.2	6.2	U	UJ	Surr-UJ
Bromodichloromethane	A0C240550	WSASB-028-5639-SO	6.1	6.1	U	UJ	Surr-UJ
Bromodichloromethane	A0C250407	WSASB-028-5640-SO	5.7	5.7	U	UJ	Surr-UJ
Bromodichloromethane	A0C250600	WSASS-036M-5647-SO	7.1	7.1	U	UJ	Surr-UJ
Bromoform	A0C250407	WSASB-022-5615-SO	6.2	6.2	U	UJ	Surr-UJ
Bromoform	A0C250407	WSASB-022-5616-SO	6.2	6.2	U	UJ	Surr-UJ
Bromoform	A0C240550	WSASB-022-5617-SO	6.0	6.0	U	UJ	Surr-UJ
Bromoform	A0C250407	WSASB-022-6200-FD	5.9	5.9	U	UJ	Surr-UJ
Bromoform	A0C250407	WSASB-028-5637-SO	6.8	6.8	U	UJ	Surr-UJ
Bromoform	A0C250407	WSASB-028-5638-SO	6.2	6.2	U	UJ	Surr-UJ
Bromoform	A0C240550	WSASB-028-5639-SO	6.1	6.1	U	UJ	Surr-UJ
Bromoform	A0C250407	WSASB-028-5640-SO	5.7	5.7	U	UJ	Surr-UJ
Bromoform	A0C250600	WSASS-036M-5647-SO	7.1	7.1	U	UJ	Surr-UJ
Bromomethane (methyl bromide)	A0C250407	WSASB-022-5615-SO	6.2	6.2	U	UJ	Surr-UJ
Bromomethane (methyl bromide)	A0C250407	WSASB-022-5616-SO	6.2	6.2	U	UJ	Surr-UJ
Bromomethane (methyl bromide)	A0C240550	WSASB-022-5617-SO	6.0	6.0	U	UJ	Surr-UJ
Bromomethane (methyl bromide)	A0C250407	WSASB-022-6200-FD	5.9	5.9	U	UJ	Surr-UJ

**Table C-4. Detailed Listing of Qualified Results for Samples from Wet Storage Area (continued)**

<b>Chemical</b>	<b>Laboratory SDG</b>	<b>Sample ID</b>	<b>Results</b>	<b>Reporting Limit</b>	<b>Laboratory Qualifier<sup>a</sup></b>	<b>Validation Qualifier<sup>b</sup></b>	<b>Validation Code<sup>c</sup></b>
bromide)							
Bromomethane (methyl bromide)	A0C250407	WSASB-028-5637-SO	6.8	6.8	U	UJ	Surr-UJ
Bromomethane (methyl bromide)	A0C250407	WSASB-028-5638-SO	6.2	6.2	U	UJ	Surr-UJ
Bromomethane (methyl bromide)	A0C240550	WSASB-028-5639-SO	6.1	6.1	U	UJ	Surr-UJ
Bromomethane (methyl bromide)	A0C250407	WSASB-028-5640-SO	5.7	5.7	U	UJ	Surr-UJ
Bromomethane (methyl bromide)	A0C250600	WSASS-036M-5647-SO	7.1	7.1	U	UJ	Surr-UJ
Carbon Disulfide	A0C250407	WSASB-022-5615-SO	6.2	6.2	U	UJ	Surr-UJ
Carbon Disulfide	A0C250407	WSASB-022-5616-SO	6.2	6.2	U	UJ	Surr-UJ
Carbon Disulfide	A0C240550	WSASB-022-5617-SO	6.0	6.0	U	UJ	Surr-UJ
Carbon Disulfide	A0C250407	WSASB-022-6200-FD	5.9	5.9	U	UJ	Surr-UJ
Carbon Disulfide	A0C250407	WSASB-028-5637-SO	6.8	6.8	U	UJ	Surr-UJ
Carbon Disulfide	A0C250407	WSASB-028-5638-SO	6.2	6.2	U	UJ	Surr-UJ
Carbon Disulfide	A0C240550	WSASB-028-5639-SO	6.1	6.1	U	UJ	Surr-UJ
Carbon Disulfide	A0C250407	WSASB-028-5640-SO	5.7	5.7	U	UJ	Surr-UJ
Carbon Disulfide	A0C250600	WSASS-036M-5647-SO	7.1	7.1	U	UJ	Surr-UJ
Carbon Tetrachloride	A0C250407	WSASB-022-5615-SO	6.2	6.2	U	UJ	Surr-UJ
Carbon Tetrachloride	A0C250407	WSASB-022-5616-SO	6.2	6.2	U	UJ	Surr-UJ
Carbon Tetrachloride	A0C240550	WSASB-022-5617-SO	6.0	6.0	U	UJ	Surr-UJ
Carbon Tetrachloride	A0C250407	WSASB-022-6200-FD	5.9	5.9	U	UJ	Surr-UJ
Carbon Tetrachloride	A0C250407	WSASB-028-5637-SO	6.8	6.8	U	UJ	Surr-UJ
Carbon Tetrachloride	A0C250407	WSASB-028-5638-SO	6.2	6.2	U	UJ	Surr-UJ
Carbon Tetrachloride	A0C240550	WSASB-028-5639-SO	6.1	6.1	U	UJ	Surr-UJ
Carbon Tetrachloride	A0C250407	WSASB-028-5640-SO	5.7	5.7	U	UJ	Surr-UJ
Carbon Tetrachloride	A0C250600	WSASS-036M-5647-SO	7.1	7.1	U	UJ	Surr-UJ
Chlorobenzene	A0C250407	WSASB-022-5615-SO	6.2	6.2	U	UJ	Surr-UJ
Chlorobenzene	A0C250407	WSASB-022-5616-SO	6.2	6.2	U	UJ	Surr-UJ
Chlorobenzene	A0C240550	WSASB-022-5617-SO	6.0	6.0	U	UJ	Surr-UJ
Chlorobenzene	A0C250407	WSASB-022-6200-FD	5.9	5.9	U	UJ	Surr-UJ
Chlorobenzene	A0C250407	WSASB-028-5637-SO	6.8	6.8	U	UJ	Surr-UJ
Chlorobenzene	A0C250407	WSASB-028-5638-SO	6.2	6.2	U	UJ	Surr-UJ

**Table C-4. Detailed Listing of Qualified Results for Samples from Wet Storage Area (continued)**

<b>Chemical</b>	<b>Laboratory SDG</b>	<b>Sample ID</b>	<b>Results</b>	<b>Reporting Limit</b>	<b>Laboratory Qualifier<sup>a</sup></b>	<b>Validation Qualifier<sup>b</sup></b>	<b>Validation Code<sup>c</sup></b>
Chlorobenzene	A0C240550	WSASB-028-5639-SO	6.1	6.1	U	UJ	Surr-UJ
Chlorobenzene	A0C250407	WSASB-028-5640-SO	5.7	5.7	U	UJ	Surr-UJ
Chlorobenzene	A0C250600	WSASS-036M-5647-SO	7.1	7.1	U	UJ	Surr-UJ
Chlorodibromomethane	A0C250407	WSASB-022-5615-SO	6.2	6.2	U	UJ	Surr-UJ
Chlorodibromomethane	A0C250407	WSASB-022-5616-SO	6.2	6.2	U	UJ	Surr-UJ
Chlorodibromomethane	A0C240550	WSASB-022-5617-SO	6.0	6.0	U	UJ	Surr-UJ
Chlorodibromomethane	A0C250407	WSASB-022-6200-FD	5.9	5.9	U	UJ	Surr-UJ
Chlorodibromomethane	A0C250407	WSASB-028-5637-SO	6.8	6.8	U	UJ	Surr-UJ
Chlorodibromomethane	A0C250407	WSASB-028-5638-SO	6.2	6.2	U	UJ	Surr-UJ
Chlorodibromomethane	A0C240550	WSASB-028-5639-SO	6.1	6.1	U	UJ	Surr-UJ
Chlorodibromomethane	A0C250407	WSASB-028-5640-SO	5.7	5.7	U	UJ	Surr-UJ
Chlorodibromomethane	A0C250600	WSASS-036M-5647-SO	7.1	7.1	U	UJ	Surr-UJ
Chloroethane	A0C250407	WSASB-022-5615-SO	6.2	6.2	U	UJ	Surr-UJ
Chloroethane	A0C250407	WSASB-022-5616-SO	6.2	6.2	U	UJ	Surr-UJ
Chloroethane	A0C240550	WSASB-022-5617-SO	6.0	6.0	U	UJ	Surr-UJ
Chloroethane	A0C250407	WSASB-022-6200-FD	5.9	5.9	U	UJ	Surr-UJ
Chloroethane	A0C250407	WSASB-028-5637-SO	6.8	6.8	U	UJ	Surr-UJ
Chloroethane	A0C250407	WSASB-028-5638-SO	6.2	6.2	U	UJ	Surr-UJ
Chloroethane	A0C240550	WSASB-028-5639-SO	6.1	6.1	U	UJ	Surr-UJ
Chloroethane	A0C250407	WSASB-028-5640-SO	5.7	5.7	U	UJ	Surr-UJ
Chloroethane	A0C250600	WSASS-036M-5647-SO	7.1	7.1	U	UJ	Surr-UJ
Chloroform	A0C250407	WSASB-022-5615-SO	6.2	6.2	U	UJ	Surr-UJ
Chloroform	A0C250407	WSASB-022-5616-SO	6.2	6.2	U	UJ	Surr-UJ
Chloroform	A0C240550	WSASB-022-5617-SO	6.0	6.0	U	UJ	Surr-UJ
Chloroform	A0C250407	WSASB-022-6200-FD	5.9	5.9	U	UJ	Surr-UJ
Chloroform	A0C250407	WSASB-028-5637-SO	6.8	6.8	U	UJ	Surr-UJ
Chloroform	A0C250407	WSASB-028-5638-SO	6.2	6.2	U	UJ	Surr-UJ
Chloroform	A0C240550	WSASB-028-5639-SO	6.1	6.1	U	UJ	Surr-UJ
Chloroform	A0C250407	WSASB-028-5640-SO	5.7	5.7	U	UJ	Surr-UJ
Chloroform	A0C250600	WSASS-036M-5647-SO	7.1	7.1	U	UJ	Surr-UJ
Chloromethane	A0C250407	WSASB-022-5615-SO	6.2	6.2	U	UJ	Surr-UJ
Chloromethane	A0C250407	WSASB-022-5616-SO	6.2	6.2	U	UJ	Surr-UJ
Chloromethane	A0C240550	WSASB-022-5617-SO	6.0	6.0	U	UJ	Surr-UJ
Chloromethane	A0C250407	WSASB-022-6200-FD	5.9	5.9	U	UJ	Surr-UJ
Chloromethane	A0C250407	WSASB-028-5637-SO	6.8	6.8	U	UJ	Surr-UJ

**Table C-4. Detailed Listing of Qualified Results for Samples from Wet Storage Area (continued)**

<b>Chemical</b>	<b>Laboratory SDG</b>	<b>Sample ID</b>	<b>Results</b>	<b>Reporting Limit</b>	<b>Laboratory Qualifier<sup>a</sup></b>	<b>Validation Qualifier<sup>b</sup></b>	<b>Validation Code<sup>c</sup></b>
Chloromethane	A0C250407	WSASB-028-5638-SO	6.2	6.2	U	UJ	Surr-UJ
Chloromethane	A0C240550	WSASB-028-5639-SO	6.1	6.1	U	UJ	Surr-UJ
Chloromethane	A0C250407	WSASB-028-5640-SO	5.7	5.7	U	UJ	Surr-UJ
Chloromethane	A0C250600	WSASS-036M-5647-SO	7.1	7.1	U	UJ	Surr-UJ
Ethylbenzene	A0C250407	WSASB-022-5615-SO	6.2	6.2	U	UJ	Surr-UJ
Ethylbenzene	A0C250407	WSASB-022-5616-SO	6.2	6.2	U	UJ	Surr-UJ
Ethylbenzene	A0C240550	WSASB-022-5617-SO	6.0	6.0	U	UJ	Surr-UJ
Ethylbenzene	A0C250407	WSASB-022-6200-FD	5.9	5.9	U	UJ	Surr-UJ
Ethylbenzene	A0C250407	WSASB-028-5637-SO	6.8	6.8	U	UJ	Surr-UJ
Ethylbenzene	A0C250407	WSASB-028-5638-SO	6.2	6.2	U	UJ	Surr-UJ
Ethylbenzene	A0C240550	WSASB-028-5639-SO	6.1	6.1	U	UJ	Surr-UJ
Ethylbenzene	A0C250407	WSASB-028-5640-SO	5.7	5.7	U	UJ	Surr-UJ
Ethylbenzene	A0C250600	WSASS-036M-5647-SO	7.1	7.1	U	UJ	Surr-UJ
Methylene Chloride	A0C250407	WSASB-022-5615-SO	6.2	6.2	JB	UJ	MB-U, Surr-J, RepLimit-J
Methylene Chloride	A0C250407	WSASB-022-5616-SO	6.2	6.2	JB	UJ	MB-U, Surr-J, RepLimit-J
Methylene Chloride	A0C240550	WSASB-022-5617-SO	6.0	6.0	JB	UJ	MB-U, Surr-J, RepLimit-J
Methylene Chloride	A0C250407	WSASB-022-6200-FD	5.9	5.9	JB	UJ	MB-U, Surr-J, RepLimit-J
Methylene Chloride	A0C250407	WSASB-028-5637-SO	6.8	6.8	JB	UJ	MB-U, Surr-J, RepLimit-J
Methylene Chloride	A0C250407	WSASB-028-5638-SO	6.2	6.2	JB	UJ	MB-U, Surr-J, RepLimit-J
Methylene Chloride	A0C240550	WSASB-028-5639-SO	6.1	6.1	JB	UJ	MB-U, Surr-J, RepLimit-J
Methylene Chloride	A0C250407	WSASB-028-5640-SO	5.7	5.7	JB	UJ	MB-U, Surr-J, RepLimit-J
Methylene Chloride	A0C250600	WSASS-036M-5647-SO	7.1	7.1	JB	UJ	MB-U, Surr-J, RepLimit-J
Styrene	A0C250407	WSASB-022-5615-SO	6.2	6.2	U	UJ	Surr-UJ
Styrene	A0C250407	WSASB-022-5616-SO	6.2	6.2	U	UJ	Surr-UJ
Styrene	A0C240550	WSASB-022-5617-SO	6.0	6.0	U	UJ	Surr-UJ
Styrene	A0C250407	WSASB-022-6200-FD	5.9	5.9	U	UJ	Surr-UJ
Styrene	A0C250407	WSASB-028-5637-SO	6.8	6.8	U	UJ	Surr-UJ
Styrene	A0C250407	WSASB-028-5638-SO	6.2	6.2	U	UJ	Surr-UJ
Styrene	A0C240550	WSASB-028-5639-SO	6.1	6.1	U	UJ	Surr-UJ
Styrene	A0C250407	WSASB-028-5640-SO	5.7	5.7	U	UJ	Surr-UJ
Styrene	A0C250600	WSASS-036M-5647-SO	7.1	7.1	U	UJ	Surr-UJ
Tetrachloroethene	A0C250407	WSASB-022-5615-SO	6.2	6.2	U	UJ	Surr-UJ
Tetrachloroethene	A0C250407	WSASB-022-5616-SO	6.2	6.2	U	UJ	Surr-UJ
Tetrachloroethene	A0C240550	WSASB-022-5617-SO	6.0	6.0	U	UJ	Surr-UJ
Tetrachloroethene	A0C250407	WSASB-022-6200-FD	5.9	5.9	U	UJ	Surr-UJ



**Table C-4. Detailed Listing of Qualified Results for Samples from Wet Storage Area (continued)**

<b>Chemical</b>	<b>Laboratory SDG</b>	<b>Sample ID</b>	<b>Results</b>	<b>Reporting Limit</b>	<b>Laboratory Qualifier<sup>a</sup></b>	<b>Validation Qualifier<sup>b</sup></b>	<b>Validation Code<sup>c</sup></b>
Tetrachloroethene	A0C250407	WSASB-028-5637-SO	6.8	6.8	U	UJ	Surr-UJ
Tetrachloroethene	A0C250407	WSASB-028-5638-SO	6.2	6.2	U	UJ	Surr-UJ
Tetrachloroethene	A0C240550	WSASB-028-5639-SO	6.1	6.1	U	UJ	Surr-UJ
Tetrachloroethene	A0C250407	WSASB-028-5640-SO	5.7	5.7	U	UJ	Surr-UJ
Tetrachloroethene	A0C250600	WSASS-036M-5647-SO	7.1	7.1	U	UJ	Surr-UJ
Toluene	A0C250407	WSASB-022-5615-SO	6.2	6.2	U	UJ	Surr-UJ
Toluene	A0C250407	WSASB-022-5616-SO	6.2	6.2	U	UJ	Surr-UJ
Toluene	A0C240550	WSASB-022-5617-SO	6.0	6.0	U	UJ	Surr-UJ
Toluene	A0C250407	WSASB-022-6200-FD	5.9	5.9	U	UJ	Surr-UJ
Toluene	A0C250407	WSASB-028-5637-SO	6.8	6.8	U	UJ	Surr-UJ
Toluene	A0C250407	WSASB-028-5638-SO	0.34	6.2	J	J	Surr-J, RepLimit-J
Toluene	A0C240550	WSASB-028-5639-SO	6.1	6.1	U	UJ	Surr-UJ
Toluene	A0C250407	WSASB-028-5640-SO	5.7	5.7	U	UJ	Surr-UJ
Toluene	A0C250600	WSASS-036M-5647-SO	7.1	7.1	U	UJ	Surr-UJ
Trichloroethene	A0C250407	WSASB-022-5615-SO	6.2	6.2	U	UJ	Surr-UJ
Trichloroethene	A0C250407	WSASB-022-5616-SO	6.2	6.2	U	UJ	Surr-UJ
Trichloroethene	A0C240550	WSASB-022-5617-SO	6.0	6.0	U	UJ	Surr-UJ
Trichloroethene	A0C250407	WSASB-022-6200-FD	5.9	5.9	U	UJ	Surr-UJ
Trichloroethene	A0C250407	WSASB-028-5637-SO	6.8	6.8	U	UJ	Surr-UJ
Trichloroethene	A0C250407	WSASB-028-5638-SO	6.2	6.2	U	UJ	Surr-UJ
Trichloroethene	A0C240550	WSASB-028-5639-SO	6.1	6.1	U	UJ	Surr-UJ
Trichloroethene	A0C250407	WSASB-028-5640-SO	5.7	5.7	U	UJ	Surr-UJ
Trichloroethene	A0C250600	WSASS-036M-5647-SO	7.1	7.1	U	UJ	Surr-UJ
Vinyl Chloride	A0C250407	WSASB-022-5615-SO	6.2	6.2	U	UJ	Surr-UJ
Vinyl Chloride	A0C250407	WSASB-022-5616-SO	6.2	6.2	U	UJ	Surr-UJ
Vinyl Chloride	A0C240550	WSASB-022-5617-SO	6.0	6.0	U	UJ	Surr-UJ
Vinyl Chloride	A0C250407	WSASB-022-6200-FD	5.9	5.9	U	UJ	Surr-UJ
Vinyl Chloride	A0C250407	WSASB-028-5637-SO	6.8	6.8	U	UJ	Surr-UJ
Vinyl Chloride	A0C250407	WSASB-028-5638-SO	6.2	6.2	U	UJ	Surr-UJ
Vinyl Chloride	A0C240550	WSASB-028-5639-SO	6.1	6.1	U	UJ	Surr-UJ
Vinyl Chloride	A0C250407	WSASB-028-5640-SO	5.7	5.7	U	UJ	Surr-UJ
Vinyl Chloride	A0C250600	WSASS-036M-5647-SO	7.1	7.1	U	UJ	Surr-UJ
Xylene (total)	A0C250407	WSASB-022-5615-SO	12	12	U	UJ	Surr-UJ
Xylene (total)	A0C250407	WSASB-022-5616-SO	12	12	U	UJ	Surr-UJ
Xylene (total)	A0C240550	WSASB-022-5617-SO	12	12	U	UJ	Surr-UJ

**Table C-4. Detailed Listing of Qualified Results for Samples from Wet Storage Area (continued)**

<b>Chemical</b>	<b>Laboratory SDG</b>	<b>Sample ID</b>	<b>Results</b>	<b>Reporting Limit</b>	<b>Laboratory Qualifier<sup>a</sup></b>	<b>Validation Qualifier<sup>b</sup></b>	<b>Validation Code<sup>c</sup></b>
Xylene (total)	A0C250407	WSASB-022-6200-FD	12	12	U	UJ	Surr-UJ
Xylene (total)	A0C250407	WSASB-028-5637-SO	14	14	U	UJ	Surr-UJ
Xylene (total)	A0C250407	WSASB-028-5638-SO	12	12	U	UJ	Surr-UJ
Xylene (total)	A0C240550	WSASB-028-5639-SO	12	12	U	UJ	Surr-UJ
Xylene (total)	A0C250407	WSASB-028-5640-SO	11	11	U	UJ	Surr-UJ
Xylene (total)	A0C250600	WSASS-036M-5647-SO	14	14	U	UJ	Surr-UJ
<i>cis</i> -1,3-Dichloropropene	A0C250407	WSASB-022-5615-SO	6.2	6.2	U	UJ	Surr-UJ
<i>cis</i> -1,3-Dichloropropene	A0C250407	WSASB-022-5616-SO	6.2	6.2	U	UJ	Surr-UJ
<i>cis</i> -1,3-Dichloropropene	A0C240550	WSASB-022-5617-SO	6.0	6.0	U	UJ	Surr-UJ
<i>cis</i> -1,3-Dichloropropene	A0C250407	WSASB-022-6200-FD	5.9	5.9	U	UJ	Surr-UJ
<i>cis</i> -1,3-Dichloropropene	A0C250407	WSASB-028-5637-SO	6.8	6.8	U	UJ	Surr-UJ
<i>cis</i> -1,3-Dichloropropene	A0C250407	WSASB-028-5638-SO	6.2	6.2	U	UJ	Surr-UJ
<i>cis</i> -1,3-Dichloropropene	A0C240550	WSASB-028-5639-SO	6.1	6.1	U	UJ	Surr-UJ
<i>cis</i> -1,3-Dichloropropene	A0C250407	WSASB-028-5640-SO	5.7	5.7	U	UJ	Surr-UJ
<i>cis</i> -1,3-Dichloropropene	A0C250600	WSASS-036M-5647-SO	7.1	7.1	U	UJ	Surr-UJ
<i>trans</i> -1,3-Dichloropropene	A0C250407	WSASB-022-5615-SO	6.2	6.2	U	UJ	Surr-UJ
<i>trans</i> -1,3-Dichloropropene	A0C250407	WSASB-022-5616-SO	6.2	6.2	U	UJ	Surr-UJ
<i>trans</i> -1,3-Dichloropropene	A0C240550	WSASB-022-5617-SO	6.0	6.0	U	UJ	Surr-UJ
<i>trans</i> -1,3-Dichloropropene	A0C250407	WSASB-022-6200-FD	5.9	5.9	U	UJ	Surr-UJ
<i>trans</i> -1,3-Dichloropropene	A0C250407	WSASB-028-5637-SO	6.8	6.8	U	UJ	Surr-UJ
<i>trans</i> -1,3-Dichloropropene	A0C250407	WSASB-028-5638-SO	6.2	6.2	U	UJ	Surr-UJ
<i>trans</i> -1,3-Dichloropropene	A0C240550	WSASB-028-5639-SO	6.1	6.1	U	UJ	Surr-UJ
<i>trans</i> -1,3-Dichloropropene	A0C250407	WSASB-028-5640-SO	5.7	5.7	U	UJ	Surr-UJ
<i>trans</i> -1,3-Dichloropropene	A0C250600	WSASS-036M-5647-SO	7.1	7.1	U	UJ	Surr-UJ

**Table C-4. Detailed Listing of Qualified Results for Samples from Wet Storage Area (continued)**

Chemical	Laboratory SDG	Sample ID	Results	Reporting Limit	Laboratory Qualifier <sup>a</sup>	Validation Qualifier <sup>b</sup>	Validation Code <sup>c</sup>
<b>Surface Water (µg/L)</b>							
Acetone	A0C250407	WSASW-037-5656-SW	10	10	J	UJ	RepLimit-J, FldQC-U
Acetone	A0C250407	WSASW-039-5658-SW	10	10	J	UJ	RepLimit-J, FldQC-U
Acetone	A0C310489	WSASW-040-5659-SW	2.3	10	J	J	RepLimit-J
Acetone	A0C310489	WSASW-040-6199-FD	2.7	10	J	J	RepLimit-J

<sup>a</sup>Laboratory Qualifiers: B = Analyte was detected in the associated blank as well as the sample, E = Inorganic result estimated because of the presence of interference, J = Estimated because result is between the method detection limit and the reporting limit, PG = More than 40% difference between primary and confirmation analysis, and U = Not detected.

<sup>b</sup>Validation Qualifiers: J = Estimated, U = Not detected, and UJ = Not detected and reporting limit estimated.

<sup>c</sup>Validation Reason Codes: CalBlk = Calibration Blank, CCV = Continuing Calibration Verification, FldQC = Field Quality Control, HT = Holding Time, LCS = Laboratory Control Sample, ProJudge = Professional Judgment, MB = Method Blank, MS = Matrix Spike, RptLimit = Reporting Limit, and Surr = Surrogate recovery.

BHC = Hexachlorocyclohexane.

DDD = Dichlorodiphenyldichloroethane.

DDE = Dichlorodiphenyldichloroethylene.

DDT = Dichlorodiphenyltrichloroethane.

ID = Identification.

µg/L = Micrograms per liter.

µg/kg = Micrograms per kilograms.

mg/kg = Milligrams per kilogram.

SDG = Sample Delivery Group.

-- = No qualifier.

For this RVAAP study, five field duplicates were analyzed for soil and surface water media. No sediment field duplicates were collected at Wet Storage Area. Two trip blanks for VOC determinations were analyzed for this sample set. Two equipment rinsates and one deionized source water blank were collected for the entire field cycle. The potable water source was previously tested for use by Ohio EPA and USACE. Approval documentation is referenced under the Performance-Based Acquisition 2008 Sharon Conglomerate Well Installation task. The project goal for blanks is to achieve concentrations less than the reporting levels. Table C-5 summarizes analytes that were detected in these blanks. The potable water blank (SCFqc-001-0001) showed detected concentrations for 12 metals and 8 miscellaneous general chemistry analytes. Of these, barium, calcium, iron, magnesium, manganese, nickel, potassium, sodium, and the general chemistry analytes exceeded their reporting limits. As noted, the results have been previously reviewed and accepted by Ohio EPA and USACE.

Toluene was the only analyte detected in the PBA08 RI field blank (PBA08-QC-6000-FB) and it was well below the laboratory reporting limit. The PBA08 RI equipment rinsate blanks (PBA08-QC-6001-ER and PBA08-QC-6002-ER) showed detections for eight metals, five SVOCs, and three VOCs. Of the metals, only manganese and nickel in one rinsate and zinc in both rinsates exceeded the reporting limit, but all except nickel were below two times the reporting limit. Only one VOC and one SVOC were detected slightly above the reporting limit. These analytes [acetone and bis(2-ethylhexyl)phthalate] are common laboratory contaminants. In general, the field blank and rinsate blank results indicate that the equipment decontamination procedure was effective and the potential for sample contamination due to ambient field conditions is very low.

**Table C-5. Results for Analytes Detected in Field Blanks or Equipment Rinse Samples**

Sample ID	CAS Number	Project Reporting Level	SCFqc-001-0001-FB	PBA08-QC-6000-FB	PBA08-QC-6001-ER	PBA08-QC-6002-ER
Date			02/06/09	02/18/10	02/18/10	04/01/10
Sample Type			Potable Water Blank	Deionized Water Blank	Equipment Rinse Blank	Equipment Rinse Blank
Analyte (mg/L)						
<i>Metals</i>						
Antimony	7440-36-0	0.005	0.00019 J	<0.005U	<0.005U	<0.005U
Arsenic	7440-38-2	0.005	0.0012 J	<0.005U	<0.005U	<0.005U
Barium	7440-39-3	0.01	0.0472	<0.01U	<0.01U	<0.01U
Calcium	7440-70-2	0.1	65.6	<2U	<2U	<2U
Chromium	7440-47-3	0.005	<0.005U	<0.005U	<0.005U	0.0012 J
Cobalt	7440-48-4	0.005	<0.005U	<0.005U	<0.005U	0.00006 J
Copper	7440-50-8	0.005	0.00057 J	<0.005U	<0.005U	<0.005U
Iron	7439-89-6	0.1	0.78	<0.15U	<0.15U	0.0957 J
Magnesium	7439-95-4	0.1	28.3	<1U	<1U	<1U
Manganese	7439-96-5	0.01	0.0919	<0.01U	<0.01U	0.0155
Nickel	7440-02-0	0.0002	0.00035 J	<0.01U	<0.01U	0.0012 J
Potassium	7440-09-7	0.2	2.86	<1U	<1U	<1U
Sodium	7440-23-5	0.2	40.1	<1U	<1U	<1U
Thallium	7440-28-0	0.002	0.00036 J	<0.002U	<0.002U	<0.002U
Vanadium	7440-62-2	0.01	<0.01U	<0.01U	0.00053 J	<0.01U
Zinc	7440-66-6	0.01	<0.0049UJ	<0.04U	0.0104 J	0.0104 J
<i>Semi-volatile Organic Compounds</i>						
Benzenemethanol	100-51-6	0.01	<0.01U	<0.01U	<0.01U	0.00078 J
Bis(2-ethylhexyl)phthalate	117-81-7	0.01	<0.01U	<0.01UJ	<0.01UJ	0.014
Di-n-butyl phthalate	84-74-2	0.01	<0.01U	<0.01U	<0.01U	0.00068 J
<i>Volatile Organic Compounds</i>						
2-Butanone	78-93-3	0.01	<0.01U	<0.01U	0.00072 J	<0.01U
Acetone	67-64-1	0.01	<0.01U	<0.01U	0.004 J	0.017
Toluene	108-88-3	0.001	<0.001U	0.00053 J	0.00042 J	0.00034 J

**Table C-5. Results for Analytes Detected in Field Blanks or Equipment Rinsate Samples (continued)**

Sample ID	CAS Number	Project Reporting Level	SCFqc-001-0001-FB	PBA08-QC-6000-FB	PBA08-QC-6001-ER	PBA08-QC-6002-ER
Date			02/06/09	02/18/10	02/18/10	04/01/10
Sample Type			Potable Water Blank	Deionized Water Blank	Equipment Rinse Blank	Equipment Rinse Blank
Analyte (mg/L)						
<i>Miscellaneous</i>						
Alkalinity	NA	1.0	250J	NA	NA	NA
Bicarbonate	NA	1.0	250J	NA	NA	NA
Bromide	24959-67-9	0.2	0.3	NA	NA	NA
Chloride	16887-00-6	0.2	85.9	NA	NA	NA
Fluoride	16984-48-8	0.1	0.1	NA	NA	NA
Orthophosphate	14265-44-2	0.1	0.2	NA	NA	NA
Phosphorous, Total	NA	0.1	0.11	NA	NA	NA
Sulfate	14808-79-8	1.0	51.6	NA	NA	NA

Explosives, propellants, pesticides, and polychlorinated biphenyls were analyzed for and not detected.

Data Qualifiers: J = Estimated, U = Not detected, and UJ = Not detected and reporting limit estimated.

Sample Type: ER = Equipment rinse blank and FB = Source water blank.

CAS = Chemical Abstract Service.

mg/L = Milligrams per liter.

NA = Not applicable.

## **C.4 DATA QUALITY EVALUATION**

### **C.4.1 Metals Analysis**

#### **C.4.1.1 Sediment and Soil**

Analytical holding times were met for all samples. Initial and continuing calibration criteria were achieved for all elements analyzed. Method blanks were acceptable and did not impact the data. However, due to instrument blank contamination, 1 data point in sediment (1.1% of sediment data) and 37 data points in soil (4.6% of soil data) were qualified as not detected below the reporting levels “UJ.” All LCS recovery criteria were met for sediment matrices. However, soil LCS recovery deviations caused various analyte results for nine data points to be qualified as estimated non-detectable concentrations “UJ” and represented 1.1% of the soil data. Due to MS/MSD recoveries being outside control limit criteria for several analytes, 21 data points in sediment (22.6% of sediment data) and 229 data points in soil (28.3% of soil data) were qualified as estimated “J” or estimated non-detectable concentration “UJ.” Other metals exhibited acceptable recoveries and were not qualified. Reporting levels are considered to be acceptable relative to QAPP goals. Based on professional judgment (serial dilution or laboratory duplicate deviations), 42 data points (5.2% of metals soil data) were qualified as estimated “J.” Due to elevated target levels present, 2 sediment and 20 soil samples required dilutions for various analytes. Although some analyses were qualified as estimated, the deviations observed should not have a primary influence on the results, and the values are considered technically sound and defensible. None of the metals in the sediment or soil results were rejected. Complete data summary tables, with associated qualifiers, are provided in Appendix D of the RI Report and can be found in the RVAAP Environmental Information Management System (REIMS).

#### **C.4.1.2 Surface Water**

Analytical holding times were met for all samples. Initial and continuing calibration criteria were achieved for all elements analyzed. Instrument blanks were acceptable and did not impact the data; however, method blanks did result in the qualification of three data points (2.6% of water data) as estimated non-detectable concentration “UJ.” These qualifications did not impact the project’s ability to consistently meet reporting levels. MS recoveries were satisfactory. Serial dilution and duplicate comparisons were acceptable within the data set. LCS determinations were considered acceptable. Reporting levels are considered consistent with QAPP goals. Some data were qualified as estimated; however, none of the deviations were considered severe enough to reject any of the data. No dilutions were required. No data were rejected. Although some analyses were qualified as estimated, the deviations observed should not have a primary influence on the results, and the values are considered technically sound and defensible. Complete data summary tables, with associated qualifiers, are provided in Appendix D of the RI Report and can be found in REIMS.

## **C.4.2 Volatile Organic Analysis**

### **C.4.2.1 Sediment and Soil**

Analytical holding times were met for all samples. Initial and continuing calibration criteria were achieved for all analyses. Due to surrogate recovery failures, 35 sediment results and 315 soil results were qualified as estimated “J” or estimated non-detectable concentration “UJ” as required. Internal standard area counts and compound retention times were acceptable throughout the sample analyses. Method blanks contained low levels of various common laboratory contaminants, which caused one data point in sediment and nine soil data points to be qualified as not detected “U,” as required in the associated samples. All LCS recoveries were within criteria. MS/MSD recoveries and relative percent difference (RPD) values were acceptable. No sediment or soil samples required dilutions. No data were rejected for any reason. Although some analyses were qualified as estimated, the deviations observed should not have a primary influence on the results, and the values are considered technically sound and defensible. Complete data summary tables, with associated qualifiers, are provided in Appendix D of the RI report and can be found in REIMS.

### **C.4.2.2 Surface Water**

Analytical holding times were met for all samples. All surrogate recoveries and internal standard areas were acceptable. Initial and continuing calibration criteria were met for all target analytes. Method blanks were free of contamination and had no impact on the sample data. One associated trip blank contained acetone below the reporting level at 2.8 µg/L, which caused this analyte to be qualified as not detected “U” in two water samples. Associated MS/MSD recoveries and RPDs were acceptable. All LCS recoveries were within acceptance criteria. No dilutions were required. No data were rejected for any reason. Although some analyses were flagged as estimated because analyte results were between the detection level and the reporting level, the deviations observed should not have a primary influence on the results, and the values are considered technically sound and defensible. Complete data summary tables, with associated qualifiers, are provided in Appendix D of the RI Report and can be found in REIMS.

## **C.4.3 Semi-volatile Organic Analysis**

### **C.4.3.1 Sediment and Soil**

Analytical holding times were met for all samples. Surrogate recovery criteria were acceptable. Internal standard area counts and compound retention times were acceptable throughout the data analyses. Initial and continuing calibration criteria were met for all compounds. All sediment method blanks were free of contamination; however, due to soil method blank contamination, one soil data point (0.1% of soil data) was qualified as not detected “UJ.” All LCS recoveries were within criteria. MS/MSD recoveries and RPD values were acceptable in sediment; however, MS/MSD deviations in soil resulted in 27 soil data points (2.7% of soil data) being qualified as estimated non-detectable concentrations “UJ.” Six soil samples required dilutions due to elevated target levels or a difficult matrix. With the exception of a total of seven analytes in samples WSASB-022-5615-SO and



WSASB-028-5637-SO, all reporting levels for undetected analytes were below facility-wide cleanup goals (FWCUGs). Of these, six had MDLs below FWCUGs. Concentrations detected between the MDL and reporting limit would have been reported by the laboratory as estimated values and are considered acceptable for their intended use. One undetected analyte, n-nitrosodi-n-propylamine in sample WSASB-028-5637-SO, had an MDL that was slightly above the FWCUG (0.18 versus 0.12 mg/kg). No sediment or soil data were rejected for any reason. Although several analyses were qualified as estimated, the deviations observed should not have a primary influence on the results, and the values are considered technically sound and defensible. Complete data summary tables, with associated qualifiers, are provided in Appendix D of the RI Report and can be found in REIMS.

#### **C.4.3.2 Surface Water**

Analytical holding times were met for all water samples. All surrogate recoveries and internal standard areas/retention times were acceptable. Initial and continuing calibration criteria were met for all analytes. As a result of method blank levels, six data points (1.8% of water data) were qualified as not detected below the reporting limit “UJ.” Due to LCS recovery deviations, four data points (1.2% of water data) were qualified as estimated non-detectable concentrations “UJ.” Associated batch MS/MSD recoveries and RPD values were acceptable for all analytes. No water samples required dilutions. No data were rejected. Although some analyses were qualified as estimated, the deviations observed should not have a primary influence on the results, and the values are considered technically sound and defensible. Complete data summary tables, with associated qualifiers, are provided in Appendix D of the RI Report and can be found in REIMS.

#### **C.4.4 Pesticide Analysis**

##### **C.4.4.1 Sediment and Soil**

Analytical holding times were met for all samples. Surrogate recoveries were within acceptance criteria. Initial calibrations were acceptable for all pesticide compounds. Pesticide continuing calibrations exceeded the 20 percent difference limit for several pesticide analytes, which caused results for 10 sediment data points (48% of pesticide sediment data) and 65 soil data points (34.5% of pesticide soil data) to be qualified estimated “J” or as estimated non-detectable concentration “UJ.” All pesticide method blanks were free of contamination and had no impact on the sample data. All sediment and soil LCS recoveries were within acceptance criteria. MS/MSD recoveries and RPD values were acceptable for most analytes in sediment and soil with the exception of one pesticide soil data point (0.53% of pesticide soil data), which was qualified as estimated non-detectable concentration “UJ.” Due to difficult matrix or elevated target levels, one pesticide sediment sample and two pesticide soil samples required dilutions. With the exception of aldrin in sample WSASB-028-5637-SO, all reporting levels were below FWCUGs. The reporting level for aldrin was above the FWCUG; however, the MDL was well below the FWCUG. Concentrations detected between the MDL and reporting limit would have been reported by the laboratory as estimated values. Data are considered acceptable for its intended use. No pesticide sediment or soil data were rejected for any reason. Although some analyses were qualified as estimated, the deviations observed should not have a primary influence on the results, and the values are considered technically sound and defensible.

Complete data summary tables, with associated qualifiers, are provided in Appendix D of the RI Report and can be found in REIMS.

#### **C.4.4.2 Surface Water**

Analytical holding times were met for all samples. All pesticide initial and continuing calibration criteria were met for all analytes. All pesticide method blanks were free of contamination and had no impact on the data. Due to low surrogate recoveries, 21 pesticide data points (20% of pesticide water data) were qualified as estimated non-detectable concentrations “UJ.” Due to pesticide LCS recovery deviations, four pesticide data points were qualified as estimated non-detectable concentrations “UJ.” MS/MSD recoveries and RPD values were acceptable for pesticides. No pesticide water samples required dilutions. No data were rejected for any reason. Although some analyses were qualified as estimated, the deviations observed should not have a primary influence on the results, and the values are considered technically sound and defensible. Complete data summary tables, with associated qualifiers, are provided in Appendix D of the RI Report and can be found in REIMS.

#### **C.4.5 Polychlorinated Biphenyl Analysis**

##### **C.4.5.1 Sediment and Soil**

Analytical holding times were met for all samples. Surrogate recoveries were within acceptance criteria. Initial and continuing calibration criteria were met for all PCB compounds. All PCB method blanks were free of contamination and had no impact on the sample data. All sediment and soil LCS recoveries were within acceptance criteria. MS/MSD recoveries and RPD values were acceptable for analytes in sediment and soil. No PCB sediment or soil samples required dilutions. No PCB sediment or soil data were rejected for any reason. Although some analyses were qualified as estimated, the deviations observed should not have a primary influence on the results, and the values are considered technically sound and defensible. Complete data summary tables, with associated qualifiers, are provided in Appendix D of the RI Report and can be found in REIMS.

##### **C.4.5.2 Surface Water**

Analytical holding times were met for all samples. All PCB initial and continuing calibration criteria were met for all analytes. All PCB method blanks were free of contamination and had no impact on the data. Due to low surrogate recoveries, 21 PCB data points (60% of PCB water data) were qualified as estimated non-detectable concentrations “UJ.” All PCB LCS recoveries were within criteria. MS/MSD recoveries and RPD values were acceptable for PCBs. No PCB water samples required dilutions. No data were rejected for any reason. Although some analyses were qualified as estimated, the deviations observed should not have a primary influence on the results, and the values are considered technically sound and defensible. Complete data summary tables, with associated qualifiers, are provided in Appendix D of the RI Report and can be found in REIMS.

## **C.4.6 Explosives and Nitroglycerin Analyses**

### **C.4.6.1 Sediment and Soil**

Analytical holding times were met for all samples. Surrogate recoveries were within acceptance criteria. Initial calibration and sediment continuing calibration criteria were acceptable. Most explosives soil continuing calibration criteria were met with the exception of a few analytes with greater than 20 percent difference values, which caused 56 soil data points (10% of explosives soil data) to be qualified as estimated non-detectable concentrations “UJ” for affected analytes. All sediment and soil method blanks were free of contamination and had no impact on the sample data. All LCS recoveries were within criteria. MS/MSD recoveries and RPD values were also acceptable. No explosives sediment or soil samples required dilutions. No data were rejected for any reason. Although some analyses were qualified as estimated, the deviations observed should not have a primary influence on the results, and the values are considered technically sound and defensible. Complete data summary tables, with associated qualifiers, are provided in Appendix D of the RI Report and can be found in REIMS.

### **C.4.6.2 Surface Water**

Analytical holding times were met for all samples. Initial and continuing calibration criteria were acceptable for all explosives analytes. All method blanks were free of contamination and had no impact on the sample data. Surrogate recoveries were acceptable throughout the data set. All LCS and MS/MSD recoveries and RPD values were within acceptance criteria. No explosives water samples required dilutions. No data were rejected or estimated for any reason. The data are considered technically sound and defensible. Complete data summary tables, with associated qualifiers, are provided in Appendix D of the RI Report and can be found in REIMS.

## **C.4.7 Nitroguanidine, Nitrocellulose, and Hexavalent Chromium Analyses**

### **C.4.7.1 Sediment and Soil**

Analytical holding times were met for all samples. Initial and continuing calibration criteria were met for all compounds. Method blanks were free of contamination. All LCS recoveries were within criteria. Sediment MS/MSD recoveries and RPD values were acceptable for all applicable analytes. However, due to soil MS recovery deviation, one soil data point (5.6% of soil data) was qualified as estimated non-detectable concentration “UJ.” No sediment or soil dilutions were required. No data were rejected for any reason. Although some analyses were qualified as estimated, the deviations observed should not have a primary influence on the results, and the values are considered technically sound and defensible. Complete data summary tables, with associated qualifiers, are provided in Appendix D of the RI Report and can be found in REIMS.

#### **C.4.7.2 Surface Water**

Initial and continuing calibration criteria were met for all analytes. Method blanks were free of contamination and had no impact on the sample data. All LCS recoveries were within acceptance criteria. Due to exceeded holding times, three data points for nitrocellulose (30% of water data) were qualified as estimated non-detectable concentration "UJ." As a result of MS recovery deviation, two data points (20% of water data) were qualified as estimated non-detectable concentration "UJ." No dilutions were required for any samples. No data were rejected. Although some analyses were qualified as estimated, the deviations observed should not have a primary influence on the results, and the values are considered technically sound and defensible. Complete data summary tables, with associated qualifiers, are provided in Appendix D of the RI Report and can be found in REIMS.

#### **C.4.8 Precision**

Field duplicate samples were collected to ascertain the contribution to variability (i.e., precision) due to the combination of environmental media, sampling consistency, and analytical precision. Field duplicate samples were collected from the same spatial and temporal conditions as the primary environmental sample. Soil samples were collected from the same sampling device after homogenization for all analytes except VOCs.

Field duplicate comparison information is presented in Table C-6. If a given analyte was not detected in both the regular and field duplicate sample, precision was considered acceptable and results were not included in the table. The RPD was calculated only when both samples were greater than five times the reporting level. When one or both sample values were between the reporting level and five times the reporting level, the absolute difference (D) was evaluated. Tables 3-1 and 3-2 of the FWQAPP set the RPD criteria at 50% for soil and sediment and at 30% for water, while D is set at one times the reporting limit for all matrices. Field duplicate comparisons for the Wet Storage Area area of concern are considered good, with most results below D of one or an RPD of 50%. Exceptions to this include calcium and cobalt in soil duplicate pair WSASB-022-5616-SO/WSASB-022-6200-FD, 14 polycyclic aromatic hydrocarbons (PAHs) for soil duplicate pair WSASB-024-5624-SO/WSASB-024-6203-FD, and 12 PAHs for soil duplicate pair WSASS-034M-5646-SO/ WSASS-034M-6195-FD.

**Table C-6. Field Duplicate Pair Comparisons for Analytes Detected in Samples from Wet Storage Area**

Sample ID	Chemical	Regular Result	Duplicate Result	RPD % or (Absolute Difference) <sup>a</sup>	Test <sup>b</sup>
<b>Soil (mg/kg)</b>					
<i>Metals</i>					
WSASB-021-5613-SO/ WSASB-021-6201-FD	Aluminum	11,300J	12,400	9%	RPD
WSASB-021-5613-SO/ WSASB-021-6201-FD	Antimony	0.091J	0.093J	(0.00)	D
WSASB-021-5613-SO/ WSASB-021-6201-FD	Arsenic	13.9J	17.7	24%	RPD
WSASB-021-5613-SO/ WSASB-021-6201-FD	Barium	34.3J	36.5J	6%	RPD
WSASB-021-5613-SO/ WSASB-021-6201-FD	Beryllium	0.63	0.65	3%	RPD
WSASB-021-5613-SO/ WSASB-021-6201-FD	Cadmium	0.045J	0.049J	(0.02)	D
WSASB-021-5613-SO/ WSASB-021-6201-FD	Calcium	5,220	3,860	30%	RPD
WSASB-021-5613-SO/ WSASB-021-6201-FD	Chromium	18.4	18.5J	1%	RPD
WSASB-021-5613-SO/ WSASB-021-6201-FD	Cobalt	14.3J	13.6	5%	RPD
WSASB-021-5613-SO/ WSASB-021-6201-FD	Copper	18.7	20.4	9%	RPD
WSASB-021-5613-SO/ WSASB-021-6201-FD	Iron	29,700	32,600J	9%	RPD
WSASB-021-5613-SO/ WSASB-021-6201-FD	Lead	12.3J	11.9	3%	RPD
WSASB-021-5613-SO/ WSASB-021-6201-FD	Magnesium	5,650	4,980J	13%	RPD
WSASB-021-5613-SO/ WSASB-021-6201-FD	Manganese	295	271	9%	RPD
WSASB-021-5613-SO/ WSASB-021-6201-FD	Mercury	0.032J	0.12U	(0.73)	D
WSASB-021-5613-SO/ WSASB-021-6201-FD	Nickel	31.8	32.5J	2%	RPD
WSASB-021-5613-SO/ WSASB-021-6201-FD	Potassium	1,760J	1,800J	2%	RPD
WSASB-021-5613-SO/ WSASB-021-6201-FD	Selenium	1.1J	1.1	(0.00)	D
WSASB-021-5613-SO/ WSASB-021-6201-FD	Silver	0.026J	0.033UJ	(0.01)	D
WSASB-021-5613-SO/ WSASB-021-6201-FD	Sodium	77.4J	74.6J	(0.02)	D
WSASB-021-5613-SO/ WSASB-021-6201-FD	Thallium	0.18J	0.18J	(0.00)	D
WSASB-021-5613-SO/ WSASB-021-6201-FD	Vanadium	18.6	19.1J	3%	RPD
WSASB-021-5613-SO/ WSASB-021-6201-FD	Zinc	61.5	67.9	10%	RPD
WSASB-022-5616-SO/ WSASB-022-6200-FD	Aluminum	9,930	10,700	8%	RPD
WSASB-022-5616-SO/ WSASB-022-6200-FD	Antimony	0.087J	0.079J	(0.01)	D
WSASB-022-5616-SO/ WSASB-022-6200-FD	Arsenic	17.3	16.8	3%	RPD
WSASB-022-5616-SO/ WSASB-022-6200-FD	Barium	64.9J	52.6J	21%	RPD

**Table C-6. Field Duplicate Pair Comparisons for Analytes Detected in Samples from Wet Storage Area (continued)**

Sample ID	Chemical	Regular Result	Duplicate Result	RPD % or (Absolute Difference) <sup>a</sup>	Test <sup>b</sup>
WSASB-022-5616-SO/ WSASB-022-6200-FD	Beryllium	0.67	0.6	11%	RPD
WSASB-022-5616-SO/ WSASB-022-6200-FD	Cadmium	0.062J	0.052J	(0.04)	D
WSASB-022-5616-SO/ WSASB-022-6200-FD	Calcium	1,460	1,190	(1.10)	D *
WSASB-022-5616-SO/ WSASB-022-6200-FD	Chromium	15.3J	15.7J	3%	RPD
WSASB-022-5616-SO/ WSASB-022-6200-FD	Cobalt	25.8	11.5	77%	RPD*
WSASB-022-5616-SO/ WSASB-022-6200-FD	Copper	23.9	20.6	15%	RPD
WSASB-022-5616-SO/ WSASB-022-6200-FD	Iron	29,300J	27,500J	6%	RPD
WSASB-022-5616-SO/ WSASB-022-6200-FD	Lead	17.5	10.9	46%	RPD
WSASB-022-5616-SO/ WSASB-022-6200-FD	Magnesium	3,380J	3,400J	1%	RPD
WSASB-022-5616-SO/ WSASB-022-6200-FD	Manganese	572	379	41%	RPD
WSASB-022-5616-SO/ WSASB-022-6200-FD	Nickel	33.5J	28.6J	16%	RPD
WSASB-022-5616-SO/ WSASB-022-6200-FD	Potassium	1,070J	1,350J	23%	RPD
WSASB-022-5616-SO/ WSASB-022-6200-FD	Selenium	1.4	0.92	(0.79)	D
WSASB-022-5616-SO/ WSASB-022-6200-FD	Sodium	44.9J	50.6J	(0.05)	D
WSASB-022-5616-SO/ WSASB-022-6200-FD	Thallium	0.17J	0.15J	(0.08)	D
WSASB-022-5616-SO/ WSASB-022-6200-FD	Vanadium	16.3J	16.3J	0%	RPD
WSASB-022-5616-SO/ WSASB-022-6200-FD	Zinc	67.2	63.5	6%	RPD
<i>Polycyclic Aromatic Hydrocarbons</i>					
WSASB-022-5616-SO/ WSASB-022-6200-FD	Benz(a)anthracene	0.01J	0.059U	(0.81)	D
WSASB-022-5616-SO/ WSASB-022-6200-FD	Benzo(b)fluoranthene	0.011J	0.0084J	(0.04)	D
WSASB-022-5616-SO/ WSASB-022-6200-FD	Fluoranthene	0.019J	0.017J	(0.03)	D
WSASB-022-5616-SO/ WSASB-022-6200-FD	Phenanthrene	0.01J	0.059U	(0.81)	D
WSASB-022-5616-SO/ WSASB-022-6200-FD	Pyrene	0.015J	0.013J	(0.03)	D
<i>Semi-volatile Organic Compounds</i>					
WSASB-022-5616-SO/ WSASB-022-6200-FD	Di-n-butyl phthalate	0.022J	0.39U	(0.92)	D
<i>Metals</i>					
WSASB-024-5624-SO/ WSASB-024-6203-FD	Aluminum	12,600	10,200J	21%	RPD
WSASB-024-5624-SO/ WSASB-024-6203-FD	Antimony	0.083J	0.088J	(0.01)	D
WSASB-024-5624-SO/ WSASB-024-6203-FD	Arsenic	20.8	19.1	9%	RPD
WSASB-024-5624-SO/ WSASB-024-6203-FD	Barium	42.1J	37.2J	12%	RPD
WSASB-024-5624-SO/ WSASB-024-6203-FD	Beryllium	0.68	0.57	(0.85)	D
WSASB-024-5624-SO/ WSASB-024-6203-FD	Cadmium	0.046UJ	0.052J	(0.02)	D
WSASB-024-5624-SO/ WSASB-024-6203-FD	Calcium	1,110	1,020	(0.35)	D
WSASB-024-5624-SO/ WSASB-024-6203-FD	Chromium	19J	16.7	13%	RPD
WSASB-024-5624-SO/ WSASB-024-6203-FD	Cobalt	13.3	10.6	23%	RPD
WSASB-024-5624-SO/ WSASB-024-6203-FD	Copper	21.1	17.8J	17%	RPD

**Table C-6. Field Duplicate Pair Comparisons for Analytes Detected in Samples from Wet Storage Area (continued)**

Sample ID	Chemical	Regular Result	Duplicate Result	RPD % or (Absolute Difference) <sup>a</sup>	Test <sup>b</sup>
WSASB-024-5624-SO/ WSASB-024-6203-FD	Iron	33,600J	29,400J	13%	RPD
WSASB-024-5624-SO/ WSASB-024-6203-FD	Lead	11.9	11.5	3%	RPD
WSASB-024-5624-SO/ WSASB-024-6203-FD	Magnesium	4,310J	4,020J	7%	RPD
WSASB-024-5624-SO/ WSASB-024-6203-FD	Manganese	254	280	10%	RPD
WSASB-024-5624-SO/ WSASB-024-6203-FD	Nickel	31.5J	28.9J	9%	RPD
WSASB-024-5624-SO/ WSASB-024-6203-FD	Potassium	1,580J	1,300J	19%	RPD
WSASB-024-5624-SO/ WSASB-024-6203-FD	Selenium	1.1	1.1J	(0.00)	D
WSASB-024-5624-SO/ WSASB-024-6203-FD	Silver	0.017UJ	0.016J	(0.00)	D
WSASB-024-5624-SO/ WSASB-024-6203-FD	Sodium	59.2J	62.7J	(0.03)	D
WSASB-024-5624-SO/ WSASB-024-6203-FD	Thallium	0.17J	0.17J	(0.00)	D
WSASB-024-5624-SO/ WSASB-024-6203-FD	Vanadium	18.8J	16.1	15%	RPD
WSASB-024-5624-SO/ WSASB-024-6203-FD	Zinc	72.2	67.3	7%	RPD
<b>Polycyclic Aromatic Hydrocarbons</b>					
WSASB-024-5624-SO/ WSASB-024-6203-FD	Acenaphthene	0.021	0.0086U	(1.40)	D *
WSASB-024-5624-SO/ WSASB-024-6203-FD	Anthracene	0.059	0.0086U	(5.90)	D *
WSASB-024-5624-SO/ WSASB-024-6203-FD	Benz(a)anthracene	0.13	0.0086U	(14.0)	D *
WSASB-024-5624-SO/ WSASB-024-6203-FD	Benzo(a)pyrene	0.12	0.0086U	(13.0)	D *
WSASB-024-5624-SO/ WSASB-024-6203-FD	Benzo(b)fluoranthene	0.14	0.0086U	(15.0)	D *
WSASB-024-5624-SO/ WSASB-024-6203-FD	Benzo(ghi)perylene	0.089	0.0086U	(9.30)	D *
WSASB-024-5624-SO/ WSASB-024-6203-FD	Benzo(k)fluoranthene	0.077	0.0086U	(8.00)	D *
WSASB-024-5624-SO/ WSASB-024-6203-FD	Chrysene	0.12	0.0086U	(13.0)	D *
WSASB-024-5624-SO/ WSASB-024-6203-FD	Fluoranthene	0.37	0.0086U	(42.0)	D *
WSASB-024-5624-SO/ WSASB-024-6203-FD	Fluorene	0.016	0.0086U	(0.86)	D
WSASB-024-5624-SO/ WSASB-024-6203-FD	Indeno(1,2,3-cd)pyrene	0.067	0.0086U	(6.80)	D *
WSASB-024-5624-SO/ WSASB-024-6203-FD	Phenanthrene	0.2	0.0086U	(22.0)	D *
WSASB-024-5624-SO/ WSASB-024-6203-FD	Pyrene	0.27	0.0086U	(30.0)	D *
WSASB-024-5624-SO/ WSASB-024-6203-FD	Dibenz(a,h)anthracene	0.019	0.0086U	(1.20)	D *
<b>Metals</b>					
WSASS-034M-5646-SO/ WSASS-034M-6195-FD	Aluminum	12,500J	12,200J	2%	RPD
WSASS-034M-5646-SO/ WSASS-034M-6195-FD	Antimony	0.12J	0.13J	(0.02)	D
WSASS-034M-5646-SO/ WSASS-034M-6195-FD	Arsenic	14J	14.4J	3%	RPD
WSASS-034M-5646-SO/ WSASS-034M-6195-FD	Barium	61.2	59.9	2%	RPD
WSASS-034M-5646-SO/ WSASS-034M-6195-FD	Beryllium	0.5	0.5	0%	RPD
WSASS-034M-5646-SO/ WSASS-034M-6195-FD	Cadmium	0.12J	0.12J	(0.00)	D
WSASS-034M-5646-SO/ WSASS-034M-6195-FD	Calcium	1,330J	1,210J	9%	RPD
WSASS-034M-5646-SO/ WSASS-034M-6195-FD	Chromium	20.4	29.9	38%	RPD

**Table C-6. Field Duplicate Pair Comparisons for Analytes Detected in Samples from Wet Storage Area (continued)**

Sample ID	Chemical	Regular Result	Duplicate Result	RPD % or (Absolute Difference) <sup>a</sup>	Test <sup>b</sup>
WSASS-034M-5646-SO/ WSASS-034M-6195-FD	Cobalt	9.9	11.7	17%	RPD
WSASS-034M-5646-SO/ WSASS-034M-6195-FD	Copper	16.3	16.5	1%	RPD
WSASS-034M-5646-SO/ WSASS-034M-6195-FD	Iron	28,100	29,800	6%	RPD
WSASS-034M-5646-SO/ WSASS-034M-6195-FD	Lead	16.2J	16.4J	1%	RPD
WSASS-034M-5646-SO/ WSASS-034M-6195-FD	Magnesium	2,820J	2,740J	3%	RPD
WSASS-034M-5646-SO/ WSASS-034M-6195-FD	Manganese	451	529	16%	RPD
WSASS-034M-5646-SO/ WSASS-034M-6195-FD	Mercury	0.019J	0.023J	(0.04)	D
WSASS-034M-5646-SO/ WSASS-034M-6195-FD	Nickel	21.7J	25.5J	16%	RPD
WSASS-034M-5646-SO/ WSASS-034M-6195-FD	Potassium	989J	979J	1%	RPD
WSASS-034M-5646-SO/ WSASS-034M-6195-FD	Selenium	1.2	1.2	(0.00)	D
WSASS-034M-5646-SO/ WSASS-034M-6195-FD	Sodium	37.2J	40.4J	(0.03)	D
WSASS-034M-5646-SO/ WSASS-034M-6195-FD	Thallium	0.16J	0.15J	(0.05)	D
WSASS-034M-5646-SO/ WSASS-034M-6195-FD	Vanadium	21.9	21.8	0%	RPD
WSASS-034M-5646-SO/ WSASS-034M-6195-FD	Zinc	56	51.2	9%	RPD
<b>Polycyclic Aromatic Hydrocarbons</b>					
WSASS-034M-5646-SO/ WSASS-034M-6195-FD	Acenaphthene	0.011	0.025	(2.10)	D *
WSASS-034M-5646-SO/ WSASS-034M-6195-FD	Anthracene	0.023	0.057	(5.00)	D *
WSASS-034M-5646-SO/ WSASS-034M-6195-FD	Benz(a)anthracene	0.074	0.15	68%	RPD*
WSASS-034M-5646-SO/ WSASS-034M-6195-FD	Benzo(a)pyrene	0.071	0.13	59%	RPD*
WSASS-034M-5646-SO/ WSASS-034M-6195-FD	Benzo(b)fluoranthene	0.082	0.17	70%	RPD*
WSASS-034M-5646-SO/ WSASS-034M-6195-FD	Benzo(ghi)perylene	0.051	0.097	62%	RPD*
WSASS-034M-5646-SO/ WSASS-034M-6195-FD	Benzo(k)fluoranthene	0.053	0.085	46%	RPD
WSASS-034M-5646-SO/ WSASS-034M-6195-FD	Chrysene	0.078	0.16	69%	RPD*
WSASS-034M-5646-SO/ WSASS-034M-6195-FD	Fluoranthene	0.17	0.35	69%	RPD*
WSASS-034M-5646-SO/ WSASS-034M-6195-FD	Fluorene	0.012	0.026	(2.10)	D *
WSASS-034M-5646-SO/ WSASS-034M-6195-FD	Indeno(1,2,3-cd)pyrene	0.044	0.08	58%	RPD*
WSASS-034M-5646-SO/ WSASS-034M-6195-FD	Naphthalene	0.011	0.013	(0.29)	D
WSASS-034M-5646-SO/ WSASS-034M-6195-FD	Phenanthrene	0.099	0.22	76%	RPD*
WSASS-034M-5646-SO/ WSASS-034M-6195-FD	Pyrene	0.13	0.26	67%	RPD*
WSASS-034M-5646-SO/ WSASS-034M-6195-FD	Dibenz(a,h)anthracene	0.014	0.023	(1.30)	D *
<b>Surface Water (mg/L)</b>					
<b>Metals</b>					
WSASW-040-5659-SW/ WSASW-040-6199-FD	Aluminum	0.347	0.354	(0.07)	D
WSASW-040-5659-SW/ WSASW-040-6199-FD	Arsenic	0.00078J	0.00055J	(0.05)	D
WSASW-040-5659-SW/ WSASW-040-6199-FD	Barium	0.0154	0.0153	(0.01)	D
WSASW-040-5659-SW/ WSASW-040-6199-FD	Calcium	20.7	21.1	2%	RPD



**Table C-6. Field Duplicate Pair Comparisons for Analytes Detected in Samples from Wet Storage Area (continued)**

Sample ID	Chemical	Regular Result	Duplicate Result	RPD % or (Absolute Difference) <sup>a</sup>	Test <sup>b</sup>
WSASW-040-5659-SW/ WSASW-040-6199-FD	Cobalt	0.00012J	0.00012J	(0.00)	D
WSASW-040-5659-SW/ WSASW-040-6199-FD	Iron	0.566	0.638	(0.48)	D
WSASW-040-5659-SW/ WSASW-040-6199-FD	Lead	0.00027J	0.00028J	(0.00)	D
WSASW-040-5659-SW/ WSASW-040-6199-FD	Magnesium	5.43	5.53	2%	RPD
WSASW-040-5659-SW/ WSASW-040-6199-FD	Manganese	0.0565	0.0572	1%	RPD
WSASW-040-5659-SW/ WSASW-040-6199-FD	Nickel	0.0009J	0.00098J	(0.01)	D
WSASW-040-5659-SW/ WSASW-040-6199-FD	Potassium	1.16	1.18	(0.02)	D
WSASW-040-5659-SW/ WSASW-040-6199-FD	Sodium	3.96	4.02	(0.06)	D
WSASW-040-5659-SW/ WSASW-040-6199-FD	Vanadium	0.00066J	0.00073J	(0.01)	D
<b><i>Semi-volatile Organic Compounds</i></b>					
WSASW-040-5659-SW/ WSASW-040-6199-FD	Bis(2-ethylhexyl) phthalate	0.01U	0.002J	(0.80)	D
<b><i>Volatile Organic Compounds</i></b>					
WSASW-040-5659-SW/ WSASW-040-6199-FD	Acetone	0.0023J	0.0027J	(0.04)	D

<sup>a</sup>RPD is calculated as  $100 \times |R-D|/(R+D)/2$ , where R is the concentration of the regular sample and D is the concentration of the duplicate. The D is calculated as  $|R-D|/L$  where L is the average reporting limit of the two samples. Values followed by a “%” are RPD values. Values in parentheses are D values.

<sup>b</sup>The test used to evaluate the duplicate comparison is the RPD if both sample results were more than five times the reporting limit or the D if any result was less than five times the reporting limit.

\*RPD or D outside criteria

Data Qualifiers: J = Estimated, U = Not detected, and UJ = Not detected and reporting limit estimated.

D = Absolute difference.

ID = Identification.

mg/kg = Milligrams per kilogram.

mg/L = Milligrams per liter.

RPD = Relative percent difference.

#### C.4.9 Sensitivity

Determining minimum detectable values allows the investigation to assess the relative confidence that can be placed in a value relative to the magnitude or level of analyte concentration observed. The closer a measured value comes to the minimum detectable concentration, the less confidence and more variation the measurement will have. Project sensitivity goals were expressed as quantitation level goals in the QAPP. These levels were achieved or exceeded throughout the analytical process, with the exception of a few SVOC and pesticide analytes that required dilution due to elevated analyte concentrations or difficult matrices. With the exception of n-nitrosodi-n-propylamine in sample WSASB-028-5637-SO, all MDLs were below FWCUGs and are considered acceptable for their intended purpose. Actual laboratory MDLs achieved during this investigation achieved project quantitation level goals. Individual analyte reporting levels varied due to matrix differences and contaminant analyte concentrations. Reporting levels were elevated in soil due to dilution factors and inherent moisture content variability and results being reported in the standard dry weight format. Reporting level variations were considered during data interpretation and statistical applications.

Method blank determinations were performed with each analytical sample batch for each analyte under investigation. These blanks were evaluated during data review to determine their potential impact on individual data points, if any. Review action levels are set at 5 times the detected blank concentration for all analytes, except those designated as common laboratory contaminants (i.e., methylene chloride, acetone, toluene, 2-butanone, and phthalate compounds) with action levels set at 10 times the detected blank concentration. During data review, reported sample concentrations are assessed against method blank action levels and the following qualifications are made when reportable quantities of analytes were observed in the associated method blank.

- When the analyte sample concentration is above 5 or 10 times the action level, the data are not qualified and it is considered a positive value.
- When inorganic analyte sample concentrations are determined to be below 5 or 10 times the action level, the data are considered impacted by the method blank and the value reported is qualified as a non-detectable concentration at the analyte value reported. These data are then qualified as “U.”
- When organic analyte sample concentrations are determined to be below 5 or 10 times the action level, the data are considered impacted by the method blank and the value reported is qualified as a non-detectable concentration. If the reported value is below the reporting level, the result is qualified as a non-detectable concentration at the reporting level. If the result is above the reporting limit, it is qualified as a non-detectable concentration at the analyte value reported. These data are then qualified as “U.”

No data were rejected as a result of method blank contamination; however, various analytes were qualified as non-detectable concentration “U” according to the validation in Table C-3.

There was only one instance of the VOC acetone detected in one project trip blank. The concentration observed was 2.8 µg/L (reporting level at 10 µg/L). The impact of this value has been assessed during data review, and values have been qualified where necessary in two water samples. Therefore, it was

determined that VOC analyses were not affected through the transportation and storage process, and that the procedures and precautions employed were effective in preserving the integrity of the sample analysis.

#### **C.4.10 Representativeness and Comparability**

Representativeness expresses the degree to which data accurately reflect the analyte or parameter of interest for the environmental site and is the qualitative term most concerned with the proper design of the sampling program. Factors that affect the representativeness of analytical data include ensuring proper preservation and holding times, using standard sampling and analytical methods, and determining matrix or analyte interferences. Samples were hand-delivered to the laboratory by the TestAmerica courier and were received within temperature specifications and in good condition. A few samples were received at a temperature of 0.8°C; however, this did not impact the quality of the data. Holding times were exceeded for nitrocellulose for three water samples; however, they were analyzed within two times the holding time and the data are considered usable but estimated. No other holding time deviations were observed.

Comparability, like representativeness, is a qualitative term relative to an individual project data set. This RI employed appropriate sampling methodologies, site surveillance, standard sampling devices, uniform training, sampling documentation, standard analytical protocols/procedures, QC checks with standard control limits, and universally accepted data reporting units to ensure comparability to other data sets. By properly implementing and documenting these standard practices, the project has established the confidence that the data will be comparable to other project and programmatic information. Tables C-7 and C-8 present the standardized parameter groups, sample containers, preservation techniques, and associated holding times for environmental media.

#### **C.4.11 Completeness**

Usable data are defined as those data that pass individual scrutiny during the verification and validation process and are accepted for unrestricted application to the human health risk assessment evaluation or equivalent-type applications. Estimated data have been determined to be acceptable for RVAAP project objectives.

The completeness goal for analytical data is 90% as defined in Tables 3-1 and 3-2 of the FWQAPP. The project achieved this goal by collecting all samples presented in the PBA08 SAP and producing usable results for 100% of all sample analyses performed.

**Table C-7. Container Requirements for Soil and Sediment Samples at RVAAP**

Analyte Group	Container	Minimum Sample Size	Preservative	Holding Time
Volatile Organic Compounds	One 2-oz glass jar with septum cap (no headspace)	20 g	Cool, 4°C	14 days
Semi-volatile Organic Compounds	4-oz glass	30 g	Cool, 4°C	14 days (extraction) 40 days (analysis)
Pesticide Compounds	4-oz glass	30 g	Cool, 4°C	14 days (extraction) 40 days (analysis)
Polychlorinated Biphenyls	4-oz glass	30 g	Cool, 4°C	14 days (extraction) 40 days (analysis)
Polycyclic Aromatic Hydrocarbon Compounds	4-oz glass	30 g	Cool, 4°C	14 days (extraction) 40 days (analysis)
Explosive Compounds	4-oz glass	10 g	Cool, 4°C	14 days (extraction) 40 days (analysis)
Nitroguanidine	4-oz glass	10 g	Cool, 4°C	14 days (extraction) 40 days (analysis)
Nitrocellulose	4-oz glass	10 g	Cool, 4°C	14 days (extraction) 40 days (analysis)
Metals (TAL)	4-oz glass or plastic	20 g	Cool, 4°C	180 days; Hg at 28 days
Hexavalent Chromium	4-oz glass	20 g	Cool, 4°C	24 hr (extraction) 24 hr (analysis)
Geotechnical Parameters	Moisture/Density/Porosity/K - Shelby tube TOC - no special container Grain Size Fraction - no special container	Various 100 g 5,000 g	Air tight, cool Cool NA	NA

Hg = Mercury.

hr = Hour.

K= Permeability.

NA = Not applicable.

oz = Ounce.

RVAAP = Ravenna Army Ammunition Plant.

TAL = Target analyte list.

TOC= Total organic carbon.

**Table C-8. Container Requirements for Surface Water Samples at RVAAP**

Analyte Group	Container	Minimum Sample Size	Preservative	Holding Time
Volatile Organic Compounds	Three 40-mL glass vial	Two 40-mL	HCl to pH <2 Cool, 4°C	14 days
Semi-volatile Organic Compounds	Two 1-L amber glass	1 L	Cool, 4°C	7 days (extraction) 40 days (analysis)
Pesticide Compounds	Two 1-L amber glass	1 L	Cool, 4°C	7 days (extraction) 40 days (analysis)
Polychlorinated Biphenyls	Two 1-L amber glass	1 L	Cool, 4°C	7 days (extraction) 40 days (analysis)
Polycyclic Aromatic Hydrocarbon Compounds	Two 1-L amber glass	1 L	Cool, 4°C	7 days (extraction) 40 days (analysis)
Explosive Compounds	Two 1-L amber glass	1 L	Cool, 4°C	7 days (extraction) 40 days (analysis)
Nitroguanidine	500-mL amber glass	10 ml	Cool, 4°C	7 days (extraction) 40 days (analysis)
Nitrocellulose	500-mL amber glass	100 mL	Cool, 4°C	7 days (extraction) 40 days (analysis)
Nitrate	250-mL poly	50 mL	Cool, 4°C	48 hr
Metals (TAL)	1-L HNO <sub>3</sub> poly	300 mL	HNO <sub>3</sub> to pH <2 Cool, 4°C	180 days; Hg at 28 days

HCl = Hydrochloric acid.

Hg = Mercury.

HNO<sub>3</sub> = Nitric acid

hr = Hour.

L = Liter.

mL = Milliliter.

poly = Polyvinyl.

RVAAP = Ravenna Army Ammunition Plant.

TAL = Target analyte list.

## C.5 DATA QUALITY ASSESSMENT SUMMARY

In concurrence with the USACE Chemical DQA presented in Attachment 1, the overall quality of the RI Report data and information meets or exceeds the established project objectives. Through proper implementation of the project data verification and assessment process, project information has been determined to be acceptable for use.

Data as presented have been qualified as usable or estimated “J” or “UJ.” Data that have been estimated indicate accuracy, precision, or sensitivity being less than desired but as adequate for interpretation. No data were rejected for this sample set. Qualifiers have been applied to data when necessary.

Data produced for this project demonstrate they can withstand scientific scrutiny; are appropriate for its intended purpose; are technically defensible; and are of known and acceptable sensitivity, precision, and accuracy. Data integrity has been documented through proper implementation of QA and QC measures. The environmental information presented has an established confidence that allows utilization for the project objectives and provides data for future needs.

## C.6 REFERENCES

DoD (U.S. Department of Defense) 2006. *Quality Systems Manual for Environmental Laboratories*. Environmental Data Quality Workgroup. Version 3. January 2006.

USACE (U.S. Army Corps of Engineers) 2001. *Facility-Wide Sampling and Analysis Plan for Environmental Investigations at the Ravenna Army Ammunition Plant, Ravenna, Ohio*. March 2001.

USACE 2007. *Louisville DoD Quality Systems Manual Supplement*. Version 1. March 2007.

USACE 2009. *Performance Based Acquisition 2008 Supplemental Investigation Sampling and Analysis Plan Addendum No. 1, Ravenna Army Ammunition Plant, Ravenna, Ohio*. December 2009.

USEPA (U.S. Environmental Protection Agency) 1994. *Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*. EPA-540/R-94/013. February 1994.

USEPA 1999. *Contract Laboratory Program National Functional Guidelines for Organic Data Review*. EPA-540/R-99/008. Final. October 1999.

# **ATTACHMENT 1**

Chemical Data Usability Report

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**SUBJECT:** FINAL CHEMICAL DATA USABILITY ASSESSMENT

**PROJECT:** Ravenna Army Ammunition Plant, Ravenna, Ohio  
18 Areas of Concern (PBA08)  
Wet Storage Area Remedial Investigation

1. Purpose:

This memorandum represents and documents the evaluation of the quality and usability of the analytical data obtained during the Remedial Investigation (RI) of the Wet Storage Area (RVAAP-45). This includes determination of contract compliance, data usability, and data quality objective attainment in accordance with EM 200-1-6, Chapter 5 (October 2006).

2. References:

- 2.1 Data Quality Control Summary Report, Appendix C of the *Draft Remedial Investigation Report for Soil, Sediment, and Surface Water at RVAAP-45 Wet Storage Area*, prepared by SAIC, November 23, 2011.
- 2.2 *Final Data Validation Report, Ravenna Army Ammunition Plant 18 Areas of Concern 2010 Sampling, Ravenna, Ohio*, prepared by MEC<sup>x</sup>, LP, March 2013.
- 2.3 *PBA 2008 Supplemental Investigation Sampling and Analysis Plan Addendum No. 1* (PBA08 SAP) prepared by SAIC, December 2009.
- 2.4 *Facility-Wide Quality Assurance Project Plan for Environmental Investigations at the Ravenna Army Ammunition Plant, Appendix , Ravenna, Ohio* (FWQAPP), prepared by SAIC, March 2001.
- 2.5 *DoD Quality Systems Manual for Environmental Laboratories*, Department of Defense (DoD QSM), Environmental Data Quality Workgroup, Version 3, January 2006.
- 2.6 *Louisville DoD Quality Systems Manual Supplement, Version 1*, prepared by USACE –Louisville District, March 2007.
- 2.7 EM 200-1-6, Chapter 5, Chemical Quality Assurance for Hazardous, Toxic and Radioactive Waste (HTRW) Projects, October 1997.

3. Project Description:

The purpose of the RI of the Wet Storage Area was to supplement the data from previous sampling events to delineate the nature and extent of contamination, evaluate contaminant fate and transport, and complete a human health risk assessment (HHRA) and ecological risk assessment (ERA) to support remedial decisions. Depending on the results of the RI, a recommendation would be provided for either no further action (NFA) or a Feasibility Study (FS) that would evaluate potential remedies and future actions.

Sampling was conducted in March 2010 by Science Application International Corporation (SAIC). Forty-two environmental soil, sediment, and surface water samples were collected and analyzed for one or more of the following parameters: metals, explosives, propellants (nitrocellulose and nitroguanidine), pesticides, polychlorinated biphenyls (PCBs), semivolatile organic compounds (SVOCs), polycyclic aromatic hydrocarbons (PAHs), volatiles (VOCs), hexavalent chromium, and

total chromium. Analytical services were provided by TestAmerica (TA-North Canton, OH and TA-West Sacramento, CA).

4. Analytical Program Overview:

Below are excerpts from Section 4.5 of the PBA08 SAP.

4.1 Data Quality Objectives

Data quality objective (DQO) summaries for this investigation will follow Tables 3-1 and 3-2 in the Facility-Wide QAPP. All QC parameters stated in the specific U.S. Environmental Protection Agency (USEPA) SW-846 methods will be adhered to for each chemical listed. The SW-846 method references found in the Facility-Wide QAPP have been revised to the Update III methods, as appropriate. Laboratories are required to comply with all methods as written; recommendations are considered requirements. Concurrence with the DoD QSM for Environmental Laboratories (DoD, 2006), and the Louisville QSM Supplement is expected.

4.2 Level of Quality Control Effort

QC efforts will follow Section 3.2 of the Facility-Wide QAPP. Field QC measurements will include field source water blanks, trip blanks, field duplicates, surrogates, and equipment rinse water blanks. Laboratory QC measurements will include method blanks, laboratory control samples (LCSs), laboratory duplicates, and matrix spike/matrix spike duplicate (MS/MSD) samples. LCS measurements will include the standard mid-level analyte concentration, plus a QC/method reporting level (MRL) low-level concentration. It is recognized that the laboratory will routinely perform and monitor the QC/MRL; however, guidance check limits will be utilized, as advisory and corrective action will not be required for individual analyte variances. The QC/MRL will be successfully analyzed at the beginning of the analytical sequences as required by the QSM. Additionally, the lab will analyze the QC/MRL sample at the close of the analytical sequence.

4.3 Accuracy, Precision, and Sensitivity of Analysis

Accuracy, precision, and sensitivity goals identified in Section 3.3 and Tables 3-1 through 3-9 of the Facility-Wide QAPP will be imposed for this investigation. As stated above, some of the analytical methods numbers have been updated (refer to Table 2-1 of this QAPP). Quality objectives related to individual method QC protocol will also follow requirements given in the DoD QSM for Environmental Laboratories and the Louisville QSM Supplement. Laboratories will make all reasonable attempts to meet the program and project reporting levels in Tables 3-1 through 3-9 of the Facility-Wide QAPP for each individual sample analysis.

4.4 Completeness, Representativeness, and Comparability

Completeness, representativeness, and comparability goals identified in Section 3.4 and Tables 3-1 and 3-2 of the Facility-Wide QAPP will be imposed for this investigation. The completeness goal for analytical data is 90%, as defined in Tables 3-1 and 3-2 of the FWQAPP.

5. Chemical Data Quality and Usability Assessment:

This assessment of the overall quality and usability of project data is based upon a thorough review of the associated Data Quality Control Summary Report as presented in Appendix C of the *Draft Remedial Investigation Report for Soil, Sediment, and Surface Water at RVAAP-45 Wet Storage Area*,

(SAIC, 2012) and Section 21 of the *Final Data Validation Report, Ravenna Army Ammunition Plant 20 Areas of Concern 2010 Sampling* (MEC<sup>x</sup>, 2013).

The Data Quality Control Summary Report represents the findings of the Level III data review of 100% of the primary data as performed by the contractor, SAIC. As a result of this review process, the data are qualified based on the technical assessment of the verification criteria. Qualifiers indicate the usability of the data.

Data validation was performed by MEC<sup>x</sup>, a USACE-Louisville District contracted third-party. The Data Validation Report details their findings from the Level IV validation of 10% of the primary sample data, analysis of field duplicate results, and the determination of data. This evaluation includes review of the same QC elements as the primary contractor's review in addition to an in-depth look into the verification of sample results, target compound identification, and raw data. The intent is to verify the quality and the reliability of the primary data for its intended use.

The data were evaluated in the context of the data quality objective (DQOs) and measurement quality objectives (MQOs) as specified in the PBA08 SAP and FWQAPP referenced in items 2 and 4 above.

The subsections below present the U.S. Army Corps of Engineers – Louisville District's assessment of the chemical data quality for the Wet Storage Area. This assessment includes determination of contract compliance, data usability, and data quality objective attainment.

#### 5.1 Contract Compliance

Samples were collected and analyzed in accordance with the procedures specified in the project QAPPs. With minor exceptions, data met the QC specifications outlined in the DoD QSM and project QAPPs. Specific non-conformances and their impact on data usability are noted and described in the associated data evaluation reports.

Some analytes had method detection levels (MDLs) and/or reporting limits (RLs) that exceeded the criteria in Table 3-1 of the SAP or in Table 3-3 of the FWQAPP, if no criteria were listed in the SAP. The failure to achieve reporting limits (RLs) less than applicable criteria for some analytes was anticipated due to analytical limitations. Results with RLs/MDLs exceeding project criteria may still be usable during risk assessment; however, it is incumbent upon the final data user to make this determination on a case by case basis.

#### 5.2 Data Quality Attainment

The quality of data generated for the Wet Storage Area RI met the project DQOs. Usable definitive data of known and documented quality was produced for 99.98 % of the sample analyses performed. This includes data qualified as estimated (J) due to QC outliers. The J qualifier indicates that accuracy, precision, or sensitivity is less than desired; however, the results are of sufficient quality to be considered usable.

During the contractor's 100% Level III evaluation, no data were rejected. One non-detectable 4-nitrotoluene result was rejected during the 10% Level IV data validation performed by MEC<sup>x</sup>.

Wet Storage Area  
Rejected Data

Sample	SDG	Analyte	Reason	Review
WSASW-037-5656-SW	A0C250407	4-Nitrotoluene	Calibration	Level IV (10%)

5.3 Data Usability

Data were consistently reviewed and qualified by both the primary contractor and the third-party validator. Overall findings were compatible. Although differences in professional opinion may have resulted in some data being qualified as estimated (J) by one reviewer and not the other, this rarely adversely impacted the usability of the data. This occurred primarily in regards to qualification of data due to MRL recovery outliers. Section 3.2 of the FWQAPP considers the QC limits “guidance”. As such, SAIC notes the outliers but doesn’t qualify based upon them. Based upon professional opinion, MECx qualifies data associated with missing MRL standards or those with recovery outliers.

6.0 Conclusion:

Through the proper implementation of the project data review, verification, and validation process that is outlined in the FWQAPP, the data for the Wet Storage Area RI are deemed acceptable for use with some exceptions. Rejected and unusable data are relegated to 1 nondetect sample result out of approximately 4,300 results. Based upon this assessment, 99.98% of the analytical results are usable as qualified to meet the project DQOs; can withstand scientific scrutiny; are technically defensible; and are of known and acceptable quality in terms of sensitivity, precision, and accuracy.



Kathy Krantz  
Project Chemist  
USACE – Louisville District

## **ATTACHMENT 2**

### **Automated Data Review Outlier Reports**

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## QC Outlier Report: Holding Times

Lab Report Batch: A0D010524

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Prep Method	Actual Holding Time		Criteria				Reported Dates ( and Times )			
					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
NTASB-123-5305-SO	A0D010524007	8270C	SO	3540C	19.0	2.0		14	40		Days	03/31/2010	04/19/2010	04/21/2010
NTASB-123-5305-SO	A0D010524007S	8270C	SO	3540C	19.0	2.0		14	40		Days	03/31/2010	04/19/2010	04/21/2010
NTASB-123-5305-SO	A0D010524007D	8270C	SO	3540C	19.0	2.0		14	40		Days	03/31/2010	04/19/2010	04/21/2010
NTASB-123-5306-SO	A0D010524008	8270C	SO	3540C	19.0	2.0		14	40		Days	03/31/2010	04/19/2010	04/21/2010
NTASB-123-6132-FD	A0D010524014	8270C	SO	3540C	19.0	2.0		14	40		Days	03/31/2010	04/19/2010	04/21/2010

# Laboratory Control Sample / Laboratory Control Sample Duplicate Outlier Report

**Method Batch :** 0096044      **Analysis Method :** 8270C      **Analysis Date :** 04/08/2010  
**Preparation Batch :** 0096044      **Preparation Type :** 3540C      **Preparation Date :** 04/06/2010  
**Lab Reporting Batch :** A0D010524      **Lab ID:** TALCAN

LCS Lab Sample ID	Matrix	Analyte Name	Reported Values		Project Limits (Percent)			
			Percent Recovery	RPD	Rejection Point	Lower Limit	Upper Limit	RPD
A0D06000044C	SO	2,4,6-Trichlorophenol	43		10.00	45.00	110.00	29.00

<b>Associated Samples</b>	
Client Sample ID	Lab Sample ID
NTASB-120-5294-SO	A0D010524002
NTASB-121-5297-SO	A0D010524003
NTASB-121-5298-SO	A0D010524004
NTASB-121-6133-FD	A0D010524015
NTASB-122-5301-SO	A0D010524005
NTASB-122-5302-SO	A0D010524006
NTASB-124-5309-SO	A0D010524009
NTASB-124-5310-SO	A0D010524010
NTASB-124-5312-SO	A0D010524011
NTASB-124-6134-FD	A0D010524016
NTASB-125-5313-SO	A0D010524012
NTASB-125-5314-SO	A0D010524013
WSASB-026-5632-SO	A0D010524017

Scope of Data Qualification: The outlier in the LCS qualifies that analyte in all samples with the same Preparation Batch ID as the LCS

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI



## Continuing Calibration (CCV) Outlier Report (Organics)

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**There are no Organic Continuing Calibrations with outliers**

## Continuing Calibration (CCAL) Outlier Report (Inorganics)

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**There are no Inorganic Continuing Calibrations with outliers**

# Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 0096022

Analysis Method : 6020

Analysis Date : 04/14/2010

Preparation Batch : 0096022

Preparation Type : 3050B

Preparation Date : 04/06/2010

Lab Reporting Batch : A0D010524

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
NTASB-120-5293-SOMS	A0D010524001S	SO	Antimony	35		30.00	75.00	125.00	20.00
			Calcium	54		30.00	70.00	130.00	20.00
NTASB-120-5293-SOMS	A0D010524001D		Antimony	35		30.00	75.00	125.00	20.00
			Barium	231	33	30.00	10.00	199.00	20.00
			Calcium	293	84	30.00	70.00	130.00	20.00
			Magnesium	159	25	30.00	70.00	130.00	20.00
			Zinc	301	28	30.00	10.00	199.00	20.00

Associated Samples: All samples in Method Batch	
Client Sample ID	Lab Sample ID
NTASB-120-5293-SO	A0D010524001
NTASB-120-5294-SO	A0D010524002
NTASB-121-5297-SO	A0D010524003
NTASB-121-5298-SO	A0D010524004
NTASB-121-6133-FD	A0D010524015
NTASB-122-5301-SO	A0D010524005
NTASB-122-5302-SO	A0D010524006
NTASB-123-5305-SO	A0D010524007
NTASB-123-5306-SO	A0D010524008
NTASB-123-6132-FD	A0D010524014
NTASB-124-5309-SO	A0D010524009
NTASB-124-5310-SO	A0D010524010
NTASB-124-5312-SO	A0D010524011
NTASB-124-6134-FD	A0D010524016
NTASB-125-5313-SO	A0D010524012
NTASB-125-5314-SO	A0D010524013
WSASB-026-5632-SO	A0D010524017

\* 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: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

# Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 0098042

Analysis Method : 8270C

Analysis Date : 04/16/2010

Preparation Batch : 0098042

Preparation Type : 3540C

Preparation Date : 04/08/2010

Lab Reporting Batch : A0D010524

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
NTASB-120-5293-SOMS	A0D010524001S	SO	3,3'-Dichlorobenzidine	8.6		0.00	10.00	130.00	56.00
NTASB-120-5293-SOMS	A0D010524001D		3,3'-Dichlorobenzidine		76	0.00	10.00	130.00	56.00
			4-Nitroaniline		32	0.00	35.00	115.00	30.00
			Benzoic acid		38	0.00	0.00	110.00	20.00

Associated Samples: Parent sample only	
Client Sample ID	Lab Sample ID
NTASB-120-5293-SO	A0D010524001

\* 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: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

# Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 0102405

Analysis Method : 8330B

Analysis Date : 04/20/2010

Preparation Batch : 0102405

Preparation Type : 8330B

Preparation Date : 04/12/2010

Lab Reporting Batch : A0D010524

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
NTASB-120-5293-SOMS	A0D010524001S	SO	4-Amino-2,6-Dinitrotoluene	71		0.00	80.00	125.00	30.00
NTASB-120-5293-SOMS	A0D010524001D		4-Amino-2,6-Dinitrotoluene	71		0.00	80.00	125.00	30.00

Associated Samples: Parent sample only	
Client Sample ID	Lab Sample ID
NTASB-120-5293-SO	A0D010524001

\* 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: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

# Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 0109057

Analysis Method : 8270C

Analysis Date : 04/21/2010

Preparation Batch : 0109057

Preparation Type : 3540C

Preparation Date : 04/19/2010

Lab Reporting Batch : A0D010524

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
NTASB-123-5305-SOMS	A0D010524007D	SO	Benzoic acid	24		0.00	0.00	110.00	20.00

Associated Samples: Parent sample only	
Client Sample ID	Lab Sample ID
NTASB-123-5305-SO	A0D010524007

\* 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: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

# Method Blank Outlier Report

Lab Reporting Batch : A0D010524

Lab ID: TALCAN

Analysis Method : 8260B

Analysis Date : 04/02/2010

Preparation Type : 5030B

Preparation Date : 04/02/2010

Method Blank Lab Sample ID : A0D050000052B

Preparation Batch : 0095052

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	8.5	20	ug/kg	J	Common Contaminant

Acetone was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
NTASB-123-5306-SO	A0D010524008	1	12	J B	ug/kg
NTASB-123-6132-FD	A0D010524014	1	13	J B	ug/kg

Methylene chloride	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	2.0	5.0	ug/kg	J	Common Contaminant

Methylene chloride was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
NTASB-123-5305-SO	A0D010524007	1	2.2	J B	ug/kg
NTASB-123-5306-SO	A0D010524008	1	2.3	J B	ug/kg
NTASB-123-6132-FD	A0D010524014	1	2.6	J B	ug/kg

# Method Blank Outlier Report

Lab Reporting Batch : A0D010524

Lab ID: TALCAN

Analysis Method : 6020

Analysis Date : 04/14/2010

Preparation Type : 3050B

Preparation Date : 04/06/2010

Method Blank Lab Sample ID : A0D060000022B

Preparation Batch : 0096022

Aluminum	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	5.4	10.0	mg/kg	J	

Aluminum contamination found in the method blank did not qualify any samples.

Barium	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	0.17	1.0	mg/kg	J	

Barium contamination found in the method blank did not qualify any samples.

Zinc	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	2.3	4.0	mg/kg	J	

Zinc contamination found in the method blank did not qualify any samples.



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

Lab Report Batch: A0D010524

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
NTASB-120-5293-SO	A0D010524001	6020	SO	Cadmium	J	0.20	0.25	mg/kg
				Selenium	J	0.59	0.63	mg/kg
				Silver	J	0.023	0.63	mg/kg
				Sodium	J	30.0	126	mg/kg
				Thallium	J	0.13	0.25	mg/kg
				7471A	Mercury	J	0.023	0.13
NTASB-120-5294-SO	A0D010524002	6020		8330B	J PG	0.017	0.24	mg/kg
				Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetr	J PG	0.017	0.24	mg/kg
NTASB-120-5294-SO	A0D010524002	6020		Antimony	J	0.14	0.60	mg/kg
				Cadmium	J	0.10	0.24	mg/kg
				Silver	J	0.015	0.60	mg/kg
				Sodium	J	32.3	119	mg/kg
				Thallium	J	0.21	0.24	mg/kg
NTASB-121-5297-SO	A0D010524003	6020		Antimony	J	0.18	0.57	mg/kg
				Cadmium	J	0.16	0.23	mg/kg
				Silver	J	0.025	0.57	mg/kg
				Thallium	J	0.11	0.23	mg/kg
				7471A	Mercury	J	0.026	0.11
NTASB-121-5298-SO	A0D010524004	6020		8330B	J PG	0.014	0.24	mg/kg
				Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetr	J PG	0.014	0.24	mg/kg
NTASB-121-5298-SO	A0D010524004	6020		Antimony	J	0.10	0.61	mg/kg
				Cadmium	J	0.083	0.24	mg/kg
				Silver	J	0.019	0.61	mg/kg
				Sodium	J	50.1	121	mg/kg
				Thallium	J	0.18	0.24	mg/kg
NTASB-121-6133-FD	A0D010524015	6020		Antimony	J	0.089	0.64	mg/kg
				Cadmium	J	0.075	0.25	mg/kg
				Silver	J	0.034	0.64	mg/kg
				Sodium	J	75.1	127	mg/kg
				Thallium	J	0.19	0.25	mg/kg
NTASB-122-5301-SO	A0D010524005	6020		Antimony	J	0.11	0.63	mg/kg
				Silver	J	0.020	0.63	mg/kg
				Thallium	J	0.094	0.25	mg/kg
				7471A	Mercury	J	0.020	0.13
NTASB-122-5302-SO	A0D010524006	6020		Antimony	J	0.087	0.61	mg/kg
				Cadmium	J	0.075	0.24	mg/kg
				Silver	J	0.018	0.61	mg/kg
				Sodium	J	53.9	122	mg/kg

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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

Lab Report Batch: A0D010524

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
NTASB-122-5302-SO	A0D010524006	6020	SO	Thallium	J	0.13	0.24	mg/kg
NTASB-123-5305-SO	A0D010524007			Antimony	J	0.40	0.69	mg/kg
				Silver	J	0.039	0.69	mg/kg
				Sodium	J	109	138	mg/kg
				Thallium	J	0.14	0.28	mg/kg
		7471A		Mercury	J	0.029	0.14	mg/kg
		8260B		Methylene chloride	J B	2.2	6.9	ug/kg
		8270C PAH		Acenaphthylene	J	20	69	ug/kg
				Anthracene	J	19	69	ug/kg
				dibenz[a,h]anthracene	J	21	69	ug/kg
				Phenanthrene	J	28	69	ug/kg
NTASB-123-5306-SO	A0D010524008	6020		Antimony	J	0.099	0.62	mg/kg
				Cadmium	J	0.098	0.25	mg/kg
				Silver	J	0.031	0.62	mg/kg
				Sodium	J	104	123	mg/kg
				Thallium	J	0.18	0.25	mg/kg
		8081A		delta-BHC	J	4.4	9.9	ug/kg
		8260B		Acetone	J B	12	25	ug/kg
				Methylene chloride	J B	2.3	6.2	ug/kg
		8270C		bis(2-Ethylhexyl) phthalate	J	97	410	ug/kg
		8270C PAH		Benzo[a]anthracene	J	13	62	ug/kg
				Benzo[b]fluoranthene	J	23	62	ug/kg
				Chrysene	J	23	62	ug/kg
				Fluoranthene	J	33	62	ug/kg
				Pyrene	J	34	62	ug/kg
NTASB-123-6132-FD	A0D010524014	6020		Antimony	J	0.079	0.62	mg/kg
				Cadmium	J	0.072	0.25	mg/kg
				Silver	J	0.026	0.62	mg/kg
				Sodium	J	94.7	123	mg/kg
				Thallium	J	0.16	0.25	mg/kg
		8260B		Acetone	J B	13	25	ug/kg
				Methylene chloride	J B	2.6	6.2	ug/kg
		8270C		bis(2-Ethylhexyl) phthalate	J	38	410	ug/kg
		8270C PAH		Benzo[b]fluoranthene	J	9.2	62	ug/kg
				Chrysene	J	10	62	ug/kg
				Fluoranthene	J	15	62	ug/kg

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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

Lab Report Batch: A0D010524

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
NTASB-123-6132-FD	A0D010524014	8270C PAH	SO	Pyrene	J	15	62	ug/kg
NTASB-124-5309-SO	A0D010524009	6020		Cadmium	J	0.052	0.27	mg/kg
				Silver	J	0.045	0.66	mg/kg
				Sodium	J	42.9	133	mg/kg
				Thallium	J	0.19	0.27	mg/kg
NTASB-124-5310-SO	A0D010524010			Antimony	J	0.085	0.63	mg/kg
				Cadmium	J	0.066	0.25	mg/kg
				Silver	J	0.057	0.63	mg/kg
				Sodium	J	66.5	127	mg/kg
				Thallium	J	0.19	0.25	mg/kg
		7471A		Mercury	J	0.020	0.13	mg/kg
NTASB-124-5312-SO	A0D010524011	6020		Antimony	J	0.080	0.57	mg/kg
				Cadmium	J	0.034	0.23	mg/kg
				Silver	J	0.025	0.57	mg/kg
				Sodium	J	56.7	114	mg/kg
				Thallium	J	0.099	0.23	mg/kg
		7471A		Mercury	J	0.019	0.11	mg/kg
NTASB-124-6134-FD	A0D010524016	6020		Cadmium	J	0.042	0.27	mg/kg
				Silver	J	0.054	0.67	mg/kg
				Sodium	J	48.6	133	mg/kg
				Thallium	J	0.22	0.27	mg/kg
		7471A		Mercury	J	0.027	0.13	mg/kg
NTASB-125-5313-SO	A0D010524012	6020		Cadmium	J	0.23	0.27	mg/kg
				Silver	J	0.021	0.66	mg/kg
				Sodium	J	26.7	133	mg/kg
				Thallium	J	0.11	0.27	mg/kg
		7471A		Mercury	J	0.056	0.13	mg/kg
NTASB-125-5314-SO	A0D010524013	6020		Cadmium	J	0.075	0.24	mg/kg
				Silver	J	0.010	0.60	mg/kg
				Sodium	J	22.2	121	mg/kg
				Thallium	J	0.078	0.24	mg/kg
WSASB-026-5632-SO	A0D010524017			Antimony	J	0.080	0.59	mg/kg
				Cadmium	J	0.046	0.23	mg/kg
				Silver	J	0.030	0.59	mg/kg
				Sodium	J	59.8	117	mg/kg
				Thallium	J	0.15	0.23	mg/kg

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0D010524

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
NTASB-120-5294-SO	A0D010524002	7471A	SO	Mercury	U	0.12	0.11904762	mg/kg
				8330B	1,3,5-Trinitrobenzene	U	0.24	0.2827381
				1,3-Dinitrobenzene	U	0.24	0.2827381	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.24	0.2827381	mg/kg
				2,4-Dinitrotoluene	U	0.24	0.2827381	mg/kg
				2,6-Dinitrotoluene	U	0.24	0.2827381	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.24	0.2827381	mg/kg
				2-Nitrotoluene	U	0.24	0.2827381	mg/kg
				3-Nitrotoluene	U	0.24	0.2827381	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.24	0.2827381	mg/kg
				4-Nitrotoluene	U	0.48	0.56547619	mg/kg
				Nitrobenzene	U	0.24	0.2827381	mg/kg
		NTASB-121-5297-SO		A0D010524003	8330B	SO	1,3,5-Trinitrobenzene	U
1,3-Dinitrobenzene	U		0.24				0.26704545	mg/kg
2,4,6-Trinitrotoluene (TNT)	U		0.24				0.26704545	mg/kg
2,4-Dinitrotoluene	U		0.24				0.26704545	mg/kg
2,6-Dinitrotoluene	U		0.24				0.26704545	mg/kg
2-Amino-4,6-dinitrotoluene	U		0.24				0.26704545	mg/kg
2-Nitrotoluene	U		0.24				0.26704545	mg/kg
3-Nitrotoluene	U		0.24				0.26704545	mg/kg
4-Amino-2,6-Dinitrotoluene	U		0.24				0.26704545	mg/kg
Nitrobenzene	U		0.24				0.26704545	mg/kg
NTASB-121-5298-SO	A0D010524004	8330B	SO	1,3,5-Trinitrobenzene	U	0.24	0.28313253	mg/kg
				1,3-Dinitrobenzene	U	0.24	0.28313253	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.24	0.28313253	mg/kg
				2,4-Dinitrotoluene	U	0.24	0.28313253	mg/kg
				2,6-Dinitrotoluene	U	0.24	0.28313253	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.24	0.28313253	mg/kg
				2-Nitrotoluene	U	0.24	0.28313253	mg/kg
				3-Nitrotoluene	U	0.24	0.28313253	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.24	0.28313253	mg/kg

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0D010524

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
NTASB-121-5298-SO	A0D010524004	8330B	SO	Nitrobenzene	U	0.24	0.28313253	mg/kg
NTASB-121-6133-FD	A0D010524015	7471A	SO	Mercury	U	0.13	0.12658228	mg/kg
		8330B		1,3,5-Trinitrobenzene	U	0.24	0.30063291	mg/kg
				1,3-Dinitrobenzene	U	0.24	0.30063291	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.24	0.30063291	mg/kg
				2,4-Dinitrotoluene	U	0.24	0.30063291	mg/kg
				2,6-Dinitrotoluene	U	0.24	0.30063291	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.24	0.30063291	mg/kg
				2-Nitrotoluene	U	0.24	0.30063291	mg/kg
				3-Nitrotoluene	U	0.24	0.30063291	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.24	0.30063291	mg/kg
				4-Nitrotoluene	U	0.48	0.60126582	mg/kg
				Nitrobenzene	U	0.24	0.30063291	mg/kg
NTASB-122-5302-SO	A0D010524006	8330B	SO	1,3,5-Trinitrobenzene	U	0.24	0.28963415	mg/kg
				1,3-Dinitrobenzene	U	0.24	0.28963415	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.24	0.28963415	mg/kg
				2,4-Dinitrotoluene	U	0.24	0.28963415	mg/kg
				2,6-Dinitrotoluene	U	0.24	0.28963415	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.24	0.28963415	mg/kg
				2-Nitrotoluene	U	0.24	0.28963415	mg/kg
				3-Nitrotoluene	U	0.24	0.28963415	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.24	0.28963415	mg/kg
				4-Nitrotoluene	U	0.48	0.57926829	mg/kg
				Nitrobenzene	U	0.24	0.28963415	mg/kg
NTASB-123-5305-SO	A0D010524007	8081A	SO	4,4'-DDD	U	14	13.8888889	ug/kg
				4,4'-DDE	U	12	11.8055556	ug/kg
				4,4'-DDT	U	14	13.8888889	ug/kg
				Aldrin	U	28	27.7777778	ug/kg
				alpha-Chordane	U	21	20.8333333	ug/kg
				delta-BHC	U	28	27.7777778	ug/kg
				Dieldrin	U	12	11.8055556	ug/kg

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0D010524

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units	
NTASB-123-5305-SO	A0D010524007	8081A	SO	Endosulfan I	U	12	11.8055556	ug/kg	
				Endosulfan sulfate	U	21	20.8333333	ug/kg	
				Endrin	U	12	11.8055556	ug/kg	
				Endrin aldehyde	U	21	20.8333333	ug/kg	
				Endrin ketone	U	14	13.8888889	ug/kg	
				gamma-Chlordane	U	12	11.8055556	ug/kg	
				Methoxychlor	U	35	34.7222222	ug/kg	
				8082	Aroclor 1016	U	46	45.8333333	ug/kg
					Aroclor 1221	U	46	45.8333333	ug/kg
					Aroclor 1232	U	46	45.8333333	ug/kg
					Aroclor 1242	U	46	45.8333333	ug/kg
					Aroclor 1248	U	46	45.8333333	ug/kg
					Aroclor 1254	U	46	45.8333333	ug/kg
					Aroclor 1260	U	46	45.8333333	ug/kg
					8260B	2-Butanone (MEK)	U	28	27.7777778
				2-Hexanone		U	28	27.7777778	ug/kg
4-methyl-2-pentanone (MIBK)	U	28	27.7777778	ug/kg					
Acetone	U	28	27.7777778	ug/kg					
Xylene (Total)	U	14	13.8888889	ug/kg					
8270C	1,2,4-Trichlorobenzene	U	460	458.333333	ug/kg				
	1,2-Dichlorobenzene	U	460	458.333333	ug/kg				
	1,3-Dichlorobenzene	U	460	458.333333	ug/kg				
	1,4-Dichlorobenzene	U	460	458.333333	ug/kg				
	2,4,5-Trichlorophenol	U	460	458.333333	ug/kg				
	2,4,6-Trichlorophenol	U	460	458.333333	ug/kg				
	2,4-Dichlorophenol	U	460	458.333333	ug/kg				
	2,4-Dimethylphenol	U	460	458.333333	ug/kg				
	2,4-Dinitrotoluene	U	460	458.333333	ug/kg				
	2,6-Dinitrotoluene	U	460	458.333333	ug/kg				
	2-Chloronaphthalene	U	460	458.333333	ug/kg				
	2-Chlorophenol	U	460	458.333333	ug/kg				
	2-Methylnaphthalene	U	460	458.333333	ug/kg				
2-Methylphenol	U	460	458.333333	ug/kg					

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0D010524

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
NTASB-123-5305-SO	A0D010524007	8270C	SO	2-Nitrophenol	U	460	458.333333	ug/kg
				3,3'-Dichlorobenzidine	U	460	458.333333	ug/kg
				3-methylphenol/4-methylphenol	U	460	458.333333	ug/kg
				4-Bromophenyl phenyl ether	U	460	458.333333	ug/kg
				4-Chloro-3-methylphenol	U	460	458.333333	ug/kg
				4-Chloroaniline	U	460	458.333333	ug/kg
				4-Chlorophenyl phenyl ether	U	460	458.333333	ug/kg
				Benzyl alcohol	U	460	458.333333	ug/kg
				bis(2-Chloroethoxy)methane	U	460	458.333333	ug/kg
				bis(2-Chloroethyl) ether	U	460	458.333333	ug/kg
				Bis(2-chloroisopropyl) ether	U	460	458.333333	ug/kg
				bis(2-Ethylhexyl) phthalate	U	460	458.333333	ug/kg
				Butyl benzyl phthalate	U	460	458.333333	ug/kg
				Dibenzofuran	U	460	458.333333	ug/kg
				Diethyl phthalate	U	460	458.333333	ug/kg
				Dimethyl phthalate	U	460	458.333333	ug/kg
				Di-n-butyl phthalate	U	460	458.333333	ug/kg
				Di-n-octyl phthalate	U	460	458.333333	ug/kg
				Hexachlorobenzene	U	460	458.333333	ug/kg
				Hexachlorobutadiene	U	460	458.333333	ug/kg
HEXACHLOROCYCLOPENTADIE	U	460	458.333333	ug/kg				
Hexachloroethane	U	460	458.333333	ug/kg				
Isophorone	U	460	458.333333	ug/kg				
Nitrobenzene	U	460	458.333333	ug/kg				
N-Nitrosodi-n-propylamine	U	460	458.333333	ug/kg				
N-Nitrosodiphenylamine	U	460	458.333333	ug/kg				
Pentachlorophenol	U	460	458.333333	ug/kg				
Phenol	U	460	458.333333	ug/kg				
NTASB-123-5306-SO	A0D010524008	353.2 Modified SO 8081A		Nitrocellulose	U	6.2	6.17283951	mg/kg
				4,4'-DDE	U	4.2	4.19753086	ug/kg
				Aldrin	U	9.9	9.87654321	ug/kg
				alpha-BHC	U	6.2	6.17283951	ug/kg

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0D010524

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units	
NTASB-123-5306-SO	A0D010524008	8081A	SO	Dieldrin	U	4.2	4.19753086	ug/kg	
				Endosulfan I	U	4.2	4.19753086	ug/kg	
				Endosulfan II	U	6.2	6.17283951	ug/kg	
				Endrin	U	4.2	4.19753086	ug/kg	
				gamma-BHC (Lindane)	U	6.2	6.17283951	ug/kg	
				gamma-Chlordane	U	4.2	4.19753086	ug/kg	
				Heptachlor epoxide	U	6.2	6.17283951	ug/kg	
				Toxaphene	U	170	165.432099	ug/kg	
				8082	Aroclor 1016	U	41	40.7407407	ug/kg
					Aroclor 1221	U	41	40.7407407	ug/kg
Aroclor 1232	U	41	40.7407407		ug/kg				
Aroclor 1242	U	41	40.7407407		ug/kg				
Aroclor 1248	U	41	40.7407407		ug/kg				
Aroclor 1254	U	41	40.7407407		ug/kg				
Aroclor 1260	U	41	40.7407407		ug/kg				
8260B	1,1,1-Trichloroethane	U	6.2		6.17283951	ug/kg			
	1,1,2,2-Tetrachloroethane	U	6.2	6.17283951	ug/kg				
	1,1,2-Trichloroethane	U	6.2	6.17283951	ug/kg				
	1,1-Dichloroethane	U	6.2	6.17283951	ug/kg				
	1,1-Dichloroethene	U	6.2	6.17283951	ug/kg				
	1,2-Dibromoethane (Ethylene Dibro	U	6.2	6.17283951	ug/kg				
	1,2-Dichloroethane	U	6.2	6.17283951	ug/kg				
	1,2-Dichloroethene (total)	U	6.2	6.17283951	ug/kg				
	1,2-Dichloropropane	U	6.2	6.17283951	ug/kg				
	2-Butanone (MEK)	U	25	24.6913580	ug/kg				
	2-Hexanone	U	25	24.6913580	ug/kg				
	4-methyl-2-pentanone (MIBK)	U	25	24.6913580	ug/kg				
	Benzene	U	6.2	6.17283951	ug/kg				
	Bromochloromethane	U	6.2	6.17283951	ug/kg				
	Bromodichloromethane	U	6.2	6.17283951	ug/kg				
	Bromoform	U	6.2	6.17283951	ug/kg				
Bromomethane (Methyl bromide)	U	6.2	6.17283951	ug/kg					
Carbon disulfide	U	6.2	6.17283951	ug/kg					

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI



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: A0D010524

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit					
							Criteria*	Units				
NTASB-123-5306-SO	A0D010524008	8260B	SO	Carbon tetrachloride	U	6.2	6.17283951	ug/kg				
				Chlorobenzene	U	6.2	6.17283951	ug/kg				
				Chlorodibromomethane	U	6.2	6.17283951	ug/kg				
				Chloroethane	U	6.2	6.17283951	ug/kg				
				Chloroform	U	6.2	6.17283951	ug/kg				
				Chloromethane	U	6.2	6.17283951	ug/kg				
				cis-1,3-Dichloropropene	U	6.2	6.17283951	ug/kg				
				Ethylbenzene	U	6.2	6.17283951	ug/kg				
				Styrene	U	6.2	6.17283951	ug/kg				
				Tetrachloroethene	U	6.2	6.17283951	ug/kg				
				Toluene	U	6.2	6.17283951	ug/kg				
				trans-1,3-Dichloropropene	U	6.2	6.17283951	ug/kg				
				Trichloroethene	U	6.2	6.17283951	ug/kg				
				Vinyl chloride	U	6.2	6.17283951	ug/kg				
				8270C				1,2,4-Trichlorobenzene	U	410	407.407407	ug/kg
								1,2-Dichlorobenzene	U	410	407.407407	ug/kg
								1,3-Dichlorobenzene	U	410	407.407407	ug/kg
								1,4-Dichlorobenzene	U	410	407.407407	ug/kg
								2,4,5-Trichlorophenol	U	410	407.407407	ug/kg
								2,4,6-Trichlorophenol	U	410	407.407407	ug/kg
2,4-Dichlorophenol	U	410	407.407407					ug/kg				
2,4-Dimethylphenol	U	410	407.407407					ug/kg				
2,4-Dinitrophenol	U	990	987.654321					ug/kg				
2,4-Dinitrotoluene	U	410	407.407407					ug/kg				
2,6-Dinitrotoluene	U	410	407.407407					ug/kg				
2-Chloronaphthalene	U	410	407.407407					ug/kg				
2-Chlorophenol	U	410	407.407407					ug/kg				
2-Methylnaphthalene	U	410	407.407407					ug/kg				
2-Methylphenol	U	410	407.407407					ug/kg				
2-Nitroaniline	U	990	987.654321	ug/kg								
2-Nitrophenol	U	410	407.407407	ug/kg								
3,3'-Dichlorobenzidine	U	410	407.407407	ug/kg								
3-methylphenol/4-methylphenol	U	410	407.407407	ug/kg								

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0D010524

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
NTASB-123-5306-SO	A0D010524008	8270C	SO	3-Nitroaniline	U	990	987.654321	ug/kg
				4,6-Dinitro-2-methylphenol	U	990	987.654321	ug/kg
				4-Bromophenyl phenyl ether	U	410	407.407407	ug/kg
				4-Chloro-3-methylphenol	U	410	407.407407	ug/kg
				4-Chloroaniline	U	410	407.407407	ug/kg
				4-Chlorophenyl phenyl ether	U	410	407.407407	ug/kg
				4-Nitroaniline	U	990	987.654321	ug/kg
				4-Nitrophenol	U	990	987.654321	ug/kg
				Benzoic acid	U	990	987.654321	ug/kg
				Benzyl alcohol	U	410	407.407407	ug/kg
				bis(2-Chloroethoxy)methane	U	410	407.407407	ug/kg
				bis(2-Chloroethyl) ether	U	410	407.407407	ug/kg
				Bis(2-chloroisopropyl) ether	U	410	407.407407	ug/kg
				Butyl benzyl phthalate	U	410	407.407407	ug/kg
				Carbazole	U	62	61.7283951	ug/kg
				Dibenzofuran	U	410	407.407407	ug/kg
				Diethyl phthalate	U	410	407.407407	ug/kg
				Dimethyl phthalate	U	410	407.407407	ug/kg
				Di-n-butyl phthalate	U	410	407.407407	ug/kg
				Di-n-octyl phthalate	U	410	407.407407	ug/kg
				Hexachlorobenzene	U	410	407.407407	ug/kg
				Hexachlorobutadiene	U	410	407.407407	ug/kg
				HEXACHLOROCYCLOPENTADIE	U	410	407.407407	ug/kg
				Hexachloroethane	U	410	407.407407	ug/kg
Isophorone	U	410	407.407407	ug/kg				
Nitrobenzene	U	410	407.407407	ug/kg				
N-Nitrosodi-n-propylamine	U	410	407.407407	ug/kg				
N-Nitrosodiphenylamine	U	410	407.407407	ug/kg				
Pentachlorophenol	U	410	407.407407	ug/kg				
Phenol	U	410	407.407407	ug/kg				
NTASB-123-6132-FD	A0D010524014	353.2 Modified SO	Nitrocellulose	U	6.2	6.17283951	mg/kg	
		8081A	4,4'-DDD	U	2.5	2.46913580	ug/kg	

\* 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: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0D010524

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
NTASB-123-6132-FD	A0D010524014	8081A	SO	4,4'-DDE	U	2.1	2.09876543	ug/kg
				4,4'-DDT	U	2.5	2.46913580	ug/kg
				alpha-BHC	U	3.1	3.08641975	ug/kg
				Dieldrin	U	2.1	2.09876543	ug/kg
				Endosulfan I	U	2.1	2.09876543	ug/kg
				Endosulfan II	U	3.1	3.08641975	ug/kg
				Endrin	U	2.1	2.09876543	ug/kg
				Endrin ketone	U	2.5	2.46913580	ug/kg
				gamma-BHC (Lindane)	U	3.1	3.08641975	ug/kg
				gamma-Chlordane	U	2.1	2.09876543	ug/kg
				Heptachlor epoxide	U	3.1	3.08641975	ug/kg
				Methoxychlor	U	6.2	6.17283951	ug/kg
				Toxaphene	U	83	82.7160494	ug/kg
				8082				Aroclor 1016
Aroclor 1221	U	41	40.7407407					ug/kg
Aroclor 1232	U	41	40.7407407					ug/kg
Aroclor 1242	U	41	40.7407407					ug/kg
Aroclor 1248	U	41	40.7407407					ug/kg
Aroclor 1254	U	41	40.7407407					ug/kg
Aroclor 1260	U	41	40.7407407					ug/kg
8260B								1,1,1-Trichloroethane
				1,1,2,2-Tetrachloroethane	U	6.2	6.17283951	ug/kg
				1,1,2-Trichloroethane	U	6.2	6.17283951	ug/kg
				1,1-Dichloroethane	U	6.2	6.17283951	ug/kg
				1,1-Dichloroethene	U	6.2	6.17283951	ug/kg
				1,2-Dibromoethane (Ethylene Dibro	U	6.2	6.17283951	ug/kg
				1,2-Dichloroethane	U	6.2	6.17283951	ug/kg
				1,2-Dichloroethene (total)	U	6.2	6.17283951	ug/kg
				1,2-Dichloropropane	U	6.2	6.17283951	ug/kg
				2-Butanone (MEK)	U	25	24.6913580	ug/kg
				2-Hexanone	U	25	24.6913580	ug/kg
4-methyl-2-pentanone (MIBK)	U	25	24.6913580	ug/kg				
Benzene	U	6.2	6.17283951	ug/kg				

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0D010524

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit					
							Criteria*	Units				
NTASB-123-6132-FD	A0D010524014	8260B	SO	Bromochloromethane	U	6.2	6.17283951	ug/kg				
				Bromodichloromethane	U	6.2	6.17283951	ug/kg				
				Bromoform	U	6.2	6.17283951	ug/kg				
				Bromomethane (Methyl bromide)	U	6.2	6.17283951	ug/kg				
				Carbon disulfide	U	6.2	6.17283951	ug/kg				
				Carbon tetrachloride	U	6.2	6.17283951	ug/kg				
				Chlorobenzene	U	6.2	6.17283951	ug/kg				
				Chlorodibromomethane	U	6.2	6.17283951	ug/kg				
				Chloroethane	U	6.2	6.17283951	ug/kg				
				Chloroform	U	6.2	6.17283951	ug/kg				
				Chloromethane	U	6.2	6.17283951	ug/kg				
				cis-1,3-Dichloropropene	U	6.2	6.17283951	ug/kg				
				Ethylbenzene	U	6.2	6.17283951	ug/kg				
				Styrene	U	6.2	6.17283951	ug/kg				
				Tetrachloroethene	U	6.2	6.17283951	ug/kg				
				Toluene	U	6.2	6.17283951	ug/kg				
				trans-1,3-Dichloropropene	U	6.2	6.17283951	ug/kg				
				Trichloroethene	U	6.2	6.17283951	ug/kg				
				Vinyl chloride	U	6.2	6.17283951	ug/kg				
				8270C				1,2,4-Trichlorobenzene	U	410	407.407407	ug/kg
								1,2-Dichlorobenzene	U	410	407.407407	ug/kg
								1,3-Dichlorobenzene	U	410	407.407407	ug/kg
								1,4-Dichlorobenzene	U	410	407.407407	ug/kg
								2,4,5-Trichlorophenol	U	410	407.407407	ug/kg
2,4,6-Trichlorophenol	U	410	407.407407					ug/kg				
2,4-Dichlorophenol	U	410	407.407407					ug/kg				
2,4-Dimethylphenol	U	410	407.407407					ug/kg				
2,4-Dinitrophenol	U	990	987.654321					ug/kg				
2,4-Dinitrotoluene	U	410	407.407407					ug/kg				
2,6-Dinitrotoluene	U	410	407.407407					ug/kg				
2-Chloronaphthalene	U	410	407.407407					ug/kg				
2-Chlorophenol	U	410	407.407407	ug/kg								
2-Methylnaphthalene	U	410	407.407407	ug/kg								

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0D010524

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
NTASB-123-6132-FD	A0D010524014	8270C	SO	2-Methylphenol	U	410	407.407407	ug/kg
				2-Nitroaniline	U	990	987.654321	ug/kg
				2-Nitrophenol	U	410	407.407407	ug/kg
				3,3'-Dichlorobenzidine	U	410	407.407407	ug/kg
				3-methylphenol/4-methylphenol	U	410	407.407407	ug/kg
				3-Nitroaniline	U	990	987.654321	ug/kg
				4,6-Dinitro-2-methylphenol	U	990	987.654321	ug/kg
				4-Bromophenyl phenyl ether	U	410	407.407407	ug/kg
				4-Chloro-3-methylphenol	U	410	407.407407	ug/kg
				4-Chloroaniline	U	410	407.407407	ug/kg
				4-Chlorophenyl phenyl ether	U	410	407.407407	ug/kg
				4-Nitroaniline	U	990	987.654321	ug/kg
				4-Nitrophenol	U	990	987.654321	ug/kg
				Benzoic acid	U	990	987.654321	ug/kg
				Benzyl alcohol	U	410	407.407407	ug/kg
				bis(2-Chloroethoxy)methane	U	410	407.407407	ug/kg
				bis(2-Chloroethyl) ether	U	410	407.407407	ug/kg
				Bis(2-chloroisopropyl) ether	U	410	407.407407	ug/kg
				Butyl benzyl phthalate	U	410	407.407407	ug/kg
				Carbazole	U	62	61.7283951	ug/kg
				Dibenzofuran	U	410	407.407407	ug/kg
				Diethyl phthalate	U	410	407.407407	ug/kg
				Dimethyl phthalate	U	410	407.407407	ug/kg
				Di-n-butyl phthalate	U	410	407.407407	ug/kg
				Di-n-octyl phthalate	U	410	407.407407	ug/kg
				Hexachlorobenzene	U	410	407.407407	ug/kg
				Hexachlorobutadiene	U	410	407.407407	ug/kg
				HEXACHLOROCYCLOPENTADIE	U	410	407.407407	ug/kg
				Hexachloroethane	U	410	407.407407	ug/kg
				Isophorone	U	410	407.407407	ug/kg
				Nitrobenzene	U	410	407.407407	ug/kg
				N-Nitrosodi-n-propylamine	U	410	407.407407	ug/kg
				N-Nitrosodiphenylamine	U	410	407.407407	ug/kg

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0D010524

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
NTASB-123-6132-FD	A0D010524014	8270C	SO	Pentachlorophenol	U	410	407.407407	ug/kg
				Phenol	U	410	407.407407	ug/kg
		8330M		Nitroguanidine	U	0.25	0.30555556	mg/kg
NTASB-124-6134-FD	A0D010524016	6020	SO	Antimony	U	0.67	0.66666667	mg/kg
NTASB-125-5313-SO	A0D010524012	8330B	SO	1,3,5-Trinitrobenzene	U	0.24	0.31666667	mg/kg
				1,3-Dinitrobenzene	U	0.24	0.31666667	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.24	0.31666667	mg/kg
				2,4-Dinitrotoluene	U	0.24	0.31666667	mg/kg
				2,6-Dinitrotoluene	U	0.24	0.31666667	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.24	0.31666667	mg/kg
				2-Nitrotoluene	U	0.24	0.31666667	mg/kg
				3-Nitrotoluene	U	0.24	0.31666667	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.24	0.31666667	mg/kg
				4-Nitrotoluene	U	0.48	0.63333333	mg/kg
				Nitrobenzene	U	0.24	0.31666667	mg/kg
WSASB-026-5632-SO	A0D010524017	7471A	SO	Mercury	U	0.12	0.11764706	mg/kg

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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

Lab Report Batch:

Lab ID:

			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 Qualifiers	RPD Dup* (%)	RPD Criteria (%)	Result Units
Empty table body content													

*\*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:** 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0C240542

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
WSASB-021-5613-SO	A0C240542001	8330B	SO	1,3,5-Trinitrobenzene	U	0.26	0.01259259	mg/kg
				1,3-Dinitrobenzene	U	0.26	0.31481481	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.26	0.31481481	mg/kg
				2,4-Dinitrotoluene	U	0.26	0.31481481	mg/kg
				2,6-Dinitrotoluene	U	0.26	0.31481481	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.26	0.31481481	mg/kg
				2-Nitrotoluene	U	0.26	0.31481481	mg/kg
				3-Nitrotoluene	U	0.26	0.31481481	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.26	0.31481481	mg/kg
				Nitrobenzene	U	0.26	0.31481481	mg/kg
WSASB-022-5617-SO	A0C240542002	8330B	SO	1,3,5-Trinitrobenzene	U	0.24	0.01132530	mg/kg
				1,3-Dinitrobenzene	U	0.24	0.28313253	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.24	0.28313253	mg/kg
				2,4-Dinitrotoluene	U	0.24	0.28313253	mg/kg
				2,6-Dinitrotoluene	U	0.24	0.28313253	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.24	0.28313253	mg/kg
				2-Nitrotoluene	U	0.24	0.28313253	mg/kg
				3-Nitrotoluene	U	0.24	0.28313253	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.24	0.28313253	mg/kg
				Nitrobenzene	U	0.24	0.28313253	mg/kg
		8330M		Nitroguanidine	U	0.26	0.30722892	mg/kg
WSASB-028-5639-SO	A0C240542007	353.2 Modified	SO	Nitrocellulose	U	6.1	6.09756098	mg/kg
		8330B		1,3,5-Trinitrobenzene	U	0.25	0.01207317	mg/kg
				1,3-Dinitrobenzene	U	0.25	0.30182927	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.25	0.30182927	mg/kg
				2,4-Dinitrotoluene	U	0.25	0.30182927	mg/kg
				2,6-Dinitrotoluene	U	0.25	0.30182927	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.25	0.30182927	mg/kg
				2-Nitrotoluene	U	0.25	0.30182927	mg/kg
				3-Nitrotoluene	U	0.25	0.30182927	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.25	0.30182927	mg/kg

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI



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: A0C240542

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
WSASB-028-5639-SO	A0C240542007	8330B	SO	4-Nitrotoluene	U	0.50	0.60365854	mg/kg
				Nitrobenzene	U	0.25	0.30182927	mg/kg
		8330M		Nitroguanidine	U	0.26	0.31097561	mg/kg
WSASB-029-5643-SO	A0C240542008	8330B	SO	1,3,5-Trinitrobenzene	U	0.24	0.0117284	mg/kg
				1,3-Dinitrobenzene	U	0.24	0.29320988	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.24	0.29320988	mg/kg
				2,4-Dinitrotoluene	U	0.24	0.29320988	mg/kg
				2,6-Dinitrotoluene	U	0.24	0.29320988	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.24	0.29320988	mg/kg
				2-Nitrotoluene	U	0.24	0.29320988	mg/kg
				3-Nitrotoluene	U	0.24	0.29320988	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.24	0.29320988	mg/kg
				4-Nitrotoluene	U	0.48	0.58641975	mg/kg
				Nitrobenzene	U	0.24	0.29320988	mg/kg

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

# Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 0084022

Analysis Method : 6020

Analysis Date : 03/26/2010

Preparation Batch : 0084022

Preparation Type : 3050B

Preparation Date : 03/25/2010

Lab Reporting Batch : A0C240550

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
WSASB-026-5631-SOMS	A0C240550005S	SO	Antimony	27		30.00	75.00	125.00	20.00
WSASB-026-5631-SOMS	A0C240550005D		Antimony	27		30.00	75.00	125.00	20.00
			Potassium	66		30.00	70.00	130.00	20.00

Associated Samples: All samples in Method Batch	
Client Sample ID	Lab Sample ID
WSASB-021-5613-SO	A0C240550001
WSASB-022-5617-SO	A0C240550002
WSASB-023-5621-SO	A0C240550003
WSASB-024-5625-SO	A0C240550004
WSASB-026-5631-SO	A0C240550005
WSASB-027-5635-SO	A0C240550006
WSASB-028-5639-SO	A0C240550007
WSASB-029-5643-SO	A0C240550008

\* 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: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

# Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 0084046

Analysis Method : 8270C

Analysis Date : 03/26/2010

Preparation Batch : 0084046

Preparation Type : 3540C

Preparation Date : 03/25/2010

Lab Reporting Batch : A0C240550

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
WSASB-026-5631-SOMS	A0C240550005S	SO	Carbazole	13		0.00	45.00	115.00	20.00
WSASB-026-5631-SOMS	A0C240550005D		2,4-Dinitrophenol	13		0.00	15.00	130.00	30.00
			Benzoic acid		200	0.00	0.00	110.00	20.00
			Carbazole	13		0.00	45.00	115.00	20.00

Associated Samples: Parent sample only	
Client Sample ID	Lab Sample ID
WSASB-026-5631-SO	A0C240550005

\* 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: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

# Laboratory Control Sample / Laboratory Control Sample Duplicate Outlier Report

Method Batch : 0084046  
 Preparation Batch : 0084046  
 Lab Reporting Batch : A0C240550

Analysis Method : 8270C  
 Preparation Type : 3540C  
 Lab ID: TALCAN

Analysis Date : 03/26/2010  
 Preparation Date : 03/25/2010

LCS Lab Sample ID	Matrix	Analyte Name	Reported Values		Project Limits (Percent)			
			Percent Recovery	RPD	Rejection Point	Lower Limit	Upper Limit	RPD
A0C25000046C	SO	Carbazole	18		10.00	45.00	115.00	20.00

<b>Associated Samples</b>	
Client Sample ID	Lab Sample ID
WSASB-021-5613-SO	A0C240550001
WSASB-023-5621-SO	A0C240550003
WSASB-024-5625-SO	A0C240550004
WSASB-026-5631-SO	A0C240550005
WSASB-027-5635-SO	A0C240550006
WSASB-029-5643-SO	A0C240550008

Scope of Data Qualification: The outlier in the LCS qualifies that analyte in all samples with the same Preparation Batch ID as the LCS

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0C240550

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units	
WSASB-022-5617-SO	A0C240550002	8081A	SO	Toxaphene	U	81	80.7228916	ug/kg	
				8082	Aroclor 1016	U	40	2.04819277	ug/kg
				Aroclor 1221	U	40	2.04819277	ug/kg	
				Aroclor 1232	U	40	2.04819277	ug/kg	
				Aroclor 1242	U	40	2.04819277	ug/kg	
				Aroclor 1248	U	40	2.04819277	ug/kg	
				Aroclor 1254	U	40	2.04819277	ug/kg	
				Aroclor 1260	U	40	2.04819277	ug/kg	
		8270C	1,2,4-Trichlorobenzene	U	400	397.590361	ug/kg		
			1,2-Dichlorobenzene	U	400	397.590361	ug/kg		
			1,3-Dichlorobenzene	U	400	397.590361	ug/kg		
			1,4-Dichlorobenzene	U	400	397.590361	ug/kg		
			2,4,5-Trichlorophenol	U	400	397.590361	ug/kg		
			2,4,6-Trichlorophenol	U	400	397.590361	ug/kg		
			2,4-Dichlorophenol	U	400	397.590361	ug/kg		
			2,4-Dimethylphenol	U	400	397.590361	ug/kg		
			2,4-Dinitrotoluene	U	400	397.590361	ug/kg		
			2,6-Dinitrotoluene	U	400	397.590361	ug/kg		
			2-Chloronaphthalene	U	400	397.590361	ug/kg		
			2-Chlorophenol	U	400	397.590361	ug/kg		
			2-Methylnaphthalene	U	400	397.590361	ug/kg		
			2-Methylphenol	U	400	397.590361	ug/kg		
			2-Nitrophenol	U	400	397.590361	ug/kg		
			3,3'-Dichlorobenzidine	U	400	397.590361	ug/kg		
			3-methylphenol/4-methylphenol	U	400	#Error	ug/kg		
			4-Bromophenyl phenyl ether	U	400	397.590361	ug/kg		
			4-Chloro-3-methylphenol	U	400	397.590361	ug/kg		
			4-Chloroaniline	U	400	397.590361	ug/kg		
			4-Chlorophenyl phenyl ether	U	400	397.590361	ug/kg		
			Benzyl alcohol	U	400	397.590361	ug/kg		
			bis(2-Chloroethoxy)methane	U	400	397.590361	ug/kg		
			bis(2-Chloroethyl) ether	U	400	397.590361	ug/kg		

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0C240550

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
WSASB-022-5617-SO	A0C240550002	8270C	SO	Bis(2-chloroisopropyl) ether	U	400	397.590361	ug/kg
				Butyl benzyl phthalate	U	400	397.590361	ug/kg
				Dibenzofuran	U	400	397.590361	ug/kg
				Diethyl phthalate	U	400	397.590361	ug/kg
				Dimethyl phthalate	U	400	397.590361	ug/kg
				Di-n-octyl phthalate	U	400	397.590361	ug/kg
				Hexachlorobenzene	U	400	397.590361	ug/kg
				Hexachlorobutadiene	U	400	397.590361	ug/kg
				HEXACHLOROCYCLOPENTADIE	U	400	#Error	ug/kg
				Hexachloroethane	U	400	397.590361	ug/kg
				Isophorone	U	400	397.590361	ug/kg
				Nitrobenzene	U	400	397.590361	ug/kg
				N-Nitrosodi-n-propylamine	U	400	397.590361	ug/kg
				N-Nitrosodiphenylamine	U	400	397.590361	ug/kg
				Pentachlorophenol	U	400	397.590361	ug/kg
Phenol	U	400	397.590361	ug/kg				
WSASB-023-5621-SO	A0C240550003	6020	SO	Antimony	U	0.58	0.57471264	mg/kg
		7471A		Mercury	U	0.12	0.11494253	mg/kg
WSASB-024-5625-SO	A0C240550004	7471A	SO	Mercury	U	0.12	0.11904762	mg/kg
WSASB-026-5631-SO	A0C240550005	7471A	SO	Mercury	U	0.13	0.12987013	mg/kg
WSASB-027-5635-SO	A0C240550006	7471A	SO	Mercury	U	0.13	0.12987013	mg/kg
WSASB-028-5639-SO	A0C240550007	6020	SO	Antimony	U	0.61	0.6097561	mg/kg
		8081A		4,4'-DDE	U	2.1	2.07317073	ug/kg
				Dieldrin	U	2.1	2.07317073	ug/kg
				Endosulfan I	U	2.1	2.07317073	ug/kg
				Endrin	U	2.1	2.07317073	ug/kg
				gamma-Chlordane	U	2.1	2.07317073	ug/kg
				Methoxychlor	U	6.1	6.09756098	ug/kg
	8260B	1,1,1-Trichloroethane	U	6.1	6.09756098	ug/kg		
		1,1,2,2-Tetrachloroethane	U	6.1	6.09756098	ug/kg		

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0C240550

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units				
WSASB-028-5639-SO	A0C240550007	8260B	SO	1,1,2-Trichloroethane	U	6.1	6.09756098	ug/kg				
				1,1-Dichloroethane	U	6.1	6.09756098	ug/kg				
				1,1-Dichloroethene	U	6.1	6.09756098	ug/kg				
				1,2-Dibromoethane (Ethylene Dibro	U	6.1	6.09756098	ug/kg				
				1,2-Dichloroethane	U	6.1	6.09756098	ug/kg				
				1,2-Dichloroethene (total)	U	6.1	6.09756098	ug/kg				
				1,2-Dichloropropane	U	6.1	6.09756098	ug/kg				
				Benzene	U	6.1	6.09756098	ug/kg				
				Bromochloromethane	U	6.1	6.09756098	ug/kg				
				Bromodichloromethane	U	6.1	6.09756098	ug/kg				
				Bromoform	U	6.1	6.09756098	ug/kg				
				Bromomethane (Methyl bromide)	U	6.1	6.09756098	ug/kg				
				Carbon disulfide	U	6.1	6.09756098	ug/kg				
				Carbon tetrachloride	U	6.1	6.09756098	ug/kg				
				Chlorobenzene	U	6.1	6.09756098	ug/kg				
				Chlorodibromomethane	U	6.1	6.09756098	ug/kg				
				Chloroethane	U	6.1	6.09756098	ug/kg				
				Chloroform	U	6.1	6.09756098	ug/kg				
				Chloromethane	U	6.1	6.09756098	ug/kg				
				cis-1,3-Dichloropropene	U	6.1	6.09756098	ug/kg				
				Ethylbenzene	U	6.1	6.09756098	ug/kg				
				Styrene	U	6.1	6.09756098	ug/kg				
				Tetrachloroethene	U	6.1	6.09756098	ug/kg				
				Toluene	U	6.1	6.09756098	ug/kg				
				trans-1,3-Dichloropropene	U	6.1	6.09756098	ug/kg				
				Trichloroethene	U	6.1	6.09756098	ug/kg				
				Vinyl chloride	U	6.1	6.09756098	ug/kg				
				8270C				Acenaphthene	U	61	60.9756098	ug/kg
								Acenaphthylene	U	61	60.9756098	ug/kg
								Anthracene	U	61	60.9756098	ug/kg
Benz[a]anthracene	U	61	60.9756098					ug/kg				
Benzo[a]pyrene	U	61	60.9756098					ug/kg				
Benzo[b]fluoranthene	U	61	60.9756098					ug/kg				

\* 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: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0C240550

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
WSASB-028-5639-SO	A0C240550007	8270C	SO	Benzo[g,h,i]perylene	U	61	60.9756098	ug/kg
				Benzo[k]fluoranthene	U	61	60.9756098	ug/kg
				Carbazole	U	61	60.9756098	ug/kg
				Chrysene	U	61	60.9756098	ug/kg
				dibenz[a,h]anthracene	U	61	60.9756098	ug/kg
				Fluoranthene	U	61	60.9756098	ug/kg
				Fluorene	U	61	60.9756098	ug/kg
				Indeno[1,2,3-cd]pyrene	U	61	60.9756098	ug/kg
				Naphthalene	U	61	60.9756098	ug/kg
				Phenanthrene	U	61	60.9756098	ug/kg
				Pyrene	U	61	402.439024	ug/kg
WSASB-029-5643-SO	A0C240550008	6020	SO	Antimony	U	0.62	0.61728395	mg/kg

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI



## Continuing Calibration (CCV) Outlier Report (Organics)

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**There are no Organic Continuing Calibrations with outliers**

## Continuing Calibration (CCAL) Outlier Report (Inorganics)

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**There are no Inorganic Continuing Calibrations with outliers**

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

Lab Report Batch: A0C240550

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
WSASB-021-5613-SO	A0C240550001	6020	SO	Antimony	J	0.091	0.62	mg/kg
				Cadmium	J	0.045	0.25	mg/kg
				Silver	J	0.026	0.62	mg/kg
				Sodium	J	77.4	124	mg/kg
				Thallium	J	0.18	0.25	mg/kg
		7471A		Mercury	J	0.032	0.12	mg/kg
WSASB-022-5617-SO	A0C240550002	6020		Antimony	J	0.10	0.60	mg/kg
				Cadmium	J	0.056	0.24	mg/kg
				Silver	J	0.025	0.60	mg/kg
				Sodium	J	53.6	120	mg/kg
				Thallium	J	0.12	0.24	mg/kg
		8260B		Methylene chloride	J B	2.0	6.0	ug/kg
		8270C		bis(2-Ethylhexyl) phthalate	J	38	400	ug/kg
				Di-n-butyl phthalate	J	21	400	ug/kg
WSASB-023-5621-SO	A0C240550003	6020		Cadmium	J	0.062	0.23	mg/kg
				Silver	J	0.016	0.58	mg/kg
				Sodium	J	53.2	115	mg/kg
				Thallium	J	0.12	0.23	mg/kg
WSASB-024-5625-SO	A0C240550004			Antimony	J	0.079	0.60	mg/kg
				Cadmium	J	0.057	0.24	mg/kg
				Silver	J	0.018	0.60	mg/kg
				Sodium	J	50.9	119	mg/kg
				Thallium	J	0.14	0.24	mg/kg
WSASB-026-5631-SO	A0C240550005			Antimony	J	0.083	0.65	mg/kg
				Cadmium	J	0.042	0.26	mg/kg
				Silver	J	0.025	0.65	mg/kg
				Sodium	J	75.2	130	mg/kg
				Thallium	J	0.17	0.26	mg/kg
WSASB-027-5635-SO	A0C240550006			Antimony	J	0.081	0.65	mg/kg
				Cadmium	J	0.040	0.26	mg/kg
				Silver	J	0.023	0.65	mg/kg
				Sodium	J	72.5	130	mg/kg
				Thallium	J	0.19	0.26	mg/kg
WSASB-028-5639-SO	A0C240550007			Cadmium	J	0.047	0.24	mg/kg
				Silver	J	0.017	0.61	mg/kg
				Sodium	J	54.4	121	mg/kg

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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

Lab Report Batch: A0C240550

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
WSASB-028-5639-SO	A0C240550007	6020	SO	Thallium	J	0.15	0.24	mg/kg
		8260B		Methylene chloride	J B	2.6	6.1	ug/kg
		8270C		bis(2-Ethylhexyl) phthalate	J	24	400	ug/kg
WSASB-029-5643-SO	A0C240550008	6020		Cadmium	J	0.038	0.25	mg/kg
				Silver	J	0.0056	0.62	mg/kg
				Sodium	J	32.8	124	mg/kg
				Thallium	J	0.12	0.25	mg/kg

# Method Blank Outlier Report

Lab Reporting Batch : A0C240550

Lab ID: TALCAN

Analysis Method : 8260B

Analysis Date : 03/25/2010

Preparation Type : 5030B

Preparation Date : 03/25/2010

Method Blank Lab Sample ID : A0C250000407B

Preparation Batch : 0084407

Methylene chloride	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	2.5	5.0	ug/kg	J	Common Contaminant

Methylene chloride was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
WSASB-022-5617-SO	A0C240550002	1	2.0	J B	ug/kg
WSASB-028-5639-SO	A0C240550007	1	2.6	J B	ug/kg

## Surrogate Recovery Outlier Report

**Lab Report Batch:** A0C240550

**Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Dilution	Matrix	Surrogate	Percent Recovery	Criteria (percent)			Associated Target Analytes
							Lower Limit	Upper Limit	Reject Point	
WSASB-022-5617-SO	A0C240550002	8260B	1	SO	4-Bromofluorobenzene	82	85.0	120.0	10.0	All Target
WSASB-028-5639-SO	A0C240550007	8260B	1	SO	4-Bromofluorobenzene	84	85.0	120.0	10.0	All Target
					Toluene-d8	82	85.0	115.0	10.0	All Target

## QC Outlier Report: Temperature (Non-qualified Outliers)

Lab Report Batch: A0C250407

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Sample Temperature ( C )	Criteria	
					Lower Limit	Upper Limit
WSASW-038-5657-SW	A0C250407026	353.2 Modified	AQ	1.5	2.0	6.0
		8081A	AQ	1.5	2.0	
		8082	AQ	1.5	2.0	
PBA08-QC-6018-TB	A0C250407028	8260B	AQ	1.5	2.0	
WSASW-038-5657-SW	A0C250407026	8260B	AQ	1.5	2.0	
		8270C	AQ	1.5	2.0	
		8270C PAH	AQ	1.5	2.0	
		8330B	AQ	1.5	2.0	
		8330M	AQ	1.5	2.0	

# Temperature Outlier Report

**Lab Report Batch:**

**Lab ID:**

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Sample Temp ( C )	Temperature Criteria ( C )			Between High and Gross Exceedence			Above Gross Exceedence		
					Low	High	Gross Exceed	Detect Quals		Non-Detect Qual(s)	Detect Quals		Non-Detect Qual(s)
								Non-Biased	Biased		Non-Biased	Biased	



## QC Outlier Report: Holding Times

Lab Report Batch: A0C250407

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Prep Method	Actual Holding Time		Criteria			Unit of Meas	Reported Dates ( and Times )			
					Coll To Prep	Prep To Ana	Coll To Ana	Coll To Prep	Prep To Ana		Coll To Ana	Collection Date	Preparation Date	Analysis Date
WSASW-037-5656-S	A0C250407025	8330M	AQ	Gen Prep	21.0	1.0		14	40		Days	03/23/2010	04/13/2010	04/14/2010
WSASW-037-5656-S	A0C250407025S	8330M	AQ	Gen Prep	21.0	1.0		14	40		Days	03/23/2010	04/13/2010	04/14/2010
WSASW-037-5656-S	A0C250407025D	8330M	AQ	Gen Prep	21.0	1.0		14	40		Days	03/23/2010	04/13/2010	04/14/2010
WSASW-038-5657-S	A0C250407026	8330M	AQ	Gen Prep	21.0	1.0		14	40		Days	03/23/2010	04/13/2010	04/14/2010
WSASW-039-5658-S	A0C250407027	8330M	AQ	Gen Prep	21.0	1.0		14	40		Days	03/23/2010	04/13/2010	04/14/2010

# Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 0085022

Analysis Method : 6020

Analysis Date : 03/29/2010

Preparation Batch : 0085022

Preparation Type : 3050B

Preparation Date : 03/26/2010

Lab Reporting Batch : A0C250407

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
WSASB-024-6203-FDMS	A0C250407021S	SO	Antimony	25		30.00	75.00	125.00	20.00
			Potassium	48		30.00	70.00	130.00	20.00
WSASB-024-6203-FDMS	A0C250407021D		Antimony	27		30.00	75.00	125.00	20.00
			Magnesium	141		30.00	70.00	130.00	20.00

Associated Samples: All samples in Method Batch	
Client Sample ID	Lab Sample ID
L10SB-066-5496-SO	A0C250407035
LL8SB-060-5349-SO	A0C250407029
WSASB-024-6203-FD	A0C250407021
WSASD-037-5649-SD	A0C250407022
WSASD-038-5650-SD	A0C250407023
WSASD-039-5651-SD	A0C250407024

\* 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: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

# Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 0085024

Analysis Method : 6020

Analysis Date : 04/05/2010

Preparation Batch : 0085024

Preparation Type : 3050B

Preparation Date : 03/26/2010

Lab Reporting Batch : A0C250407

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
WSASB-027-5633-SOMS A0C250407012S		SO	Antimony	26		30.00	75.00	125.00	20.00
			Potassium	64		30.00	70.00	130.00	20.00
WSASB-027-5633-SOMS A0C250407012D			Antimony	24		30.00	75.00	125.00	20.00
			Barium			30.00	10.00	199.00	20.00
			Magnesium	53		30.00	70.00	130.00	20.00
			Potassium	60		30.00	70.00	130.00	20.00

Associated Samples: All samples in Method Batch	
Client Sample ID	Lab Sample ID
WSASB-021-5611-SO	A0C250407001
WSASB-021-5612-SO	A0C250407002
WSASB-021-6201-FD	A0C250407020
WSASB-022-5615-SO	A0C250407003
WSASB-022-5616-SO	A0C250407004
WSASB-022-6200-FD	A0C250407019
WSASB-023-5619-SO	A0C250407005
WSASB-023-5620-SO	A0C250407006
WSASB-024-5623-SO	A0C250407007
WSASB-024-5624-SO	A0C250407008
WSASB-024-5626-SO	A0C250407009
WSASB-026-5629-SO	A0C250407010
WSASB-026-5630-SO	A0C250407011
WSASB-027-5633-SO	A0C250407012
WSASB-027-5634-SO	A0C250407013
WSASB-028-5637-SO	A0C250407014
WSASB-028-5638-SO	A0C250407015
WSASB-028-5640-SO	A0C250407016
WSASB-029-5641-SO	A0C250407017
WSASB-029-5642-SO	A0C250407018

\* 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: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

# Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 0088046

Analysis Method : 8270C

Analysis Date : 04/12/2010

Preparation Batch : 0088046

Preparation Type : 3540C

Preparation Date : 03/29/2010

Lab Reporting Batch : A0C250407

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
WSASB-027-5633-SOMS	A0C250407012D	SO	3,3'-Dichlorobenzidine	67		0.00	10.00	130.00	56.00
			Benzoic acid	30		0.00	0.00	110.00	20.00
			Carbazole	146	28	0.00	45.00	115.00	20.00
			Dibenzofuran	106		0.00	50.00	105.00	30.00

Associated Samples: Parent sample only	
Client Sample ID	Lab Sample ID
WSASB-027-5633-SO	A0C250407012

\* 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: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

# Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 0089037

Analysis Method : 8081A

Analysis Date : 04/12/2010

Preparation Batch : 0089037

Preparation Type : 3540C

Preparation Date : 03/30/2010

Lab Reporting Batch : A0C250407

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
WSASB-022-5615-SOMS	A0C250407003S	SO	beta-BHC	142		0.00	60.00	125.00	43.00
			Endrin	151		0.00	60.00	135.00	38.00

Associated Samples: Parent sample only	
Client Sample ID	Lab Sample ID
WSASB-022-5615-SO	A0C250407003

\* 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: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

# Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 0099345

Analysis Method : 353.2 Modified

Analysis Date : 04/12/2010

Preparation Batch : 0099345

Preparation Type : Gen Prep

Preparation Date : 04/09/2010

Lab Reporting Batch : A0C250407

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
WSASB-022-5616-SOMS	A0C250407004S	SO	Nitrocellulose	12		10.00	34.00	115.00	71.00
WSASB-022-5616-SOMS	A0C250407004D		Nitrocellulose	14		10.00	34.00	115.00	71.00

Associated Samples: All samples in Method Batch	
Client Sample ID	Lab Sample ID
WSASB-022-5615-SO	A0C250407003
WSASB-022-5616-SO	A0C250407004
WSASB-022-6200-FD	A0C250407019
WSASB-028-5637-SO	A0C250407014
WSASB-028-5638-SO	A0C250407015
WSASB-028-5640-SO	A0C250407016
WSASD-037-5649-SD	A0C250407022

\* 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: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

# Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 0103203

Analysis Method : 353.2 Modified

Analysis Date : 04/14/2010

Preparation Batch : 0103203

Preparation Type : 3535

Preparation Date : 04/13/2010

Lab Reporting Batch : A0C250407

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
WSASW-037-5656-SWM	A0C250407025D	AQ	Nitrocellulose		77		26.00	144.00	45.00

Associated Samples: All samples in Method Batch	
Client Sample ID	Lab Sample ID
WSASW-037-5656-SW	A0C250407025
WSASW-038-5657-SW	A0C250407026
WSASW-039-5658-SW	A0C250407027

\* 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: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

# Laboratory Control Sample / Laboratory Control Sample Duplicate Outlier Report

Method Batch : 0084148

Analysis Method : 8081A

Analysis Date : 04/05/2010

Preparation Batch : 0084148

Preparation Type : 3520C

Preparation Date : 03/25/2010

Lab Reporting Batch : A0C250407

Lab ID: TALCAN

LCS Lab Sample ID	Matrix	Analyte Name	Reported Values		Project Limits (Percent)			
			Percent Recovery	RPD	Rejection Point	Lower Limit	Upper Limit	RPD
A0C250000148C	AQ	Endrin ketone	70		10.00	75.00	125.00	50.00
A0C250000148L		gamma-BHC (Lindane)	91	25	10.00	25.00	135.00	22.00

<b>Associated Samples</b>	
Client Sample ID	Lab Sample ID
WSASW-037-5656-SW	A0C250407025
WSASW-038-5657-SW	A0C250407026
WSASW-039-5658-SW	A0C250407027

Scope of Data Qualification: The outlier in the LCS qualifies that analyte in all samples with the same Preparation Batch ID as the LCS

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI



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: A0C250407

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
LL8SB-060-5349-SO	A0C250407029	7471A	SO	Mercury	U	0.12	0.11764706	mg/kg
WSASB-021-5611-SO	A0C250407001	8330B	SO	1,3,5-Trinitrobenzene	U	0.25	0.01222222	mg/kg
				1,3-Dinitrobenzene	U	0.25	0.30555556	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.25	0.30555556	mg/kg
				2,4-Dinitrotoluene	U	0.25	0.30555556	mg/kg
				2,6-Dinitrotoluene	U	0.25	0.30555556	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.25	0.30555556	mg/kg
				2-Nitrotoluene	U	0.25	0.30555556	mg/kg
				3-Nitrotoluene	U	0.25	0.30555556	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.25	0.30555556	mg/kg
				4-Nitrotoluene	U	0.50	0.61111111	mg/kg
				Nitrobenzene	U	0.25	0.30555556	mg/kg
WSASB-021-6201-FD	A0C250407020	8330B	SO	1,3,5-Trinitrobenzene	U	0.24	0.01160494	mg/kg
				1,3-Dinitrobenzene	U	0.24	0.29012346	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.24	0.29012346	mg/kg
				2,4-Dinitrotoluene	U	0.24	0.29012346	mg/kg
				2,6-Dinitrotoluene	U	0.24	0.29012346	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.24	0.29012346	mg/kg
				2-Nitrotoluene	U	0.24	0.29012346	mg/kg
				3-Nitrotoluene	U	0.24	0.29012346	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.24	0.29012346	mg/kg
				Nitrobenzene	U	0.24	0.29012346	mg/kg
WSASB-022-5615-SO	A0C250407003	8081A	SO	beta-BHC	U	44	43.75	ug/kg
				Heptachlor	U	44	43.75	ug/kg
		8330B	SO	1,3,5-Trinitrobenzene	U	0.24	0.011875	mg/kg
				1,3-Dinitrobenzene	U	0.24	0.296875	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.24	0.296875	mg/kg
				2,4-Dinitrotoluene	U	0.24	0.296875	mg/kg
				2,6-Dinitrotoluene	U	0.24	0.296875	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.24	0.296875	mg/kg

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0C250407

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units	
WSASB-022-5615-SO	A0C250407003	8330B	SO	2-Nitrotoluene	U	0.24	0.296875	mg/kg	
				3-Nitrotoluene	U	0.24	0.296875	mg/kg	
				4-Amino-2,6-Dinitrotoluene	U	0.24	0.296875	mg/kg	
				4-Nitrotoluene	U	0.48	0.59375	mg/kg	
				Nitrobenzene	U	0.24	0.296875	mg/kg	
WSASB-022-5616-SO	A0C250407004	353.2 Modified SO 8081A	SO	Nitrocellulose	U	6.2	6.17283951	mg/kg	
				4,4'-DDD	U	2.5	2.46913580	ug/kg	
				4,4'-DDE	U	2.1	2.09876543	ug/kg	
				4,4'-DDT	U	2.5	2.46913580	ug/kg	
				alpha-BHC	U	3.1	3.08641975	ug/kg	
				Dieldrin	U	2.1	2.09876543	ug/kg	
				Endosulfan I	U	2.1	2.09876543	ug/kg	
				Endosulfan II	U	3.1	3.08641975	ug/kg	
				Endrin	U	2.1	2.09876543	ug/kg	
				Endrin ketone	U	2.5	2.46913580	ug/kg	
				gamma-BHC (Lindane)	U	3.1	3.08641975	ug/kg	
				gamma-Chlordane	U	2.1	2.09876543	ug/kg	
				Heptachlor epoxide	U	3.1	3.08641975	ug/kg	
				Methoxychlor	U	6.2	6.17283951	ug/kg	
				Toxaphene	U	83	82.7160494	ug/kg	
				8082	Aroclor 1016	U	41	2.09876543	ug/kg
					Aroclor 1221	U	41	2.09876543	ug/kg
					Aroclor 1232	U	41	2.09876543	ug/kg
					Aroclor 1242	U	41	2.09876543	ug/kg
					Aroclor 1248	U	41	2.09876543	ug/kg
Aroclor 1254	U	41	2.09876543		ug/kg				
Aroclor 1260	U	41	2.09876543		ug/kg				
8260B	1,1,1-Trichloroethane	U	6.2	6.17283951	ug/kg				
	1,1,2,2-Tetrachloroethane	U	6.2	6.17283951	ug/kg				
	1,1,2-Trichloroethane	U	6.2	6.17283951	ug/kg				
	1,1-Dichloroethane	U	6.2	6.17283951	ug/kg				
	1,1-Dichloroethene	U	6.2	6.17283951	ug/kg				

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0C250407

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units				
WSASB-022-5616-SO	A0C250407004	8260B	SO	1,2-Dibromoethane (Ethylene Dibro	U	6.2	6.17283951	ug/kg				
				1,2-Dichloroethane	U	6.2	6.17283951	ug/kg				
				1,2-Dichloroethene (total)	U	6.2	6.17283951	ug/kg				
				1,2-Dichloropropane	U	6.2	6.17283951	ug/kg				
				2-Butanone (MEK)	U	25	24.6913580	ug/kg				
				2-Hexanone	U	25	24.6913580	ug/kg				
				4-methyl-2-pentanone (MIBK)	U	25	24.6913580	ug/kg				
				Acetone	U	25	24.6913580	ug/kg				
				Benzene	U	6.2	6.17283951	ug/kg				
				Bromochloromethane	U	6.2	6.17283951	ug/kg				
				Bromodichloromethane	U	6.2	6.17283951	ug/kg				
				Bromoform	U	6.2	6.17283951	ug/kg				
				Bromomethane (Methyl bromide)	U	6.2	6.17283951	ug/kg				
				Carbon disulfide	U	6.2	6.17283951	ug/kg				
				Carbon tetrachloride	U	6.2	6.17283951	ug/kg				
				Chlorobenzene	U	6.2	6.17283951	ug/kg				
				Chlorodibromomethane	U	6.2	6.17283951	ug/kg				
				Chloroethane	U	6.2	6.17283951	ug/kg				
				Chloroform	U	6.2	6.17283951	ug/kg				
				Chloromethane	U	6.2	6.17283951	ug/kg				
				cis-1,3-Dichloropropene	U	6.2	6.17283951	ug/kg				
				Ethylbenzene	U	6.2	6.17283951	ug/kg				
				Styrene	U	6.2	6.17283951	ug/kg				
				Tetrachloroethene	U	6.2	6.17283951	ug/kg				
				Toluene	U	6.2	6.17283951	ug/kg				
				trans-1,3-Dichloropropene	U	6.2	6.17283951	ug/kg				
				Trichloroethene	U	6.2	6.17283951	ug/kg				
				Vinyl chloride	U	6.2	6.17283951	ug/kg				
				8270C				1,2,4-Trichlorobenzene	U	410	407.407407	ug/kg
								1,2-Dichlorobenzene	U	410	407.407407	ug/kg
								1,3-Dichlorobenzene	U	410	407.407407	ug/kg
								1,4-Dichlorobenzene	U	410	407.407407	ug/kg
2,4,5-Trichlorophenol	U	410	407.407407					ug/kg				

\* 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: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0C250407

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
WSASB-022-5616-SO	A0C250407004	8270C	SO	2,4,6-Trichlorophenol	U	410	407.407407	ug/kg
				2,4-Dichlorophenol	U	410	407.407407	ug/kg
				2,4-Dimethylphenol	U	410	407.407407	ug/kg
				2,4-Dinitrophenol	U	990	987.654321	ug/kg
				2,4-Dinitrotoluene	U	410	407.407407	ug/kg
				2,6-Dinitrotoluene	U	410	407.407407	ug/kg
				2-Chloronaphthalene	U	410	407.407407	ug/kg
				2-Chlorophenol	U	410	407.407407	ug/kg
				2-Methylnaphthalene	U	410	407.407407	ug/kg
				2-Methylphenol	U	410	407.407407	ug/kg
				2-Nitroaniline	U	990	987.654321	ug/kg
				2-Nitrophenol	U	410	407.407407	ug/kg
				3,3'-Dichlorobenzidine	U	410	407.407407	ug/kg
				3-methylphenol/4-methylphenol	U	410	#Error	ug/kg
				3-Nitroaniline	U	990	987.654321	ug/kg
				4,6-Dinitro-2-methylphenol	U	990	987.654321	ug/kg
				4-Bromophenyl phenyl ether	U	410	407.407407	ug/kg
				4-Chloro-3-methylphenol	U	410	407.407407	ug/kg
				4-Chloroaniline	U	410	407.407407	ug/kg
				4-Chlorophenyl phenyl ether	U	410	407.407407	ug/kg
				4-Nitroaniline	U	990	987.654321	ug/kg
				4-Nitrophenol	U	990	987.654321	ug/kg
				Benzoic acid	U	990	987.654321	ug/kg
				Benzyl alcohol	U	410	407.407407	ug/kg
				bis(2-Chloroethoxy)methane	U	410	407.407407	ug/kg
				bis(2-Chloroethyl) ether	U	410	407.407407	ug/kg
				Bis(2-chloroisopropyl) ether	U	410	407.407407	ug/kg
				bis(2-Ethylhexyl) phthalate	U	410	407.407407	ug/kg
				Butyl benzyl phthalate	U	410	407.407407	ug/kg
				Carbazole	U	62	61.7283951	ug/kg
				Dibenzofuran	U	410	407.407407	ug/kg
				Diethyl phthalate	U	410	407.407407	ug/kg
				Dimethyl phthalate	U	410	407.407407	ug/kg

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0C250407

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units	
WSASB-022-5616-SO	A0C250407004	8270C	SO	Di-n-octyl phthalate	U	410	407.407407	ug/kg	
				Hexachlorobenzene	U	410	407.407407	ug/kg	
				Hexachlorobutadiene	U	410	407.407407	ug/kg	
				HEXACHLOROCYCLOPENTADIE	U	410	#Error	ug/kg	
				Hexachloroethane	U	410	407.407407	ug/kg	
				Isophorone	U	410	407.407407	ug/kg	
				Nitrobenzene	U	410	407.407407	ug/kg	
				N-Nitrosodi-n-propylamine	U	410	407.407407	ug/kg	
				N-Nitrosodiphenylamine	U	410	407.407407	ug/kg	
				Pentachlorophenol	U	410	407.407407	ug/kg	
				Phenol	U	410	407.407407	ug/kg	
WSASB-022-6200-FD	A0C250407019	353.2 Modified	SO	Nitrocellulose	U	5.9	5.88235294	mg/kg	
				7471A	Mercury	U	0.12	0.11764706	mg/kg
				8081A	4,4'-DDD	U	2.4	2.35294118	ug/kg
					4,4'-DDT	U	2.4	2.35294118	ug/kg
					alpha-BHC	U	3.0	2.94117647	ug/kg
					Endosulfan II	U	3.0	2.94117647	ug/kg
					Endrin ketone	U	2.4	2.35294118	ug/kg
					gamma-BHC (Lindane)	U	3.0	2.94117647	ug/kg
					Heptachlor epoxide	U	3.0	2.94117647	ug/kg
					Methoxychlor	U	5.9	5.88235294	ug/kg
					Toxaphene	U	79	78.8235294	ug/kg
					8082	Aroclor 1016	U	39	2
				Aroclor 1221		U	39	2	ug/kg
				Aroclor 1232		U	39	2	ug/kg
				Aroclor 1242		U	39	2	ug/kg
				Aroclor 1248		U	39	2	ug/kg
				Aroclor 1254		U	39	2	ug/kg
				8260B	Aroclor 1260	U	39	2	ug/kg
					1,1,1-Trichloroethane	U	5.9	5.88235294	ug/kg
					1,1,2,2-Tetrachloroethane	U	5.9	5.88235294	ug/kg
1,1,2-Trichloroethane	U	5.9	5.88235294		ug/kg				

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0C250407

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
WSASB-022-6200-FD	A0C250407019	8260B	SO	1,1-Dichloroethane	U	5.9	5.88235294	ug/kg
				1,1-Dichloroethene	U	5.9	5.88235294	ug/kg
				1,2-Dibromoethane (Ethylene Dibro	U	5.9	5.88235294	ug/kg
				1,2-Dichloroethane	U	5.9	5.88235294	ug/kg
				1,2-Dichloroethene (total)	U	5.9	5.88235294	ug/kg
				1,2-Dichloropropane	U	5.9	5.88235294	ug/kg
				2-Butanone (MEK)	U	24	23.5294118	ug/kg
				2-Hexanone	U	24	23.5294118	ug/kg
				4-methyl-2-pentanone (MIBK)	U	24	23.5294118	ug/kg
				Acetone	U	24	23.5294118	ug/kg
				Benzene	U	5.9	5.88235294	ug/kg
				Bromochloromethane	U	5.9	5.88235294	ug/kg
				Bromodichloromethane	U	5.9	5.88235294	ug/kg
				Bromoform	U	5.9	5.88235294	ug/kg
				Bromomethane (Methyl bromide)	U	5.9	5.88235294	ug/kg
				Carbon disulfide	U	5.9	5.88235294	ug/kg
				Carbon tetrachloride	U	5.9	5.88235294	ug/kg
				Chlorobenzene	U	5.9	5.88235294	ug/kg
				Chlorodibromomethane	U	5.9	5.88235294	ug/kg
				Chloroethane	U	5.9	5.88235294	ug/kg
				Chloroform	U	5.9	5.88235294	ug/kg
				Chloromethane	U	5.9	5.88235294	ug/kg
				cis-1,3-Dichloropropene	U	5.9	5.88235294	ug/kg
				Ethylbenzene	U	5.9	5.88235294	ug/kg
				Styrene	U	5.9	5.88235294	ug/kg
				Tetrachloroethene	U	5.9	5.88235294	ug/kg
				Toluene	U	5.9	5.88235294	ug/kg
trans-1,3-Dichloropropene	U	5.9	5.88235294	ug/kg				
Trichloroethene	U	5.9	5.88235294	ug/kg				
Vinyl chloride	U	5.9	5.88235294	ug/kg				
Xylene (Total)	U	12	11.7647059	ug/kg				
		8270C		1,2,4-Trichlorobenzene	U	390	388.235294	ug/kg
				1,2-Dichlorobenzene	U	390	388.235294	ug/kg

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0C250407

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
WSASB-022-6200-FD	A0C250407019	8270C	SO	1,3-Dichlorobenzene	U	390	388.235294	ug/kg
				1,4-Dichlorobenzene	U	390	388.235294	ug/kg
				2,4,5-Trichlorophenol	U	390	388.235294	ug/kg
				2,4,6-Trichlorophenol	U	390	388.235294	ug/kg
				2,4-Dichlorophenol	U	390	388.235294	ug/kg
				2,4-Dimethylphenol	U	390	388.235294	ug/kg
				2,4-Dinitrotoluene	U	390	388.235294	ug/kg
				2,6-Dinitrotoluene	U	390	388.235294	ug/kg
				2-Chloronaphthalene	U	390	388.235294	ug/kg
				2-Chlorophenol	U	390	388.235294	ug/kg
				2-Methylnaphthalene	U	390	388.235294	ug/kg
				2-Methylphenol	U	390	388.235294	ug/kg
				2-Nitrophenol	U	390	388.235294	ug/kg
				3,3'-Dichlorobenzidine	U	390	388.235294	ug/kg
				3-methylphenol/4-methylphenol	U	390	#Error	ug/kg
				4-Bromophenyl phenyl ether	U	390	388.235294	ug/kg
				4-Chloro-3-methylphenol	U	390	388.235294	ug/kg
				4-Chloroaniline	U	390	388.235294	ug/kg
				4-Chlorophenyl phenyl ether	U	390	388.235294	ug/kg
				Benzyl alcohol	U	390	388.235294	ug/kg
				bis(2-Chloroethoxy)methane	U	390	388.235294	ug/kg
				bis(2-Chloroethyl) ether	U	390	388.235294	ug/kg
				Bis(2-chloroisopropyl) ether	U	390	388.235294	ug/kg
				bis(2-Ethylhexyl) phthalate	U	390	388.235294	ug/kg
Butyl benzyl phthalate	U	390	388.235294	ug/kg				
Carbazole	U	59	58.8235294	ug/kg				
Dibenzofuran	U	390	388.235294	ug/kg				
Diethyl phthalate	U	390	388.235294	ug/kg				
Dimethyl phthalate	U	390	388.235294	ug/kg				
Di-n-butyl phthalate	U	390	388.235294	ug/kg				
Di-n-octyl phthalate	U	390	388.235294	ug/kg				
Hexachlorobenzene	U	390	388.235294	ug/kg				
Hexachlorobutadiene	U	390	388.235294	ug/kg				

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0C250407

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
WSASB-022-6200-FD	A0C250407019	8270C	SO	HEXACHLOROCYCLOPENTADIE	U	390	#Error	ug/kg
				Hexachloroethane	U	390	388.235294	ug/kg
				Isophorone	U	390	388.235294	ug/kg
				Nitrobenzene	U	390	388.235294	ug/kg
				N-Nitrosodi-n-propylamine	U	390	388.235294	ug/kg
				N-Nitrosodiphenylamine	U	390	388.235294	ug/kg
				Pentachlorophenol	U	390	388.235294	ug/kg
				Phenol	U	390	388.235294	ug/kg
WSASB-023-5619-SO	A0C250407005	8330B	SO	1,3,5-Trinitrobenzene	U	0.25	0.012375	mg/kg
				1,3-Dinitrobenzene	U	0.25	0.309375	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.25	0.309375	mg/kg
				2,4-Dinitrotoluene	U	0.25	0.309375	mg/kg
				2,6-Dinitrotoluene	U	0.25	0.309375	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.25	0.309375	mg/kg
				2-Nitrotoluene	U	0.25	0.309375	mg/kg
				3-Nitrotoluene	U	0.25	0.309375	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.25	0.309375	mg/kg
				4-Nitrotoluene	U	0.50	0.61875	mg/kg
				Nitrobenzene	U	0.25	0.309375	mg/kg
WSASB-023-5620-SO	A0C250407006	8330B	SO	1,3,5-Trinitrobenzene	U	0.24	0.01132530	mg/kg
				1,3-Dinitrobenzene	U	0.24	0.28313253	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.24	0.28313253	mg/kg
				2,4-Dinitrotoluene	U	0.24	0.28313253	mg/kg
				2,6-Dinitrotoluene	U	0.24	0.28313253	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.24	0.28313253	mg/kg
				2-Nitrotoluene	U	0.24	0.28313253	mg/kg
				3-Nitrotoluene	U	0.24	0.28313253	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.24	0.28313253	mg/kg
Nitrobenzene	U	0.24	0.28313253	mg/kg				
WSASB-024-5624-SO	A0C250407008	7471A	SO	Mercury	U	0.13	0.12820513	mg/kg

\* 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: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI



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: A0C250407

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
WSASB-024-5626-SO	A0C250407009	7471A	SO	Mercury	U	0.12	0.11627907	mg/kg
				8330B	1,3,5-Trinitrobenzene	U	0.25	0.01151163
				1,3-Dinitrobenzene	U	0.25	0.2877907	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.25	0.2877907	mg/kg
				2,4-Dinitrotoluene	U	0.25	0.2877907	mg/kg
				2,6-Dinitrotoluene	U	0.25	0.2877907	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.25	0.2877907	mg/kg
				2-Nitrotoluene	U	0.25	0.2877907	mg/kg
				3-Nitrotoluene	U	0.25	0.2877907	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.25	0.2877907	mg/kg
				4-Nitrotoluene	U	0.50	0.5755814	mg/kg
				Nitrobenzene	U	0.25	0.2877907	mg/kg
		WSASB-024-6203-FD		A0C250407021	7471A	SO	Mercury	U
8330B	1,3,5-Trinitrobenzene		U				0.26	0.01320513
	1,3-Dinitrobenzene		U		0.26		0.33012821	mg/kg
	2,4,6-Trinitrotoluene (TNT)		U		0.26		0.33012821	mg/kg
	2,4-Dinitrotoluene		U		0.26		0.33012821	mg/kg
	2,6-Dinitrotoluene		U		0.26		0.33012821	mg/kg
	2-Amino-4,6-dinitrotoluene		U		0.26		0.33012821	mg/kg
	2-Nitrotoluene		U		0.26		0.33012821	mg/kg
	3-Nitrotoluene		U		0.26		0.33012821	mg/kg
	4-Amino-2,6-Dinitrotoluene		U		0.26		0.33012821	mg/kg
	4-Nitrotoluene		U		0.52		0.66025641	mg/kg
	Nitrobenzene		U		0.26		0.33012821	mg/kg
WSASB-026-5629-SO	A0C250407010		7471A		SO		Mercury	U
WSASB-026-5630-SO	A0C250407011	6020	SO	Antimony	U	0.67	0.66666667	mg/kg
WSASB-027-5633-SO	A0C250407012	8330B	SO	1,3,5-Trinitrobenzene	U	0.25	0.012375	mg/kg
				1,3-Dinitrobenzene	U	0.25	0.309375	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.25	0.309375	mg/kg
				2,4-Dinitrotoluene	U	0.25	0.309375	mg/kg

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0C250407

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units	
WSASB-027-5633-SO	A0C250407012	8330B	SO	2,6-Dinitrotoluene	U	0.25	0.309375	mg/kg	
				2-Amino-4,6-dinitrotoluene	U	0.25	0.309375	mg/kg	
				2-Nitrotoluene	U	0.25	0.309375	mg/kg	
				3-Nitrotoluene	U	0.25	0.309375	mg/kg	
				4-Amino-2,6-Dinitrotoluene	U	0.25	0.309375	mg/kg	
				4-Nitrotoluene	U	0.50	0.61875	mg/kg	
				Nitrobenzene	U	0.25	0.309375	mg/kg	
WSASB-027-5634-SO	A0C250407013	7471A	SO	Mercury	U	0.13	0.12987013	mg/kg	
WSASB-028-5637-SO	A0C250407014	8081A	SO	Aldrin	U	55	54.7945205	ug/kg	
				beta-BHC	U	48	47.9452055	ug/kg	
				delta-BHC	U	55	54.7945205	ug/kg	
				Heptachlor	U	48	47.9452055	ug/kg	
				Toxaphene	U	920	917.808219	ug/kg	
				8260B	Xylene (Total)	U	14	13.6986301	ug/kg
				8270C	1,2,4-Trichlorobenzene	U	2300	2260.27397	ug/kg
					1,2-Dichlorobenzene	U	2300	2260.27397	ug/kg
					1,3-Dichlorobenzene	U	2300	2260.27397	ug/kg
					1,4-Dichlorobenzene	U	2300	2260.27397	ug/kg
					2,4,5-Trichlorophenol	U	2300	2260.27397	ug/kg
					2,4,6-Trichlorophenol	U	2300	2260.27397	ug/kg
					2,4-Dichlorophenol	U	2300	2260.27397	ug/kg
					2,4-Dimethylphenol	U	2300	2260.27397	ug/kg
					2,4-Dinitrophenol	U	5500	5479.45205	ug/kg
					2,4-Dinitrotoluene	U	2300	2260.27397	ug/kg
					2,6-Dinitrotoluene	U	2300	2260.27397	ug/kg
					2-Chloronaphthalene	U	2300	2260.27397	ug/kg
					2-Chlorophenol	U	2300	2260.27397	ug/kg
					2-Methylnaphthalene	U	2300	2260.27397	ug/kg
2-Methylphenol	U	2300	2260.27397	ug/kg					
2-Nitroaniline	U	5500	5479.45205	ug/kg					
2-Nitrophenol	U	2300	2260.27397	ug/kg					

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0C250407

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
WSASB-028-5637-SO	A0C250407014	8270C	SO	3,3'-Dichlorobenzidine	U	2300	2260.27397	ug/kg
				3-methylphenol/4-methylphenol	U	2300	#Error	ug/kg
				3-Nitroaniline	U	5500	5479.45205	ug/kg
				4,6-Dinitro-2-methylphenol	U	5500	5479.45205	ug/kg
				4-Bromophenyl phenyl ether	U	2300	2260.27397	ug/kg
				4-Chloro-3-methylphenol	U	2300	2260.27397	ug/kg
				4-Chloroaniline	U	2300	2260.27397	ug/kg
				4-Chlorophenyl phenyl ether	U	2300	2260.27397	ug/kg
				4-Nitroaniline	U	5500	5479.45205	ug/kg
				4-Nitrophenol	U	5500	5479.45205	ug/kg
				Benzoic acid	U	5500	5479.45205	ug/kg
				Benzyl alcohol	U	2300	2260.27397	ug/kg
				bis(2-Chloroethoxy)methane	U	2300	2260.27397	ug/kg
				bis(2-Chloroethyl) ether	U	2300	2260.27397	ug/kg
				Bis(2-chloroisopropyl) ether	U	2300	2260.27397	ug/kg
				bis(2-Ethylhexyl) phthalate	U	2300	2260.27397	ug/kg
				Butyl benzyl phthalate	U	2300	2260.27397	ug/kg
				Diethyl phthalate	U	2300	2260.27397	ug/kg
				Dimethyl phthalate	U	2300	2260.27397	ug/kg
				Di-n-butyl phthalate	U	2300	2260.27397	ug/kg
				Di-n-octyl phthalate	U	2300	2260.27397	ug/kg
				Hexachlorobenzene	U	2300	2260.27397	ug/kg
				Hexachlorobutadiene	U	2300	2260.27397	ug/kg
				HEXACHLOROCYCLOPENTADIE	U	2300	#Error	ug/kg
				Hexachloroethane	U	2300	2260.27397	ug/kg
				Isophorone	U	2300	2260.27397	ug/kg
				Nitrobenzene	U	2300	2260.27397	ug/kg
				N-Nitrosodi-n-propylamine	U	2300	2260.27397	ug/kg
N-Nitrosodiphenylamine	U	2300	2260.27397	ug/kg				
Pentachlorophenol	U	2300	2260.27397	ug/kg				
Phenol	U	2300	2260.27397	ug/kg				
WSASB-028-5638-SO	A0C250407015	353.2 Modified SO	Nitrocellulose		U	6.2	6.17283951	mg/kg

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0C250407

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units	
WSASB-028-5638-SO	A0C250407015	6020	SO	Antimony	U	0.62	0.61728395	mg/kg	
				8081A	4,4'-DDD	U	2.5	2.46913580	ug/kg
				4,4'-DDE	U	2.1	2.09876543	ug/kg	
				4,4'-DDT	U	2.5	2.46913580	ug/kg	
				Aldrin	U	5.0	4.93827160	ug/kg	
				alpha-BHC	U	3.1	3.08641975	ug/kg	
				delta-BHC	U	5.0	4.93827160	ug/kg	
				Dieldrin	U	2.1	2.09876543	ug/kg	
				Endosulfan I	U	2.1	2.09876543	ug/kg	
				Endosulfan II	U	3.1	3.08641975	ug/kg	
				Endrin	U	2.1	2.09876543	ug/kg	
				Endrin ketone	U	2.5	2.46913580	ug/kg	
				gamma-BHC (Lindane)	U	3.1	3.08641975	ug/kg	
				gamma-Chlordane	U	2.1	2.09876543	ug/kg	
				Heptachlor epoxide	U	3.1	3.08641975	ug/kg	
				Methoxychlor	U	6.2	6.17283951	ug/kg	
				Toxaphene	U	83	82.7160494	ug/kg	
				8082	Aroclor 1016	U	41	2.09876543	ug/kg
					Aroclor 1221	U	41	2.09876543	ug/kg
					Aroclor 1232	U	41	2.09876543	ug/kg
Aroclor 1242	U	41	2.09876543		ug/kg				
Aroclor 1248	U	41	2.09876543		ug/kg				
Aroclor 1254	U	41	2.09876543		ug/kg				
Aroclor 1260	U	41	2.09876543		ug/kg				
8260B	1,1,1-Trichloroethane	U	6.2		6.17283951	ug/kg			
	1,1,2,2-Tetrachloroethane	U	6.2		6.17283951	ug/kg			
	1,1,2-Trichloroethane	U	6.2		6.17283951	ug/kg			
	1,1-Dichloroethane	U	6.2	6.17283951	ug/kg				
	1,1-Dichloroethene	U	6.2	6.17283951	ug/kg				
	1,2-Dibromoethane (Ethylene Dibro)	U	6.2	6.17283951	ug/kg				
	1,2-Dichloroethane	U	6.2	6.17283951	ug/kg				
1,2-Dichloroethene (total)	U	6.2	6.17283951	ug/kg					
1,2-Dichloropropane	U	6.2	6.17283951	ug/kg					

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0C250407

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit	
							Criteria*	Units
WSASB-028-5638-SO	A0C250407015	8260B	SO	2-Butanone (MEK)	U	25	24.6913580	ug/kg
				2-Hexanone	U	25	24.6913580	ug/kg
				4-methyl-2-pentanone (MIBK)	U	25	24.6913580	ug/kg
				Acetone	U	25	24.6913580	ug/kg
				Benzene	U	6.2	6.17283951	ug/kg
				Bromochloromethane	U	6.2	6.17283951	ug/kg
				Bromodichloromethane	U	6.2	6.17283951	ug/kg
				Bromoform	U	6.2	6.17283951	ug/kg
				Bromomethane (Methyl bromide)	U	6.2	6.17283951	ug/kg
				Carbon disulfide	U	6.2	6.17283951	ug/kg
				Carbon tetrachloride	U	6.2	6.17283951	ug/kg
				Chlorobenzene	U	6.2	6.17283951	ug/kg
				Chlorodibromomethane	U	6.2	6.17283951	ug/kg
				Chloroethane	U	6.2	6.17283951	ug/kg
				Chloroform	U	6.2	6.17283951	ug/kg
				Chloromethane	U	6.2	6.17283951	ug/kg
				cis-1,3-Dichloropropene	U	6.2	6.17283951	ug/kg
				Ethylbenzene	U	6.2	6.17283951	ug/kg
				Styrene	U	6.2	6.17283951	ug/kg
				Tetrachloroethene	U	6.2	6.17283951	ug/kg
				trans-1,3-Dichloropropene	U	6.2	6.17283951	ug/kg
				Trichloroethene	U	6.2	6.17283951	ug/kg
				Vinyl chloride	U	6.2	6.17283951	ug/kg
				8270C				1,2,4-Trichlorobenzene
1,2-Dichlorobenzene	U	410	407.407407					ug/kg
1,3-Dichlorobenzene	U	410	407.407407					ug/kg
1,4-Dichlorobenzene	U	410	407.407407					ug/kg
2,4,5-Trichlorophenol	U	410	407.407407					ug/kg
2,4,6-Trichlorophenol	U	410	407.407407					ug/kg
2,4-Dichlorophenol	U	410	407.407407					ug/kg
2,4-Dimethylphenol	U	410	407.407407					ug/kg
2,4-Dinitrophenol	U	990	987.654321	ug/kg				
2,4-Dinitrotoluene	U	410	407.407407	ug/kg				

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0C250407

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
WSASB-028-5638-SO	A0C250407015	8270C	SO	2,6-Dinitrotoluene	U	410	407.407407	ug/kg
				2-Chloronaphthalene	U	410	407.407407	ug/kg
				2-Chlorophenol	U	410	407.407407	ug/kg
				2-Methylnaphthalene	U	410	407.407407	ug/kg
				2-Methylphenol	U	410	407.407407	ug/kg
				2-Nitroaniline	U	990	987.654321	ug/kg
				2-Nitrophenol	U	410	407.407407	ug/kg
				3,3'-Dichlorobenzidine	U	410	407.407407	ug/kg
				3-methylphenol/4-methylphenol	U	410	#Error	ug/kg
				3-Nitroaniline	U	990	987.654321	ug/kg
				4,6-Dinitro-2-methylphenol	U	990	987.654321	ug/kg
				4-Bromophenyl phenyl ether	U	410	407.407407	ug/kg
				4-Chloro-3-methylphenol	U	410	407.407407	ug/kg
				4-Chloroaniline	U	410	407.407407	ug/kg
				4-Chlorophenyl phenyl ether	U	410	407.407407	ug/kg
				4-Nitroaniline	U	990	987.654321	ug/kg
				4-Nitrophenol	U	990	987.654321	ug/kg
				Benzoic acid	U	990	987.654321	ug/kg
				Benzyl alcohol	U	410	407.407407	ug/kg
				bis(2-Chloroethoxy)methane	U	410	407.407407	ug/kg
				bis(2-Chloroethyl) ether	U	410	407.407407	ug/kg
				Bis(2-chloroisopropyl) ether	U	410	407.407407	ug/kg
				bis(2-Ethylhexyl) phthalate	U	410	407.407407	ug/kg
				Butyl benzyl phthalate	U	410	407.407407	ug/kg
				Carbazole	U	62	61.7283951	ug/kg
				Dibenzofuran	U	410	407.407407	ug/kg
				Diethyl phthalate	U	410	407.407407	ug/kg
				Dimethyl phthalate	U	410	407.407407	ug/kg
				Di-n-butyl phthalate	U	410	407.407407	ug/kg
				Di-n-octyl phthalate	U	410	407.407407	ug/kg
				Hexachlorobenzene	U	410	407.407407	ug/kg
				Hexachlorobutadiene	U	410	407.407407	ug/kg
				HEXACHLOROCYCLOPENTADIE	U	410	#Error	ug/kg

\* 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: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0C250407

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units	
WSASB-028-5638-SO	A0C250407015	8270C	SO	Hexachloroethane	U	410	407.407407	ug/kg	
				Isophorone	U	410	407.407407	ug/kg	
				Nitrobenzene	U	410	407.407407	ug/kg	
				N-Nitrosodi-n-propylamine	U	410	407.407407	ug/kg	
				N-Nitrosodiphenylamine	U	410	407.407407	ug/kg	
				Pentachlorophenol	U	410	407.407407	ug/kg	
				Phenol	U	410	407.407407	ug/kg	
				8330B	1,3,5-Trinitrobenzene	U	0.25	0.01222222	mg/kg
				1,3-Dinitrobenzene	U	0.25	0.30555556	mg/kg	
				2,4,6-Trinitrotoluene (TNT)	U	0.25	0.30555556	mg/kg	
				2,4-Dinitrotoluene	U	0.25	0.30555556	mg/kg	
				2,6-Dinitrotoluene	U	0.25	0.30555556	mg/kg	
				2-Amino-4,6-dinitrotoluene	U	0.25	0.30555556	mg/kg	
				2-Nitrotoluene	U	0.25	0.30555556	mg/kg	
3-Nitrotoluene	U	0.25	0.30555556	mg/kg					
4-Amino-2,6-Dinitrotoluene	U	0.25	0.30555556	mg/kg					
4-Nitrotoluene	U	0.50	0.61111111	mg/kg					
Nitrobenzene	U	0.25	0.30555556	mg/kg					
WSASB-028-5640-SO	A0C250407016	8081A	SO	4,4'-DDD	U	2.3	2.29885057	ug/kg	
				Aldrin	U	4.6	4.59770115	ug/kg	
				alpha-BHC	U	2.9	2.87356322	ug/kg	
				delta-BHC	U	4.6	4.59770115	ug/kg	
				Endosulfan II	U	2.9	2.87356322	ug/kg	
				Endrin ketone	U	2.3	2.29885057	ug/kg	
				gamma-BHC (Lindane)	U	2.9	2.87356322	ug/kg	
				Heptachlor epoxide	U	2.9	2.87356322	ug/kg	
				8082	Aroclor 1016	U	38	1.95402299	ug/kg
				Aroclor 1221	U	38	1.95402299	ug/kg	
				Aroclor 1232	U	38	1.95402299	ug/kg	
				Aroclor 1242	U	38	1.95402299	ug/kg	
				Aroclor 1248	U	38	1.95402299	ug/kg	
				Aroclor 1254	U	38	1.95402299	ug/kg	

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0C250407

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit	
							Criteria*	Units
WSASB-028-5640-SO	A0C250407016	8082	SO	Aroclor 1260	U	38	1.95402299	ug/kg
		8260B		2-Butanone (MEK)	U	23	22.9885057	ug/kg
				2-Hexanone	U	23	22.9885057	ug/kg
				4-methyl-2-pentanone (MIBK)	U	23	22.9885057	ug/kg
				Acetone	U	23	22.9885057	ug/kg
		8270C		1,2,4-Trichlorobenzene	U	380	379.310345	ug/kg
				1,2-Dichlorobenzene	U	380	379.310345	ug/kg
				1,3-Dichlorobenzene	U	380	379.310345	ug/kg
				1,4-Dichlorobenzene	U	380	379.310345	ug/kg
				2,4,5-Trichlorophenol	U	380	379.310345	ug/kg
				2,4,6-Trichlorophenol	U	380	379.310345	ug/kg
				2,4-Dichlorophenol	U	380	379.310345	ug/kg
				2,4-Dimethylphenol	U	380	379.310345	ug/kg
				2,4-Dinitrophenol	U	920	919.54023	ug/kg
				2,4-Dinitrotoluene	U	380	379.310345	ug/kg
				2,6-Dinitrotoluene	U	380	379.310345	ug/kg
				2-Chloronaphthalene	U	380	379.310345	ug/kg
				2-Chlorophenol	U	380	379.310345	ug/kg
				2-Methylnaphthalene	U	380	379.310345	ug/kg
				2-Methylphenol	U	380	379.310345	ug/kg
				2-Nitroaniline	U	920	919.54023	ug/kg
				2-Nitrophenol	U	380	379.310345	ug/kg
				3,3'-Dichlorobenzidine	U	380	379.310345	ug/kg
				3-methylphenol/4-methylphenol	U	380	#Error	ug/kg
				3-Nitroaniline	U	920	919.54023	ug/kg
				4,6-Dinitro-2-methylphenol	U	920	919.54023	ug/kg
				4-Bromophenyl phenyl ether	U	380	379.310345	ug/kg
				4-Chloro-3-methylphenol	U	380	379.310345	ug/kg
				4-Chloroaniline	U	380	379.310345	ug/kg
				4-Chlorophenyl phenyl ether	U	380	379.310345	ug/kg
				4-Nitroaniline	U	920	919.54023	ug/kg
				4-Nitrophenol	U	920	919.54023	ug/kg
				Benzoic acid	U	920	919.54023	ug/kg

\* 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: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI



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: A0C250407

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units				
WSASB-028-5640-SO	A0C250407016	8270C	SO	Benzyl alcohol	U	380	379.310345	ug/kg				
				bis(2-Chloroethoxy)methane	U	380	379.310345	ug/kg				
				bis(2-Chloroethyl) ether	U	380	379.310345	ug/kg				
				Bis(2-chloroisopropyl) ether	U	380	379.310345	ug/kg				
				bis(2-Ethylhexyl) phthalate	U	380	379.310345	ug/kg				
				Butyl benzyl phthalate	U	380	379.310345	ug/kg				
				Dibenzofuran	U	380	379.310345	ug/kg				
				Diethyl phthalate	U	380	379.310345	ug/kg				
				Dimethyl phthalate	U	380	379.310345	ug/kg				
				Di-n-butyl phthalate	U	380	379.310345	ug/kg				
				Di-n-octyl phthalate	U	380	379.310345	ug/kg				
				Hexachlorobenzene	U	380	379.310345	ug/kg				
				Hexachlorobutadiene	U	380	379.310345	ug/kg				
				HEXACHLOROCYCLOPENTADIE	U	380	#Error	ug/kg				
				Hexachloroethane	U	380	379.310345	ug/kg				
				Isophorone	U	380	379.310345	ug/kg				
				Nitrobenzene	U	380	379.310345	ug/kg				
				N-Nitrosodi-n-propylamine	U	380	379.310345	ug/kg				
				N-Nitrosodiphenylamine	U	380	379.310345	ug/kg				
				Pentachlorophenol	U	380	379.310345	ug/kg				
				Phenol	U	380	379.310345	ug/kg				
				WSASD-037-5649-SD	A0C250407022	6020	SO	1,3,5-Trinitrobenzene	U	0.24	0.0108046	mg/kg
								1,3-Dinitrobenzene	U	0.24	0.27011494	mg/kg
2,4,6-Trinitrotoluene (TNT)	U	0.24	0.27011494					mg/kg				
2,4-Dinitrotoluene	U	0.24	0.27011494					mg/kg				
2,6-Dinitrotoluene	U	0.24	0.27011494					mg/kg				
2-Amino-4,6-dinitrotoluene	U	0.24	0.27011494					mg/kg				
2-Nitrotoluene	U	0.24	0.27011494					mg/kg				
3-Nitrotoluene	U	0.24	0.27011494					mg/kg				
4-Amino-2,6-Dinitrotoluene	U	0.24	0.27011494					mg/kg				
Nitrobenzene	U	0.24	0.27011494					mg/kg				
WSASD-037-5649-SD	A0C250407022	6020	SO	Thallium	U	0.30	0.29850746	mg/kg				

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0C250407

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit							
							Criteria*	Units						
WSASD-037-5649-SD	A0C250407022	7471A	SO	Mercury	U	0.15	0.14925373	mg/kg						
				Aldrin	U	120	119.402985	ug/kg						
				delta-BHC	U	120	119.402985	ug/kg						
				Methoxychlor	U	150	149.253731	ug/kg						
		8260B				2-Hexanone	U	30	29.8507463	ug/kg				
						4-methyl-2-pentanone (MIBK)	U	30	29.8507463	ug/kg				
						Acetone	U	30	29.8507463	ug/kg				
						Xylene (Total)	U	15	14.9253731	ug/kg				
						8270C				2,4-Dinitrophenol	U	1200	1194.02985	ug/kg
										2-Nitroaniline	U	1200	1194.02985	ug/kg
		3-Nitroaniline	U	1200	1194.02985					ug/kg				
		4,6-Dinitro-2-methylphenol	U	1200	1194.02985					ug/kg				
						4-Nitroaniline	U	1200	1194.02985	ug/kg				
						4-Nitrophenol	U	1200	1194.02985	ug/kg				
				Benzoic acid	U	1200	1194.02985	ug/kg						
WSASD-038-5650-SD	A0C250407023	7471A	SO	Mercury	U	0.12	0.11627907	mg/kg						
WSASD-039-5651-SD	A0C250407024	6020	SO	Antimony	U	0.63	0.625	mg/kg						
				8270C		Carbazole	U	63	62.5	ug/kg				
WSASW-037-5656-SW	A0C250407025	8330B	AQ	3-Nitrotoluene	U	0.48	0.475	ug/L						
				Hexahydro-1,3,5-Trinitro-1,3,5-Triaz	U	0.24	0.2375	ug/L						

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

# QC Outlier Report: Trip Blank

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Lab Reporting Batch :  
Method/Preparation Batch :  
Client Sample ID :  
Lab Sample ID :

Lab ID:  
Analysis Date :  
Preparation Date :  
Preparation Type :

Analysis Method :

**No contamination was found.**

## Continuing Calibration (CCV) Outlier Report (Organics)

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**There are no Organic Continuing Calibrations with outliers**

## Continuing Calibration (CCAL) Outlier Report (Inorganics)

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**There are no Inorganic Continuing Calibrations with outliers**

## Continuing Calibration (CCV) Outlier Report (Organics)

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**There are no Organic Continuing Calibrations with outliers**

## Continuing Calibration (CCAL) Outlier Report (Inorganics)

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**There are no Inorganic Continuing Calibrations with outliers**

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

Lab Report Batch: A0C250407

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
L10SB-066-5496-SO	A0C250407035	6020	SO	Antimony	J	0.12	0.56	mg/kg
				Cadmium	J	0.073	0.22	mg/kg
				Silver	J	0.016	0.56	mg/kg
				Sodium	J	29.5	112	mg/kg
				Thallium	J	0.080	0.22	mg/kg
LL8SB-060-5349-SO	A0C250407029			Antimony	J	0.075	0.59	mg/kg
				Cadmium	J	0.066	0.23	mg/kg
				Silver	J	0.029	0.59	mg/kg
PBA08-QC-6018-TB	A0C250407028	8260B	AQ	Acetone	J	2.8	10	ug/L
				Thallium	J	0.21	0.23	mg/kg
WSASB-021-5611-SO	A0C250407001	6020	SO	Antimony	J	0.19	0.62	mg/kg
				Silver	J	0.070	0.62	mg/kg
				Sodium	J	29.7	123	mg/kg
				Thallium	J	0.18	0.25	mg/kg
WSASB-021-5612-SO	A0C250407002	6020		Mercury	J	0.076	0.12	mg/kg
				Antimony	J	0.084	0.62	mg/kg
				Cadmium	J	0.071	0.25	mg/kg
				Silver	J	0.016	0.62	mg/kg
WSASB-021-6201-FD	A0C250407020			Sodium	J	49.8	125	mg/kg
				Thallium	J	0.17	0.25	mg/kg
				Antimony	J	0.093	0.62	mg/kg
				Cadmium	J	0.049	0.25	mg/kg
				Silver	J	0.033	0.62	mg/kg
WSASB-022-5615-SO	A0C250407003			Sodium	J	74.6	124	mg/kg
				Thallium	J	0.18	0.25	mg/kg
				Antimony	J	0.098	0.62	mg/kg
				Cadmium	J	0.12	0.25	mg/kg
				Silver	J	0.018	0.62	mg/kg
WSASB-022-5616-SO	A0C250407004	6020		Sodium	J	33.0	125	mg/kg
				Thallium	J	0.14	0.25	mg/kg
				Methylene chloride	J B	3.8	6.2	ug/kg
				2-Methylnaphthalene	J	22	820	ug/kg
				bis(2-Ethylhexyl) phthalate	J	84	820	ug/kg
WSASB-022-5616-SO	A0C250407004	6020		Dibenzofuran	J	70	820	ug/kg
				Antimony	J	0.087	0.62	mg/kg
				Cadmium	J	0.062	0.25	mg/kg

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

Lab Report Batch: A0C250407

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
WSASB-022-5616-SO	A0C250407004	6020	SO	Silver	J	0.014	0.62	mg/kg
				Sodium	J	44.9	124	mg/kg
				Thallium	J	0.17	0.25	mg/kg
		8260B		Methylene chloride	J B	4.0	6.2	ug/kg
		8270C		Di-n-butyl phthalate	J	22	410	ug/kg
WSASB-022-6200-FD	A0C250407019	6020		Antimony	J	0.079	0.59	mg/kg
				Cadmium	J	0.052	0.24	mg/kg
				Silver	J	0.013	0.59	mg/kg
				Sodium	J	50.6	118	mg/kg
				Thallium	J	0.15	0.24	mg/kg
	8260B		Methylene chloride	J B	4.4	5.9	ug/kg	
WSASB-023-5619-SO	A0C250407005	6020		Antimony	J	0.081	0.62	mg/kg
				Cadmium	J	0.064	0.25	mg/kg
				Silver	J	0.019	0.62	mg/kg
				Sodium	J	45.1	125	mg/kg
				Thallium	J	0.18	0.25	mg/kg
WSASB-023-5620-SO	A0C250407006			Antimony	J	0.096	0.60	mg/kg
				Cadmium	J	0.050	0.24	mg/kg
				Silver	J	0.013	0.60	mg/kg
				Sodium	J	42.5	120	mg/kg
				Thallium	J	0.17	0.24	mg/kg
WSASB-024-5623-SO	A0C250407007			Antimony	J	0.090	0.64	mg/kg
				Silver	J	0.026	0.64	mg/kg
				Sodium	J	35.8	128	mg/kg
				Thallium	J	0.15	0.26	mg/kg
WSASB-024-5624-SO	A0C250407008			Antimony	J	0.083	0.64	mg/kg
				Cadmium	J	0.046	0.26	mg/kg
				Silver	J	0.017	0.64	mg/kg
				Sodium	J	59.2	129	mg/kg
				Thallium	J	0.17	0.26	mg/kg
WSASB-024-5626-SO	A0C250407009			Cadmium	J	0.067	0.23	mg/kg
				Silver	J	0.030	0.58	mg/kg
				Sodium	J	60.3	116	mg/kg
				Thallium	J	0.12	0.23	mg/kg
WSASB-024-6203-FD	A0C250407021			Antimony	J	0.088	0.64	mg/kg
				Cadmium	J	0.052	0.26	mg/kg

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

Lab Report Batch: A0C250407

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
WSASB-024-6203-FD	A0C250407021	6020	SO	Silver	J	0.016	0.64	mg/kg
				Sodium	J	62.7	129	mg/kg
				Thallium	J	0.17	0.26	mg/kg
WSASB-026-5629-SO	A0C250407010			Cadmium	J	0.058	0.27	mg/kg
				Silver	J	0.018	0.68	mg/kg
				Sodium	J	38.6	136	mg/kg
WSASB-026-5630-SO	A0C250407011			Thallium	J	0.17	0.27	mg/kg
				Cadmium	J	0.043	0.27	mg/kg
				Silver	J	0.036	0.67	mg/kg
WSASB-026-5633-SO	A0C250407011			Sodium	J	62.4	134	mg/kg
				Thallium	J	0.22	0.27	mg/kg
				Antimony	J	0.079	0.62	mg/kg
WSASB-027-5633-SO	A0C250407012			Cadmium	J	0.099	0.25	mg/kg
				Silver	J	0.021	0.62	mg/kg
				Sodium	J	37.7	125	mg/kg
WSASB-027-5634-SO	A0C250407013			Thallium	J	0.16	0.25	mg/kg
				Antimony	J	0.091	0.65	mg/kg
				Cadmium	J	0.048	0.26	mg/kg
WSASB-027-5637-SO	A0C250407014			Silver	J	0.019	0.65	mg/kg
				Sodium	J	59.7	130	mg/kg
				Thallium	J	0.20	0.26	mg/kg
WSASB-028-5637-SO	A0C250407015			Antimony	J	0.10	0.68	mg/kg
				Cadmium	J	0.26	0.27	mg/kg
				Silver	J	0.028	0.68	mg/kg
WSASB-028-5638-SO	A0C250407015	6020		Sodium	J	29.1	137	mg/kg
				Thallium	J	0.13	0.27	mg/kg
				8260B	J B	3.4	6.8	ug/kg
WSASB-028-5638-SO	A0C250407015	6020		8270C	J	190	2300	ug/kg
				8330B	J PG	0.026	0.25	mg/kg
				Cadmium	J	0.039	0.25	mg/kg
WSASB-028-5638-SO	A0C250407015	6020		Silver	J	0.013	0.62	mg/kg
				Sodium	J	49.8	124	mg/kg
				Thallium	J	0.17	0.25	mg/kg
WSASB-028-5638-SO	A0C250407015	7471A		Mercury	J	0.025	0.12	mg/kg
				8260B	J B	3.7	6.2	ug/kg
				Toluene	J	0.34	6.2	ug/kg

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

Lab Report Batch: A0C250407

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
WSASB-028-5640-SO	A0C250407016	6020	SO	Cadmium	J	0.052	0.23	mg/kg
				Silver	J	0.025	0.57	mg/kg
				Sodium	J	56.6	115	mg/kg
				Thallium	J	0.10	0.23	mg/kg
				8081A	4,4'-DDT	J	0.85	2.3
	8260B	Methylene chloride	J B	3.6	5.7	ug/kg		
WSASB-029-5641-SO	A0C250407017	6020		Antimony	J	0.088	0.66	mg/kg
				Cadmium	J	0.10	0.27	mg/kg
				Silver	J	0.013	0.66	mg/kg
				Sodium	J	32.9	133	mg/kg
				Thallium	J	0.15	0.27	mg/kg
	7471A	Mercury	J	0.027	0.13	mg/kg		
WSASB-029-5642-SO	A0C250407018	6020		Antimony	J	0.080	0.62	mg/kg
				Cadmium	J	0.050	0.25	mg/kg
				Silver	J	0.010	0.62	mg/kg
				Sodium	J	37.2	125	mg/kg
				Thallium	J	0.16	0.25	mg/kg
WSASD-037-5649-SD	A0C250407022			Antimony	J	0.095	0.74	mg/kg
				Cadmium	J	0.15	0.30	mg/kg
				Selenium	J	0.68	0.74	mg/kg
				Silver	J	0.027	0.74	mg/kg
				Sodium	J	35.7	148	mg/kg
				8260B	2-Butanone (MEK)	J	2.1	30
		Methylene chloride	J B	4.5	7.4	ug/kg		
	8270C	2-Methylnaphthalene	J	80	490	ug/kg		
WSASD-038-5650-SD	A0C250407023	6020		Cadmium	J	0.11	0.23	mg/kg
				Selenium	J	0.46	0.58	mg/kg
				Silver	J	0.012	0.58	mg/kg
				Sodium	J	28.8	116	mg/kg
				Thallium	J	0.078	0.23	mg/kg
	8270C	2-Methylnaphthalene	J	8.4	380	ug/kg		
WSASD-039-5651-SD	A0C250407024	6020		Silver	J	0.017	0.63	mg/kg
				Sodium	J	23.9	125	mg/kg
				Thallium	J	0.10	0.25	mg/kg
	7471A	Mercury	J	0.045	0.13	mg/kg		
WSASW-037-5656-SW	A0C250407025	6020	AQ	Arsenic	J	0.51	5.0	ug/L

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

Lab Report Batch: A0C250407

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
WSASW-037-5656-SW	A0C250407025	6020	AQ	Cobalt	J B	0.16	5.0	ug/L
				Lead	J	0.25	3.0	ug/L
				Nickel	J	0.80	10.0	ug/L
		8260B	Acetone	J	1.4	10	ug/L	
		8270C	bis(2-Ethylhexyl) phthalate	J B	2.9	10	ug/L	
			Di-n-butyl phthalate	J B	1.6	10	ug/L	
WSASW-038-5657-SW	A0C250407026	6020		Antimony	J	0.28	5.0	ug/L
				Arsenic	J	0.58	5.0	ug/L
				Cobalt	J B	0.16	5.0	ug/L
				Lead	J	0.26	3.0	ug/L
		8270C	Nickel	J	0.85	10.0	ug/L	
			Selenium	J	0.22	5.0	ug/L	
			Vanadium	J	0.63	10.0	ug/L	
			bis(2-Ethylhexyl) phthalate	J B	2.4	10	ug/L	
Di-n-butyl phthalate	J B	1.3	10	ug/L				
WSASW-039-5658-SW	A0C250407027	6020		Arsenic	J	0.82	5.0	ug/L
				Chromium	J	0.76	5.0	ug/L
				Cobalt	J B	0.22	5.0	ug/L
				Copper	J	1.8	5.0	ug/L
				Lead	J	0.46	3.0	ug/L
				Nickel	J	1.3	10.0	ug/L
		8260B	Selenium	J	0.26	5.0	ug/L	
			Vanadium	J	1.0	10.0	ug/L	
			Acetone	J	1.5	10	ug/L	
			8270C	bis(2-Ethylhexyl) phthalate	J B	2.9	10	ug/L
Di-n-butyl phthalate	J B	1.1		10	ug/L			

## Method Blank Outlier Report

Lab Reporting Batch : A0C250407

Lab ID: TALCAN

Analysis Method : 8270C

Analysis Date : 04/12/2010

Preparation Type : 3520C

Preparation Date : 03/25/2010

Method Blank Lab Sample ID : A0C250000140B

Preparation Batch : 0084140

### bis(2-Ethylhexyl) phthalate

Method Blank Result:

Result	Reporting Limit	Units	Lab Qual	Comments
8.2	10	ug/L	J	Common Contaminant

bis(2-Ethylhexyl) phthalate was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
WSASW-037-5656-SW	A0C250407025	1	2.9	J B	ug/L
WSASW-038-5657-SW	A0C250407026	1	2.4	J B	ug/L
WSASW-039-5658-SW	A0C250407027	1	2.9	J B	ug/L

### Di-n-butyl phthalate

Method Blank Result:

Result	Reporting Limit	Units	Lab Qual	Comments
0.71	10	ug/L	J	Common Contaminant

Di-n-butyl phthalate was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
WSASW-037-5656-SW	A0C250407025	1	1.6	J B	ug/L
WSASW-038-5657-SW	A0C250407026	1	1.3	J B	ug/L
WSASW-039-5658-SW	A0C250407027	1	1.1	J B	ug/L

## Method Blank Outlier Report

Lab Reporting Batch : AOC250407

Lab ID: TALCAN

Analysis Method : 8260B

Analysis Date : 03/25/2010

Preparation Type : 5030B

Preparation Date : 03/25/2010

Method Blank Lab Sample ID : AOC250000407B

Preparation Batch : 0084407

Methylene chloride	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	2.5	5.0	ug/kg	J	Common Contaminant

Methylene chloride was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
WSASB-022-5615-SO	AOC250407003	1	3.8	J B	ug/kg
WSASB-022-5616-SO	AOC250407004	1	4.0	J B	ug/kg
WSASB-028-5637-SO	AOC250407014	1	3.4	J B	ug/kg
WSASB-028-5638-SO	AOC250407015	1	3.7	J B	ug/kg
WSASB-028-5640-SO	AOC250407016	1	3.6	J B	ug/kg

## Method Blank Outlier Report

Lab Reporting Batch : AOC250407

Lab ID: TALCAN

Analysis Method : 6020

Analysis Date : 04/02/2010

Preparation Type : 3005A

Preparation Date : 03/26/2010

Method Blank Lab Sample ID : AOC260000016B

Preparation Batch : 0085016

Cobalt	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	0.062	5.0	ug/L	J	

Cobalt was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
WSASW-037-5656-SW	AOC250407025	1	0.16	J B	ug/L
WSASW-038-5657-SW	AOC250407026	1	0.16	J B	ug/L
WSASW-039-5658-SW	AOC250407027	1	0.22	J B	ug/L

Manganese	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	1.9	10.0	ug/L	J	

Manganese contamination found in the method blank did not qualify any samples.

## Method Blank Outlier Report

Lab Reporting Batch : A0C250407

Lab ID: TALCAN

Analysis Method : 6020

Analysis Date : 03/29/2010

Preparation Type : 3050B

Preparation Date : 03/26/2010

Method Blank Lab Sample ID : A0C260000022B

Preparation Batch : 0085022

Cobalt	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	0.0047	0.50	mg/kg	J	

Cobalt contamination found in the method blank did not qualify any samples.



# Method Blank Outlier Report

Lab Reporting Batch : A0C250407

Lab ID: TALCAN

Analysis Method : 8260B

Analysis Date : 03/26/2010

Preparation Type : 5030B

Preparation Date : 03/26/2010

Method Blank Lab Sample ID : A0C290000407B

Preparation Batch : 0088407

Methylene chloride	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	3.3	5.0	ug/kg	J	Common Contaminant

Methylene chloride was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
WSASB-022-6200-FD	A0C250407019	1	4.4	J B	ug/kg
WSASD-037-5649-SD	A0C250407022	1	4.5	J B	ug/kg

## Surrogate Recovery Outlier Report

Lab Report Batch: A0C250407

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Dilution	Matrix	Surrogate	Percent Recovery	Criteria (percent)			Associated Target Analytes		
							Lower Limit	Upper Limit	Reject Point			
WSASB-022-5615-SO	A0C250407003	8260B	1	SO	4-Bromofluorobenzene	77	85.0	120.0	10.0	All Target		
					Toluene-d8	84	85.0	115.0	10.0	All Target		
WSASB-022-5615-SOMS	A0C250407003S	8081A	10	SO	Decachlorobiphenyl	236	55.0	130.0	10.0	All Target		
WSASB-022-5615-SOMSD	A0C250407003D	8081A	10	SO	Decachlorobiphenyl	286	55.0	130.0	10.0	All Target		
WSASB-022-5616-SO	A0C250407004	8260B	1	SO	4-Bromofluorobenzene	80	85.0	120.0	10.0	All Target		
					Toluene-d8	84	85.0	115.0	10.0	All Target		
WSASB-022-6200-FD	A0C250407019	8260B	1	SO	Toluene-d8	84	85.0	115.0	10.0	All Target		
WSASB-028-5637-SO	A0C250407014	8081A	10	SO	Decachlorobiphenyl	200	55.0	130.0	10.0	All Target		
					8260B	1	4-Bromofluorobenzene	75	85.0	120.0	10.0	All Target
							Toluene-d8	82	85.0	115.0	10.0	All Target
WSASB-028-5638-SO	A0C250407015	8260B	1	SO	4-Bromofluorobenzene	79	85.0	120.0	10.0	All Target		
WSASB-028-5640-SO	A0C250407016	8260B	1	SO	4-Bromofluorobenzene	76	85.0	120.0	10.0	All Target		
WSASD-037-5649-SD	A0C250407022	8081A	20	SO	Decachlorobiphenyl	180	55.0	130.0	10.0	All Target		
					8260B	1	4-Bromofluorobenzene	77	85.0	120.0	10.0	All Target
							Toluene-d8	80	85.0	115.0	10.0	All Target
WSASW-039-5658-SW	A0C250407027	8082	1	AQ	Decachlorobiphenyl	24	40.0	135.0	10.0	All Target		

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

Lab Report Batch:

Lab ID:

Analysis Method	Matrix	Analyte Name	Field Sample			Field Sample Duplicate			RPD Dup* (%)	RPD Criteria (%)	Result Units
			Client Sample ID	Ana Type	Result	Lab Qualifier	Client Sample Duplicate ID	Ana Type			

*\*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:** 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

## QC Outlier Report: Temperature (Non-qualified Outliers)

Lab Report Batch: A0C250600

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Sample Temperature ( C )	Criteria	
					Lower Limit	Upper Limit
CPCSD-046-5024-SD	A0C250600006	353.2 Modified	SO	0.8	2.0	6.0
CPCSD-046-5784-SD	A0C250600007	353.2 Modified	SO	0.8	2.0	6.0
CPCSD-046-5024-SD	A0C250600006	8081A	SO	0.8	2.0	
CPCSD-046-5784-SD	A0C250600007	8081A	SO	0.8	2.0	
CPCSD-046-5024-SD	A0C250600006	8082	SO	0.8	2.0	
CPCSD-046-5784-SD	A0C250600007	8082	SO	0.8	2.0	
CPCSD-046-5024-SD	A0C250600006	8260B	SO	0.8	2.0	
CPCSD-046-5784-SD	A0C250600007	8260B	SO	0.8	2.0	
CPCSB-031-5109-SO	A0C250600001	8270C	SO	0.8	2.0	
CPCSB-031-5109-SOMS	A0C250600001S	8270C	SO	0.8	2.0	
CPCSB-031-5109-SOMSD	A0C250600001D	8270C	SO	0.8	2.0	
CPCSB-032-5113-SO	A0C250600002	8270C	SO	0.8	2.0	
CPCSB-032-5114-SO	A0C250600003	8270C	SO	0.8	2.0	
CPCSB-032-5116-SO	A0C250600004	8270C	SO	0.8	2.0	
CPCSB-032-6073-FD	A0C250600005	8270C	SO	0.8	2.0	
CPCSD-046-5024-SD	A0C250600006	8270C	SO	0.8	2.0	
CPCSD-046-5024-SDMS	A0C250600006S	8270C	SO	0.8	2.0	
CPCSD-046-5024-SDMSD	A0C250600006D	8270C	SO	0.8	2.0	
CPCSD-046-5784-SD	A0C250600007	8270C	SO	0.8	2.0	
CPCSB-031-5109-SO	A0C250600001	8270C PAH	SO	0.8	2.0	
CPCSB-031-5109-SOMS	A0C250600001S	8270C PAH	SO	0.8	2.0	
CPCSB-031-5109-SOMSD	A0C250600001D	8270C PAH	SO	0.8	2.0	
CPCSB-032-5113-SO	A0C250600002	8270C PAH	SO	0.8	2.0	
CPCSB-032-5114-SO	A0C250600003	8270C PAH	SO	0.8	2.0	
CPCSB-032-5116-SO	A0C250600004	8270C PAH	SO	0.8	2.0	
CPCSB-032-6073-FD	A0C250600005	8270C PAH	SO	0.8	2.0	
CPCSD-046-5024-SD	A0C250600006	8270C PAH	SO	0.8	2.0	
CPCSD-046-5024-SDMS	A0C250600006S	8270C PAH	SO	0.8	2.0	
CPCSD-046-5024-SDMSD	A0C250600006D	8270C PAH	SO	0.8	2.0	

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## QC Outlier Report: Temperature (Non-qualified Outliers)

Lab Report Batch: A0C250600

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Sample Temperature ( C )	Criteria	
					Lower Limit	Upper Limit
CPCSD-046-5784-SD	A0C250600007	8270C PAH	SO	0.8	2.0	
CPCSB-031-5109-SO	A0C250600001	8330B	SO	0.8	2.0	
CPCSB-031-5109-SOMS	A0C250600001S	8330B	SO	0.8	2.0	
CPCSB-031-5109-SOMSD	A0C250600001D	8330B	SO	0.8	2.0	
CPCSB-032-5113-SO	A0C250600002	8330B	SO	0.8	2.0	
CPCSB-032-5114-SO	A0C250600003	8330B	SO	0.8	2.0	
CPCSB-032-5116-SO	A0C250600004	8330B	SO	0.8	2.0	
CPCSB-032-6073-FD	A0C250600005	8330B	SO	0.8	2.0	
CPCSD-046-5024-SD	A0C250600006	8330B	SO	0.8	2.0	
CPCSD-046-5784-SD	A0C250600007	8330B	SO	0.8	2.0	
CPCSD-046-5024-SD	A0C250600006	8330M	SO	0.8	2.0	
CPCSD-046-5784-SD	A0C250600007	8330M	SO	0.8	2.0	

# Temperature Outlier Report

**Lab Report Batch:**

**Lab ID:**

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Sample Temp ( C )	Temperature Criteria ( C )			Between High and Gross Exceedence			Above Gross Exceedence		
					Low	High	Gross Exceed	Detect Quals		Non-Detect Qual(s)	Detect Quals		Non-Detect Qual(s)
								Non-Biased	Biased		Non-Biased	Biased	

## QC Outlier Report: Holding Times

Lab Report Batch: A0C250600

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Prep Method	Actual Holding Time		Criteria				Reported Dates ( and Times )			
					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
CPCSD-046-5024-SD	A0C250600006	8270C	SO	3540C	20.0	2.0		14	40		Days	03/25/2010	04/14/2010	04/16/2010
CPCSD-046-5024-SD	A0C250600006S	8270C	SO	3540C	20.0	2.0		14	40		Days	03/25/2010	04/14/2010	04/16/2010
CPCSD-046-5024-SD	A0C250600006D	8270C	SO	3540C	20.0	2.0		14	40		Days	03/25/2010	04/14/2010	04/16/2010
CPCSW-046-5029-S	A0C250600009	8330M	AQ	Gen Prep	19.0	1.0		14	40		Days	03/25/2010	04/13/2010	04/14/2010

# Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 0090026

Analysis Method : 6020

Analysis Date : 04/09/2010

Preparation Batch : 0090026

Preparation Type : 3050B

Preparation Date : 03/31/2010

Lab Reporting Batch : A0C250600

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
CPCSB-031-5109-SOMS	A0C250600001S	SO	Antimony	28		30.00	75.00	125.00	20.00
CPCSB-031-5109-SOMS	A0C250600001D		Antimony	32		30.00	75.00	125.00	20.00
			Cobalt	112		30.00	55.00	110.00	20.00
WSASS-033M-5645-SO	A0C250600011S		Antimony	25		30.00	75.00	125.00	20.00
			Calcium	4.3		30.00	70.00	130.00	20.00
			Potassium	0.0		30.00	70.00	130.00	20.00
WSASS-033M-5645-SO	A0C250600011D		Antimony	26		30.00	75.00	125.00	20.00
			Calcium	4.0		30.00	70.00	130.00	20.00
			Potassium	0.0		30.00	70.00	130.00	20.00

## Associated Samples: All samples in Method Batch

Client Sample ID	Lab Sample ID
CPCSB-031-5109-SO	A0C250600001
CPCSB-032-5113-SO	A0C250600002
CPCSB-032-5114-SO	A0C250600003
CPCSB-032-5116-SO	A0C250600004
CPCSB-032-6073-FD	A0C250600005
CPCSD-046-5024-SD	A0C250600006
CPCSD-046-5784-SD	A0C250600007
CPCSD-049-5032-SD	A0C250600008
WSASS-030-5653-SO	A0C250600017
WSASS-031-5654-SO	A0C250600018
WSASS-032-5655-SO	A0C250600019
WSASS-033M-5645-SO	A0C250600011
WSASS-034M-5646-SO	A0C250600012
WSASS-034M-6195-FD	A0C250600013
WSASS-035M-5648-SO	A0C250600016
WSASS-036M-5647-SO	A0C250600014

\* 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: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI



# Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 0090030  
 Preparation Batch : 0090030  
 Lab Reporting Batch : A0C250600

Analysis Method : 8270C  
 Preparation Type : 3540C  
 Lab ID: TALCAN

Analysis Date : 04/09/2010  
 Preparation Date : 03/31/2010

Client Sample ID	Lab Sample ID	Matrix	Analyte Name	Reported *		Project Limits (Percent)			
				Percent Recovery	RPD	Rejection Point**	Lower Limit	Upper Limit	RPD
WSASS-033M-5645-SO	A0C250600011S	SO	1,2,4-Trichlorobenzene	26		0.00	45.00	110.00	30.00
			1,2-Dichlorobenzene	28		0.00	45.00	95.00	25.00
			1,3-Dichlorobenzene	27		0.00	40.00	100.00	30.00
			1,4-Dichlorobenzene	29		0.00	35.00	105.00	30.00
			2,4,5-Trichlorophenol	34		0.00	50.00	110.00	30.00
			2,4,6-Trichlorophenol	30		0.00	45.00	110.00	29.00
			2,4-Dichlorophenol	29		0.00	45.00	110.00	30.00
			2,4-Dimethylphenol	21		0.00	30.00	105.00	30.00
			2,4-Dinitrotoluene	33		0.00	50.00	115.00	30.00
			2,6-Dinitrotoluene	33		0.00	50.00	110.00	39.00
			2-Chloronaphthalene	29		0.00	45.00	105.00	28.00
			2-Chlorophenol	30		0.00	45.00	105.00	54.00
			2-Methylnaphthalene	29		0.00	45.00	105.00	27.00
			2-Methylphenol	32		0.00	40.00	105.00	29.00
			2-Nitroaniline	33		0.00	45.00	120.00	39.00
			2-Nitrophenol	27		0.00	40.00	110.00	30.00
			3,3'-Dichlorobenzidine	0.0		0.00	10.00	130.00	56.00
			3-methylphenol/4-methylphenol	30					
			3-Nitroaniline	13		0.00	25.00	110.00	45.00
			4,6-Dinitro-2-methylphenol	26		0.00	30.00	135.00	30.00
			4-Bromophenyl phenyl ether	32		0.00	45.00	115.00	30.00
			4-Chloro-3-methylphenol	32		0.00	45.00	115.00	55.00
			4-Chloroaniline	0.0		0.00	10.00	95.00	30.00
			4-Chlorophenyl phenyl ether	32		0.00	45.00	110.00	29.00
			4-Nitroaniline	20		0.00	35.00	115.00	30.00
			bis(2-Chloroethoxy)methane	28		0.00	45.00	110.00	30.00
			bis(2-Chloroethyl) ether	28		0.00	40.00	105.00	30.00
			bis(2-Ethylhexyl) phthalate	35		0.00	45.00	125.00	30.00
			Butyl benzyl phthalate	34		0.00	50.00	125.00	35.00
			Carbazole	32		0.00	45.00	115.00	20.00
			Dibenzofuran	32		0.00	50.00	105.00	30.00
			Diethyl phthalate	34		0.00	50.00	115.00	29.00
Dimethyl phthalate	33		0.00	50.00	110.00	30.00			
Di-n-butyl phthalate	33		0.00	55.00	110.00	24.00			
Di-n-octyl phthalate	33		0.00	40.00	130.00	30.00			
Hexachlorobenzene	30		0.00	45.00	120.00	30.00			
Hexachlorobutadiene	25		0.00	40.00	115.00	25.00			
Hexachloroethane	28		0.00	35.00	110.00	29.00			
Isophorone	28		0.00	45.00	110.00	30.00			
Nitrobenzene	26		0.00	40.00	115.00	29.00			

\* 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: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

# Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

WSASS-033M-5645-SO	A0C250600011S	SO	N-Nitrosodi-n-propylamine	31		0.00	40.00	115.00	50.00	
			N-Nitrosodiphenylamine	29		0.00	50.00	115.00	68.00	
			Phenol	33		0.00	40.00	100.00	30.00	
WSASS-033M-5645-SO	A0C250600011D		1,2,4-Trichlorobenzene	41	45	0.00	45.00	110.00	30.00	
			1,2-Dichlorobenzene		49	0.00	45.00	95.00	25.00	
			1,3-Dichlorobenzene		45	0.00	40.00	100.00	30.00	
			1,4-Dichlorobenzene		52	0.00	35.00	105.00	30.00	
			2,4,5-Trichlorophenol		48	0.00	50.00	110.00	30.00	
			2,4,6-Trichlorophenol		54	0.00	45.00	110.00	29.00	
			2,4-Dichlorophenol		46	0.00	45.00	110.00	30.00	
			2,4-Dimethylphenol		68	0.00	30.00	105.00	30.00	
			2,4-Dinitrophenol		36	0.00	15.00	130.00	30.00	
			2,4-Dinitrotoluene		48	0.00	50.00	115.00	30.00	
			2,6-Dinitrotoluene		52	0.00	50.00	110.00	39.00	
			2-Chloronaphthalene		52	0.00	45.00	105.00	28.00	
			2-Chlorophenol		57	0.00	45.00	105.00	54.00	
			2-Methylnaphthalene		49	0.00	45.00	105.00	27.00	
			2-Methylphenol		58	0.00	40.00	105.00	29.00	
			2-Nitroaniline		52	0.00	45.00	120.00	39.00	
			2-Nitrophenol		54	0.00	40.00	110.00	30.00	
			3,3'-Dichlorobenzidine		0.0		0.00	10.00	130.00	56.00
			3-methylphenol/4-methylphenol		56					
			3-Nitroaniline		14		0.00	25.00	110.00	45.00
			4,6-Dinitro-2-methylphenol			35	0.00	30.00	135.00	30.00
			4-Bromophenyl phenyl ether			51	0.00	45.00	115.00	30.00
			4-Chloroaniline		0.0		0.00	10.00	95.00	30.00
			4-Chlorophenyl phenyl ether			56	0.00	45.00	110.00	29.00
			4-Nitroaniline		26		0.00	35.00	115.00	30.00
			4-Nitrophenol			71	0.00	15.00	140.00	30.00
			Benzoic acid			65	0.00	0.00	110.00	20.00
			Benzyl alcohol			62	0.00	20.00	125.00	30.00
			bis(2-Chloroethoxy)methane			49	0.00	45.00	110.00	30.00
			bis(2-Chloroethyl) ether			101	0.00	40.00	105.00	30.00
			Bis(2-chloroisopropyl) ether			57	0.00	20.00	115.00	30.00
			bis(2-Ethylhexyl) phthalate			54	0.00	45.00	125.00	30.00
			Butyl benzyl phthalate			52	0.00	50.00	125.00	35.00
	Carbazole			44	0.00	45.00	115.00	20.00		
	Dibenzofuran			47	0.00	50.00	105.00	30.00		
	Diethyl phthalate			53	0.00	50.00	115.00	29.00		
	Dimethyl phthalate			53	0.00	50.00	110.00	30.00		
	Di-n-butyl phthalate			52	0.00	55.00	110.00	24.00		
	Di-n-octyl phthalate			54	0.00	40.00	130.00	30.00		
	Hexachlorobenzene			55	0.00	45.00	120.00	30.00		
	Hexachlorobutadiene			49	0.00	40.00	115.00	25.00		
	Hexachloroethane			40	0.00	35.00	110.00	29.00		
	Isophorone			49	0.00	45.00	110.00	30.00		
	Nitrobenzene			46	0.00	40.00	115.00	29.00		
	N-Nitrosodi-n-propylamine			57	0.00	40.00	115.00	50.00		

\* 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:** 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

# Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

WSASS-033M-5645-SO A0C250600011D SO Phenol 57 0.00 40.00 100.00 30.00

Associated Samples: Parent sample only	
Client Sample ID	Lab Sample ID
WSASS-033M-5645-SO	A0C250600011

\* 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:** 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

# Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 0090040

Analysis Method : 8081A

Analysis Date : 04/15/2010

Preparation Batch : 0090040

Preparation Type : 3540C

Preparation Date : 03/31/2010

Lab Reporting Batch : A0C250600

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
WSASS-036M-5647-SO	A0C250600014S	SO	Heptachlor epoxide	54		0.00	65.00	130.00	43.00
WSASS-036M-5647-SO	A0C250600014D		Heptachlor epoxide	47		0.00	65.00	130.00	43.00

Associated Samples: Parent sample only	
Client Sample ID	Lab Sample ID
WSASS-036M-5647-SO	A0C250600014

\* 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: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

# Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

**Method Batch** : 0104295                      **Analysis Method** : 8270C                      **Analysis Date** : 04/16/2010  
**Preparation Batch** : 0104295                      **Preparation Type** : 3540C                      **Preparation Date** : 04/14/2010  
**Lab Reporting Batch** : A0C250600                      **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
CPCSD-046-5024-SDMS	A0C250600006S	SO	Hexachloroethane	23		0.00	35.00	110.00	29.00
CPCSD-046-5024-SDMS	A0C250600006D		Benzoic acid		44	0.00	0.00	110.00	20.00
			Hexachloroethane	27		0.00	35.00	110.00	29.00

Associated Samples: Parent sample only	
Client Sample ID	Lab Sample ID
CPCSD-046-5024-SD	A0C250600006

\* 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:** 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0C250600

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
CPCSB-031-5109-SO	A0C250600001	8270C	SO	2,4-Dinitrophenol	U	1100	1066.66667	ug/kg
				2-Nitroaniline	U	1100	1066.66667	ug/kg
				3-Nitroaniline	U	1100	1066.66667	ug/kg
				4,6-Dinitro-2-methylphenol	U	1100	1066.66667	ug/kg
				4-Nitroaniline	U	1100	1066.66667	ug/kg
				4-Nitrophenol	U	1100	1066.66667	ug/kg
				Benzoic acid	U	1100	1066.66667	ug/kg
				Carbazole	U	67	66.6666667	ug/kg
CPCSB-032-5113-SO	A0C250600002	8270C	SO	1,2,4-Trichlorobenzene	U	410	407.407407	ug/kg
				1,2-Dichlorobenzene	U	410	407.407407	ug/kg
				1,3-Dichlorobenzene	U	410	407.407407	ug/kg
				1,4-Dichlorobenzene	U	410	407.407407	ug/kg
				2,4,5-Trichlorophenol	U	410	407.407407	ug/kg
				2,4,6-Trichlorophenol	U	410	407.407407	ug/kg
				2,4-Dichlorophenol	U	410	407.407407	ug/kg
				2,4-Dimethylphenol	U	410	407.407407	ug/kg
				2,4-Dinitrophenol	U	990	987.654321	ug/kg
				2,4-Dinitrotoluene	U	410	407.407407	ug/kg
				2,6-Dinitrotoluene	U	410	407.407407	ug/kg
				2-Chloronaphthalene	U	410	407.407407	ug/kg
				2-Chlorophenol	U	410	407.407407	ug/kg
				2-Methylnaphthalene	U	410	407.407407	ug/kg
				2-Methylphenol	U	410	407.407407	ug/kg
				2-Nitroaniline	U	990	987.654321	ug/kg
				2-Nitrophenol	U	410	407.407407	ug/kg
				3,3'-Dichlorobenzidine	U	410	407.407407	ug/kg
				3-methylphenol/4-methylphenol	U	410	#Error	ug/kg
				3-Nitroaniline	U	990	987.654321	ug/kg
4,6-Dinitro-2-methylphenol	U	990	987.654321	ug/kg				
4-Bromophenyl phenyl ether	U	410	407.407407	ug/kg				
4-Chloro-3-methylphenol	U	410	407.407407	ug/kg				

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0C250600

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
CPCSB-032-5113-SO	A0C250600002	8270C	SO	4-Chloroaniline	U	410	407.407407	ug/kg
				4-Chlorophenyl phenyl ether	U	410	407.407407	ug/kg
				4-Nitroaniline	U	990	987.654321	ug/kg
				4-Nitrophenol	U	990	987.654321	ug/kg
				Benzoic acid	U	990	987.654321	ug/kg
				Benzyl alcohol	U	410	407.407407	ug/kg
				bis(2-Chloroethoxy)methane	U	410	407.407407	ug/kg
				bis(2-Chloroethyl) ether	U	410	407.407407	ug/kg
				Bis(2-chloroisopropyl) ether	U	410	407.407407	ug/kg
				bis(2-Ethylhexyl) phthalate	U	410	407.407407	ug/kg
				Butyl benzyl phthalate	U	410	407.407407	ug/kg
				Carbazole	U	62	61.7283951	ug/kg
				Dibenzofuran	U	410	407.407407	ug/kg
				Diethyl phthalate	U	410	407.407407	ug/kg
				Dimethyl phthalate	U	410	407.407407	ug/kg
				Di-n-butyl phthalate	U	410	407.407407	ug/kg
				Di-n-octyl phthalate	U	410	407.407407	ug/kg
				Hexachlorobenzene	U	410	407.407407	ug/kg
				Hexachlorobutadiene	U	410	407.407407	ug/kg
				HEXACHLOROCYCLOPENTADIE	U	410	#Error	ug/kg
Hexachloroethane	U	410	407.407407	ug/kg				
Isophorone	U	410	407.407407	ug/kg				
Nitrobenzene	U	410	407.407407	ug/kg				
N-Nitrosodi-n-propylamine	U	410	407.407407	ug/kg				
N-Nitrosodiphenylamine	U	410	407.407407	ug/kg				
Pentachlorophenol	U	410	407.407407	ug/kg				
Phenol	U	410	407.407407	ug/kg				
8330B				1,3,5-Trinitrobenzene	U	0.26	0.01271605	mg/kg
				1,3-Dinitrobenzene	U	0.26	0.31790123	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.26	0.31790123	mg/kg
				2,4-Dinitrotoluene	U	0.26	0.31790123	mg/kg
				2,6-Dinitrotoluene	U	0.26	0.31790123	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.26	0.31790123	mg/kg

\* 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: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0C250600

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit	
							Criteria*	Units
CPCSB-032-5113-SO	A0C250600002	8330B	SO	2-Nitrotoluene	U	0.26	0.31790123	mg/kg
				3-Nitrotoluene	U	0.26	0.31790123	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.26	0.31790123	mg/kg
				4-Nitrotoluene	U	0.52	0.63580247	mg/kg
				Nitrobenzene	U	0.26	0.31790123	mg/kg
CPCSB-032-5114-SO	A0C250600003	7471A	SO	Mercury	U	0.12	0.11627907	mg/kg
		8330B		1,3,5-Trinitrobenzene	U	0.26	0.01186047	mg/kg
		1,3-Dinitrobenzene		U	0.26	0.29651163	mg/kg	
		2,4,6-Trinitrotoluene (TNT)		U	0.26	0.29651163	mg/kg	
		2,4-Dinitrotoluene		U	0.26	0.29651163	mg/kg	
		2,6-Dinitrotoluene		U	0.26	0.29651163	mg/kg	
		2-Amino-4,6-dinitrotoluene		U	0.26	0.29651163	mg/kg	
		2-Nitrotoluene		U	0.26	0.29651163	mg/kg	
		3-Nitrotoluene		U	0.26	0.29651163	mg/kg	
		4-Amino-2,6-Dinitrotoluene		U	0.26	0.29651163	mg/kg	
Nitrobenzene	U	0.26	0.29651163	mg/kg				
CPCSB-032-5116-SO	A0C250600004	7471A	SO	Mercury	U	0.12	0.11627907	mg/kg
CPCSB-032-6073-FD	A0C250600005	8270C	SO	1,2,4-Trichlorobenzene	U	400	397.590361	ug/kg
				1,2-Dichlorobenzene	U	400	397.590361	ug/kg
				1,3-Dichlorobenzene	U	400	397.590361	ug/kg
				1,4-Dichlorobenzene	U	400	397.590361	ug/kg
				2,4,5-Trichlorophenol	U	400	397.590361	ug/kg
				2,4,6-Trichlorophenol	U	400	397.590361	ug/kg
				2,4-Dichlorophenol	U	400	397.590361	ug/kg
				2,4-Dimethylphenol	U	400	397.590361	ug/kg
				2,4-Dinitrotoluene	U	400	397.590361	ug/kg
				2,6-Dinitrotoluene	U	400	397.590361	ug/kg
				2-Chloronaphthalene	U	400	397.590361	ug/kg
				2-Chlorophenol	U	400	397.590361	ug/kg
				2-Methylnaphthalene	U	400	397.590361	ug/kg
2-Methylphenol	U	400	397.590361	ug/kg				

\* 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: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI



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: A0C250600

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
CPCSB-032-6073-FD	A0C250600005	8270C	SO	2-Nitrophenol	U	400	397.590361	ug/kg
				3,3'-Dichlorobenzidine	U	400	397.590361	ug/kg
				3-methylphenol/4-methylphenol	U	400	#Error	ug/kg
				4-Bromophenyl phenyl ether	U	400	397.590361	ug/kg
				4-Chloro-3-methylphenol	U	400	397.590361	ug/kg
				4-Chloroaniline	U	400	397.590361	ug/kg
				4-Chlorophenyl phenyl ether	U	400	397.590361	ug/kg
				Benzyl alcohol	U	400	397.590361	ug/kg
				bis(2-Chloroethoxy)methane	U	400	397.590361	ug/kg
				bis(2-Chloroethyl) ether	U	400	397.590361	ug/kg
				Bis(2-chloroisopropyl) ether	U	400	397.590361	ug/kg
				bis(2-Ethylhexyl) phthalate	U	400	397.590361	ug/kg
				Butyl benzyl phthalate	U	400	397.590361	ug/kg
				Dibenzofuran	U	400	397.590361	ug/kg
				Diethyl phthalate	U	400	397.590361	ug/kg
				Dimethyl phthalate	U	400	397.590361	ug/kg
				Di-n-butyl phthalate	U	400	397.590361	ug/kg
				Di-n-octyl phthalate	U	400	397.590361	ug/kg
				Hexachlorobenzene	U	400	397.590361	ug/kg
				Hexachlorobutadiene	U	400	397.590361	ug/kg
				HEXACHLOROCYCLOPENTADIE	U	400	#Error	ug/kg
				Hexachloroethane	U	400	397.590361	ug/kg
				Isophorone	U	400	397.590361	ug/kg
Nitrobenzene	U	400	397.590361	ug/kg				
N-Nitrosodi-n-propylamine	U	400	397.590361	ug/kg				
N-Nitrosodiphenylamine	U	400	397.590361	ug/kg				
Pentachlorophenol	U	400	397.590361	ug/kg				
Phenol	U	400	397.590361	ug/kg				
CPCSD-046-5784-SD	A0C250600007	8081A	SO	alpha-BHC	U	3.6	3.57142857	ug/kg
				alpha-Chordane	U	4.3	4.28571429	ug/kg
				Endosulfan II	U	3.6	3.57142857	ug/kg
				Endosulfan sulfate	U	4.3	4.28571429	ug/kg

\* 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: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0C250600

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units	
CPCSD-046-5784-SD	A0C250600007	8081A	SO	Endrin aldehyde	U	4.3	4.28571429	ug/kg	
				gamma-BHC (Lindane)	U	3.6	3.57142857	ug/kg	
				Heptachlor epoxide	U	3.6	3.57142857	ug/kg	
				8330B	1,3,5-Trinitrobenzene	U	0.25	0.01414286	mg/kg
				1,3-Dinitrobenzene	U	0.25	0.35357143	mg/kg	
				2,4,6-Trinitrotoluene (TNT)	U	0.25	0.35357143	mg/kg	
				2,4-Dinitrotoluene	U	0.25	0.35357143	mg/kg	
				2,6-Dinitrotoluene	U	0.25	0.35357143	mg/kg	
				2-Amino-4,6-dinitrotoluene	U	0.25	0.35357143	mg/kg	
				2-Nitrotoluene	U	0.25	0.35357143	mg/kg	
				3-Nitrotoluene	U	0.25	0.35357143	mg/kg	
				4-Amino-2,6-Dinitrotoluene	U	0.25	0.35357143	mg/kg	
				4-Nitrotoluene	U	0.50	0.70714286	mg/kg	
				Nitrobenzene	U	0.25	0.35357143	mg/kg	
CPCSD-049-5032-SD	A0C250600008	7196A	SO	Chromium, hexavalent	U	3.1	3.07692308	mg/kg	
CPCSW-046-5029-SW	A0C250600009	8330B	AQ	3-Nitrotoluene	U	0.48	0.475	ug/L	
				Hexahydro-1,3,5-Trinitro-1,3,5-Triaz	U	0.24	0.2375	ug/L	
WSASS-032-5655-SO	A0C250600019	7196A	SO	Chromium, hexavalent	U	1.1	1.05263158	mg/kg	
WSASS-036M-5647-SO	A0C250600014	8081A	SO	Aldrin	U	4.1	4.08163265	ug/kg	
				alpha-BHC	U	2.6	2.55102041	ug/kg	
				beta-BHC	U	3.6	3.57142857	ug/kg	
				delta-BHC	U	4.1	4.08163265	ug/kg	
				Endosulfan II	U	2.6	2.55102041	ug/kg	
				Endrin aldehyde	U	3.1	3.06122449	ug/kg	
				gamma-BHC (Lindane)	U	2.6	2.55102041	ug/kg	
				Heptachlor	U	3.6	3.57142857	ug/kg	
				Heptachlor epoxide	U	2.6	2.55102041	ug/kg	
				8082	Aroclor 1016	U	34	1.73469388	ug/kg
Aroclor 1221	U	34	1.73469388	ug/kg					
Aroclor 1232	U	34	1.73469388	ug/kg					

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0C250600

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units		
WSASS-036M-5647-SO	A0C250600014	8082	SO	Aroclor 1242	U	34	1.73469388	ug/kg		
				Aroclor 1248	U	34	1.73469388	ug/kg		
				Aroclor 1254	U	34	1.73469388	ug/kg		
				8270C		Aroclor 1260	U	34	1.73469388	ug/kg
					1,2,4-Trichlorobenzene	U	340	336.734694	ug/kg	
					1,2-Dichlorobenzene	U	340	336.734694	ug/kg	
					1,3-Dichlorobenzene	U	340	336.734694	ug/kg	
					1,4-Dichlorobenzene	U	340	336.734694	ug/kg	
					2,4,5-Trichlorophenol	U	340	336.734694	ug/kg	
					2,4,6-Trichlorophenol	U	340	336.734694	ug/kg	
					2,4-Dichlorophenol	U	340	336.734694	ug/kg	
					2,4-Dimethylphenol	U	340	336.734694	ug/kg	
					2,4-Dinitrophenol	U	820	816.326531	ug/kg	
					2,4-Dinitrotoluene	U	340	336.734694	ug/kg	
					2,6-Dinitrotoluene	U	340	336.734694	ug/kg	
					2-Chloronaphthalene	U	340	336.734694	ug/kg	
					2-Chlorophenol	U	340	336.734694	ug/kg	
					2-Methylphenol	U	340	336.734694	ug/kg	
					2-Nitroaniline	U	820	816.326531	ug/kg	
					2-Nitrophenol	U	340	336.734694	ug/kg	
					3,3'-Dichlorobenzidine	U	340	336.734694	ug/kg	
					3-methylphenol/4-methylphenol	U	340	#Error	ug/kg	
					3-Nitroaniline	U	820	816.326531	ug/kg	
					4,6-Dinitro-2-methylphenol	U	820	816.326531	ug/kg	
					4-Bromophenyl phenyl ether	U	340	336.734694	ug/kg	
					4-Chloro-3-methylphenol	U	340	336.734694	ug/kg	
					4-Chloroaniline	U	340	336.734694	ug/kg	
					4-Chlorophenyl phenyl ether	U	340	336.734694	ug/kg	
					4-Nitroaniline	U	820	816.326531	ug/kg	
					4-Nitrophenol	U	820	816.326531	ug/kg	
				Benzoic acid	U	820	816.326531	ug/kg		
		Benzyl alcohol	U	340	336.734694	ug/kg				
		bis(2-Chloroethoxy)methane	U	340	336.734694	ug/kg				

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0C250600

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units				
WSASS-036M-5647-SO	A0C250600014	8270C	SO	bis(2-Chloroethyl) ether	U	340	336.734694	ug/kg				
				Bis(2-chloroisopropyl) ether	U	340	336.734694	ug/kg				
				bis(2-Ethylhexyl) phthalate	U	340	336.734694	ug/kg				
				Butyl benzyl phthalate	U	340	336.734694	ug/kg				
				Dibenzofuran	U	340	336.734694	ug/kg				
				Diethyl phthalate	U	340	336.734694	ug/kg				
				Dimethyl phthalate	U	340	336.734694	ug/kg				
				Di-n-octyl phthalate	U	340	336.734694	ug/kg				
				Hexachlorobenzene	U	340	336.734694	ug/kg				
				Hexachlorobutadiene	U	340	336.734694	ug/kg				
				HEXACHLOROCYCLOPENTADIE	U	340	#Error	ug/kg				
				Hexachloroethane	U	340	336.734694	ug/kg				
				Isophorone	U	340	336.734694	ug/kg				
				Nitrobenzene	U	340	336.734694	ug/kg				
				N-Nitrosodi-n-propylamine	U	340	336.734694	ug/kg				
				N-Nitrosodiphenylamine	U	340	336.734694	ug/kg				
				Pentachlorophenol	U	340	336.734694	ug/kg				
				Phenol	U	340	336.734694	ug/kg				
						8330B		1,3,5-Trinitrobenzene	U	0.25	0.01010204	mg/kg
								1,3-Dinitrobenzene	U	0.25	0.25255102	mg/kg
2,4,6-Trinitrotoluene (TNT)	U	0.25	0.25255102					mg/kg				
2,4-Dinitrotoluene	U	0.25	0.25255102					mg/kg				
2,6-Dinitrotoluene	U	0.25	0.25255102					mg/kg				
2-Amino-4,6-dinitrotoluene	U	0.25	0.25255102					mg/kg				
2-Nitrotoluene	U	0.25	0.25255102					mg/kg				
3-Nitrotoluene	U	0.25	0.25255102					mg/kg				
4-Amino-2,6-Dinitrotoluene	U	0.25	0.25255102					mg/kg				
4-Nitrotoluene	U	0.50	0.50510204					mg/kg				
Nitrobenzene	U	0.25	0.25255102					mg/kg				
WSASS-036M-5647-SOV	A0C250600015	8260B	SO					2-Butanone (MEK)	U	29	28.5714286	ug/kg
				2-Hexanone	U	29	28.5714286	ug/kg				
				4-methyl-2-pentanone (MIBK)	U	29	28.5714286	ug/kg				

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

# 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: A0C250600

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
WSASS-036M-5647-SOV	A0C250600015	8260B	SO	Acetone	U	29	28.5714286	ug/kg

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

# QC Outlier Report: Trip Blank

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Lab Reporting Batch :  
Method/Preparation Batch :  
Client Sample ID :  
Lab Sample ID :

Lab ID:  
Analysis Date :  
Preparation Date :  
Preparation Type :

Analysis Method :

**No contamination was found.**

## Continuing Calibration (CCV) Outlier Report (Organics)

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**There are no Organic Continuing Calibrations with outliers**

## Continuing Calibration (CCAL) Outlier Report (Inorganics)

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**There are no Inorganic Continuing Calibrations with outliers**



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

Lab Report Batch: A0C250600

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units		
CPCSB-031-5109-SO	A0C250600001	6020	SO	Antimony	J	0.12	0.67	mg/kg		
				Cadmium	J	0.17	0.27	mg/kg		
				Silver	J	0.032	0.67	mg/kg		
				Sodium	J	43.3	134	mg/kg		
				Thallium	J	0.18	0.27	mg/kg		
		7471A		Mercury	J	0.021	0.13	mg/kg		
CPCSB-032-5113-SO	A0C250600002	6020		Antimony	J	0.086	0.62	mg/kg		
				Cadmium	J	0.095	0.25	mg/kg		
				Silver	J	0.022	0.62	mg/kg		
				Sodium	J	47.0	123	mg/kg		
				Thallium	J	0.18	0.25	mg/kg		
CPCSB-032-5114-SO	A0C250600003			Antimony	J	0.13	0.58	mg/kg		
				Cadmium	J	0.046	0.23	mg/kg		
				Silver	J	0.0078	0.58	mg/kg		
				Sodium	J	46.6	116	mg/kg		
				Thallium	J	0.14	0.23	mg/kg		
CPCSB-032-5116-SO	A0C250600004			Cadmium	J	0.032	0.23	mg/kg		
				Silver	J	0.024	0.58	mg/kg		
				Sodium	J	110	117	mg/kg		
				Thallium	J	0.16	0.23	mg/kg		
		8270C		2-Methylnaphthalene	J	14	380	ug/kg		
CPCSB-032-6073-FD	A0C250600005	6020		Beryllium	J G	0.58	0.60	mg/kg		
				Cadmium	J	0.069	0.24	mg/kg		
				Silver	J	0.016	0.60	mg/kg		
				Sodium	J	46.6	120	mg/kg		
				Thallium	J	0.12	0.24	mg/kg		
CPCSD-046-5024-SD	A0C250600006	353.2 Modified		Nitrocellulose	B	5.7	32.4	mg/kg		
				6020	Antimony	J	1.9	3.2	mg/kg	
				Selenium	J	2.9	3.2	mg/kg		
						Sodium	J	142	648	mg/kg
						Thallium	J	0.37	1.3	mg/kg
				7471A		Mercury	J	0.15	0.65	mg/kg
				8260B		2-Butanone (MEK)	J	33	130	ug/kg
						Acetone	J	91	130	ug/kg
						Methylene chloride	J B	25	32	ug/kg
		8330B		1,3-Dinitrobenzene	J PG	0.036	0.24	mg/kg		

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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

Lab Report Batch: A0C250600

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units	
CPCSD-046-5024-SD	A0C250600006	8330B	SO	2,4,6-Trinitrotoluene (TNT)	J	0.15	0.24	mg/kg	
				4-Amino-2,6-Dinitrotoluene	J PG	0.12	0.24	mg/kg	
				Methyl-2,4,6-Trinitrophenylnitramine (T	J PG	0.019	0.24	mg/kg	
				Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetr	J PG	0.083	0.24	mg/kg	
CPCSD-046-5784-SD	A0C250600007	6020		Antimony	J	0.19	0.71	mg/kg	
				Silver	J	0.090	0.71	mg/kg	
				Sodium	J	58.4	142	mg/kg	
				Thallium	J	0.13	0.28	mg/kg	
				8081A	delta-BHC	J	1.8	5.7	ug/kg
				8260B	2-Butanone (MEK)	J	7.2	28	ug/kg
					Acetone	J	24	28	ug/kg
CPCSW-046-5029-SW	A0C250600009	6020	AQ	Antimony	J	0.94	5.0	ug/L	
				Arsenic	J	0.78	5.0	ug/L	
				Chromium	J	0.59	5.0	ug/L	
				Cobalt	J B	0.24	5.0	ug/L	
				Copper	J	1.9	5.0	ug/L	
				Lead	J	0.39	3.0	ug/L	
				Nickel	J	1.9	10.0	ug/L	
				Selenium	J	0.24	5.0	ug/L	
				Vanadium	J	0.89	10.0	ug/L	
				8260B	Acetone	J	2.4	10	ug/L
8270C				bis(2-Ethylhexyl) phthalate	J	1.9	10	ug/L	
				Di-n-butyl phthalate	J B	1.4	10	ug/L	
				8330B	4-Amino-2,6-Dinitrotoluene	J PG	0.072	0.14	ug/L
				PBA08-QC-6019-TB	A0C250600010	8260B	Acetone	J	5.6
WSASS-031-5654-SO	A0C250600018	7196A	SO	Chromium, hexavalent	J	0.52	1.2	mg/kg	
WSASS-033M-5645-SO	A0C250600011	6020		Antimony	J	0.10	0.51	mg/kg	
				Cadmium	J	0.11	0.20	mg/kg	
				Silver	J	0.024	0.51	mg/kg	
				Sodium	J	37.7	102	mg/kg	
				Thallium	J	0.16	0.20	mg/kg	
7471A	Mercury	J	0.018	0.10	mg/kg				
WSASS-034M-5646-SO	A0C250600012	6020		Antimony	J	0.12	0.51	mg/kg	
				Cadmium	J	0.12	0.20	mg/kg	
				Silver	J	0.028	0.51	mg/kg	

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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

Lab Report Batch: A0C250600

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units	
WSASS-034M-5646-SO	A0C250600012	6020	SO	Sodium	J	37.2	102	mg/kg	
				Thallium	J	0.16	0.20	mg/kg	
				7471A	Mercury	J	0.019	0.10	mg/kg
WSASS-034M-6195-FD	A0C250600013	6020		Antimony	J	0.13	0.51	mg/kg	
				Cadmium	J	0.12	0.20	mg/kg	
				Silver	J	0.026	0.51	mg/kg	
				Sodium	J	40.4	102	mg/kg	
				Thallium	J	0.15	0.20	mg/kg	
				7471A	Mercury	J	0.023	0.10	mg/kg
WSASS-035M-5648-SO	A0C250600016	6020		Antimony	J	0.11	0.51	mg/kg	
				Cadmium	J	0.19	0.20	mg/kg	
				Silver	J	0.035	0.51	mg/kg	
				Sodium	J	44.0	102	mg/kg	
				Thallium	J	0.15	0.20	mg/kg	
				7471A	Mercury	J	0.025	0.10	mg/kg
WSASS-036M-5647-SO	A0C250600014	6020		Antimony	J	0.11	0.51	mg/kg	
				Cadmium	J	0.11	0.20	mg/kg	
				Silver	J	0.023	0.51	mg/kg	
				Sodium	J	35.4	102	mg/kg	
				Thallium	J	0.16	0.20	mg/kg	
				7471A	Mercury	J	0.036	0.10	mg/kg
				8081A	4,4'-DDE	J	0.40	1.7	ug/kg
					alpha-Chordane	J	2.1	3.1	ug/kg
					Endosulfan sulfate	J	2.6	3.1	ug/kg
	Endrin	J	0.69	1.7	ug/kg				
WSASS-036M-5647-SOV	A0C250600015	8270C		2-Methylnaphthalene	J	9.0	340	ug/kg	
				Di-n-butyl phthalate	J B	20	340	ug/kg	
				8260B	Methylene chloride	J B	4.4	7.1	ug/kg

## Method Blank Outlier Report

Lab Reporting Batch : A0C250600

Lab ID: TALCAN

Analysis Method : 6020

Analysis Date : 04/01/2010

Preparation Type : 3005A

Preparation Date : 03/26/2010

Method Blank Lab Sample ID : A0C260000016B

Preparation Batch : 0085016

<b>Cobalt</b>	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	0.062	5.0	ug/L	J	

Cobalt was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
CPCSW-046-5029-SW	A0C250600009	1	0.24	J B	ug/L

<b>Manganese</b>	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	1.9	10.0	ug/L	J	

Manganese contamination found in the method blank did not qualify any samples.

# Method Blank Outlier Report

Lab Reporting Batch : A0C250600

Lab ID: TALCAN

Analysis Method : 8270C

Analysis Date : 04/13/2010

Preparation Type : 3520C

Preparation Date : 03/26/2010

Method Blank Lab Sample ID : A0C260000040B

Preparation Batch : 0085040

Di-n-butyl phthalate	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	0.96	10	ug/L	J	Common Contaminant

Di-n-butyl phthalate was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
CPCSW-046-5029-SW	A0C250600009	1	1.4	J B	ug/L

# Method Blank Outlier Report

Lab Reporting Batch : A0C250600

Lab ID: TALCAN

Analysis Method : 8260B

Analysis Date : 03/26/2010

Preparation Type : 5030B

Preparation Date : 03/26/2010

Method Blank Lab Sample ID : A0C290000407B

Preparation Batch : 0088407

Methylene chloride	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	3.3	5.0	ug/kg	J	Common Contaminant

Methylene chloride was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
CPCSD-046-5024-SD	A0C250600006	1	25	J B	ug/kg
CPCSD-046-5784-SD	A0C250600007	1	5.6	J B	ug/kg
WSASS-036M-5647-SOVOC	A0C250600015	1	4.4	J B	ug/kg

# Method Blank Outlier Report

Lab Reporting Batch : A0C250600

Lab ID: TALCAN

Analysis Method : 6020

Analysis Date : 04/09/2010

Preparation Type : 3050B

Preparation Date : 03/31/2010

Method Blank Lab Sample ID : A0C310000026B

Preparation Batch : 0090026

Nickel	Result	Reporting Limit	Units	Lab Qual	Comments
	Method Blank Result:	0.46	1.0	mg/kg	J

Nickel contamination found in the method blank did not qualify any samples.

# Method Blank Outlier Report

Lab Reporting Batch : A0C250600

Lab ID: TALCAN

Analysis Method : 8270C

Analysis Date : 04/08/2010

Preparation Type : 3540C

Preparation Date : 04/03/2010

Method Blank Lab Sample ID : A0D030000017B

Preparation Batch : 0093017

Di-n-butyl phthalate	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	19	330	ug/kg	J	Common Contaminant

Di-n-butyl phthalate was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
WSASS-036M-5647-SO	A0C250600014	1	20	J B	ug/kg



## Surrogate Recovery Outlier Report

Lab Report Batch: A0C250600

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Dilution	Matrix	Surrogate	Percent Recovery	Criteria (percent)			Associated Target Analytes
							Lower Limit	Upper Limit	Reject Point	
CPCSD-046-5024-SD	A0C250600006	8260B	1	SO	4-Bromofluorobenzene	71	85.0	120.0	10.0	All Target
					Toluene-d8	82	85.0	115.0	10.0	All Target
CPCSD-046-5784-SD	A0C250600007	8260B	1	SO	4-Bromofluorobenzene	74	85.0	120.0	10.0	All Target
					Toluene-d8	82	85.0	115.0	10.0	All Target
CPCSW-046-5029-SW	A0C250600009	8082	1	AQ	Decachlorobiphenyl	27	40.0	135.0	10.0	All Target
WSASS-036M-5647-SOVOCS	A0C250600015	8260B	1	SO	4-Bromofluorobenzene	80	85.0	120.0	10.0	All Target

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

Lab Report Batch:

Lab ID:

Analysis Method	Matrix	Analyte Name	Field Sample			Field Sample Duplicate			RPD Dup* (%)	RPD Criteria (%)	Result Units
			Client Sample ID	Ana Type	Result	Lab Qualifier	Client Sample Duplicate ID	Ana Type			

*\*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.*

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## QC Outlier Report: Temperature (Non-qualified Outliers)

Lab Report Batch: A0C310489

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Sample Temperature ( C )	Criteria	
					Lower Limit	Upper Limit
LNWSD-083-5272-SD	A0C310489016	353.2 Modified	SO	1.8	2.0	6.0
LNWSW-084-5277-SW	A0C310489021	353.2 Modified	AQ	0.4	2.0	6.0
WSASW-040-5659-SW	A0C310489026	353.2 Modified	AQ	1.0	2.0	6.0
WSASW-040-6199-FD	A0C310489027	353.2 Modified	AQ	1.8	2.0	6.0
LNWSD-083-5272-SD	A0C310489016	8081A	SO	1.8	2.0	
LNWSW-084-5277-SW	A0C310489021	8081A	AQ	0.4	2.0	
WSASW-040-5659-SW	A0C310489026	8081A	AQ	1.0	2.0	
WSASW-040-6199-FD	A0C310489027	8081A	AQ	1.8	2.0	
LNWSD-083-5272-SD	A0C310489016	8082	SO	1.8	2.0	
LNWSW-084-5277-SW	A0C310489021	8082	AQ	0.4	2.0	
WSASW-040-5659-SW	A0C310489026	8082	AQ	1.0	2.0	
WSASW-040-6199-FD	A0C310489027	8082	AQ	1.8	2.0	
LNWSD-083-5272-SD	A0C310489016	8260B	SO	1.8	2.0	
LNWSW-084-5277-SW	A0C310489021	8260B	AQ	0.4	2.0	
WSASW-040-5659-SW	A0C310489026	8260B	AQ	1.0	2.0	
WSASW-040-6199-FD	A0C310489027	8260B	AQ	1.8	2.0	
LNWSD-083-5272-SD	A0C310489016	8270C	SO	1.8	2.0	
LNWSD-084-5273-SD	A0C310489017	8270C	SO	1.8	2.0	
LNWSD-085-5274-SD	A0C310489018	8270C	SO	1.8	2.0	
LNWSW-084-5277-SW	A0C310489021	8270C	AQ	0.4	2.0	
WSASD-040-5652-SD	A0C310489025	8270C	SO	1.8	2.0	
WSASW-040-5659-SW	A0C310489026	8270C	AQ	1.0	2.0	
WSASW-040-6199-FD	A0C310489027	8270C	AQ	1.8	2.0	
LNWSD-083-5272-SD	A0C310489016	8270C PAH	SO	1.8	2.0	
LNWSD-084-5273-SD	A0C310489017	8270C PAH	SO	1.8	2.0	
LNWSD-085-5274-SD	A0C310489018	8270C PAH	SO	1.8	2.0	
LNWSW-084-5277-SW	A0C310489021	8270C PAH	AQ	0.4	2.0	
WSASD-040-5652-SD	A0C310489025	8270C PAH	SO	1.8	2.0	
WSASW-040-5659-SW	A0C310489026	8270C PAH	AQ	1.0	2.0	

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## QC Outlier Report: Temperature (Non-qualified Outliers)

Lab Report Batch: A0C310489

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Sample Temperature ( C )	Criteria	
					Lower Limit	Upper Limit
WSASW-040-6199-FD	A0C310489027	8270C PAH	AQ	1.8	2.0	
LNWSD-083-5272-SD	A0C310489016	8330B	SO	1.8	2.0	
LNWSD-084-5273-SD	A0C310489017	8330B	SO	1.8	2.0	
LNWSD-085-5274-SD	A0C310489018	8330B	SO	1.8	2.0	
LNWSW-084-5277-SW	A0C310489021	8330B	AQ	0.4	2.0	
WSASD-040-5652-SD	A0C310489025	8330B	SO	1.8	2.0	
WSASW-040-5659-SW	A0C310489026	8330B	AQ	1.0	2.0	
WSASW-040-6199-FD	A0C310489027	8330B	AQ	1.8	2.0	
LNWSD-083-5272-SD	A0C310489016	8330M	SO	1.8	2.0	
LNWSW-084-5277-SW	A0C310489021	8330M	AQ	0.4	2.0	
WSASW-040-5659-SW	A0C310489026	8330M	AQ	1.0	2.0	
WSASW-040-6199-FD	A0C310489027	8330M	AQ	1.8	2.0	

# Temperature Outlier Report

**Lab Report Batch:**

**Lab ID:**

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Sample Temp ( C )	Temperature Criteria ( C )			Between High and Gross Exceedence			Above Gross Exceedence		
					Low	High	Gross Exceed	Detect Quals		Non-Detect Qual(s)	Detect Quals		Non-Detect Qual(s)
								Non-Biased	Biased		Non-Biased	Biased	

# Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 0090313

Analysis Method : 8270C

Analysis Date : 04/19/2010

Preparation Batch : 0090313

Preparation Type : 3540C

Preparation Date : 04/01/2010

Lab Reporting Batch : A0C310489

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
ASYSB-061-5722-SOMS	A0C310489006S	SO	3,3'-Dichlorobenzidine	2.9		0.00	10.00	130.00	56.00
			4-Nitroaniline	33		0.00	35.00	115.00	30.00
ASYSB-061-5722-SOMS	A0C310489006D		3,3'-Dichlorobenzidine	5.7	65	0.00	10.00	130.00	56.00

Associated Samples: Parent sample only	
Client Sample ID	Lab Sample ID
ASYSB-061-5722-SO	A0C310489006

\* 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

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# Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 0091028

Analysis Method : 6020

Analysis Date : 04/13/2010

Preparation Batch : 0091028

Preparation Type : 3050B

Preparation Date : 04/01/2010

Lab Reporting Batch : A0C310489

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
ASYSB-061-5722-SOMS	A0C310489006S	SO	Antimony	31		30.00	75.00	125.00	20.00
ASYSB-061-5722-SOMS	A0C310489006D		Antimony	30		30.00	75.00	125.00	20.00
			Cobalt	119		30.00	55.00	110.00	20.00
			Magnesium	139		30.00	70.00	130.00	20.00

## Associated Samples: All samples in Method Batch

Client Sample ID	Lab Sample ID
ASYSB-059-5714-SO	A0C310489001
ASYSB-059-5715-SO	A0C310489002
ASYSB-059-5717-SO	A0C310489003
ASYSB-059-6220-FD	A0C310489014
ASYSB-060-5718-SO	A0C310489004
ASYSB-060-5719-SO	A0C310489005
ASYSB-061-5722-SO	A0C310489006
ASYSB-061-5723-SO	A0C310489007
ASYSB-062-5726-SO	A0C310489008
ASYSB-062-5727-SO	A0C310489009
ASYSB-062-6218-FD	A0C310489012
ASYSB-064-5734-SO	A0C310489010
ASYSB-064-5735-SO	A0C310489011
ASYSB-064-6219-FD	A0C310489013
LL11SB-065-5576-SO	A0C310489015
LNWSD-083-5272-SD	A0C310489016
LNWSD-084-5273-SD	A0C310489017
LNWSD-085-5274-SD	A0C310489018
LNWSD-086-5275-SD	A0C310489019
WSASD-040-5652-SD	A0C310489025

\* 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: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

# Laboratory Control Sample / Laboratory Control Sample Duplicate Outlier Report

**Method Batch :** 0090315                      **Analysis Method :** 8270C                      **Analysis Date :** 04/21/2010  
**Preparation Batch :** 0090315                      **Preparation Type :** 3520C                      **Preparation Date :** 04/01/2010  
**Lab Reporting Batch :** A0C310489                      **Lab ID:** TALCAN

LCS Lab Sample ID	Matrix	Analyte Name	Reported Values		Project Limits (Percent)			
			Percent Recovery	RPD	Rejection Point	Lower Limit	Upper Limit	RPD
A0C310000315L	AQ	2,4-Dinitrophenol	52	35	10.00	15.00	140.00	34.00
		Benzoic acid	26	54	0.00	0.00	125.00	20.00

<b>Associated Samples</b>	
Client Sample ID	Lab Sample ID
LNWSW-083-5276-SW	A0C310489020
LNWSW-084-5277-SW	A0C310489021
LNWSW-085-5278-SW	A0C310489022
LNWSW-086-5279-SW	A0C310489023
WSASW-040-5659-SW	A0C310489026
WSASW-040-6199-FD	A0C310489027

Scope of Data Qualification: The outlier in the LCS qualifies that analyte in all samples with the same Preparation Batch ID as the LCS

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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: A0C310489

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
ASYSB-059-5717-SO	A0C310489003	7471A	SO	Mercury	U	0.12	0.11904762	mg/kg
ASYSB-059-6220-FD	A0C310489014	7471A	SO	Mercury	U	0.13	0.125	mg/kg
		8330B		1,3,5-Trinitrobenzene	U	0.24	0.01175	mg/kg
				1,3-Dinitrobenzene	U	0.24	0.29375	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.24	0.29375	mg/kg
				2,4-Dinitrotoluene	U	0.24	0.29375	mg/kg
				2,6-Dinitrotoluene	U	0.24	0.29375	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.24	0.29375	mg/kg
				2-Nitrotoluene	U	0.24	0.29375	mg/kg
				3-Nitrotoluene	U	0.24	0.29375	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.24	0.29375	mg/kg
				Nitrobenzene	U	0.24	0.29375	mg/kg
ASYSB-060-5718-SO	A0C310489004	6020	SO	Antimony	U	0.69	0.68493151	mg/kg
		7471A		Mercury	U	0.14	0.13698630	mg/kg
ASYSB-061-5723-SO	A0C310489007	7471A	SO	Mercury	U	0.13	0.12987013	mg/kg
		8330B		1,3,5-Trinitrobenzene	U	0.24	0.01220779	mg/kg
				1,3-Dinitrobenzene	U	0.24	0.30519481	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.24	0.30519481	mg/kg
				2,4-Dinitrotoluene	U	0.24	0.30519481	mg/kg
				2,6-Dinitrotoluene	U	0.24	0.30519481	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.24	0.30519481	mg/kg
				2-Nitrotoluene	U	0.24	0.30519481	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.24	0.30519481	mg/kg
				Nitrobenzene	U	0.24	0.30519481	mg/kg
ASYSB-062-5726-SO	A0C310489008	8081A	SO	Aldrin	U	25	24.6913580	ug/kg
				beta-BHC	U	22	21.6049383	ug/kg
				delta-BHC	U	25	24.6913580	ug/kg
				Heptachlor	U	22	21.6049383	ug/kg
				Methoxychlor	U	31	30.8641975	ug/kg
		8082		Aroclor 1016	U	41	2.09876543	ug/kg

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

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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: A0C310489

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
ASYSB-062-5726-SO	A0C310489008	8082	SO	Aroclor 1221	U	41	2.09876543	ug/kg
				Aroclor 1232	U	41	2.09876543	ug/kg
				Aroclor 1242	U	41	2.09876543	ug/kg
				Aroclor 1248	U	41	2.09876543	ug/kg
				Aroclor 1254	U	41	2.09876543	ug/kg
				Aroclor 1260	U	41	2.09876543	ug/kg
				8260B	2-Butanone (MEK)	U	25	24.6913580
	2-Hexanone	U	25	24.6913580	ug/kg			
	4-methyl-2-pentanone (MIBK)	U	25	24.6913580	ug/kg			
	Acetone	U	25	24.6913580	ug/kg			
8270C				1,2,4-Trichlorobenzene	U	410	407.407407	ug/kg
				1,2-Dichlorobenzene	U	410	407.407407	ug/kg
				1,3-Dichlorobenzene	U	410	407.407407	ug/kg
				1,4-Dichlorobenzene	U	410	407.407407	ug/kg
				2,4,5-Trichlorophenol	U	410	407.407407	ug/kg
				2,4,6-Trichlorophenol	U	410	407.407407	ug/kg
				2,4-Dichlorophenol	U	410	407.407407	ug/kg
				2,4-Dimethylphenol	U	410	407.407407	ug/kg
				2,4-Dinitrotoluene	U	410	407.407407	ug/kg
				2,6-Dinitrotoluene	U	410	407.407407	ug/kg
				2-Chloronaphthalene	U	410	407.407407	ug/kg
				2-Chlorophenol	U	410	407.407407	ug/kg
				2-Methylphenol	U	410	407.407407	ug/kg
				2-Nitrophenol	U	410	407.407407	ug/kg
				3,3'-Dichlorobenzidine	U	410	407.407407	ug/kg
				3-methylphenol/4-methylphenol	U	410	#Error	ug/kg
				4-Bromophenyl phenyl ether	U	410	407.407407	ug/kg
				4-Chloro-3-methylphenol	U	410	407.407407	ug/kg
				4-Chloroaniline	U	410	407.407407	ug/kg
				4-Chlorophenyl phenyl ether	U	410	407.407407	ug/kg
Benzyl alcohol	U	410	407.407407	ug/kg				
bis(2-Chloroethoxy)methane	U	410	407.407407	ug/kg				
bis(2-Chloroethyl) ether	U	410	407.407407	ug/kg				

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

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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: A0C310489

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units				
ASYSB-062-5726-SO	A0C310489008	8270C	SO	Bis(2-chloroisopropyl) ether	U	410	407.407407	ug/kg				
				bis(2-Ethylhexyl) phthalate	U	410	407.407407	ug/kg				
				Butyl benzyl phthalate	U	410	407.407407	ug/kg				
				Dibenzofuran	U	410	407.407407	ug/kg				
				Diethyl phthalate	U	410	407.407407	ug/kg				
				Dimethyl phthalate	U	410	407.407407	ug/kg				
				Di-n-butyl phthalate	U	410	407.407407	ug/kg				
				Di-n-octyl phthalate	U	410	407.407407	ug/kg				
				Hexachlorobenzene	U	410	407.407407	ug/kg				
				Hexachlorobutadiene	U	410	407.407407	ug/kg				
				HEXACHLOROCYCLOPENTADIE	U	410	#Error	ug/kg				
				Hexachloroethane	U	410	407.407407	ug/kg				
				Isophorone	U	410	407.407407	ug/kg				
				Nitrobenzene	U	410	407.407407	ug/kg				
				N-Nitrosodi-n-propylamine	U	410	407.407407	ug/kg				
				N-Nitrosodiphenylamine	U	410	407.407407	ug/kg				
				Pentachlorophenol	U	410	407.407407	ug/kg				
				Phenol	U	410	407.407407	ug/kg				
				8330B				1,3,5-Trinitrobenzene	U	0.24	0.0117284	mg/kg
								1,3-Dinitrobenzene	U	0.24	0.29320988	mg/kg
2,4,6-Trinitrotoluene (TNT)	U	0.24	0.29320988					mg/kg				
2,4-Dinitrotoluene	U	0.24	0.29320988					mg/kg				
2,6-Dinitrotoluene	U	0.24	0.29320988					mg/kg				
2-Amino-4,6-dinitrotoluene	U	0.24	0.29320988					mg/kg				
2-Nitrotoluene	U	0.24	0.29320988					mg/kg				
4-Amino-2,6-Dinitrotoluene	U	0.24	0.29320988					mg/kg				
4-Nitrotoluene	U	0.48	0.58641975					mg/kg				
Nitrobenzene	U	0.24	0.29320988					mg/kg				
8330M												
ASYSB-062-5727-SO	A0C310489009	353.2 Modified SO		Nitrocellulose	U	6.2	6.17283951	mg/kg				
				6020	U	0.62	0.61728395	mg/kg				
				8081A	U	25	24.6913580	ug/kg				

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0C310489

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit		
							Criteria*	Units	
ASYSB-062-5727-SO	A0C310489009	8081A	SO	beta-BHC	U	22	21.6049383	ug/kg	
				delta-BHC	U	25	24.6913580	ug/kg	
				Heptachlor	U	22	21.6049383	ug/kg	
				Methoxychlor	U	31	30.8641975	ug/kg	
				8082	Aroclor 1016	U	41	2.09876543	ug/kg
					Aroclor 1221	U	41	2.09876543	ug/kg
					Aroclor 1232	U	41	2.09876543	ug/kg
					Aroclor 1242	U	41	2.09876543	ug/kg
					Aroclor 1248	U	41	2.09876543	ug/kg
					Aroclor 1254	U	41	2.09876543	ug/kg
					Aroclor 1260	U	41	2.09876543	ug/kg
					8260B	1,1,1-Trichloroethane	U	6.2	6.17283951
				1,1,2,2-Tetrachloroethane		U	6.2	6.17283951	ug/kg
				1,1,2-Trichloroethane		U	6.2	6.17283951	ug/kg
				1,1-Dichloroethane		U	6.2	6.17283951	ug/kg
		1,1-Dichloroethene	U	6.2		6.17283951	ug/kg		
		1,2-Dibromoethane (Ethylene Dibro	U	6.2		6.17283951	ug/kg		
		1,2-Dichloroethane	U	6.2		6.17283951	ug/kg		
		1,2-Dichloroethene (total)	U	6.2		6.17283951	ug/kg		
		1,2-Dichloropropane	U	6.2		6.17283951	ug/kg		
		2-Butanone (MEK)	U	25		24.6913580	ug/kg		
		2-Hexanone	U	25		24.6913580	ug/kg		
		4-methyl-2-pentanone (MIBK)	U	25		24.6913580	ug/kg		
		Benzene	U	6.2		6.17283951	ug/kg		
		Bromochloromethane	U	6.2		6.17283951	ug/kg		
		Bromodichloromethane	U	6.2		6.17283951	ug/kg		
		Bromoform	U	6.2		6.17283951	ug/kg		
		Bromomethane (Methyl bromide)	U	6.2		6.17283951	ug/kg		
		Carbon tetrachloride	U	6.2		6.17283951	ug/kg		
		Chlorobenzene	U	6.2	6.17283951	ug/kg			
		Chlorodibromomethane	U	6.2	6.17283951	ug/kg			
		Chloroethane	U	6.2	6.17283951	ug/kg			
		Chloroform	U	6.2	6.17283951	ug/kg			

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0C310489

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units	
ASYSB-062-5727-SO	A0C310489009	8260B	SO	Chloromethane	U	6.2	6.17283951	ug/kg	
				cis-1,3-Dichloropropene	U	6.2	6.17283951	ug/kg	
				Ethylbenzene	U	6.2	6.17283951	ug/kg	
				Styrene	U	6.2	6.17283951	ug/kg	
				Tetrachloroethene	U	6.2	6.17283951	ug/kg	
				Toluene	U	6.2	6.17283951	ug/kg	
				trans-1,3-Dichloropropene	U	6.2	6.17283951	ug/kg	
				Trichloroethene	U	6.2	6.17283951	ug/kg	
				Vinyl chloride	U	6.2	6.17283951	ug/kg	
				8270C	1,2,4-Trichlorobenzene	U	410	407.407407	ug/kg
					1,2-Dichlorobenzene	U	410	407.407407	ug/kg
					1,3-Dichlorobenzene	U	410	407.407407	ug/kg
					1,4-Dichlorobenzene	U	410	407.407407	ug/kg
					2,4,5-Trichlorophenol	U	410	407.407407	ug/kg
					2,4,6-Trichlorophenol	U	410	407.407407	ug/kg
		2,4-Dichlorophenol	U		410	407.407407	ug/kg		
		2,4-Dimethylphenol	U		410	407.407407	ug/kg		
		2,4-Dinitrotoluene	U		410	407.407407	ug/kg		
		2,6-Dinitrotoluene	U		410	407.407407	ug/kg		
		2-Chloronaphthalene	U		410	407.407407	ug/kg		
		2-Chlorophenol	U		410	407.407407	ug/kg		
		2-Methylnaphthalene	U		410	407.407407	ug/kg		
		2-Methylphenol	U		410	407.407407	ug/kg		
		2-Nitrophenol	U		410	407.407407	ug/kg		
		3,3'-Dichlorobenzidine	U		410	407.407407	ug/kg		
		3-methylphenol/4-methylphenol	U		410	#Error	ug/kg		
		4-Bromophenyl phenyl ether	U		410	407.407407	ug/kg		
		4-Chloro-3-methylphenol	U	410	407.407407	ug/kg			
		4-Chloroaniline	U	410	407.407407	ug/kg			
		4-Chlorophenyl phenyl ether	U	410	407.407407	ug/kg			
		Benzyl alcohol	U	410	407.407407	ug/kg			
		bis(2-Chloroethoxy)methane	U	410	407.407407	ug/kg			
		bis(2-Chloroethyl) ether	U	410	407.407407	ug/kg			

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0C310489

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
ASYSB-062-5727-SO	A0C310489009	8270C	SO	Bis(2-chloroisopropyl) ether	U	410	407.407407	ug/kg
				bis(2-Ethylhexyl) phthalate	U	410	407.407407	ug/kg
				Butyl benzyl phthalate	U	410	407.407407	ug/kg
				Carbazole	U	62	61.7283951	ug/kg
				Dibenzofuran	U	410	407.407407	ug/kg
				Diethyl phthalate	U	410	407.407407	ug/kg
				Dimethyl phthalate	U	410	407.407407	ug/kg
				Di-n-butyl phthalate	U	410	407.407407	ug/kg
				Di-n-octyl phthalate	U	410	407.407407	ug/kg
				Hexachlorobenzene	U	410	407.407407	ug/kg
				Hexachlorobutadiene	U	410	407.407407	ug/kg
				HEXACHLOROCYCLOPENTADIE	U	410	#Error	ug/kg
				Hexachloroethane	U	410	407.407407	ug/kg
				Isophorone	U	410	407.407407	ug/kg
				Nitrobenzene	U	410	407.407407	ug/kg
				N-Nitrosodi-n-propylamine	U	410	407.407407	ug/kg
				N-Nitrosodiphenylamine	U	410	407.407407	ug/kg
				Pentachlorophenol	U	410	407.407407	ug/kg
				Phenol	U	410	407.407407	ug/kg
						8330B		1,3,5-Trinitrobenzene
1,3-Dinitrobenzene	U	0.24	0.29320988					mg/kg
2,4,6-Trinitrotoluene (TNT)	U	0.24	0.29320988					mg/kg
2,4-Dinitrotoluene	U	0.24	0.29320988					mg/kg
2,6-Dinitrotoluene	U	0.24	0.29320988					mg/kg
2-Amino-4,6-dinitrotoluene	U	0.24	0.29320988					mg/kg
2-Nitrotoluene	U	0.24	0.29320988					mg/kg
3-Nitrotoluene	U	0.24	0.29320988					mg/kg
4-Amino-2,6-Dinitrotoluene	U	0.24	0.29320988					mg/kg
4-Nitrotoluene	U	0.48	0.58641975					mg/kg
Nitrobenzene	U	0.24	0.29320988					mg/kg
ASYSB-062-6218-FD	A0C310489012	7471A	SO	Mercury	U	0.13	0.12658228	mg/kg
		8081A		4,4'-DDD	U	13	12.6582278	ug/kg

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0C310489

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit	
							Criteria*	Units
ASYSB-062-6218-FD	A0C310489012	8081A	SO	4,4'-DDE	U	11	10.7594937	ug/kg
				4,4'-DDT	U	13	12.6582278	ug/kg
				alpha-BHC	U	16	15.8227848	ug/kg
				alpha-Chordane	U	19	18.9873418	ug/kg
				Dieldrin	U	11	10.7594937	ug/kg
				Endosulfan I	U	11	10.7594937	ug/kg
				Endosulfan II	U	16	15.8227848	ug/kg
				Endosulfan sulfate	U	19	18.9873418	ug/kg
				Endrin	U	11	10.7594937	ug/kg
				Endrin aldehyde	U	19	18.9873418	ug/kg
				Endrin ketone	U	13	12.6582278	ug/kg
				gamma-BHC (Lindane)	U	16	15.8227848	ug/kg
				gamma-Chlordane	U	11	10.7594937	ug/kg
				Heptachlor epoxide	U	16	15.8227848	ug/kg
				8082				Aroclor 1016
Aroclor 1221	U	42	2.15189873					ug/kg
Aroclor 1232	U	42	2.15189873					ug/kg
Aroclor 1242	U	42	2.15189873					ug/kg
Aroclor 1248	U	42	2.15189873					ug/kg
Aroclor 1254	U	42	2.15189873					ug/kg
Aroclor 1260	U	42	2.15189873					ug/kg
8260B				Xylene (Total)	U	13	12.6582278	ug/kg
				8270C				1,2-Dichlorobenzene
1,3-Dichlorobenzene	U	420	417.721519					ug/kg
1,4-Dichlorobenzene	U	420	417.721519					ug/kg
2,4,5-Trichlorophenol	U	420	417.721519					ug/kg
2,4,6-Trichlorophenol	U	420	417.721519					ug/kg
2,4-Dichlorophenol	U	420	417.721519					ug/kg
2,4-Dimethylphenol	U	420	417.721519					ug/kg
2,4-Dinitrotoluene	U	420	417.721519					ug/kg
2,6-Dinitrotoluene	U	420	417.721519					ug/kg
2-Chloronaphthalene	U	420	417.721519					ug/kg

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0C310489

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
ASYSB-062-6218-FD	A0C310489012	8270C	SO	2-Chlorophenol	U	420	417.721519	ug/kg
				2-Methylnaphthalene	U	420	417.721519	ug/kg
				2-Methylphenol	U	420	417.721519	ug/kg
				2-Nitrophenol	U	420	417.721519	ug/kg
				3,3'-Dichlorobenzidine	U	420	417.721519	ug/kg
				3-methylphenol/4-methylphenol	U	420	#Error	ug/kg
				4-Bromophenyl phenyl ether	U	420	417.721519	ug/kg
				4-Chloro-3-methylphenol	U	420	417.721519	ug/kg
				4-Chloroaniline	U	420	417.721519	ug/kg
				4-Chlorophenyl phenyl ether	U	420	417.721519	ug/kg
				Benzyl alcohol	U	420	417.721519	ug/kg
				bis(2-Chloroethoxy)methane	U	420	417.721519	ug/kg
				bis(2-Chloroethyl) ether	U	420	417.721519	ug/kg
				Bis(2-chloroisopropyl) ether	U	420	417.721519	ug/kg
				bis(2-Ethylhexyl) phthalate	U	420	417.721519	ug/kg
				Butyl benzyl phthalate	U	420	417.721519	ug/kg
				Dibenzofuran	U	420	417.721519	ug/kg
				Diethyl phthalate	U	420	417.721519	ug/kg
				Dimethyl phthalate	U	420	417.721519	ug/kg
				Di-n-butyl phthalate	U	420	417.721519	ug/kg
				Di-n-octyl phthalate	U	420	417.721519	ug/kg
				Hexachlorobenzene	U	420	417.721519	ug/kg
				Hexachlorobutadiene	U	420	417.721519	ug/kg
				HEXACHLOROCYCLOPENTADIE	U	420	#Error	ug/kg
				Hexachloroethane	U	420	417.721519	ug/kg
				Isophorone	U	420	417.721519	ug/kg
				Nitrobenzene	U	420	417.721519	ug/kg
				N-Nitrosodi-n-propylamine	U	420	417.721519	ug/kg
N-Nitrosodiphenylamine	U	420	417.721519	ug/kg				
Pentachlorophenol	U	420	417.721519	ug/kg				
Phenol	U	420	417.721519	ug/kg				
		8330B		1,3,5-Trinitrobenzene	U	0.24	0.01202532	mg/kg
				1,3-Dinitrobenzene	U	0.24	0.30063291	mg/kg

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI



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: A0C310489

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units	
ASYSB-062-6218-FD	A0C310489012	8330B	SO	2,4,6-Trinitrotoluene (TNT)	U	0.24	0.30063291	mg/kg	
				2,4-Dinitrotoluene	U	0.24	0.30063291	mg/kg	
				2,6-Dinitrotoluene	U	0.24	0.30063291	mg/kg	
				2-Amino-4,6-dinitrotoluene	U	0.24	0.30063291	mg/kg	
				2-Nitrotoluene	U	0.24	0.30063291	mg/kg	
				3-Nitrotoluene	U	0.24	0.30063291	mg/kg	
				4-Amino-2,6-Dinitrotoluene	U	0.24	0.30063291	mg/kg	
				4-Nitrotoluene	U	0.48	0.60126582	mg/kg	
				Nitrobenzene	U	0.24	0.30063291	mg/kg	
ASYSB-064-5734-SO	A0C310489010	6020	SO	Thallium	U G	3.4	3.38983051	mg/kg	
ASYSB-064-5735-SO	A0C310489011	7471A	SO	Mercury	U	0.13	0.12987013	mg/kg	
ASYSB-064-6219-FD	A0C310489013	7471A	SO	Mercury	U	0.13	0.12658228	mg/kg	
LL11SB-065-5576-SO	A0C310489015	7471A	SO	Mercury	U	0.12	0.11627907	mg/kg	
LNWSD-083-5272-SD	A0C310489016	8081A	SO	4,4'-DDE	U	2.4	2.3943662	ug/kg	
				Dieldrin	U	2.4	2.3943662	ug/kg	
				Endosulfan I	U	2.4	2.3943662	ug/kg	
				Endrin	U	2.4	2.3943662	ug/kg	
				gamma-Chlordane	U	2.4	2.3943662	ug/kg	
				8330B	1,3,5-Trinitrobenzene	U	0.25	0.01394366	mg/kg
					1,3-Dinitrobenzene	U	0.25	0.34859155	mg/kg
		2,4,6-Trinitrotoluene (TNT)	U		0.25	0.34859155	mg/kg		
		2,4-Dinitrotoluene	U		0.25	0.34859155	mg/kg		
		2,6-Dinitrotoluene	U		0.25	0.34859155	mg/kg		
		2-Amino-4,6-dinitrotoluene	U		0.25	0.34859155	mg/kg		
		2-Nitrotoluene	U		0.25	0.34859155	mg/kg		
		3-Nitrotoluene	U		0.25	0.34859155	mg/kg		
		4-Amino-2,6-Dinitrotoluene	U		0.25	0.34859155	mg/kg		
		4-Nitrotoluene	U		0.50	0.6971831	mg/kg		
		Nitrobenzene	U	0.25	0.34859155	mg/kg			

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0C310489

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
LNWSD-084-5273-SD	A0C310489017	7471A	SO	Mercury	U	0.21	0.20833333	mg/kg
		8270C		1,2,4-Trichlorobenzene	U	690	687.5	ug/kg
				1,2-Dichlorobenzene	U	690	687.5	ug/kg
				1,3-Dichlorobenzene	U	690	687.5	ug/kg
				1,4-Dichlorobenzene	U	690	687.5	ug/kg
				2,4,5-Trichlorophenol	U	690	687.5	ug/kg
				2,4,6-Trichlorophenol	U	690	687.5	ug/kg
				2,4-Dichlorophenol	U	690	687.5	ug/kg
				2,4-Dimethylphenol	U	690	687.5	ug/kg
				2,4-Dinitrophenol	U	1700	1666.66667	ug/kg
				2,4-Dinitrotoluene	U	690	687.5	ug/kg
				2,6-Dinitrotoluene	U	690	687.5	ug/kg
				2-Chloronaphthalene	U	690	687.5	ug/kg
				2-Chlorophenol	U	690	687.5	ug/kg
				2-Methylnaphthalene	U	690	687.5	ug/kg
				2-Methylphenol	U	690	687.5	ug/kg
				2-Nitroaniline	U	1700	1666.66667	ug/kg
				2-Nitrophenol	U	690	687.5	ug/kg
				3,3'-Dichlorobenzidine	U	690	687.5	ug/kg
				3-methylphenol/4-methylphenol	U	690	#Error	ug/kg
				3-Nitroaniline	U	1700	1666.66667	ug/kg
				4,6-Dinitro-2-methylphenol	U	1700	1666.66667	ug/kg
				4-Bromophenyl phenyl ether	U	690	687.5	ug/kg
				4-Chloro-3-methylphenol	U	690	687.5	ug/kg
				4-Chloroaniline	U	690	687.5	ug/kg
				4-Chlorophenyl phenyl ether	U	690	687.5	ug/kg
				4-Nitroaniline	U	1700	1666.66667	ug/kg
				4-Nitrophenol	U	1700	1666.66667	ug/kg
				Benzoic acid	U	1700	1666.66667	ug/kg
				Benzyl alcohol	U	690	687.5	ug/kg
				bis(2-Chloroethoxy)methane	U	690	687.5	ug/kg
				bis(2-Chloroethyl) ether	U	690	687.5	ug/kg
				Bis(2-chloroisopropyl) ether	U	690	687.5	ug/kg

\* 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: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0C310489

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit		
							Criteria*	Units	
LNWSD-084-5273-SD	A0C310489017	8270C	SO	bis(2-Ethylhexyl) phthalate	U	690	687.5	ug/kg	
				Butyl benzyl phthalate	U	690	687.5	ug/kg	
				Dibenzofuran	U	690	687.5	ug/kg	
				Diethyl phthalate	U	690	687.5	ug/kg	
				Dimethyl phthalate	U	690	687.5	ug/kg	
				Di-n-butyl phthalate	U	690	687.5	ug/kg	
				Di-n-octyl phthalate	U	690	687.5	ug/kg	
				Hexachlorobenzene	U	690	687.5	ug/kg	
				Hexachlorobutadiene	U	690	687.5	ug/kg	
				HEXACHLOROCYCLOPENTADIE	U	690	#Error	ug/kg	
				Hexachloroethane	U	690	687.5	ug/kg	
				Isophorone	U	690	687.5	ug/kg	
				Nitrobenzene	U	690	687.5	ug/kg	
				N-Nitrosodi-n-propylamine	U	690	687.5	ug/kg	
				N-Nitrosodiphenylamine	U	690	687.5	ug/kg	
				Pentachlorophenol	U	690	687.5	ug/kg	
Phenol	U	690	687.5	ug/kg					
LNWSD-085-5274-SD	A0C310489018	6020	SO	Antimony	U	0.61	0.6097561	mg/kg	
		8270C		2,4-Dinitrophenol	U	980	975.609756	ug/kg	
				2-Nitroaniline	U	980	975.609756	ug/kg	
				3-Nitroaniline	U	980	975.609756	ug/kg	
				4,6-Dinitro-2-methylphenol	U	980	975.609756	ug/kg	
				4-Nitroaniline	U	980	975.609756	ug/kg	
				4-Nitrophenol	U	980	975.609756	ug/kg	
				Benzoic acid	U	980	975.609756	ug/kg	
				Carbazole	U	61	60.9756098	ug/kg	
				8330B	1,3,5-Trinitrobenzene	U	0.24	0.01146341	mg/kg
					1,3-Dinitrobenzene	U	0.24	0.28658537	mg/kg
		2,4,6-Trinitrotoluene (TNT)			U	0.24	0.28658537	mg/kg	
		2,4-Dinitrotoluene			U	0.24	0.28658537	mg/kg	
		2,6-Dinitrotoluene			U	0.24	0.28658537	mg/kg	
		2-Amino-4,6-dinitrotoluene			U	0.24	0.28658537	mg/kg	

\* 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: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0C310489

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
LNWSD-085-5274-SD	A0C310489018	8330B	SO	2-Nitrotoluene	U	0.24	0.28658537	mg/kg
				3-Nitrotoluene	U	0.24	0.28658537	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.24	0.28658537	mg/kg
				Nitrobenzene	U	0.24	0.28658537	mg/kg
LNWSD-086-5275-SD	A0C310489019	8270C	SO	1,2,4-Trichlorobenzene	U	570	568.965517	ug/kg
				1,2-Dichlorobenzene	U	570	568.965517	ug/kg
				1,3-Dichlorobenzene	U	570	568.965517	ug/kg
				1,4-Dichlorobenzene	U	570	568.965517	ug/kg
				2,4,5-Trichlorophenol	U	570	568.965517	ug/kg
				2,4,6-Trichlorophenol	U	570	568.965517	ug/kg
				2,4-Dichlorophenol	U	570	568.965517	ug/kg
				2,4-Dimethylphenol	U	570	568.965517	ug/kg
				2,4-Dinitrophenol	U	1400	1379.31034	ug/kg
				2,4-Dinitrotoluene	U	570	568.965517	ug/kg
				2,6-Dinitrotoluene	U	570	568.965517	ug/kg
				2-Chloronaphthalene	U	570	568.965517	ug/kg
				2-Chlorophenol	U	570	568.965517	ug/kg
				2-Methylnaphthalene	U	570	568.965517	ug/kg
				2-Methylphenol	U	570	568.965517	ug/kg
				2-Nitroaniline	U	1400	1379.31034	ug/kg
				2-Nitrophenol	U	570	568.965517	ug/kg
				3,3'-Dichlorobenzidine	U	570	568.965517	ug/kg
				3-methylphenol/4-methylphenol	U	570	#Error	ug/kg
				3-Nitroaniline	U	1400	1379.31034	ug/kg
				4,6-Dinitro-2-methylphenol	U	1400	1379.31034	ug/kg
4-Bromophenyl phenyl ether	U	570	568.965517	ug/kg				
4-Chloro-3-methylphenol	U	570	568.965517	ug/kg				
4-Chloroaniline	U	570	568.965517	ug/kg				
4-Chlorophenyl phenyl ether	U	570	568.965517	ug/kg				
4-Nitroaniline	U	1400	1379.31034	ug/kg				
4-Nitrophenol	U	1400	1379.31034	ug/kg				
Benzoic acid	U	1400	1379.31034	ug/kg				

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0C310489

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit	
							Criteria*	Units
LNWSD-086-5275-SD	A0C310489019	8270C	SO	Benzyl alcohol	U	570	568.965517	ug/kg
				bis(2-Chloroethoxy)methane	U	570	568.965517	ug/kg
				bis(2-Chloroethyl) ether	U	570	568.965517	ug/kg
				Bis(2-chloroisopropyl) ether	U	570	568.965517	ug/kg
				bis(2-Ethylhexyl) phthalate	U	570	568.965517	ug/kg
				Butyl benzyl phthalate	U	570	568.965517	ug/kg
				Carbazole	U	87	86.2068966	ug/kg
				Dibenzofuran	U	570	568.965517	ug/kg
				Diethyl phthalate	U	570	568.965517	ug/kg
				Dimethyl phthalate	U	570	568.965517	ug/kg
				Di-n-butyl phthalate	U	570	568.965517	ug/kg
				Di-n-octyl phthalate	U	570	568.965517	ug/kg
				Hexachlorobenzene	U	570	568.965517	ug/kg
				Hexachlorobutadiene	U	570	568.965517	ug/kg
				HEXACHLOROCYCLOPENTADIE	U	570	#Error	ug/kg
				Hexachloroethane	U	570	568.965517	ug/kg
				Isophorone	U	570	568.965517	ug/kg
				Nitrobenzene	U	570	568.965517	ug/kg
				N-Nitrosodi-n-propylamine	U	570	568.965517	ug/kg
				N-Nitrosodiphenylamine	U	570	568.965517	ug/kg
Pentachlorophenol	U	570	568.965517	ug/kg				
Phenol	U	570	568.965517	ug/kg				
LNWSW-083-5276-SW	A0C310489020	8330B	AQ	1,3-Dinitrobenzene	U	0.15	0.1485	ug/L
				2,4,6-Trinitrotoluene (TNT)	U	0.15	0.1485	ug/L
				2,4-Dinitrotoluene	U	0.15	0.1485	ug/L
				2,6-Dinitrotoluene	U	0.15	0.1485	ug/L
				2-Amino-4,6-dinitrotoluene	U	0.30	0.297	ug/L
				2-Nitrotoluene	U	0.15	0.1485	ug/L
				3-Nitrotoluene	U	0.50	0.495	ug/L
				4-Amino-2,6-Dinitrotoluene	U	0.15	0.1485	ug/L
				Hexahydro-1,3,5-Trinitro-1,3,5-Triaz	U	0.25	0.2475	ug/L
				Methyl-2,4,6-TrinitrophenylNitramin	U	0.15	0.1485	ug/L

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0C310489

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria* Units
LNWSW-083-5276-SW	A0C310489020	8330B	AQ	Nitrobenzene	U	0.15	0.1485 ug/L
				Octahydro-1,3,5,7-tetranitro-1,3,5,7	U	0.15	0.1485 ug/L
LNWSW-084-5277-SW	A0C310489021	8330B	AQ	1,3-Dinitrobenzene	U	0.15	0.1485 ug/L
				2,4,6-Trinitrotoluene (TNT)	U	0.15	0.1485 ug/L
				2,4-Dinitrotoluene	U	0.15	0.1485 ug/L
				2,6-Dinitrotoluene	U	0.15	0.1485 ug/L
				2-Amino-4,6-dinitrotoluene	U	0.30	0.297 ug/L
				2-Nitrotoluene	U	0.15	0.1485 ug/L
				3-Nitrotoluene	U	0.50	0.495 ug/L
				4-Amino-2,6-Dinitrotoluene	U	0.15	0.1485 ug/L
				Hexahydro-1,3,5-Trinitro-1,3,5-Triaz	U	0.25	0.2475 ug/L
				Methyl-2,4,6-Trinitrophenylnitramin	U	0.15	0.1485 ug/L
				Nitrobenzene	U	0.15	0.1485 ug/L
				Octahydro-1,3,5,7-tetranitro-1,3,5,7	U	0.15	0.1485 ug/L
LNWSW-085-5278-SW	A0C310489022	8330B	AQ	1,3,5-Trinitrobenzene	U	0.11	0.106 ug/L
				1,3-Dinitrobenzene	U	0.16	0.159 ug/L
				2,4,6-Trinitrotoluene (TNT)	U	0.16	0.159 ug/L
				2,4-Dinitrotoluene	U	0.16	0.159 ug/L
				2,6-Dinitrotoluene	U	0.16	0.159 ug/L
				2-Amino-4,6-dinitrotoluene	U	0.32	0.318 ug/L
				2-Nitrotoluene	U	0.16	0.159 ug/L
				4-Amino-2,6-Dinitrotoluene	U	0.16	0.159 ug/L
				4-Nitrotoluene	U	1.1	1.06 ug/L
				Methyl-2,4,6-Trinitrophenylnitramin	U	0.16	0.159 ug/L
				Nitrobenzene	U	0.16	0.159 ug/L
				Nitroglycerin	U	1.1	1.06 ug/L
				Octahydro-1,3,5,7-tetranitro-1,3,5,7	U	0.16	0.159 ug/L
PETN	U	1.1	1.06 ug/L				
LNWSW-086-5279-SW	A0C310489023	8330B	AQ	1,3-Dinitrobenzene	U	0.16	0.1575 ug/L
				2,4,6-Trinitrotoluene (TNT)	U	0.16	0.1575 ug/L
				2,4-Dinitrotoluene	U	0.16	0.1575 ug/L

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0C310489

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit	
							Criteria*	Units
LNWSW-086-5279-SW	A0C310489023	8330B	AQ	2,6-Dinitrotoluene	U	0.16	0.1575	ug/L
				2-Amino-4,6-dinitrotoluene	U	0.32	0.315	ug/L
				2-Nitrotoluene	U	0.16	0.1575	ug/L
				4-Amino-2,6-Dinitrotoluene	U	0.16	0.1575	ug/L
				Methyl-2,4,6-Trinitrophenylnitramin	U	0.16	0.1575	ug/L
				Nitrobenzene	U	0.16	0.1575	ug/L
				Octahydro-1,3,5,7-tetranitro-1,3,5,7	U	0.16	0.1575	ug/L
WSASD-040-5652-SD	A0C310489025	6020	SO	Antimony	U	0.58	0.57471264	mg/kg
				Thallium	U	0.23	0.22988506	mg/kg
		7471A		Mercury	U	0.12	0.11494253	mg/kg
		8270C		1,2,4-Trichlorobenzene	U	380	379.310345	ug/kg
				1,2-Dichlorobenzene	U	380	379.310345	ug/kg
				1,3-Dichlorobenzene	U	380	379.310345	ug/kg
				1,4-Dichlorobenzene	U	380	379.310345	ug/kg
				2,4,5-Trichlorophenol	U	380	379.310345	ug/kg
				2,4,6-Trichlorophenol	U	380	379.310345	ug/kg
				2,4-Dichlorophenol	U	380	379.310345	ug/kg
				2,4-Dimethylphenol	U	380	379.310345	ug/kg
				2,4-Dinitrophenol	U	920	919.54023	ug/kg
				2,4-Dinitrotoluene	U	380	379.310345	ug/kg
				2,6-Dinitrotoluene	U	380	379.310345	ug/kg
				2-Chloronaphthalene	U	380	379.310345	ug/kg
				2-Chlorophenol	U	380	379.310345	ug/kg
				2-Methylnaphthalene	U	380	379.310345	ug/kg
				2-Methylphenol	U	380	379.310345	ug/kg
				2-Nitroaniline	U	920	919.54023	ug/kg
				2-Nitrophenol	U	380	379.310345	ug/kg
				3,3'-Dichlorobenzidine	U	380	379.310345	ug/kg
	3-methylphenol/4-methylphenol		U	380	#Error	ug/kg		
	3-Nitroaniline	U	920	919.54023	ug/kg			
	4,6-Dinitro-2-methylphenol	U	920	919.54023	ug/kg			
	4-Bromophenyl phenyl ether	U	380	379.310345	ug/kg			

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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: A0C310489

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit	
							Criteria*	Units
WSASD-040-5652-SD	A0C310489025	8270C	SO	4-Chloro-3-methylphenol	U	380	379.310345	ug/kg
				4-Chloroaniline	U	380	379.310345	ug/kg
				4-Chlorophenyl phenyl ether	U	380	379.310345	ug/kg
				4-Nitroaniline	U	920	919.54023	ug/kg
				4-Nitrophenol	U	920	919.54023	ug/kg
				Benzoic acid	U	920	919.54023	ug/kg
				Benzyl alcohol	U	380	379.310345	ug/kg
				bis(2-Chloroethoxy)methane	U	380	379.310345	ug/kg
				bis(2-Chloroethyl) ether	U	380	379.310345	ug/kg
				Bis(2-chloroisopropyl) ether	U	380	379.310345	ug/kg
				Butyl benzyl phthalate	U	380	379.310345	ug/kg
				Carbazole	U	58	57.4712644	ug/kg
				Dibenzofuran	U	380	379.310345	ug/kg
				Diethyl phthalate	U	380	379.310345	ug/kg
				Dimethyl phthalate	U	380	379.310345	ug/kg
				Di-n-butyl phthalate	U	380	379.310345	ug/kg
				Di-n-octyl phthalate	U	380	379.310345	ug/kg
				Hexachlorobenzene	U	380	379.310345	ug/kg
				Hexachlorobutadiene	U	380	379.310345	ug/kg
				HEXACHLOROCYCLOPENTADIE	U	380	#Error	ug/kg
Hexachloroethane	U	380	379.310345	ug/kg				
Isophorone	U	380	379.310345	ug/kg				
Nitrobenzene	U	380	379.310345	ug/kg				
N-Nitrosodi-n-propylamine	U	380	379.310345	ug/kg				
N-Nitrosodiphenylamine	U	380	379.310345	ug/kg				
Pentachlorophenol	U	380	379.310345	ug/kg				
Phenol	U	380	379.310345	ug/kg				
WSASW-040-5659-SW	A0C310489026	8330B	AQ	1,3-Dinitrobenzene	U	0.15	0.1485	ug/L
				2,4,6-Trinitrotoluene (TNT)	U	0.15	0.1485	ug/L
				2,4-Dinitrotoluene	U	0.15	0.1485	ug/L
				2,6-Dinitrotoluene	U	0.15	0.1485	ug/L
				2-Amino-4,6-dinitrotoluene	U	0.30	0.297	ug/L

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI



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: A0C310489

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria* Units
WSASW-040-5659-SW	A0C310489026	8330B	AQ	2-Nitrotoluene	U	0.15	0.1485 ug/L
				3-Nitrotoluene	U	0.50	0.495 ug/L
				4-Amino-2,6-Dinitrotoluene	U	0.15	0.1485 ug/L
				Hexahydro-1,3,5-Trinitro-1,3,5-Triaz	U	0.25	0.2475 ug/L
				Methyl-2,4,6-Trinitrophenylnitramin	U	0.15	0.1485 ug/L
				Nitrobenzene	U	0.15	0.1485 ug/L
				Octahydro-1,3,5,7-tetranitro-1,3,5,7	U	0.15	0.1485 ug/L
WSASW-040-6199-FD	A0C310489027	8330B	AQ	1,3-Dinitrobenzene	U	0.15	0.147 ug/L
				2,4,6-Trinitrotoluene (TNT)	U	0.15	0.147 ug/L
				2,4-Dinitrotoluene	U	0.15	0.147 ug/L
				2,6-Dinitrotoluene	U	0.15	0.147 ug/L
				2-Nitrotoluene	U	0.15	0.147 ug/L
				4-Amino-2,6-Dinitrotoluene	U	0.15	0.147 ug/L
				Methyl-2,4,6-Trinitrophenylnitramin	U	0.15	0.147 ug/L
				Nitrobenzene	U	0.15	0.147 ug/L
Octahydro-1,3,5,7-tetranitro-1,3,5,7	U	0.15	0.147 ug/L				

\* Reporting Limit Criteria = (Dilution Factor) \* (Reporting Limit from the reference project library) \* (Percent Moisture Correction)

Percent Moisture Correction:

Soil:  $100 / (100 - \text{Percent Moisture})$

Water: 1

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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

Lab Report Batch: A0C310489

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
ASYSB-059-5714-SO	A0C310489001	6020	SO	Antimony	J	0.27	0.61	mg/kg
				Silver	J	0.043	0.61	mg/kg
		8330B		PETN	J PG	0.065	0.50	mg/kg
ASYSB-059-5715-SO	A0C310489002	6020		Cadmium	J	0.086	0.25	mg/kg
				Silver	J	0.011	0.62	mg/kg
				Sodium	J	51.5	124	mg/kg
				Thallium	J	0.17	0.25	mg/kg
ASYSB-059-5717-SO	A0C310489003			Antimony	J	0.081	0.60	mg/kg
				Cadmium	J	0.078	0.24	mg/kg
				Silver	J	0.025	0.60	mg/kg
				Thallium	J	0.15	0.24	mg/kg
ASYSB-059-6220-FD	A0C310489014			Antimony	J	0.10	0.63	mg/kg
				Cadmium	J	0.077	0.25	mg/kg
				Silver	J	0.031	0.63	mg/kg
				Sodium	J	86.2	125	mg/kg
				Thallium	J	0.19	0.25	mg/kg
ASYSB-060-5718-SO	A0C310489004			Cadmium	J	0.039	0.28	mg/kg
				Silver	J	0.020	0.69	mg/kg
				Sodium	J	47.4	138	mg/kg
				Thallium	J	0.15	0.28	mg/kg
				8330B		3-Nitrotoluene	J	0.17
ASYSB-060-5719-SO	A0C310489005	6020		Antimony	J	0.088	0.61	mg/kg
				Cadmium	J	0.042	0.24	mg/kg
				Silver	J	0.020	0.61	mg/kg
				Sodium	J	84.8	121	mg/kg
				Thallium	J	0.18	0.24	mg/kg
ASYSB-061-5722-SO	A0C310489006			Antimony	J	0.12	0.70	mg/kg
				Cadmium	J	0.16	0.28	mg/kg
				Silver	J	0.049	0.70	mg/kg
				Sodium	J	39.5	140	mg/kg
				Thallium	J	0.20	0.28	mg/kg
ASYSB-061-5723-SO	A0C310489007	6020		7471A	J	0.030	0.14	mg/kg
				Antimony	J	0.12	0.65	mg/kg
				Cadmium	J	0.088	0.26	mg/kg
				Silver	J	0.031	0.65	mg/kg

Project Number and Name: 172819.00.09456.00.9200.02.200 - RVAAP PBA2008 17 AOCs RI

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

Lab Report Batch: A0C310489

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
ASYSB-061-5723-SO	A0C310489007	6020	SO	Sodium	J	55.2	130	mg/kg
				Thallium	J	0.25	0.26	mg/kg
				8330B	3-Nitrotoluene	J	0.021	0.24
ASYSB-062-5726-SO	A0C310489008	353.2 Modified		Nitrocellulose	B	1.6	6.1	mg/kg
				6020	Antimony	J	0.14	0.61
		6020	Cadmium	J	0.17	0.25	mg/kg	
			Silver	J	0.058	0.61	mg/kg	
			Sodium	J	72.4	123	mg/kg	
		7471A	Thallium	J	0.16	0.25	mg/kg	
			Mercury	J	0.034	0.12	mg/kg	
		8260B	Carbon disulfide	J	0.87	6.1	ug/kg	
			Methylene chloride	J B	3.4	6.1	ug/kg	
			Toluene	J	0.65	6.1	ug/kg	
8270C	2-Methylnaphthalene		J	50	410	ug/kg		
8330B	3-Nitrotoluene		J PG	0.017	0.24	mg/kg		
ASYSB-062-5727-SO	A0C310489009	6020		Cadmium	J	0.026	0.25	mg/kg
				Silver	J	0.025	0.62	mg/kg
				Sodium	J	33.8	123	mg/kg
		8260B	Thallium	J	0.15	0.25	mg/kg	
			Carbon disulfide	J	1.1	6.2	ug/kg	
			Methylene chloride	J B	3.5	6.2	ug/kg	
ASYSB-062-6218-FD	A0C310489012	6020		Antimony	J	0.12	0.63	mg/kg
				Cadmium	J	0.032	0.25	mg/kg
				Silver	J	0.027	0.63	mg/kg
		8260B	Sodium	J	44.2	126	mg/kg	
			Thallium	J	0.18	0.25	mg/kg	
			Carbon disulfide	J	1.5	6.3	ug/kg	
Methylene chloride	J B	3.3	6.3	ug/kg				
	ASYSB-064-5734-SO	A0C310489010	7471A	Mercury	J	0.12	0.17	mg/kg
ASYSB-064-5735-SO	A0C310489011	6020		Antimony	J	0.085	0.65	mg/kg
				Cadmium	J	0.028	0.26	mg/kg
				Silver	J	0.035	0.65	mg/kg
				Sodium	J	83.1	129	mg/kg
				Thallium	J	0.22	0.26	mg/kg
ASYSB-064-6219-FD	A0C310489013			Antimony	J	0.10	0.64	mg/kg
				Cadmium	J	0.059	0.25	mg/kg

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

Lab Report Batch: A0C310489

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
ASYSB-064-6219-FD	A0C310489013	6020	SO	Silver	J	0.046	0.64	mg/kg
				Thallium	J	0.21	0.25	mg/kg
LL11SB-065-5576-SO	A0C310489015			Antimony	J	0.078	0.58	mg/kg
				Cadmium	J	0.039	0.23	mg/kg
				Silver	J	0.021	0.58	mg/kg
				Sodium	J	52.5	116	mg/kg
				Thallium	J	0.11	0.23	mg/kg
LNWSD-083-5272-SD	A0C310489016	6020		Antimony	J	0.090	0.70	mg/kg
				Silver	J	0.038	0.70	mg/kg
				Sodium	J	45.6	140	mg/kg
				Thallium	J	0.16	0.28	mg/kg
		8260B		2-Butanone (MEK)	J	5.4	28	ug/kg
				Acetone	J B	23	28	ug/kg
				Methylene chloride	J B	2.7	7.0	ug/kg
		8270C		bis(2-Ethylhexyl) phthalate	J	420	460	ug/kg
LNWSD-084-5273-SD	A0C310489017	6020		Antimony	J	0.24	1.0	mg/kg
				Silver	J	0.041	1.0	mg/kg
				Sodium	J	54.4	208	mg/kg
				Thallium	J	0.19	0.42	mg/kg
LNWSD-085-5274-SD	A0C310489018	6020		Cadmium	J	0.11	0.25	mg/kg
				Silver	J	0.018	0.61	mg/kg
				Sodium	J	48.2	123	mg/kg
				Thallium	J	0.096	0.25	mg/kg
		8270C		2-Methylnaphthalene	J	150	400	ug/kg
LNWSD-086-5275-SD	A0C310489019	6020		Antimony	J	0.20	0.87	mg/kg
				Silver	J	0.040	0.87	mg/kg
				Sodium	J	45.7	173	mg/kg
				Thallium	J	0.19	0.35	mg/kg
		7471A		Mercury	J	0.047	0.17	mg/kg
		8330B		1,3,5-Trinitrobenzene	J PG	0.023	0.25	mg/kg
LNWSW-083-5276-SW	A0C310489020	6020	AQ	Arsenic	J	0.81	5.0	ug/L
				Cobalt	J	0.19	5.0	ug/L
				Lead	J	0.42	3.0	ug/L
				Nickel	J	1.2	10.0	ug/L
				Vanadium	J	0.86	10.0	ug/L
		8260B		Acetone	J	2.7	10	ug/L

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

Lab Report Batch: A0C310489

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
LNWSW-083-5276-SW	A0C310489020	8270C	AQ	bis(2-Ethylhexyl) phthalate	J	0.90	10	ug/L
LNWSW-084-5277-SW	A0C310489021	6020		Antimony	J	0.23	5.0	ug/L
				Arsenic	J	0.91	5.0	ug/L
				Cadmium	J	0.043	2.0	ug/L
				Chromium	J	0.67	5.0	ug/L
				Cobalt	J	0.23	5.0	ug/L
				Copper	J	1.5	5.0	ug/L
				Lead	J	0.52	3.0	ug/L
				Nickel	J	1.1	10.0	ug/L
				Silver	J	0.028	5.0	ug/L
				Thallium	J	0.38	2.0	ug/L
				Vanadium	J	0.93	10.0	ug/L
		8260B		Acetone	J	1.6	10	ug/L
LNWSW-085-5278-SW	A0C310489022	6020		Arsenic	J	1.0	5.0	ug/L
				Chromium	J	3.1	5.0	ug/L
				Cobalt	J	0.25	5.0	ug/L
				Copper	J	1.4	5.0	ug/L
				Lead	J	0.59	3.0	ug/L
				Nickel	J	2.0	10.0	ug/L
				Vanadium	J	1.2	10.0	ug/L
		8260B		Acetone	J	1.7	10	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J	5.0	10	ug/L
LNWSW-086-5279-SW	A0C310489023	353.2 Modified		Nitrocellulose	B	0.13	0.50	mg/L
		6020		Arsenic	J	1.9	5.0	ug/L
				Cadmium	J	0.057	2.0	ug/L
				Chromium	J	0.77	5.0	ug/L
				Cobalt	J	1.3	5.0	ug/L
				Copper	J	1.4	5.0	ug/L
				Lead	J	1.0	3.0	ug/L
				Nickel	J	1.1	10.0	ug/L
				Selenium	J	0.20	5.0	ug/L
				Vanadium	J	1.2	10.0	ug/L
		8260B		Acetone	J	2.1	10	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J	4.8	10	ug/L
WSASD-040-5652-SD	A0C310489025	6020	SO	Cadmium	J	0.097	0.23	mg/kg
				Selenium	J	0.51	0.58	mg/kg

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

Lab Report Batch: A0C310489

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
WSASD-040-5652-SD	A0C310489025	6020	SO	Silver	J	0.0030	0.58	mg/kg
				Sodium	J	26.0	115	mg/kg
				8270C	bis(2-Ethylhexyl) phthalate	J	34	380
WSASW-040-5659-SW	A0C310489026	6020	AQ	Arsenic	J	0.78	5.0	ug/L
				Cobalt	J	0.12	5.0	ug/L
				Lead	J	0.27	3.0	ug/L
				Nickel	J	0.90	10.0	ug/L
				Vanadium	J	0.66	10.0	ug/L
				8260B	Acetone	J	2.3	10
WSASW-040-6199-FD	A0C310489027	6020		Arsenic	J	0.55	5.0	ug/L
				Cobalt	J	0.12	5.0	ug/L
				Lead	J	0.28	3.0	ug/L
				Nickel	J	0.98	10.0	ug/L
				Vanadium	J	0.73	10.0	ug/L
				8260B	Acetone	J	2.7	10
	8270C	bis(2-Ethylhexyl) phthalate	J	2.0	10	ug/L		

## Method Blank Outlier Report

Lab Reporting Batch : A0C310489

Lab ID: TALCAN

Analysis Method : 6020

Analysis Date : 04/13/2010

Preparation Type : 3050B

Preparation Date : 04/01/2010

Method Blank Lab Sample ID : A0D010000028B

Preparation Batch : 0091028

Potassium	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	4.2	100	mg/kg	J	

Potassium contamination found in the method blank did not qualify any samples.

# Method Blank Outlier Report

Lab Reporting Batch : A0C310489

Lab ID: TALCAN

Analysis Method : 8330B

Analysis Date : 04/16/2010

Preparation Type : 3535

Preparation Date : 04/02/2010

Method Blank Lab Sample ID : G0D020000105B

Preparation Batch : 0092105

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 contamination found in the method blank did not qualify any samples.



# Method Blank Outlier Report

Lab Reporting Batch : A0C310489

Lab ID: TALCAN

Analysis Method : 8260B

Analysis Date : 04/01/2010

Preparation Type : 5030B

Preparation Date : 04/01/2010

Method Blank Lab Sample ID : A0D020000132B

Preparation Batch : 0092132

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	8.7	20	ug/kg	J	Common Contaminant

Acetone was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
ASYSB-062-5727-SO	A0C310489009	1	30	B	ug/kg
ASYSB-062-6218-FD	A0C310489012	1	26	B	ug/kg
LNWSD-083-5272-SD	A0C310489016	1	23	J B	ug/kg

Methylene chloride	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	3.3	5.0	ug/kg	J	Common Contaminant

Methylene chloride was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
ASYSB-062-5726-SO	A0C310489008	1	3.4	J B	ug/kg
ASYSB-062-5727-SO	A0C310489009	1	3.5	J B	ug/kg
ASYSB-062-6218-FD	A0C310489012	1	3.3	J B	ug/kg
LNWSD-083-5272-SD	A0C310489016	1	2.7	J B	ug/kg

## Surrogate Recovery Outlier Report

Lab Report Batch: A0C310489

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Dilution	Matrix	Surrogate	Percent Recovery	Criteria (percent)			Associated Target Analytes
							Lower Limit	Upper Limit	Reject Point	
LNWSW-083-5276-SW	A0C310489020	8082	1	AQ	Decachlorobiphenyl	34	40.0	135.0	10.0	All Target
LNWSW-084-5277-SW	A0C310489021	8081A	1	AQ	Decachlorobiphenyl	21	30.0	135.0	10.0	All Target
		8082			Decachlorobiphenyl	20	40.0	135.0	10.0	All Target
LNWSW-086-5279-SW	A0C310489023	8082	1	AQ	Decachlorobiphenyl	27	40.0	135.0	10.0	All Target
		8270C			2-Fluorophenol	1.7	20.0	110.0	10.0	Acid
WSASW-040-5659-SW	A0C310489026	8082	1	AQ	Decachlorobiphenyl	29	40.0	135.0	10.0	All Target
WSASW-040-6199-FD	A0C310489027	8081A	1	AQ	Decachlorobiphenyl	24	30.0	135.0	10.0	All Target
		8082			Decachlorobiphenyl	22	40.0	135.0	10.0	All Target

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

Lab Report Batch:

Lab ID:

Analysis Method	Matrix	Analyte Name	Field Sample			Field Sample Duplicate			RPD Dup* (%)	RPD Criteria (%)	Result Units
			Client Sample ID	Ana Type	Result	Lab Qualifier	Client Sample Duplicate ID	Ana Type			

*\*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.*

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