

APPENDIX C

Data Quality Control Summary Report

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TABLE OF CONTENTS

LIST OF TABLES	ii
ACRONYMS AND ABBREVIATIONS.....	iii

C.0 PROJECT QUALITY ASSURANCE SUMMARY	1
C.1 PURPOSE OF THIS REPORT	1
C.2 QUALITY ASSURANCE PROGRAM	2
C.2.1 Monthly Progress Reports	2
C.2.2 Daily Activity Logs	2
C.2.3 Laboratory “Definitive” Level Data Reporting	2
C.3 DATA VERIFICATION	3
C.3.1 Field Data Verification	3
C.3.2 Laboratory Data Verification.....	3
C.3.3 Definitions of Data Qualifiers (Flags)	5
C.3.4 Data Acceptability	5
C.4 DATA QUALITY EVALUATION	41
C.4.1 Metals Analysis	41
C.4.1.1 Sediment and Soil	41
C.4.1.2 Surface Water	41
C.4.2 Volatile Organic Analysis	42
C.4.2.1 Sediment and Soil	42
C.4.2.2 Surface Water	42
C.4.3 Semi-volatile Organic Analysis.....	42
C.4.3.1 Sediment and Soil	42
C.4.3.2 Surface Water	43
C.4.4 Pesticide Analyses	43
C.4.4.1 Sediment and Soil	43
C.4.4.2 Surface Water	44
C.4.5 Polychlorinated Biphenyl Analyses.....	44
C.4.5.1 Sediment and Soil	44
C.4.5.2 Surface Water	44
C.4.6 Explosives and Nitroglycerin Analysis	45
C.4.6.1 Sediment and Soil	45
C.4.6.2 Surface Water	45
C.4.7 Nitroguanidine, Nitrocellulose, and Hexavalent Chromium Analyses.....	45
C.4.7.1 Sediment and Soil	45
C.4.7.2 Surface Water	45
C.4.8 Precision	46
C.4.9 Sensitivity	46
C.4.10 Representativeness and Comparability	52
C.4.11 Completeness.....	52

C.5	DATA QUALITY ASSESSMENT SUMMARY	52
C.6	AUGUST 2012 SAMPLING.....	53
C.7	REFERENCES	58

LIST OF TABLES

Table C-1.	Number of Samples Taken at Load Line 11.....	6
Table C-2.	Identification of Regular and QC Samples Taken at Load Line 11	7
Table C-3.	Results Rejected in Validation for Samples from Load Line 11	9
Table C-4.	Summary of Qualified Results for Samples from Load Line 11	10
Table C-5.	Detailed Listing of Qualified Results for Samples from Load Line 11.....	12
Table C-6.	Results for Analytes Detected in Field Blanks or Equipment Rinsate Samples.....	39
Table C-7.	Field Duplicate Pair Comparisons for Analytes Detected in Samples from Load Line 11	48
Table C-8.	Container Requirements for Soil and Sediment Samples.....	55
Table C-9.	Container Requirements for Surface Water Samples	56
Table C-10.	Identification of August 2012 Samples Taken at Load Line 11	57

LIST OF ATTACHMENTS

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

ACRONYMS AND ABBREVIATIONS

ADR	Automated Data Review
AOC	Area of Concern
D	absolute difference
DoD	U.S. Department of Defense
DQA	Data Quality Assessment
DQO	Data Quality Objective
FWCUG	Facility-wide Cleanup Goal
FWQAPP	Facility-wide Quality Assurance Project Plan
LCS	Laboratory Control Standard
MDL	Method Detection Level
MPR	Monthly Progress Report
MS	Matrix Spike
MSD	Matrix Spike Duplicate
Ohio EPA	Ohio Environmental Protection Agency
PAH	Polycyclic Aromatic Hydrocarbon
PBA08	Performance Based Acquisition 2008
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

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:

1. 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;
2. The quality of the data collected; and
3. 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 provides an assessment of the analytical information gathered during the implementation of the RI at Load Line 11. 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 (DQOs) 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*, herein referred to as the FWQAPP (USACE 2001), 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 Load Line 11. The purposes of these documents were to enumerate the quantity and type of samples to be taken to inspect the area of concern (AOC) 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 were 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 (MPRs) were completed by the Leidos Project Manager for the duration of the project. The MPRs 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. (herein referred to as 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). U.S. Environmental Protection Agency (USEPA) "definitive" data have been reported, and include 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, as presented in Section C.4.

C.3 DATA VERIFICATION

The objective when evaluating project data quality is to determine its usability. The evaluation is based on the interpretation of laboratory QC measures, field QC measures, and project DQOs. 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 that 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 document factors that may affect the usability of the data. This process did not include an in-depth review of raw data instrument output or a re-calculation 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 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

There were 50 environmental sediment, soil, and surface water samples collected with approximately 4,360 discrete analyses (i.e., analytes) obtained, reviewed, and integrated into the assessment (these totals do not include field measurements and field descriptions). Under the direction of the PBA08 SAP and USACE Louisville District, the project successfully collected RI samples and produced acceptable results for 99.9% of the sample analyses performed. One soil and two sediment results for antimony 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 provides a summary of results rejected during review, Table C-4 provides a summary of qualified analyses grouped by media and analyte category, and Table C-5 shows the individual results qualified during review. The majority of the estimated values were based on values observed between the laboratory method detection levels (MDLs) and the 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 Load Line 11

Media	Environmental Samples	Field Duplicates	USACE Split Samples	Trip Blanks	Equipment Rinse Blanks^a	Source Water Blanks^b
Sediment	3	0	0	0	2	2
Soil	44	5	5	0		
Surface Water	3	0	0	1	NA	NA

^aEquipment rinse blanks were collected at a frequency of 2 per field cycle for the entire Performance Based Acquisition 2008 remedial investigation (PBA08 RI) for the 17 areas of concern (AOCs) as presented in Section 4.6 of the PBA08 Sampling and Analysis Plan (PBA08 SAP).

^bSource 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.

NA = Not applicable.

USACE = U.S. Army Corps of Engineers.

Table C-2. Identification of Regular and QC Samples Taken at Load Line 11

Environmental Samples	Laboratory Sample Delivery Group	Field Duplicates	USACE Split Samples	Trip Blanks ^a	Metals	Explosives	SVOCs	Propellants ^b	VOCs	Pesticides	PCBs	PAHs	Hexavalent Chromium	Total Chromium
Sediment														
LL11SD-082-5593-SD	A0B260454	NS	NS	NS	X	X	X		X					
LL11SD-083-5594-SD	A0B260454	NS	NS	NS	X	X	X	X	X	X	X			
LL11SD-084-5595-SD	A0B260454	NS	NS	NS	X	X	X		X					
Soil														
LL11SB-060-5551-SO	A0C190535	NS	NS	NS	X	X					X	X		
LL11SB-060-5552-SO	A0C190535	NS	NS	NS	X	X					X	X		
LL11SB-060-5553-SO	A0C190539, A0C190542	NS	NS	NS	X	X					X	X		
LL11SB-061-5555-SO	A0C180563	NS	NS	NS	X	X					X	X		
LL11SB-061-5556-SO	A0C180563	NS	NS	NS	X	X					X	X		
LL11SB-061-5557-SO	A0C180551, A0C180555	NS	NS	NS	X	X					X	X		
LL11SB-062-5559-SO	A0C190535	LL11SB-062-6189-FD	LL11SB-062-6193-QA	NS	X	X					X	X		
LL11SB-062-5560-SO	A0C190535	NS	NS	NS	X	X					X	X		
LL11SB-062-5561-SO	A0C190539, A0C190542	NS	NS	NS	X	X					X	X		
LL11SB-063-5563-SO	A0C230534	NS	NS	NS	X	X					X	X		
LL11SB-063-5564-SO	A0C230534	NS	NS	NS	X	X					X	X		
LL11SB-063-5565-SO	A0C230534	NS	NS	NS	X	X					X	X		
LL11SB-064-5569-SO	A0C180563	NS	NS	NS	X	X					X	X		
LL11SB-064-5570-SO	A0C180563	NS	NS	NS	X	X					X	X		
LL11SB-064-5571-SO	A0C180551, A0C180555	NS	NS	NS	X	X					X	X		
LL11SB-064-5572-SO	A0C180563	LL11SB-064-6188-FD	LL11SB-064-6192-QA	NS	X	X					X	X		
LL11SB-065-5573-SO	A0C230534	NS	NS	NS	X	X					X	X		
LL11SB-065-5574-SO	A0C230534	NS	NS	NS	X	X					X	X		
LL11SB-065-5575-SO	A0C230523, A0C230527	NS	NS	NS	X	X					X	X		
LL11SB-065-5576-SO	A0C310489	NS	NS	NS	X	X					X	X		
LL11SB-066-5577-SO	A0C230534	NS	NS	NS	X	X					X	X		
LL11SB-066-5578-SO	A0C230534	NS	NS	NS	X	X					X	X		
LL11SB-066-5579-SO	A0C230523, A0C230527	NS	NS	NS	X	X					X	X		
LL11SB-067-5581-SO	A0C180563	NS	NS	NS	X	X					X	X		
LL11SB-067-5582-SO	A0C180563	LL11SB-067-6186-FD	LL11SB-067-6190-QA	NS	X	X					X	X		
LL11SB-067-5583-SO	A0C180551, A0C180555	NS	NS	NS	X	X					X	X		
LL11SB-068-5585-SO	A0C180563	NS	NS	NS	X	X	X	X	X	X	X			
LL11SB-068-5586-SO	A0C180563	NS	NS	NS	X	X	X	X	X	X	X			
LL11SB-068-5587-SO	A0C180551, A0C180555	LL11SB-068-6187-FD	LL11SB-068-6191-QA	NS	X	X	X	X	X	X	X			
LL11SB-069-5589-SO	A0C230534	NS	NS	NS	X	X					X	X		
LL11SB-069-5590-SO	A0C230534	NS	NS	NS	X	X					X	X		
LL11SB-069-5591-SO	A0C230534	NS	NS	NS	X	X					X	X		
LL11SS-070-5596-SO	A0D130516	NS	NS	NS	X	X					X	X		
LL11SS-071-5597-SO	A0D130516	NS	NS	NS	X	X					X	X		
LL11SS-072-5598-SO	A0D130516	NS	NS	NS									X	X
LL11SS-073-5599-SO	A0D130516	NS	NS	NS									X	X
LL11SS-074-5600-SO	A0D130516	NS	NS	NS	X	X					X	X		
LL11SS-075-5601-SO	A0D130516	NS	NS	NS									X	X
LL11SS-076-5602-SO	A0D130516	LL11SS-076-6183-FD	LL11SS-076-6182-QA	NS	X	X					X	X		
LL11SS-077-5603-SO	A0D130516	NS	NS	NS	X	X					X	X		

Table C-2. Identification of Regular and QC Samples Taken at Load Line 11 (continued)

Environmental Samples	Laboratory Sample Delivery Group	Field Duplicates	USACE Split Samples	Trip Blanks ^a	Metals	Explosives	SVOCs	Propellants ^b	VOCs	Pesticides	PCBs	PAHs	Hexavalent Chromium	Total Chromium
LL11SS-078-5604-SO	A0D130516	NS	NS	NS	X	X					X	X		
LL11SS-079-5605-SO	A0D130516	NS	NS	NS	X	X	X	X	X	X	X			
LL11SS-080-5606-SO	A0D130516	NS	NS	NS	X	X					X	X		
LL11SS-081-5607-SO	A0D130516	NS	NS	NS	X	X					X	X		
Surface Water														
LL11SW-082-5608-SW	A0B260454	NS	NS	PBA08-QC-6012-TB	X	X	X	X	X	X	X			
LL11SW-083-5609-SW	A0B260454	NS	NS	PBA08-QC-6012-TB	X	X	X	X	X	X	X			
LL11SW-084-5610-SW	A0B260454	NS	NS	PBA08-QC-6012-TB	X	X	X	X	X	X	X			

Equipment rinse blanks were collected at a frequency of two 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.

^aTrip blanks only accompany samples for VOCs in water.

^bPropellants include nitrocellulose and nitroguanidine.

NS = Not sampled.

PAH = Polycyclic aromatic hydrocarbon.

PCB = Polychlorinated biphenyl.

QC = Quality control.

SVOC = Semi-volatile organic compound.

VOC = Volatile organic compound.

USACE = U.S. Army Corps of Engineers.

Table C-3. Results Rejected in Validation for Samples from Load Line 11

Sample Delivery Group	Sample ID	Station	Chemical	Results	Reporting Limit	Laboratory Qualifier	Validation Qualifier	Validation Code
<i>Metals (mg/kg)</i>								
A0B260454	LL11SD-082-5593-SD	LL11sd-082	Antimony	0.65	0.65	U	R	MS-R
A0B260454	LL11SD-084-5595-SD	LL11sd-084	Antimony	0.78	0.78	U	R	MS-R
A0C190535	LL11SB-062-5560-SO	LL11sb-062	Antimony	0.63	0.63	U	R	MS-R

ID = Identification.
mg/kg = Milligrams per kilogram.
MS = Matrix spike.
R = Rejected.
U = Not detected.

Table C-4. Summary of Qualified Results for Samples from Load Line 11

Analysis Group	Validation Qualifier ^a	Validation Reason Code ^b	Number Qualified	Total Number of Analyses	Percent Qualified
Sediment					
All Analyses	R	--	2	450	0.44
	J	--	44	450	9.8
	UJ	--	47	450	10
	U	--	1	450	0.22
	None	--	356	450	79
Metals	R	MS-R	2	69	2.9
	J	MS-J	6	69	8.7
	J	MS-J, RepLimit-J	1	69	1.4
	J	RepLimit-J	7	69	10
	UJ	RepLimit-J, CalBlk-U	5	69	7.2
	U	CalBlk-U	1	69	1.4
	None	None	47	69	68
Explosives	None	None	48	48	100
Propellants	None	None	2	2	100
SVOCs	J	RepLimit-J	28	198	14
	UJ	MB-U, RepLimit-J	3	198	1.5
	None	None	167	198	84
Pesticides	None	None	21	21	100
PCBs	None	None	7	7	100
VOCs	J	RepLimit-J	2	105	1.9
	UJ	CCV-UJ	2	105	1.9
	UJ	MB-U, RepLimit-J	1	105	0.95
	UJ	MB-U, RepLimit-J	1	105	0.95
	UJ	MB-U, Surr-J, RepLimit-J	1	105	0.95
	UJ	Surr-UJ	34	105	32
	None	None	64	105	61
Soil					
All Analyses	R	--	1	3,398	0.029
	J	--	441	3,398	13
	UJ	--	236	3,398	6.9
	None	--	2,720	3,398	80
Metals	R	MS-R	1	1,061	0.094
	J	LCS-J	39	1,061	3.7
	J	LCS-J, RepLimit-J	4	1,061	0.38
	J	MS-J	133	1,061	13
	J	MS-J, ProJudge-J	1	1,061	0.094
	J	MS-J, RepLimit-J	35	1,061	3.3
	J	ProJudge-J	16	1,061	1.5
	J	RepLimit-J	177	1,061	17
	UJ	MB-U, RepLimit-J	1	1,061	0.094
	UJ	MS-UJ	10	1,061	0.94
Metals	UJ	RepLimit-J, CalBlk-U	27	1,061	2.5
	None	None	617	1,061	58
Hexavalent Chromium	J	RepLimit-J	2	3	67
	None	None	1	3	33
Explosives	J	RepLimit-J	4	736	0.54
	UJ	CCV-UJ	2	736	0.27
	None	None	730	736	99
Propellants	None	None	10	10	100
SVOCs	J	MS-J, RepLimit-J	3	986	0.30
	J	HT-J, RepLimit-J	2	986	0.20
	J	RepLimit-J	22	986	2.2
	UJ	HT-UJ	46	986	4.7
	UJ	HT-UJ, MS-UJ	2	986	0.20

Table C-4. Summary of Qualified Results for Samples from Load Line 11 (continued)

Analysis Group	Validation Qualifier^a	Validation Reason Code^b	Number Qualified	Total Number of Analyses	Percent Qualified
	UJ	LCS-UJ	1	986	0.10
	UJ	MB-U, RepLimit-J	2	986	0.20
	UJ	MS-UJ	10	986	1.0
	None	None	898	986	91
Pesticides	UJ	CCV-UJ	6	105	5.7
	UJ	MS-UJ	2	105	1.9
	None	None	97	105	92
PCBs	J	RepLimit-J	3	322	0.93
	UJ	HT-UJ	7	322	2.2
	UJ	Surr-UJ	14	322	4.3
	None	None	298	322	93
VOCs	UJ	MB-U, RepLimit-J	1	175	0.57
	UJ	MB-U, Surr-J, RepLimit-J	3	175	1.7
	UJ	Surr-UJ	102	175	58
	None	None	69	175	39
Surface Water					
All Analyses	J	--	38	510	7.5
	UJ	--	19	510	3.7
	None	--	453	510	89
Metals	J	RepLimit-J	25	69	36
	UJ	MB-U, RepLimit-J	2	69	2.9
	UJ	MS-UJ	3	69	4.3
	UJ	RepLimit-J, CalBlk-U	1	69	1.4
	None	None	38	69	55
Explosives	None	None	48	48	100
Propellants	None	None	6	6	100
SVOCs	J	RepLimit-J	10	198	5.1
	UJ	MB-U, RepLimit-J	3	198	1.5
	UJ	MS-UJ	4	198	2
	None	None	181	198	91
Pesticides	J	RepLimit-J	3	63	4.8
	None	None	60	63	95
PCBs	None	None	21	21	100
VOCs	UJ	CCV-UJ	3	105	2.9
	UJ	LCS-UJ	2	105	1.9
	UJ	MS-UJ, LCS-UJ	1	105	0.95
	None	None	99	105	94

^aValidation Qualifiers: J = estimated, R = rejected, U = not detected, and UJ = not detected and reporting limit estimated.

^bValidation Reason Codes: CalBlk = Calibration Blank, CCV = Continuing Calibration Verification, HT = Holding Time, LCS = Laboratory Control Sample, MB = Method Blank, MS = Matrix Spike, ProJudge = Professional Judgment, RptLimit = Reporting Limit, and Surr = Surrogate Recovery.

PCB = Polychlorinated biphenyl.

SVOC = Semi-volatile organic compound.

VOC = Volatile organic compound.

-- = No qualifier.

Table C-5. Detailed Listing of Qualified Results for Samples from Load Line 11

Sample ID	Laboratory SDG	Chemical	Results	Reporting Limit	Laboratory Qualifier ^a	Validation Qualifier ^b	Validation Code ^c
<i>Metals</i>							
Sediment (mg/kg)							
LL11SD-082-5593-SD	A0B260454	Antimony	0.65	0.65	U	R	MS-R
LL11SD-083-5594-SD	A0B260454	Antimony	0.13	0.75	J	J	MS-J, RepLimit-J
LL11SD-084-5595-SD	A0B260454	Antimony	0.78	0.78	U	R	MS-R
LL11SD-082-5593-SD	A0B260454	Cadmium	0.056	0.26	J	UJ	RepLimit-J, CalBlk-U
LL11SD-083-5594-SD	A0B260454	Cadmium	0.13	0.30	J	UJ	RepLimit-J, CalBlk-U
LL11SD-084-5595-SD	A0B260454	Cadmium	0.42	0.31	-	U	CalBlk-U
LL11SD-082-5593-SD	A0B260454	Calcium	1,490	260	-	J	MS-J
LL11SD-083-5594-SD	A0B260454	Calcium	3,190	302	-	J	MS-J
LL11SD-084-5595-SD	A0B260454	Calcium	3,100	311	-	J	MS-J
LL11SD-084-5595-SD	A0B260454	Mercury	0.049	0.16	J	J	RepLimit-J
LL11SD-082-5593-SD	A0B260454	Potassium	390	130	-	J	MS-J
LL11SD-083-5594-SD	A0B260454	Potassium	1,230	151	-	J	MS-J
LL11SD-084-5595-SD	A0B260454	Potassium	685	156	-	J	MS-J
LL11SD-082-5593-SD	A0B260454	Selenium	0.48	0.65	J	J	RepLimit-J
LL11SD-082-5593-SD	A0B260454	Silver	0.027	0.65	J	UJ	RepLimit-J, CalBlk-U
LL11SD-083-5594-SD	A0B260454	Silver	0.022	0.75	J	UJ	RepLimit-J, CalBlk-U
LL11SD-084-5595-SD	A0B260454	Silver	0.062	0.78	J	UJ	RepLimit-J, CalBlk-U
LL11SD-082-5593-SD	A0B260454	Sodium	33.2	130	J	J	RepLimit-J
LL11SD-083-5594-SD	A0B260454	Sodium	68.1	151	J	J	RepLimit-J
LL11SD-084-5595-SD	A0B260454	Sodium	36.0	156	J	J	RepLimit-J
LL11SD-083-5594-SD	A0B260454	Thallium	0.14	0.30	J	J	RepLimit-J
LL11SD-084-5595-SD	A0B260454	Thallium	0.13	0.31	J	J	RepLimit-J
Soil (mg/kg)							
LL11SB-063-5563-SO	A0C230534	Aluminum	8,570	14.7	E	J	ProJudge-J
LL11SB-063-5564-SO	A0C230534	Aluminum	8,900	122	-	J	ProJudge-J
LL11SB-063-5565-SO	A0C230534	Aluminum	8,210	127	-	J	ProJudge-J
LL11SB-065-5573-SO	A0C230534	Aluminum	12,900	129	-	J	ProJudge-J
LL11SB-060-5551-SO	A0C190535	Antimony	0.099	0.69	J	J	MS-J, RepLimit-J

Table C-5. Detailed Listing of Qualified Results for Samples from Load Line 11 (continued)

Sample ID	Laboratory SDG	Chemical	Results	Reporting Limit	Laboratory Qualifier^a	Validation Qualifier^b	Validation Code^c
LL11SB-060-5552-SO	A0C190535	Antimony	0.084	0.61	J	J	MS-J, RepLimit-J
LL11SB-060-5553-SO	A0C190539	Antimony	0.093	0.59	J	J	MS-J, RepLimit-J
LL11SB-061-5555-SO	A0C180563	Antimony	0.081	0.60	J	J	MS-J, RepLimit-J
LL11SB-061-5556-SO	A0C180563	Antimony	0.084	0.58	J	J	MS-J, RepLimit-J
LL11SB-061-5557-SO	A0C180551	Antimony	0.079	0.58	J	J	MS-J, RepLimit-J
LL11SB-062-5559-SO	A0C190535	Antimony	0.10	0.66	J	J	MS-J, RepLimit-J
LL11SB-062-5560-SO	A0C190535	Antimony	0.63	0.63	U	R	MS-R
LL11SB-062-5561-SO	A0C190539	Antimony	0.077	0.58	J	J	MS-J, RepLimit-J
LL11SB-062-6189-FD	A0C190535	Antimony	0.12	0.68	J	J	MS-J, RepLimit-J
LL11SB-063-5563-SO	A0C230534	Antimony	0.10	0.74	J	J	MS-J, RepLimit-J
LL11SB-063-5564-SO	A0C230534	Antimony	0.61	0.61	U	UJ	MS-UJ
LL11SB-063-5565-SO	A0C230534	Antimony	0.63	0.63	U	UJ	MS-UJ
LL11SB-064-5569-SO	A0C180563	Antimony	0.080	0.56	J	J	MS-J, RepLimit-J
LL11SB-064-5570-SO	A0C180563	Antimony	0.083	0.57	J	J	MS-J, RepLimit-J
LL11SB-064-5571-SO	A0C180551	Antimony	0.077	0.60	J	J	MS-J, RepLimit-J
LL11SB-064-5572-SO	A0C180563	Antimony	0.63	0.63	U	UJ	MS-UJ
LL11SB-064-6188-FD	A0C180563	Antimony	0.62	0.62	U	UJ	MS-UJ
LL11SB-065-5573-SO	A0C230534	Antimony	0.087	0.65	J	J	MS-J, RepLimit-J
LL11SB-065-5574-SO	A0C230534	Antimony	0.092	0.60	J	J	MS-J, RepLimit-J
LL11SB-065-5575-SO	A0C230523	Antimony	0.087	0.58	J	J	MS-J, RepLimit-J
LL11SB-065-5576-SO	A0C310489	Antimony	0.078	0.58	J	J	MS-J, RepLimit-J
LL11SB-066-5577-SO	A0C230534	Antimony	0.70	0.70	U	UJ	MS-UJ
LL11SB-066-5578-SO	A0C230534	Antimony	0.086	0.59	J	J	MS-J, RepLimit-J
LL11SB-066-5579-SO	A0C230523	Antimony	0.077	0.59	J	J	MS-J, RepLimit-J
LL11SB-067-5581-SO	A0C180563	Antimony	0.099	0.60	J	J	MS-J, RepLimit-J
LL11SB-067-5582-SO	A0C180563	Antimony	0.081	0.60	J	J	MS-J, RepLimit-J
LL11SB-067-5583-SO	A0C180551	Antimony	0.082	0.59	J	J	MS-J, RepLimit-J
LL11SB-067-6186-FD	A0C180563	Antimony	0.12	0.60	J	J	MS-J, RepLimit-J
LL11SB-068-5585-SO	A0C180563	Antimony	0.091	0.61	J	J	MS-J, RepLimit-J
LL11SB-068-5586-SO	A0C180563	Antimony	0.11	0.61	J	J	MS-J, RepLimit-J
LL11SB-068-5587-SO	A0C180551	Antimony	0.082	0.59	J	J	MS-J, RepLimit-J
LL11SB-068-6187-FD	A0C180563	Antimony	0.076	0.59	J	J	MS-J, RepLimit-J
LL11SB-069-5589-SO	A0C230534	Antimony	0.70	0.70	U	UJ	MS-UJ
LL11SB-069-5590-SO	A0C230534	Antimony	0.60	0.60	U	UJ	MS-UJ
LL11SB-069-5591-SO	A0C230534	Antimony	0.60	0.60	U	UJ	MS-UJ

Table C-5. Detailed Listing of Qualified Results for Samples from Load Line 11 (continued)

Sample ID	Laboratory SDG	Chemical	Results	Reporting Limit	Laboratory Qualifier^a	Validation Qualifier^b	Validation Code^c
LL11SS-070-5596-SO	A0D130516	Antimony	0.74	0.59	-	J	MS-J
LL11SS-071-5597-SO	A0D130516	Antimony	0.10	0.62	J	J	MS-J, RepLimit-J
LL11SS-074-5600-SO	A0D130516	Antimony	0.12	0.58	J	J	MS-J, RepLimit-J
LL11SS-076-5602-SO	A0D130516	Antimony	0.26	0.64	J	J	MS-J, RepLimit-J
LL11SS-076-6183-FD	A0D130516	Antimony	0.15	0.63	J	J	MS-J, RepLimit-J
LL11SS-077-5603-SO	A0D130516	Antimony	0.62	0.62	U	UJ	MS-UJ
LL11SS-078-5604-SO	A0D130516	Antimony	0.16	0.62	J	J	MS-J, RepLimit-J
LL11SS-079-5605-SO	A0D130516	Antimony	0.084	0.59	J	J	MS-J, RepLimit-J
LL11SS-080-5606-SO	A0D130516	Antimony	0.72	0.72	U	UJ	MS-UJ
LL11SS-081-5607-SO	A0D130516	Antimony	0.12	0.85	J	J	MS-J, RepLimit-J
LL11SB-060-5551-SO	A0C190535	Arsenic	13.3	0.69	-	J	MS-J
LL11SB-060-5552-SO	A0C190535	Arsenic	15.9	0.61	-	J	MS-J
LL11SB-060-5553-SO	A0C190539	Arsenic	16.8	0.59	E	J	MS-J
LL11SB-061-5555-SO	A0C180563	Arsenic	12.1	0.60	-	J	ProJudge-J
LL11SB-061-5556-SO	A0C180563	Arsenic	15.1	0.58	-	J	ProJudge-J
LL11SB-062-5559-SO	A0C190535	Arsenic	10.6	0.66	-	J	MS-J
LL11SB-062-5560-SO	A0C190535	Arsenic	11.7	0.63	-	J	MS-J
LL11SB-062-5561-SO	A0C190539	Arsenic	18.2	0.58	E	J	MS-J
LL11SB-062-6189-FD	A0C190535	Arsenic	10.2	0.68	-	J	MS-J
LL11SB-063-5563-SO	A0C230534	Arsenic	9.3	0.74	E	J	LCS-J
LL11SB-063-5564-SO	A0C230534	Arsenic	12.0	0.61	-	J	LCS-J
LL11SB-063-5565-SO	A0C230534	Arsenic	15.5	0.63	-	J	LCS-J
LL11SB-064-5569-SO	A0C180563	Arsenic	2.7	0.56	-	J	ProJudge-J
LL11SB-064-5570-SO	A0C180563	Arsenic	12.5	0.57	-	J	ProJudge-J
LL11SB-064-5572-SO	A0C180563	Arsenic	11.5	0.63	-	J	MS-J, ProJudge-J
LL11SB-064-6188-FD	A0C180563	Arsenic	11.5	0.62	-	J	ProJudge-J
LL11SB-065-5573-SO	A0C230534	Arsenic	10.3	0.65	-	J	LCS-J
LL11SB-065-5575-SO	A0C230523	Arsenic	24.7	0.58	-	J	LCS-J
LL11SB-066-5579-SO	A0C230523	Arsenic	15.1	0.59	-	J	LCS-J
LL11SB-067-5581-SO	A0C180563	Arsenic	10.1	0.60	-	J	ProJudge-J
LL11SB-067-5582-SO	A0C180563	Arsenic	12.5	0.60	-	J	ProJudge-J
LL11SB-067-6186-FD	A0C180563	Arsenic	15.5	0.60	-	J	ProJudge-J
LL11SB-068-5585-SO	A0C180563	Arsenic	12.3	0.61	-	J	ProJudge-J
LL11SB-068-5586-SO	A0C180563	Arsenic	9.7	0.61	-	J	ProJudge-J
LL11SB-068-6187-FD	A0C180563	Arsenic	9.5	0.59	-	J	ProJudge-J

Table C-5. Detailed Listing of Qualified Results for Samples from Load Line 11 (continued)

Sample ID	Laboratory SDG	Chemical	Results	Reporting Limit	Laboratory Qualifier^a	Validation Qualifier^b	Validation Code^c
LL11SB-060-5551-SO	A0C190535	Barium	57.5	1.4	-	J	MS-J
LL11SB-060-5552-SO	A0C190535	Barium	103	1.2	-	J	MS-J
LL11SB-061-5555-SO	A0C180563	Barium	45.5	1.2	-	J	MS-J
LL11SB-061-5556-SO	A0C180563	Barium	31.9	1.2	-	J	MS-J
LL11SB-062-5559-SO	A0C190535	Barium	73.8	1.3	-	J	MS-J
LL11SB-062-5560-SO	A0C190535	Barium	65.9	1.3	-	J	MS-J
LL11SB-062-6189-FD	A0C190535	Barium	66.1	1.4	-	J	MS-J
LL11SB-064-5569-SO	A0C180563	Barium	14.6	1.1	-	J	MS-J
LL11SB-064-5570-SO	A0C180563	Barium	28.8	1.1	-	J	MS-J
LL11SB-064-6188-FD	A0C180563	Barium	26.4	1.2	-	J	MS-J
LL11SB-065-5574-SO	A0C230534	Barium	88.9	1.2	-	J	MS-J
LL11SB-066-5577-SO	A0C230534	Barium	69.5	1.4	-	J	MS-J
LL11SB-066-5578-SO	A0C230534	Barium	70.0	1.2	-	J	MS-J
LL11SB-067-5581-SO	A0C180563	Barium	57.7	1.2	-	J	MS-J
LL11SB-067-5582-SO	A0C180563	Barium	46.7	1.2	-	J	MS-J
LL11SB-067-6186-FD	A0C180563	Barium	48.3	1.2	-	J	MS-J
LL11SB-068-5585-SO	A0C180563	Barium	55.9	1.2	-	J	MS-J
LL11SB-068-5586-SO	A0C180563	Barium	48.3	1.2	-	J	MS-J
LL11SB-068-6187-FD	A0C180563	Barium	26.0	1.2	-	J	MS-J
LL11SB-069-5589-SO	A0C230534	Barium	50.4	1.4	-	J	MS-J
LL11SB-069-5590-SO	A0C230534	Barium	21.6	1.2	-	J	MS-J
LL11SB-069-5591-SO	A0C230534	Barium	48.3	1.2	-	J	MS-J
LL11SB-060-5553-SO	A0C190539	Beryllium	0.28	0.12	-	J	LCS-J
LL11SB-062-5561-SO	A0C190539	Beryllium	0.34	0.12	-	J	LCS-J
LL11SB-060-5551-SO	A0C190535	Cadmium	0.21	0.28	J	J	RepLimit-J
LL11SB-060-5552-SO	A0C190535	Cadmium	0.074	0.24	J	J	RepLimit-J
LL11SB-060-5553-SO	A0C190539	Cadmium	0.077	0.24	J	J	RepLimit-J
LL11SB-061-5555-SO	A0C180563	Cadmium	0.068	0.24	J	J	RepLimit-J
LL11SB-061-5556-SO	A0C180563	Cadmium	0.044	0.23	J	J	RepLimit-J
LL11SB-061-5557-SO	A0C180551	Cadmium	0.053	0.23	J	J	RepLimit-J
LL11SB-062-5559-SO	A0C190535	Cadmium	0.24	0.26	J	J	RepLimit-J
LL11SB-062-5560-SO	A0C190535	Cadmium	0.065	0.25	J	UJ	RepLimit-J, CalBlk-U
LL11SB-062-5561-SO	A0C190539	Cadmium	0.061	0.23	J	J	RepLimit-J
LL11SB-062-6189-FD	A0C190535	Cadmium	0.26	0.27	J	J	RepLimit-J

Table C-5. Detailed Listing of Qualified Results for Samples from Load Line 11 (continued)

Sample ID	Laboratory SDG	Chemical	Results	Reporting Limit	Laboratory Qualifier^a	Validation Qualifier^b	Validation Code^c
LL11SB-063-5563-SO	A0C230534	Cadmium	0.24	0.29	J	J	RepLimit-J
LL11SB-063-5564-SO	A0C230534	Cadmium	0.088	0.24	J	J	RepLimit-J
LL11SB-063-5565-SO	A0C230534	Cadmium	0.049	0.25	J	UJ	RepLimit-J, CalBlk-U
LL11SB-064-5569-SO	A0C180563	Cadmium	0.053	0.22	J	J	RepLimit-J
LL11SB-064-5570-SO	A0C180563	Cadmium	0.068	0.23	J	J	RepLimit-J
LL11SB-064-5571-SO	A0C180551	Cadmium	0.064	0.24	J	J	RepLimit-J
LL11SB-064-5572-SO	A0C180563	Cadmium	0.065	0.25	J	J	RepLimit-J
LL11SB-064-6188-FD	A0C180563	Cadmium	0.054	0.25	J	UJ	RepLimit-J, CalBlk-U
LL11SB-065-5573-SO	A0C230534	Cadmium	0.073	0.26	J	J	RepLimit-J
LL11SB-065-5574-SO	A0C230534	Cadmium	0.13	0.24	J	J	RepLimit-J
LL11SB-065-5575-SO	A0C230523	Cadmium	0.051	0.23	J	J	RepLimit-J
LL11SB-065-5576-SO	A0C310489	Cadmium	0.039	0.23	J	J	RepLimit-J
LL11SB-066-5577-SO	A0C230534	Cadmium	0.13	0.28	J	J	RepLimit-J
LL11SB-066-5578-SO	A0C230534	Cadmium	0.054	0.24	J	J	RepLimit-J
LL11SB-066-5579-SO	A0C230523	Cadmium	0.059	0.24	J	J	RepLimit-J
LL11SB-067-5581-SO	A0C180563	Cadmium	0.14	0.24	J	J	RepLimit-J
LL11SB-067-5582-SO	A0C180563	Cadmium	0.066	0.24	J	J	RepLimit-J
LL11SB-067-5583-SO	A0C180551	Cadmium	0.051	0.24	J	J	RepLimit-J
LL11SB-067-6186-FD	A0C180563	Cadmium	0.082	0.24	J	J	RepLimit-J
LL11SB-068-5585-SO	A0C180563	Cadmium	0.15	0.25	J	J	RepLimit-J
LL11SB-068-5586-SO	A0C180563	Cadmium	0.063	0.25	J	J	RepLimit-J
LL11SB-068-5587-SO	A0C180551	Cadmium	0.037	0.23	J	J	RepLimit-J
LL11SB-068-6187-FD	A0C180563	Cadmium	0.036	0.23	J	UJ	RepLimit-J, CalBlk-U
LL11SB-069-5590-SO	A0C230534	Cadmium	0.058	0.24	J	J	RepLimit-J
LL11SB-069-5591-SO	A0C230534	Cadmium	0.060	0.24	J	J	RepLimit-J
LL11SS-070-5596-SO	A0D130516	Cadmium	0.17	0.24	J	J	RepLimit-J
LL11SS-071-5597-SO	A0D130516	Cadmium	0.13	0.25	J	J	RepLimit-J
LL11SS-074-5600-SO	A0D130516	Cadmium	0.17	0.23	J	J	RepLimit-J
LL11SS-076-5602-SO	A0D130516	Cadmium	0.071	0.25	J	J	RepLimit-J
LL11SS-076-6183-FD	A0D130516	Cadmium	0.080	0.25	J	J	RepLimit-J
LL11SS-077-5603-SO	A0D130516	Cadmium	0.057	0.25	J	J	RepLimit-J
LL11SS-079-5605-SO	A0D130516	Cadmium	0.092	0.24	J	J	RepLimit-J

Table C-5. Detailed Listing of Qualified Results for Samples from Load Line 11 (continued)

Sample ID	Laboratory SDG	Chemical	Results	Reporting Limit	Laboratory Qualifier^a	Validation Qualifier^b	Validation Code^c
LL11SB-061-5555-SO	A0C180563	Calcium	2,300	241	-	J	MS-J
LL11SB-061-5556-SO	A0C180563	Calcium	1,870	230	-	J	MS-J
LL11SB-064-5569-SO	A0C180563	Calcium	1,690	222	-	J	MS-J
LL11SB-064-5570-SO	A0C180563	Calcium	6,320	230	-	J	MS-J
LL11SB-064-5572-SO	A0C180563	Calcium	5,850	252	-	J	MS-J
LL11SB-064-6188-FD	A0C180563	Calcium	5,080	248	-	J	MS-J
LL11SB-065-5574-SO	A0C230534	Calcium	1,340	239	-	J	MS-J
LL11SB-066-5577-SO	A0C230534	Calcium	180	279	J	J	MS-J, RepLimit-J
LL11SB-066-5578-SO	A0C230534	Calcium	790	238	-	J	MS-J
LL11SB-067-5581-SO	A0C180563	Calcium	2,250	239	-	J	MS-J
LL11SB-067-5582-SO	A0C180563	Calcium	915	241	-	J	MS-J
LL11SB-067-5583-SO	A0C180551	Calcium	205	236	J	J	RepLimit-J
LL11SB-067-6186-FD	A0C180563	Calcium	1,720	240	-	J	MS-J
LL11SB-068-5585-SO	A0C180563	Calcium	1,260	246	-	J	MS-J
LL11SB-068-5586-SO	A0C180563	Calcium	1,230	245	-	J	MS-J
LL11SB-068-6187-FD	A0C180563	Calcium	459	234	-	J	MS-J
LL11SB-069-5589-SO	A0C230534	Calcium	1,870	281	-	J	MS-J
LL11SB-069-5590-SO	A0C230534	Calcium	1,650	240	-	J	MS-J
LL11SB-069-5591-SO	A0C230534	Calcium	8,520	240	-	J	MS-J
LL11SS-079-5605-SO	A0D130516	Calcium	113	238	J B	UJ	MB-U, RepLimit-J
LL11SB-060-5551-SO	A0C190535	Cobalt	8.3	0.69	-	J	MS-J
LL11SB-060-5552-SO	A0C190535	Cobalt	27.1	0.61	-	J	MS-J
LL11SB-062-5559-SO	A0C190535	Cobalt	13.0	0.66	-	J	MS-J
LL11SB-062-5560-SO	A0C190535	Cobalt	11.5	0.63	-	J	MS-J
LL11SB-062-6189-FD	A0C190535	Cobalt	10.5	0.68	-	J	MS-J
LL11SB-060-5553-SO	A0C190539	Copper	23.9	0.59	-	J	MS-J
LL11SB-062-5561-SO	A0C190539	Copper	18.0	0.58	-	J	MS-J
LL11SB-065-5576-SO	A0C310489	Copper	15.5	0.58	-	J	ProJudge-J
LL11SS-070-5596-SO	A0D130516	Copper	19.6	0.59	B	J	MS-J
LL11SS-071-5597-SO	A0D130516	Copper	16.2	0.62	B	J	MS-J
LL11SS-074-5600-SO	A0D130516	Copper	16.4	0.58	B	J	MS-J
LL11SS-076-5602-SO	A0D130516	Copper	17.9	0.64	B	J	MS-J
LL11SS-076-6183-FD	A0D130516	Copper	18.0	0.63	B	J	MS-J
LL11SS-077-5603-SO	A0D130516	Copper	15.5	0.62	B	J	MS-J
LL11SS-078-5604-SO	A0D130516	Copper	17.3	0.62	B	J	MS-J

Table C-5. Detailed Listing of Qualified Results for Samples from Load Line 11 (continued)

Sample ID	Laboratory SDG	Chemical	Results	Reporting Limit	Laboratory Qualifier^a	Validation Qualifier^b	Validation Code^c
LL11SS-079-5605-SO	A0D130516	Copper	11.2	0.59	B	J	MS-J
LL11SS-080-5606-SO	A0D130516	Copper	10.2	0.72	B	J	MS-J
LL11SS-081-5607-SO	A0D130516	Copper	18.1	0.85	B	J	MS-J
LL11SB-060-5551-SO	A0C190535	Lead	20.5	0.42	-	J	MS-J
LL11SB-060-5552-SO	A0C190535	Lead	15.8	0.37	-	J	MS-J
LL11SB-061-5555-SO	A0C180563	Lead	15.3	0.36	-	J	MS-J
LL11SB-061-5556-SO	A0C180563	Lead	14.9	0.35	-	J	MS-J
LL11SB-062-5559-SO	A0C190535	Lead	21.4	0.40	-	J	MS-J
LL11SB-062-5560-SO	A0C190535	Lead	16.5	0.38	-	J	MS-J
LL11SB-062-6189-FD	A0C190535	Lead	23.4	0.41	-	J	MS-J
LL11SB-064-5569-SO	A0C180563	Lead	3.9	0.33	-	J	MS-J
LL11SB-064-5570-SO	A0C180563	Lead	10.4	0.34	-	J	MS-J
LL11SB-064-5572-SO	A0C180563	Lead	9.7	0.38	-	J	MS-J
LL11SB-064-6188-FD	A0C180563	Lead	8.8	0.37	-	J	MS-J
LL11SB-065-5576-SO	A0C310489	Lead	10.2	0.35	-	J	MS-J
LL11SB-067-5581-SO	A0C180563	Lead	16.9	0.36	-	J	MS-J
LL11SB-067-5582-SO	A0C180563	Lead	11.6	0.36	-	J	MS-J
LL11SB-067-6186-FD	A0C180563	Lead	8.6	0.36	-	J	MS-J
LL11SB-068-5585-SO	A0C180563	Lead	14.8	0.37	-	J	MS-J
LL11SB-068-5586-SO	A0C180563	Lead	12.9	0.37	-	J	MS-J
LL11SB-068-6187-FD	A0C180563	Lead	8.0	0.35	-	J	MS-J
LL11SB-060-5553-SO	A0C190539	Magnesium	2,140	119	-	J	MS-J
LL11SB-061-5555-SO	A0C180563	Magnesium	2,880	120	-	J	MS-J
LL11SB-061-5556-SO	A0C180563	Magnesium	2,600	115	-	J	MS-J
LL11SB-062-5561-SO	A0C190539	Magnesium	3,040	116	-	J	MS-J
LL11SB-063-5563-SO	A0C230534	Magnesium	3,060	147	-	J	MS-J
LL11SB-063-5564-SO	A0C230534	Magnesium	4,710	122	-	J	MS-J
LL11SB-063-5565-SO	A0C230534	Magnesium	4,250	127	-	J	MS-J
LL11SB-064-5569-SO	A0C180563	Magnesium	121	111	-	J	MS-J
LL11SB-064-5570-SO	A0C180563	Magnesium	3,010	115	-	J	MS-J
LL11SB-064-5572-SO	A0C180563	Magnesium	3,460	126	-	J	MS-J
LL11SB-064-6188-FD	A0C180563	Magnesium	3,740	124	-	J	MS-J
LL11SB-065-5573-SO	A0C230534	Magnesium	2,210	129	-	J	MS-J
LL11SB-065-5575-SO	A0C230523	Magnesium	2,540	117	-	J	MS-J
LL11SB-065-5576-SO	A0C310489	Magnesium	3,530	116	-	J	MS-J

Table C-5. Detailed Listing of Qualified Results for Samples from Load Line 11 (continued)

Sample ID	Laboratory SDG	Chemical	Results	Reporting Limit	Laboratory Qualifier^a	Validation Qualifier^b	Validation Code^c
LL11SB-066-5579-SO	A0C230523	Magnesium	2,540	118	-	J	MS-J
LL11SB-067-5581-SO	A0C180563	Magnesium	2,380	119	-	J	MS-J
LL11SB-067-5582-SO	A0C180563	Magnesium	2,890	120	-	J	MS-J
LL11SB-067-6186-FD	A0C180563	Magnesium	2,220	120	-	J	MS-J
LL11SB-068-5585-SO	A0C180563	Magnesium	2,250	123	-	J	MS-J
LL11SB-068-5586-SO	A0C180563	Magnesium	2,770	123	-	J	MS-J
LL11SB-068-6187-FD	A0C180563	Magnesium	1,440	117	-	J	MS-J
LL11SB-060-5551-SO	A0C190535	Mercury	0.077	0.14	J	J	RepLimit-J
LL11SB-062-5559-SO	A0C190535	Mercury	0.035	0.13	J	J	RepLimit-J
LL11SB-062-5560-SO	A0C190535	Mercury	0.026	0.13	J	J	RepLimit-J
LL11SB-062-6189-FD	A0C190535	Mercury	0.041	0.14	J	J	RepLimit-J
LL11SB-063-5563-SO	A0C230534	Mercury	0.041	0.15	J	J	RepLimit-J
LL11SB-065-5573-SO	A0C230534	Mercury	0.043	0.13	J	J	RepLimit-J
LL11SB-065-5575-SO	A0C230523	Mercury	0.025	0.12	J	J	RepLimit-J
LL11SB-066-5577-SO	A0C230534	Mercury	0.053	0.14	J	J	RepLimit-J
LL11SB-066-5578-SO	A0C230534	Mercury	0.045	0.12	J	J	RepLimit-J
LL11SB-067-6186-FD	A0C180563	Mercury	0.031	0.12	J	J	RepLimit-J
LL11SB-068-5585-SO	A0C180563	Mercury	0.023	0.12	J	J	RepLimit-J
LL11SB-068-5586-SO	A0C180563	Mercury	0.036	0.12	J	J	RepLimit-J
LL11SB-069-5589-SO	A0C230534	Mercury	0.054	0.14	J	J	RepLimit-J
LL11SB-069-5591-SO	A0C230534	Mercury	0.068	0.12	J	J	RepLimit-J
LL11SS-070-5596-SO	A0D130516	Mercury	0.044	0.12	J	J	RepLimit-J
LL11SS-071-5597-SO	A0D130516	Mercury	0.031	0.12	J	J	RepLimit-J
LL11SS-074-5600-SO	A0D130516	Mercury	0.018	0.12	J	J	RepLimit-J
LL11SS-076-5602-SO	A0D130516	Mercury	0.039	0.13	J	J	RepLimit-J
LL11SS-076-6183-FD	A0D130516	Mercury	0.034	0.13	J	J	RepLimit-J
LL11SS-078-5604-SO	A0D130516	Mercury	0.031	0.12	J	J	RepLimit-J
LL11SS-079-5605-SO	A0D130516	Mercury	0.020	0.12	J	J	RepLimit-J
LL11SS-080-5606-SO	A0D130516	Mercury	0.037	0.14	J	J	RepLimit-J
LL11SS-081-5607-SO	A0D130516	Mercury	0.040	0.17	J	J	RepLimit-J
LL11SB-060-5553-SO	A0C190539	Nickel	17.7	1.2	B	J	MS-J
LL11SB-062-5561-SO	A0C190539	Nickel	19.2	1.2	B	J	MS-J
LL11SB-065-5576-SO	A0C310489	Nickel	19.6	1.2	-	J	MS-J
LL11SB-060-5551-SO	A0C190535	Potassium	852	139	-	J	MS-J
LL11SB-060-5552-SO	A0C190535	Potassium	1,050	122	-	J	MS-J

Table C-5. Detailed Listing of Qualified Results for Samples from Load Line 11 (continued)

Sample ID	Laboratory SDG	Chemical	Results	Reporting Limit	Laboratory Qualifier^a	Validation Qualifier^b	Validation Code^c
LL11SB-062-5559-SO	A0C190535	Potassium	658	132	-	J	MS-J
LL11SB-062-5560-SO	A0C190535	Potassium	1,290	125	-	J	MS-J
LL11SB-062-6189-FD	A0C190535	Potassium	804	135	-	J	MS-J
LL11SB-060-5551-SO	A0C190535	Selenium	1.1	0.69	-	J	LCS-J
LL11SB-060-5552-SO	A0C190535	Selenium	1.4	0.61	-	J	LCS-J
LL11SB-060-5553-SO	A0C190539	Selenium	0.73	0.59	-	J	LCS-J
LL11SB-061-5555-SO	A0C180563	Selenium	0.72	0.60	-	J	LCS-J
LL11SB-061-5556-SO	A0C180563	Selenium	0.65	0.58	-	J	LCS-J
LL11SB-062-5559-SO	A0C190535	Selenium	0.90	0.66	-	J	LCS-J
LL11SB-062-5560-SO	A0C190535	Selenium	0.84	0.63	-	J	LCS-J
LL11SB-062-5561-SO	A0C190539	Selenium	0.64	0.58	-	J	LCS-J
LL11SB-062-6189-FD	A0C190535	Selenium	0.94	0.68	-	J	LCS-J
LL11SB-063-5563-SO	A0C230534	Selenium	1.1	0.74	-	J	LCS-J
LL11SB-063-5564-SO	A0C230534	Selenium	0.80	0.61	-	J	LCS-J
LL11SB-063-5565-SO	A0C230534	Selenium	1.1	0.63	-	J	LCS-J
LL11SB-064-5569-SO	A0C180563	Selenium	0.25	0.56	J	J	LCS-J, RepLimit-J
LL11SB-064-5570-SO	A0C180563	Selenium	0.50	0.57	J	J	LCS-J, RepLimit-J
LL11SB-064-5571-SO	A0C180551	Selenium	0.59	0.60	J	J	RepLimit-J
LL11SB-064-5572-SO	A0C180563	Selenium	0.55	0.63	J	J	LCS-J, RepLimit-J
LL11SB-064-6188-FD	A0C180563	Selenium	0.81	0.62	-	J	LCS-J
LL11SB-065-5573-SO	A0C230534	Selenium	0.89	0.65	-	J	LCS-J
LL11SB-065-5575-SO	A0C230523	Selenium	0.84	0.58	-	J	LCS-J
LL11SB-066-5579-SO	A0C230523	Selenium	0.80	0.59	-	J	LCS-J
LL11SB-067-5581-SO	A0C180563	Selenium	0.72	0.60	-	J	LCS-J
LL11SB-067-5582-SO	A0C180563	Selenium	0.87	0.60	-	J	LCS-J
LL11SB-067-6186-FD	A0C180563	Selenium	0.91	0.60	-	J	LCS-J
LL11SB-068-5585-SO	A0C180563	Selenium	0.75	0.61	-	J	LCS-J
LL11SB-068-5586-SO	A0C180563	Selenium	0.65	0.61	-	J	LCS-J
LL11SB-068-5587-SO	A0C180551	Selenium	0.56	0.59	J	J	RepLimit-J
LL11SB-068-6187-FD	A0C180563	Selenium	0.50	0.59	J	J	LCS-J, RepLimit-J
LL11SS-070-5596-SO	A0D130516	Selenium	0.91	0.59	-	J	LCS-J
LL11SS-071-5597-SO	A0D130516	Selenium	0.83	0.62	-	J	LCS-J
LL11SS-074-5600-SO	A0D130516	Selenium	0.84	0.58	-	J	LCS-J
LL11SS-076-5602-SO	A0D130516	Selenium	0.81	0.64	-	J	LCS-J
LL11SS-076-6183-FD	A0D130516	Selenium	0.88	0.63	-	J	LCS-J

Table C-5. Detailed Listing of Qualified Results for Samples from Load Line 11 (continued)

Sample ID	Laboratory SDG	Chemical	Results	Reporting Limit	Laboratory Qualifier^a	Validation Qualifier^b	Validation Code^c
LL11SS-077-5603-SO	A0D130516	Selenium	0.78	0.62	-	J	LCS-J
LL11SS-078-5604-SO	A0D130516	Selenium	0.94	0.62	-	J	LCS-J
LL11SS-079-5605-SO	A0D130516	Selenium	0.70	0.59	-	J	LCS-J
LL11SS-080-5606-SO	A0D130516	Selenium	0.88	0.72	-	J	LCS-J
LL11SS-081-5607-SO	A0D130516	Selenium	1.2	0.85	-	J	LCS-J
LL11SB-060-5551-SO	A0C190535	Silver	0.040	0.69	J	UJ	RepLimit-J, CalBlk-U
LL11SB-060-5552-SO	A0C190535	Silver	0.035	0.61	J	UJ	RepLimit-J, CalBlk-U
LL11SB-060-5553-SO	A0C190539	Silver	0.019	0.59	J	J	RepLimit-J
LL11SB-061-5555-SO	A0C180563	Silver	0.023	0.60	J	J	RepLimit-J
LL11SB-061-5556-SO	A0C180563	Silver	0.019	0.58	J	J	RepLimit-J
LL11SB-061-5557-SO	A0C180551	Silver	0.021	0.58	J	J	RepLimit-J
LL11SB-062-5559-SO	A0C190535	Silver	0.036	0.66	J	UJ	RepLimit-J, CalBlk-U
LL11SB-062-5560-SO	A0C190535	Silver	0.018	0.63	J	UJ	RepLimit-J, CalBlk-U
LL11SB-062-5561-SO	A0C190539	Silver	0.017	0.58	J	J	RepLimit-J
LL11SB-062-6189-FD	A0C190535	Silver	0.033	0.68	J	UJ	RepLimit-J, CalBlk-U
LL11SB-063-5563-SO	A0C230534	Silver	0.025	0.74	J	J	RepLimit-J
LL11SB-063-5564-SO	A0C230534	Silver	0.015	0.61	J	UJ	RepLimit-J, CalBlk-U
LL11SB-063-5565-SO	A0C230534	Silver	0.020	0.63	J	UJ	RepLimit-J, CalBlk-U
LL11SB-064-5569-SO	A0C180563	Silver	0.0046	0.56	J	J	RepLimit-J
LL11SB-064-5570-SO	A0C180563	Silver	0.017	0.57	J	J	RepLimit-J
LL11SB-064-5571-SO	A0C180551	Silver	0.019	0.60	J	J	RepLimit-J
LL11SB-064-5572-SO	A0C180563	Silver	0.017	0.63	J	J	RepLimit-J
LL11SB-064-6188-FD	A0C180563	Silver	0.018	0.62	J	UJ	RepLimit-J, CalBlk-U
LL11SB-065-5573-SO	A0C230534	Silver	0.017	0.65	J	UJ	RepLimit-J, CalBlk-U
LL11SB-065-5574-SO	A0C230534	Silver	0.013	0.60	J	UJ	RepLimit-J, CalBlk-U

Table C-5. Detailed Listing of Qualified Results for Samples from Load Line 11 (continued)

Sample ID	Laboratory SDG	Chemical	Results	Reporting Limit	Laboratory Qualifier^a	Validation Qualifier^b	Validation Code^c
LL11SB-065-5575-SO	A0C230523	Silver	0.014	0.58	J	J	RepLimit-J
LL11SB-065-5576-SO	A0C310489	Silver	0.021	0.58	J	UJ	RepLimit-J, CalBlk-U
LL11SB-066-5577-SO	A0C230534	Silver	0.050	0.70	J	J	RepLimit-J
LL11SB-066-5578-SO	A0C230534	Silver	0.015	0.59	J	UJ	RepLimit-J, CalBlk-U
LL11SB-066-5579-SO	A0C230523	Silver	0.011	0.59	J	J	RepLimit-J
LL11SB-067-5581-SO	A0C180563	Silver	0.024	0.60	J	J	RepLimit-J
LL11SB-067-5582-SO	A0C180563	Silver	0.0076	0.60	J	J	RepLimit-J
LL11SB-067-5583-SO	A0C180551	Silver	0.0059	0.59	J	J	RepLimit-J
LL11SB-067-6186-FD	A0C180563	Silver	0.010	0.60	J	UJ	RepLimit-J, CalBlk-U
LL11SB-068-5585-SO	A0C180563	Silver	0.025	0.61	J	UJ	RepLimit-J, CalBlk-U
LL11SB-068-5586-SO	A0C180563	Silver	0.019	0.61	J	J	RepLimit-J
LL11SB-068-5587-SO	A0C180551	Silver	0.010	0.59	J	J	RepLimit-J
LL11SB-068-6187-FD	A0C180563	Silver	0.0063	0.59	J	UJ	RepLimit-J, CalBlk-U
LL11SB-069-5589-SO	A0C230534	Silver	0.036	0.70	J	J	RepLimit-J
LL11SB-069-5590-SO	A0C230534	Silver	0.024	0.60	J	UJ	RepLimit-J, CalBlk-U
LL11SB-069-5591-SO	A0C230534	Silver	0.022	0.60	J	UJ	RepLimit-J, CalBlk-U
LL11SS-070-5596-SO	A0D130516	Silver	0.029	0.59	J	UJ	RepLimit-J, CalBlk-U
LL11SS-071-5597-SO	A0D130516	Silver	0.028	0.62	J	UJ	RepLimit-J, CalBlk-U
LL11SS-074-5600-SO	A0D130516	Silver	0.027	0.58	J	UJ	RepLimit-J, CalBlk-U
LL11SS-076-5602-SO	A0D130516	Silver	0.024	0.64	J	UJ	RepLimit-J, CalBlk-U
LL11SS-076-6183-FD	A0D130516	Silver	0.024	0.63	J	UJ	RepLimit-J, CalBlk-U
LL11SS-077-5603-SO	A0D130516	Silver	0.032	0.62	J	J	RepLimit-J
LL11SS-078-5604-SO	A0D130516	Silver	0.035	0.62	J	J	RepLimit-J

Table C-5. Detailed Listing of Qualified Results for Samples from Load Line 11 (continued)

Sample ID	Laboratory SDG	Chemical	Results	Reporting Limit	Laboratory Qualifier^a	Validation Qualifier^b	Validation Code^c
LL11SS-079-5605-SO	A0D130516	Silver	0.021	0.59	J	UJ	RepLimit-J, CalBlk-U
LL11SS-080-5606-SO	A0D130516	Silver	0.053	0.72	J	J	RepLimit-J
LL11SS-081-5607-SO	A0D130516	Silver	0.060	0.85	J	J	RepLimit-J
LL11SB-060-5551-SO	A0C190535	Sodium	44.5	139	J	J	RepLimit-J
LL11SB-060-5552-SO	A0C190535	Sodium	63.2	122	J	J	RepLimit-J
LL11SB-060-5553-SO	A0C190539	Sodium	34.3	119	J	J	RepLimit-J
LL11SB-061-5555-SO	A0C180563	Sodium	63.6	120	J	J	RepLimit-J
LL11SB-061-5556-SO	A0C180563	Sodium	64.2	115	J	J	RepLimit-J
LL11SB-061-5557-SO	A0C180551	Sodium	56.6	115	J	J	RepLimit-J
LL11SB-062-5559-SO	A0C190535	Sodium	34.8	132	J	J	RepLimit-J
LL11SB-062-5560-SO	A0C190535	Sodium	48.5	125	J	J	RepLimit-J
LL11SB-062-5561-SO	A0C190539	Sodium	41.7	116	J	J	RepLimit-J
LL11SB-062-6189-FD	A0C190535	Sodium	35.9	135	J	J	RepLimit-J
LL11SB-063-5563-SO	A0C230534	Sodium	74.3	147	J	J	RepLimit-J
LL11SB-063-5564-SO	A0C230534	Sodium	62.2	122	J	J	RepLimit-J
LL11SB-063-5565-SO	A0C230534	Sodium	65.8	127	J	J	RepLimit-J
LL11SB-064-5569-SO	A0C180563	Sodium	21.9	111	J	J	RepLimit-J
LL11SB-064-5570-SO	A0C180563	Sodium	46.5	115	J	J	RepLimit-J
LL11SB-064-5571-SO	A0C180551	Sodium	34.8	119	J	J	RepLimit-J
LL11SB-064-5572-SO	A0C180563	Sodium	53.0	126	J	J	RepLimit-J
LL11SB-064-6188-FD	A0C180563	Sodium	61.3	124	J	J	RepLimit-J
LL11SB-065-5573-SO	A0C230534	Sodium	30.4	129	J	J	RepLimit-J
LL11SB-065-5574-SO	A0C230534	Sodium	51.2	120	J	J	RepLimit-J
LL11SB-065-5575-SO	A0C230523	Sodium	40.3	117	J	J	RepLimit-J
LL11SB-065-5576-SO	A0C310489	Sodium	52.5	116	J	J	RepLimit-J
LL11SB-066-5577-SO	A0C230534	Sodium	30.3	139	J	J	RepLimit-J
LL11SB-066-5578-SO	A0C230534	Sodium	39.7	119	J	J	RepLimit-J
LL11SB-066-5579-SO	A0C230523	Sodium	41.6	118	J	J	RepLimit-J
LL11SB-067-5581-SO	A0C180563	Sodium	39.4	119	J	J	RepLimit-J
LL11SB-067-5582-SO	A0C180563	Sodium	44.6	120	J	J	RepLimit-J
LL11SB-067-5583-SO	A0C180551	Sodium	31.4	118	J	J	RepLimit-J
LL11SB-067-6186-FD	A0C180563	Sodium	38.9	120	J	J	RepLimit-J
LL11SB-068-5585-SO	A0C180563	Sodium	39.2	123	J	J	RepLimit-J
LL11SB-068-5586-SO	A0C180563	Sodium	41.6	123	J	J	RepLimit-J

Table C-5. Detailed Listing of Qualified Results for Samples from Load Line 11 (continued)

Sample ID	Laboratory SDG	Chemical	Results	Reporting Limit	Laboratory Qualifier^a	Validation Qualifier^b	Validation Code^c
LL11SB-068-5587-SO	A0C180551	Sodium	27.4	117	J	J	RepLimit-J
LL11SB-068-6187-FD	A0C180563	Sodium	28.4	117	J	J	RepLimit-J
LL11SB-069-5589-SO	A0C230534	Sodium	33.0	140	J	J	RepLimit-J
LL11SB-069-5590-SO	A0C230534	Sodium	47.6	120	J	J	RepLimit-J
LL11SB-069-5591-SO	A0C230534	Sodium	52.4	120	J	J	RepLimit-J
LL11SS-070-5596-SO	A0D130516	Sodium	85.9	118	J	J	RepLimit-J
LL11SS-071-5597-SO	A0D130516	Sodium	34.5	124	J	J	RepLimit-J
LL11SS-074-5600-SO	A0D130516	Sodium	36.2	117	J	J	RepLimit-J
LL11SS-076-5602-SO	A0D130516	Sodium	36.0	127	J	J	RepLimit-J
LL11SS-076-6183-FD	A0D130516	Sodium	33.2	125	J	J	RepLimit-J
LL11SS-077-5603-SO	A0D130516	Sodium	35.2	124	J	J	RepLimit-J
LL11SS-078-5604-SO	A0D130516	Sodium	40.6	124	J	J	RepLimit-J
LL11SS-079-5605-SO	A0D130516	Sodium	22.5	119	J	J	RepLimit-J
LL11SS-080-5606-SO	A0D130516	Sodium	38.5	143	J	J	RepLimit-J
LL11SS-081-5607-SO	A0D130516	Sodium	48.2	170	J	J	RepLimit-J
LL11SB-060-5551-SO	A0C190535	Thallium	0.19	0.28	J	J	RepLimit-J
LL11SB-060-5552-SO	A0C190535	Thallium	0.19	0.24	J	J	RepLimit-J
LL11SB-060-5553-SO	A0C190539	Thallium	0.12	0.24	J	J	RepLimit-J
LL11SB-061-5555-SO	A0C180563	Thallium	0.15	0.24	J	J	RepLimit-J
LL11SB-061-5556-SO	A0C180563	Thallium	0.14	0.23	J	J	RepLimit-J
LL11SB-061-5557-SO	A0C180551	Thallium	0.13	0.23	J	J	RepLimit-J
LL11SB-062-5559-SO	A0C190535	Thallium	0.17	0.26	J	J	RepLimit-J
LL11SB-062-5560-SO	A0C190535	Thallium	0.18	0.25	J	J	RepLimit-J
LL11SB-062-5561-SO	A0C190539	Thallium	0.12	0.23	J	J	RepLimit-J
LL11SB-062-6189-FD	A0C190535	Thallium	0.16	0.27	J	J	RepLimit-J
LL11SB-063-5563-SO	A0C230534	Thallium	0.13	0.29	J	J	RepLimit-J
LL11SB-063-5564-SO	A0C230534	Thallium	0.15	0.24	J	J	RepLimit-J
LL11SB-063-5565-SO	A0C230534	Thallium	0.11	0.25	J	J	RepLimit-J
LL11SB-064-5570-SO	A0C180563	Thallium	0.11	0.23	J	J	RepLimit-J
LL11SB-064-5571-SO	A0C180551	Thallium	0.11	0.24	J	J	RepLimit-J
LL11SB-064-5572-SO	A0C180563	Thallium	0.10	0.25	J	J	RepLimit-J
LL11SB-064-6188-FD	A0C180563	Thallium	0.11	0.25	J	J	RepLimit-J
LL11SB-065-5573-SO	A0C230534	Thallium	0.13	0.26	J	J	RepLimit-J
LL11SB-065-5574-SO	A0C230534	Thallium	0.19	0.24	J	J	RepLimit-J
LL11SB-065-5575-SO	A0C230523	Thallium	0.13	0.23	J	J	RepLimit-J

Table C-5. Detailed Listing of Qualified Results for Samples from Load Line 11 (continued)

Sample ID	Laboratory SDG	Chemical	Results	Reporting Limit	Laboratory Qualifier^a	Validation Qualifier^b	Validation Code^c
LL11SB-065-5576-SO	A0C310489	Thallium	0.11	0.23	J	J	RepLimit-J
LL11SB-066-5577-SO	A0C230534	Thallium	0.18	0.28	J	J	RepLimit-J
LL11SB-066-5578-SO	A0C230534	Thallium	0.14	0.24	J	J	RepLimit-J
LL11SB-066-5579-SO	A0C230523	Thallium	0.13	0.24	J	J	RepLimit-J
LL11SB-067-5581-SO	A0C180563	Thallium	0.14	0.24	J	J	RepLimit-J
LL11SB-067-5582-SO	A0C180563	Thallium	0.15	0.24	J	J	RepLimit-J
LL11SB-067-5583-SO	A0C180551	Thallium	0.12	0.24	J	J	RepLimit-J
LL11SB-068-5585-SO	A0C180563	Thallium	0.16	0.25	J	J	RepLimit-J
LL11SB-068-5586-SO	A0C180563	Thallium	0.16	0.25	J	J	RepLimit-J
LL11SB-068-5587-SO	A0C180551	Thallium	0.097	0.23	J	J	RepLimit-J
LL11SB-068-6187-FD	A0C180563	Thallium	0.11	0.23	J	J	RepLimit-J
LL11SB-069-5589-SO	A0C230534	Thallium	0.10	0.28	J	J	RepLimit-J
LL11SB-069-5590-SO	A0C230534	Thallium	0.10	0.24	J	J	RepLimit-J
LL11SB-069-5591-SO	A0C230534	Thallium	0.11	0.24	J	J	RepLimit-J
LL11SS-070-5596-SO	A0D130516	Thallium	0.15	0.24	J	J	RepLimit-J
LL11SS-071-5597-SO	A0D130516	Thallium	0.16	0.25	J	J	RepLimit-J
LL11SS-074-5600-SO	A0D130516	Thallium	0.15	0.23	J	J	RepLimit-J
LL11SS-076-5602-SO	A0D130516	Thallium	0.16	0.25	J	J	RepLimit-J
LL11SS-076-6183-FD	A0D130516	Thallium	0.16	0.25	J	J	RepLimit-J
LL11SS-077-5603-SO	A0D130516	Thallium	0.21	0.25	J	J	RepLimit-J
LL11SS-078-5604-SO	A0D130516	Thallium	0.16	0.25	J	J	RepLimit-J
LL11SS-079-5605-SO	A0D130516	Thallium	0.11	0.24	J	J	RepLimit-J
LL11SS-080-5606-SO	A0D130516	Thallium	0.16	0.29	J	J	RepLimit-J
LL11SS-081-5607-SO	A0D130516	Thallium	0.21	0.34	J	J	RepLimit-J
LL11SB-061-5555-SO	A0C180563	Zinc	52.6	4.8	-	J	MS-J
LL11SB-061-5556-SO	A0C180563	Zinc	52.3	4.6	-	J	MS-J
LL11SB-064-5569-SO	A0C180563	Zinc	20.9	4.4	-	J	MS-J
LL11SB-064-5570-SO	A0C180563	Zinc	55.2	4.6	-	J	MS-J
LL11SB-064-5572-SO	A0C180563	Zinc	46.9	5.0	-	J	MS-J
LL11SB-064-6188-FD	A0C180563	Zinc	47.7	5.0	-	J	MS-J
LL11SB-067-5581-SO	A0C180563	Zinc	46.9	4.8	-	J	MS-J
LL11SB-067-5582-SO	A0C180563	Zinc	52.2	4.8	-	J	MS-J
LL11SB-067-6186-FD	A0C180563	Zinc	39.6	4.8	-	J	MS-J
LL11SB-068-5585-SO	A0C180563	Zinc	56.0	4.9	-	J	MS-J
LL11SB-068-5586-SO	A0C180563	Zinc	42.9	4.9	-	J	MS-J

Table C-5. Detailed Listing of Qualified Results for Samples from Load Line 11 (continued)

Sample ID	Laboratory SDG	Chemical	Results	Reporting Limit	Laboratory Qualifier^a	Validation Qualifier^b	Validation Code^c
LL11SB-068-6187-FD	A0C180563	Zinc	36.0	4.7	-	J	MS-J
LL11SS-070-5596-SO	A0D130516	Zinc	57.8	4.7	-	J	MS-J
LL11SS-071-5597-SO	A0D130516	Zinc	52.8	4.9	-	J	MS-J
LL11SS-074-5600-SO	A0D130516	Zinc	54.9	4.7	-	J	MS-J
LL11SS-076-5602-SO	A0D130516	Zinc	38.8	5.1	-	J	MS-J
LL11SS-076-6183-FD	A0D130516	Zinc	40.8	5.0	-	J	MS-J
LL11SS-077-5603-SO	A0D130516	Zinc	45.6	5.0	-	J	MS-J
LL11SS-078-5604-SO	A0D130516	Zinc	478	4.9	-	J	MS-J
LL11SS-079-5605-SO	A0D130516	Zinc	40.4	4.8	-	J	MS-J
LL11SS-080-5606-SO	A0D130516	Zinc	78.6	5.7	-	J	MS-J
LL11SS-081-5607-SO	A0D130516	Zinc	117	6.8	-	J	MS-J
Surface Water (µg/L)							
LL11SW-084-5610-SW	A0B260454	Antimony	0.36	5.0	J	J	RepLimit-J
LL11SW-082-5608-SW	A0B260454	Arsenic	0.66	5.0	J	J	RepLimit-J
LL11SW-083-5609-SW	A0B260454	Arsenic	0.58	5.0	J	J	RepLimit-J
LL11SW-084-5610-SW	A0B260454	Arsenic	4.3	5.0	J	J	RepLimit-J
LL11SW-084-5610-SW	A0B260454	Beryllium	0.11	1.0	J	J	RepLimit-J
LL11SW-082-5608-SW	A0B260454	Cadmium	0.035	2.0	J	J	RepLimit-J
LL11SW-084-5610-SW	A0B260454	Cadmium	0.24	2.0	J	J	RepLimit-J
LL11SW-082-5608-SW	A0B260454	Chromium	0.79	5.0	J	J	RepLimit-J
LL11SW-083-5609-SW	A0B260454	Chromium	0.78	5.0	J	J	RepLimit-J
LL11SW-084-5610-SW	A0B260454	Chromium	3.3	5.0	J	J	RepLimit-J
LL11SW-082-5608-SW	A0B260454	Cobalt	0.26	5.0	J	J	RepLimit-J
LL11SW-083-5609-SW	A0B260454	Cobalt	0.17	5.0	J	J	RepLimit-J
LL11SW-084-5610-SW	A0B260454	Cobalt	1.9	5.0	J	J	RepLimit-J
LL11SW-082-5608-SW	A0B260454	Copper	2.4	5.0	J	J	RepLimit-J
LL11SW-083-5609-SW	A0B260454	Copper	1.4	5.0	J	J	RepLimit-J
LL11SW-082-5608-SW	A0B260454	Lead	0.43	3.0	J	J	RepLimit-J
LL11SW-083-5609-SW	A0B260454	Lead	0.44	3.0	J	J	RepLimit-J
LL11SW-082-5608-SW	A0B260454	Mercury	0.20	0.20	U	UJ	MS-UJ
LL11SW-083-5609-SW	A0B260454	Mercury	0.20	0.20	U	UJ	MS-UJ
LL11SW-084-5610-SW	A0B260454	Mercury	0.20	0.20	U	UJ	MS-UJ
LL11SW-082-5608-SW	A0B260454	Nickel	1.2	10.0	J	J	RepLimit-J
LL11SW-083-5609-SW	A0B260454	Nickel	0.91	10.0	J	J	RepLimit-J
LL11SW-084-5610-SW	A0B260454	Nickel	3.9	10.0	J	J	RepLimit-J

Table C-5. Detailed Listing of Qualified Results for Samples from Load Line 11 (continued)

Sample ID	Laboratory SDG	Chemical	Results	Reporting Limit	Laboratory Qualifier ^a	Validation Qualifier ^b	Validation Code ^c
LL11SW-083-5609-SW	A0B260454	Selenium	0.26	5.0	J	J	RepLimit-J
LL11SW-084-5610-SW	A0B260454	Selenium	0.73	5.0	J	J	RepLimit-J
LL11SW-084-5610-SW	A0B260454	Silver	0.078	5.0	J	UJ	RepLimit-J, CalBlk-U
LL11SW-082-5608-SW	A0B260454	Vanadium	0.86	10.0	J	J	RepLimit-J
LL11SW-083-5609-SW	A0B260454	Vanadium	1.1	10.0	J	J	RepLimit-J
LL11SW-084-5610-SW	A0B260454	Vanadium	5.1	10.0	J	J	RepLimit-J
LL11SW-082-5608-SW	A0B260454	Zinc	15.3	40.0	J B	UJ	MB-U, RepLimit-J
LL11SW-084-5610-SW	A0B260454	Zinc	30.0	40.0	J B	UJ	MB-U, RepLimit-J
Hexavalent Chromium							
Soil (mg/kg)							
LL11SS-072-5598-SO	A0D130516	Chromium, hexavalent	0.44	0.98	J	J	RepLimit-J
LL11SS-075-5601-SO	A0D130516	Chromium, hexavalent	0.71	0.95	J	J	RepLimit-J
Explosives							
Soil (mg/kg)							
LL11SB-061-5555-SO	A0C180563	Methyl-2,4,6-TrinitrophenylNitramine (Tetryl)	0.020	0.24	J PG	J	RepLimit-J
LL11SB-060-5551-SO	A0C190535	Octahydro-1,3,5,7-tetranitro-1,3,5,7- tetrazocine (HMX)	0.24	0.24	U	UJ	CCV-UJ
LL11SB-060-5552-SO	A0C190535	Octahydro-1,3,5,7-tetranitro-1,3,5,7- tetrazocine (HMX)	0.25	0.25	U	UJ	CCV-UJ
LL11SS-081-5607-SO	A0D130516	Octahydro-1,3,5,7-tetranitro-1,3,5,7- tetrazocine (HMX)	0.013	0.25	J	J	RepLimit-J
LL11SB-061-5555-SO	A0C180563	PETN	0.049	0.48	J PG	J	RepLimit-J
LL11SB-067-5581-SO	A0C180563	PETN	0.036	0.48	J PG	J	RepLimit-J
Polycyclic Aromatic Hydrocarbons							
Soil (µg/kg)							
LL11SB-068-5586-SO	A0C180563	Anthracene	61	61	U	UJ	MS-UJ
LL11SB-068-5585-SO	A0C180563	Benz(a)anthracene	15	61	J	J	RepLimit-J
LL11SB-068-5586-SO	A0C180563	Benz(a)anthracene	11	61	J	J	RepLimit-J
LL11SS-079-5605-SO	A0D130516	Benz(a)anthracene	13	59	J	J	RepLimit-J
LL11SB-068-5585-SO	A0C180563	Benzo(a)pyrene	14	61	J	J	RepLimit-J
LL11SB-068-5586-SO	A0C180563	Benzo(a)pyrene	11	61	J	J	MS-J, RepLimit-J
LL11SS-079-5605-SO	A0D130516	Benzo(a)pyrene	17	59	J	J	RepLimit-J
LL11SB-068-5585-SO	A0C180563	Benzo(b)fluoranthene	22	61	J	J	RepLimit-J

Table C-5. Detailed Listing of Qualified Results for Samples from Load Line 11 (continued)

Sample ID	Laboratory SDG	Chemical	Results	Reporting Limit	Laboratory Qualifier ^a	Validation Qualifier ^b	Validation Code ^c
LL11SB-068-5586-SO	A0C180563	Benzo(b)fluoranthene	16	61	J	J	MS-J, RepLimit-J
LL11SB-068-5585-SO	A0C180563	Benzo(g,h,i)perylene	14	61	J	J	RepLimit-J
LL11SS-079-5605-SO	A0D130516	Benzo(g,h,i)perylene	13	59	J	J	RepLimit-J
LL11SB-068-5585-SO	A0C180563	Benzo(k)fluoranthene	9.4	61	J	J	RepLimit-J
LL11SB-068-5586-SO	A0C180563	Benzo(k)fluoranthene	61	61	U	UJ	MS-UJ
LL11SB-068-5585-SO	A0C180563	Chrysene	16	61	J	J	RepLimit-J
LL11SB-068-5586-SO	A0C180563	Chrysene	10	61	J	J	MS-J, RepLimit-J
LL11SS-079-5605-SO	A0D130516	Chrysene	18	59	J	J	RepLimit-J
LL11SB-068-5585-SO	A0C180563	Fluoranthene	34	61	J	J	RepLimit-J
LL11SB-068-5586-SO	A0C180563	Fluoranthene	25	61	J	J	RepLimit-J
LL11SS-079-5605-SO	A0D130516	Fluoranthene	28	59	J	J	RepLimit-J
LL11SB-068-5585-SO	A0C180563	Indeno(1,2,3-cd)pyrene	11	61	J	J	RepLimit-J
LL11SB-068-5585-SO	A0C180563	Phenanthrene	17	61	J	J	RepLimit-J
LL11SB-068-5586-SO	A0C180563	Phenanthrene	13	61	J	J	RepLimit-J
LL11SS-079-5605-SO	A0D130516	Phenanthrene	12	59	J	J	RepLimit-J
LL11SB-068-5585-SO	A0C180563	Pyrene	25	61	J	J	RepLimit-J
LL11SB-068-5586-SO	A0C180563	Pyrene	19	61	J	J	RepLimit-J
LL11SS-079-5605-SO	A0D130516	Pyrene	23	59	J	J	RepLimit-J
Semi-volatile Organic Compounds							
Sediment (µg/kg)							
LL11SD-082-5593-SD	A0B260454	2-Methylnaphthalene	9.7	430	J	J	RepLimit-J
LL11SD-083-5594-SD	A0B260454	2-Methylnaphthalene	13	500	J	J	RepLimit-J
LL11SD-083-5594-SD	A0B260454	Anthracene	25	75	J	J	RepLimit-J
LL11SD-082-5593-SD	A0B260454	Benz(a)anthracene	14	65	J	J	RepLimit-J
LL11SD-084-5595-SD	A0B260454	Benz(a)anthracene	19	78	J	J	RepLimit-J
LL11SD-082-5593-SD	A0B260454	Benzo(a)pyrene	12	65	J	J	RepLimit-J
LL11SD-084-5595-SD	A0B260454	Benzo(a)pyrene	21	78	J	J	RepLimit-J
LL11SD-082-5593-SD	A0B260454	Benzo(b)fluoranthene	17	65	J	J	RepLimit-J
LL11SD-084-5595-SD	A0B260454	Benzo(b)fluoranthene	38	78	J	J	RepLimit-J
LL11SD-082-5593-SD	A0B260454	Benzo(g,h,i)perylene	11	65	J	J	RepLimit-J
LL11SD-083-5594-SD	A0B260454	Benzo(g,h,i)perylene	64	75	J	J	RepLimit-J
LL11SD-084-5595-SD	A0B260454	Benzo(g,h,i)perylene	17	78	J	J	RepLimit-J
LL11SD-082-5593-SD	A0B260454	Benzo(k)fluoranthene	8.9	65	J	J	RepLimit-J
LL11SD-083-5594-SD	A0B260454	Benzo(k)fluoranthene	56	75	J	J	RepLimit-J
LL11SD-084-5595-SD	A0B260454	Benzo(k)fluoranthene	11	78	J	J	RepLimit-J

Table C-5. Detailed Listing of Qualified Results for Samples from Load Line 11 (continued)

Sample ID	Laboratory SDG	Chemical	Results	Reporting Limit	Laboratory Qualifier ^a	Validation Qualifier ^b	Validation Code ^c
LL11SD-082-5593-SD	A0B260454	Chrysene	14	65	J	J	RepLimit-J
LL11SD-084-5595-SD	A0B260454	Chrysene	23	78	J	J	RepLimit-J
LL11SD-082-5593-SD	A0B260454	Fluoranthene	25	65	J	J	RepLimit-J
LL11SD-084-5595-SD	A0B260454	Fluoranthene	43	78	J	J	RepLimit-J
LL11SD-083-5594-SD	A0B260454	Fluorene	12	75	J	J	RepLimit-J
LL11SD-083-5594-SD	A0B260454	Indeno(1,2,3-cd)pyrene	56	75	J	J	RepLimit-J
LL11SD-084-5595-SD	A0B260454	Indeno(1,2,3-cd)pyrene	15	78	J	J	RepLimit-J
LL11SD-083-5594-SD	A0B260454	Naphthalene	10	75	J	J	RepLimit-J
LL11SD-082-5593-SD	A0B260454	Phenanthrene	17	65	J	J	RepLimit-J
LL11SD-084-5595-SD	A0B260454	Phenanthrene	16	78	J	J	RepLimit-J
LL11SD-082-5593-SD	A0B260454	Pyrene	19	65	J	J	RepLimit-J
LL11SD-084-5595-SD	A0B260454	Pyrene	33	78	J	J	RepLimit-J
LL11SD-082-5593-SD	A0B260454	Bis(2-ethylhexyl) phthalate	430	430	J B	UJ	MB-U, RepLimit-J
LL11SD-083-5594-SD	A0B260454	Bis(2-ethylhexyl) phthalate	500	500	J B	UJ	MB-U, RepLimit-J
LL11SD-084-5595-SD	A0B260454	Bis(2-ethylhexyl) phthalate	510	510	J B	UJ	MB-U, RepLimit-J
LL11SD-083-5594-SD	A0B260454	Dibenz(a,h)anthracene	17	75	J	J	RepLimit-J
Soil (µg/kg)							
LL11SB-068-5586-SO	A0C180563	1,2,4-Trichlorobenzene	410	410	U	UJ	HT-UJ
LL11SB-068-5586-SO	A0C180563	1,2-Dichlorobenzene	410	410	U	UJ	HT-UJ
LL11SS-079-5605-SO	A0D130516	1,2-Dichlorobenzene	390	390	U	UJ	MS-UJ
LL11SB-068-5586-SO	A0C180563	1,3-Dichlorobenzene	410	410	U	UJ	HT-UJ
LL11SS-079-5605-SO	A0D130516	1,3-Dichlorobenzene	390	390	U	UJ	MS-UJ
LL11SB-068-5586-SO	A0C180563	1,4-Dichlorobenzene	410	410	U	UJ	HT-UJ
LL11SS-079-5605-SO	A0D130516	1,4-Dichlorobenzene	390	390	U	UJ	MS-UJ
LL11SB-068-5586-SO	A0C180563	2,4,5-Trichlorophenol	410	410	U	UJ	HT-UJ, MS-UJ
LL11SB-068-5586-SO	A0C180563	2,4,6-Trichlorophenol	410	410	U	UJ	HT-UJ
LL11SB-068-5586-SO	A0C180563	2,4-Dichlorophenol	410	410	U	UJ	HT-UJ
LL11SB-068-5586-SO	A0C180563	2,4-Dimethylphenol	410	410	U	UJ	HT-UJ
LL11SB-068-5586-SO	A0C180563	2,4-Dinitrophenol	980	980	U	UJ	HT-UJ
LL11SB-068-5586-SO	A0C180563	2,4-Dinitrotoluene	410	410	U	UJ	HT-UJ
LL11SB-068-5586-SO	A0C180563	2,6-Dinitrotoluene	410	410	U	UJ	HT-UJ
LL11SB-068-5586-SO	A0C180563	2-Chloronaphthalene	410	410	U	UJ	HT-UJ
LL11SB-068-5586-SO	A0C180563	2-Chlorophenol	410	410	U	UJ	HT-UJ
LL11SB-068-5586-SO	A0C180563	2-Methylnaphthalene	410	410	U	UJ	HT-UJ
LL11SB-068-5586-SO	A0C180563	2-Methylphenol	410	410	U	UJ	HT-UJ

Table C-5. Detailed Listing of Qualified Results for Samples from Load Line 11 (continued)

Sample ID	Laboratory SDG	Chemical	Results	Reporting Limit	Laboratory Qualifier^a	Validation Qualifier^b	Validation Code^c
LL11SB-068-5586-SO	A0C180563	2-Nitroaniline	980	980	U	UJ	HT-UJ
LL11SB-068-5586-SO	A0C180563	2-Nitrophenol	410	410	U	UJ	HT-UJ
LL11SB-068-5586-SO	A0C180563	3,3'-Dichlorobenzidine	410	410	U	UJ	HT-UJ, MS-UJ
LL11SS-079-5605-SO	A0D130516	3,3'-Dichlorobenzidine	390	390	U	UJ	MS-UJ
LL11SB-068-5586-SO	A0C180563	3-Nitroaniline	980	980	U	UJ	HT-UJ
LL11SS-079-5605-SO	A0D130516	3-Nitroaniline	950	950	U	UJ	MS-UJ
LL11SB-068-5586-SO	A0C180563	3-Methylphenol/4-methylphenol	410	410	U	UJ	HT-UJ
LL11SB-068-5586-SO	A0C180563	4,6-Dinitro-2-methylphenol	980	980	U	UJ	HT-UJ
LL11SB-068-5586-SO	A0C180563	4-Bromophenyl phenyl ether	410	410	U	UJ	HT-UJ
LL11SB-068-5586-SO	A0C180563	4-Chloro-3-methylphenol	410	410	U	UJ	HT-UJ
LL11SB-068-5586-SO	A0C180563	4-Chloroaniline	410	410	U	UJ	HT-UJ
LL11SS-079-5605-SO	A0D130516	4-Chloroaniline	390	390	U	UJ	MS-UJ
LL11SB-068-5586-SO	A0C180563	4-Chlorophenyl phenyl ether	410	410	U	UJ	HT-UJ
LL11SB-068-5586-SO	A0C180563	4-Nitroaniline	980	980	U	UJ	HT-UJ
LL11SB-068-5586-SO	A0C180563	4-Nitrophenol	980	980	U	UJ	HT-UJ
LL11SB-068-5586-SO	A0C180563	Benzoic Acid	980	980	U	UJ	HT-UJ
LL11SB-068-5586-SO	A0C180563	Benzenemethanol	410	410	U	UJ	HT-UJ
LL11SB-068-5586-SO	A0C180563	Bis(2-chloroisopropyl) ether	410	410	U	UJ	HT-UJ
LL11SS-079-5605-SO	A0D130516	Bis(2-chloroisopropyl) ether	390	390	U	UJ	MS-UJ
LL11SB-068-5586-SO	A0C180563	Butyl benzyl phthalate	410	410	U	UJ	HT-UJ
LL11SB-068-5586-SO	A0C180563	Carbazole	61	61	U	UJ	HT-UJ
LL11SB-068-5587-SO	A0C180551	Carbazole	59	59	U	UJ	LCS-UJ
LL11SB-068-5586-SO	A0C180563	Di-n-butyl phthalate	19	410	J	J	HT-J, RepLimit-J
LL11SB-068-5587-SO	A0C180551	Di-n-butyl phthalate	390	390	J B	UJ	MB-U, RepLimit-J
LL11SB-068-6187-FD	A0C180563	Di-n-butyl phthalate	19	390	J	J	RepLimit-J
LL11SB-068-5586-SO	A0C180563	Di-n-octyl phthalate	410	410	U	UJ	HT-UJ
LL11SB-068-5586-SO	A0C180563	Dibenzofuran	410	410	U	UJ	HT-UJ
LL11SB-068-5586-SO	A0C180563	Diethyl phthalate	410	410	U	UJ	HT-UJ
LL11SB-068-5586-SO	A0C180563	Dimethyl phthalate	410	410	U	UJ	HT-UJ
LL11SB-068-5586-SO	A0C180563	Hexachlorocyclopentadiene	410	410	U	UJ	HT-UJ
LL11SB-068-5586-SO	A0C180563	Hexachlorobenzene	410	410	U	UJ	HT-UJ
LL11SB-068-5586-SO	A0C180563	Hexachlorobutadiene	410	410	U	UJ	HT-UJ
LL11SB-068-5586-SO	A0C180563	Hexachloroethane	410	410	U	UJ	HT-UJ
LL11SS-079-5605-SO	A0D130516	Hexachloroethane	390	390	U	UJ	MS-UJ
LL11SB-068-5586-SO	A0C180563	Isophorone	410	410	U	UJ	HT-UJ

Table C-5. Detailed Listing of Qualified Results for Samples from Load Line 11 (continued)

Sample ID	Laboratory SDG	Chemical	Results	Reporting Limit	Laboratory Qualifier ^a	Validation Qualifier ^b	Validation Code ^c
LL11SB-068-5586-SO	A0C180563	N-Nitrosodi-n-propylamine	410	410	U	UJ	HT-UJ
LL11SB-068-5586-SO	A0C180563	N-Nitrosodiphenylamine	410	410	U	UJ	HT-UJ
LL11SB-068-5586-SO	A0C180563	Nitrobenzene	410	410	U	UJ	HT-UJ
LL11SB-068-5586-SO	A0C180563	Pentachlorophenol	410	410	U	UJ	HT-UJ
LL11SB-068-5586-SO	A0C180563	Phenol	410	410	U	UJ	HT-UJ
LL11SB-068-5586-SO	A0C180563	Bis(2-chloroethoxy)methane	410	410	U	UJ	HT-UJ
LL11SB-068-5586-SO	A0C180563	Bis(2-chloroethyl) ether	410	410	U	UJ	HT-UJ
LL11SB-068-5586-SO	A0C180563	Bis(2-ethylhexyl) phthalate	24	410	J	J	HT-J, RepLimit-J
LL11SB-068-5587-SO	A0C180551	Bis(2-ethylhexyl) phthalate	390	390	J B	UJ	MB-U, RepLimit-J
Surface Water (µg/L)							
LL11SW-083-5609-SW	A0B260454	2,4-Dinitrophenol	25	25	U	UJ	MS-UJ
LL11SW-083-5609-SW	A0B260454	3,3'-Dichlorobenzidine	10	10	U	UJ	MS-UJ
LL11SW-083-5609-SW	A0B260454	Anthracene	10	10	U	UJ	MS-UJ
LL11SW-084-5610-SW	A0B260454	Benz(a)anthracene	0.35	10	J	J	RepLimit-J
LL11SW-084-5610-SW	A0B260454	Benzo(a)pyrene	0.33	10	J	J	RepLimit-J
LL11SW-083-5609-SW	A0B260454	Benzo(b)fluoranthene	10	10	U	UJ	MS-UJ
LL11SW-084-5610-SW	A0B260454	Benzo(b)fluoranthene	0.41	10	J	J	RepLimit-J
LL11SW-084-5610-SW	A0B260454	Benzo(g,h,i)perylene	0.24	10	J	J	RepLimit-J
LL11SW-084-5610-SW	A0B260454	Benzo(k)fluoranthene	0.24	10	J	J	RepLimit-J
LL11SW-084-5610-SW	A0B260454	Chrysene	0.35	10	J	J	RepLimit-J
LL11SW-084-5610-SW	A0B260454	Fluoranthene	0.73	10	J	J	RepLimit-J
LL11SW-084-5610-SW	A0B260454	Indeno(1,2,3-cd)pyrene	0.21	10	J	J	RepLimit-J
LL11SW-084-5610-SW	A0B260454	Phenanthrene	0.22	10	J	J	RepLimit-J
LL11SW-084-5610-SW	A0B260454	Pyrene	0.57	10	J	J	RepLimit-J
LL11SW-082-5608-SW	A0B260454	Bis(2-ethylhexyl) phthalate	10	10	J B	UJ	MB-U, RepLimit-J
LL11SW-083-5609-SW	A0B260454	Bis(2-ethylhexyl) phthalate	10	10	J B	UJ	MB-U, RepLimit-J
LL11SW-084-5610-SW	A0B260454	Bis(2-ethylhexyl) phthalate	10	10	J B	UJ	MB-U, RepLimit-J
Pesticides							
Soil (µg/kg)							
LL11SS-079-5605-SO	A0D130516	4,4'-DDD	12	12	U	UJ	CCV-UJ
LL11SB-068-5585-SO	A0C180563	4,4'-DDT	12	12	U	UJ	CCV-UJ
LL11SB-068-5586-SO	A0C180563	4,4'-DDT	2.5	2.5	U	UJ	CCV-UJ
LL11SB-068-6187-FD	A0C180563	4,4'-DDT	2.3	2.3	U	UJ	CCV-UJ
LL11SB-068-5586-SO	A0C180563	Dieldrin	2.1	2.1	U	UJ	MS-UJ
LL11SS-079-5605-SO	A0D130516	Endosulfan II	15	15	U	UJ	MS-UJ

Table C-5. Detailed Listing of Qualified Results for Samples from Load Line 11 (continued)

Sample ID	Laboratory SDG	Chemical	Results	Reporting Limit	Laboratory Qualifier^a	Validation Qualifier^b	Validation Code^c
LL11SS-079-5605-SO	A0D130516	Endrin	10	10	U	UJ	CCV-UJ
LL11SS-079-5605-SO	A0D130516	Toxaphene	400	400	U	UJ	CCV-UJ
Surface Water (µg/L)							
LL11SW-083-5609-SW	A0B260454	Beta-BHC	0.013	0.050	J	J	RepLimit-J
LL11SW-084-5610-SW	A0B260454	Beta-BHC	0.0096	0.050	J	J	RepLimit-J
LL11SW-083-5609-SW	A0B260454	Gamma-Chlordane	0.015	0.050	J	J	RepLimit-J
Polychlorinated Biphenyls							
Soil (µg/kg)							
LL11SB-061-5556-SO	A0C180563	Aroclor 1016	38	38	U	UJ	Surr-UJ
LL11SB-066-5577-SO	A0C230534	Aroclor 1016	46	46	U	UJ	HT-UJ
LL11SB-069-5589-SO	A0C230534	Aroclor 1016	46	46	U	UJ	Surr-UJ
LL11SB-061-5556-SO	A0C180563	Aroclor 1221	38	38	U	UJ	Surr-UJ
LL11SB-066-5577-SO	A0C230534	Aroclor 1221	46	46	U	UJ	HT-UJ
LL11SB-069-5589-SO	A0C230534	Aroclor 1221	46	46	U	UJ	Surr-UJ
LL11SB-061-5556-SO	A0C180563	Aroclor 1232	38	38	U	UJ	Surr-UJ
LL11SB-066-5577-SO	A0C230534	Aroclor 1232	46	46	U	UJ	HT-UJ
LL11SB-069-5589-SO	A0C230534	Aroclor 1232	46	46	U	UJ	Surr-UJ
LL11SB-061-5556-SO	A0C180563	Aroclor 1242	38	38	U	UJ	Surr-UJ
LL11SB-066-5577-SO	A0C230534	Aroclor 1242	46	46	U	UJ	HT-UJ
LL11SB-069-5589-SO	A0C230534	Aroclor 1242	46	46	U	UJ	Surr-UJ
LL11SB-061-5556-SO	A0C180563	Aroclor 1248	38	38	U	UJ	Surr-UJ
LL11SB-066-5577-SO	A0C230534	Aroclor 1248	46	46	U	UJ	HT-UJ
LL11SB-069-5589-SO	A0C230534	Aroclor 1248	46	46	U	UJ	Surr-UJ
LL11SB-061-5556-SO	A0C180563	Aroclor 1254	38	38	U	UJ	Surr-UJ
LL11SB-064-5569-SO	A0C180563	Aroclor 1254	20	37	J	J	RepLimit-J
LL11SB-066-5577-SO	A0C230534	Aroclor 1254	46	46	U	UJ	HT-UJ
LL11SB-069-5589-SO	A0C230534	Aroclor 1254	46	46	U	UJ	Surr-UJ
LL11SS-074-5600-SO	A0D130516	Aroclor 1254	20	39	J	J	RepLimit-J
LL11SS-078-5604-SO	A0D130516	Aroclor 1254	35	41	J	J	RepLimit-J
LL11SB-061-5556-SO	A0C180563	Aroclor 1260	38	38	U	UJ	Surr-UJ
LL11SB-066-5577-SO	A0C230534	Aroclor 1260	46	46	U	UJ	HT-UJ
LL11SB-069-5589-SO	A0C230534	Aroclor 1260	46	46	U	UJ	Surr-UJ
Volatile Organic Compounds							
Sediment (µg/kg)							
LL11SD-084-5595-SD	A0B260454	1,1,1-Trichloroethane	7.8	7.8	U	UJ	Surr-UJ

Table C-5. Detailed Listing of Qualified Results for Samples from Load Line 11 (continued)

Sample ID	Laboratory SDG	Chemical	Results	Reporting Limit	Laboratory Qualifier ^a	Validation Qualifier ^b	Validation Code ^c
LL11SD-084-5595-SD	A0B260454	1,1,2,2-Tetrachloroethane	7.8	7.8	U	UJ	Surr-UJ
LL11SD-084-5595-SD	A0B260454	1,1,2-Trichloroethane	7.8	7.8	U	UJ	Surr-UJ
LL11SD-084-5595-SD	A0B260454	1,1-Dichloroethane	7.8	7.8	U	UJ	Surr-UJ
LL11SD-084-5595-SD	A0B260454	1,1-Dichloroethene	7.8	7.8	U	UJ	Surr-UJ
LL11SD-084-5595-SD	A0B260454	1,2-Dibromoethane (ethylene dibromide)	7.8	7.8	U	UJ	Surr-UJ
LL11SD-084-5595-SD	A0B260454	1,2-Dichloroethane	7.8	7.8	U	UJ	Surr-UJ
LL11SD-084-5595-SD	A0B260454	1,2-Dichloroethene (total)	7.8	7.8	U	UJ	Surr-UJ
LL11SD-084-5595-SD	A0B260454	1,2-Dichloropropane	7.8	7.8	U	UJ	Surr-UJ
LL11SD-082-5593-SD	A0B260454	2-Butanone (MEK)	26	26	J B	UJ	MB-U, RepLimit-J
LL11SD-084-5595-SD	A0B260454	2-Butanone (MEK)	31	31	U	UJ	Surr-UJ
LL11SD-084-5595-SD	A0B260454	2-Hexanone	31	31	U	UJ	Surr-UJ
LL11SD-084-5595-SD	A0B260454	4-Methyl-2-pentanone (MIBK)	31	31	U	UJ	Surr-UJ
LL11SD-082-5593-SD	A0B260454	Acetone	26	26	J B	UJ	MB-U, RepLimit-J, FldQC-U
LL11SD-084-5595-SD	A0B260454	Acetone	31	31	U	UJ	Surr-UJ
LL11SD-084-5595-SD	A0B260454	Benzene	7.8	7.8	U	UJ	Surr-UJ
LL11SD-084-5595-SD	A0B260454	Bromochloromethane	7.8	7.8	U	UJ	Surr-UJ
LL11SD-084-5595-SD	A0B260454	Bromodichloromethane	7.8	7.8	U	UJ	Surr-UJ
LL11SD-084-5595-SD	A0B260454	Bromoform	7.8	7.8	U	UJ	Surr-UJ
LL11SD-084-5595-SD	A0B260454	Bromomethane (methyl bromide)	7.8	7.8	U	UJ	Surr-UJ
LL11SD-082-5593-SD	A0B260454	Carbon Disulfide	0.63	6.5	J	J	RepLimit-J
LL11SD-084-5595-SD	A0B260454	Carbon Disulfide	7.8	7.8	U	UJ	Surr-UJ
LL11SD-082-5593-SD	A0B260454	Carbon Tetrachloride	6.5	6.5	U	UJ	CCV-UJ
LL11SD-083-5594-SD	A0B260454	Carbon Tetrachloride	7.5	7.5	U	UJ	CCV-UJ
LL11SD-084-5595-SD	A0B260454	Carbon Tetrachloride	7.8	7.8	U	UJ	Surr-UJ
LL11SD-084-5595-SD	A0B260454	Chlorobenzene	7.8	7.8	U	UJ	Surr-UJ
LL11SD-084-5595-SD	A0B260454	Chlorodibromomethane	7.8	7.8	U	UJ	Surr-UJ
LL11SD-084-5595-SD	A0B260454	Chloroethane	7.8	7.8	U	UJ	Surr-UJ
LL11SD-084-5595-SD	A0B260454	Chloroform	7.8	7.8	U	UJ	Surr-UJ
LL11SD-084-5595-SD	A0B260454	Chloromethane	7.8	7.8	U	UJ	Surr-UJ
LL11SD-084-5595-SD	A0B260454	Ethylbenzene	7.8	7.8	U	UJ	Surr-UJ
LL11SD-084-5595-SD	A0B260454	Methylene Chloride	7.8	7.8	J B	UJ	MB-U, Surr-J, RepLimit-J
LL11SD-084-5595-SD	A0B260454	Styrene	7.8	7.8	U	UJ	Surr-UJ
LL11SD-084-5595-SD	A0B260454	Tetrachloroethene	7.8	7.8	U	UJ	Surr-UJ

Table C-5. Detailed Listing of Qualified Results for Samples from Load Line 11 (continued)

Sample ID	Laboratory SDG	Chemical	Results	Reporting Limit	Laboratory Qualifier ^a	Validation Qualifier ^b	Validation Code ^c
LL11SD-082-5593-SD	A0B260454	Toluene	0.40	6.5	J	J	RepLimit-J
LL11SD-084-5595-SD	A0B260454	Toluene	7.8	7.8	U	UJ	Surr-UJ
LL11SD-084-5595-SD	A0B260454	Trichloroethene	7.8	7.8	U	UJ	Surr-UJ
LL11SD-084-5595-SD	A0B260454	Vinyl Chloride	7.8	7.8	U	UJ	Surr-UJ
LL11SD-084-5595-SD	A0B260454	Xylene (total)	16	16	U	UJ	Surr-UJ
LL11SD-084-5595-SD	A0B260454	<i>cis</i> -1,3-Dichloropropene	7.8	7.8	U	UJ	Surr-UJ
LL11SD-084-5595-SD	A0B260454	<i>trans</i> -1,3-Dichloropropene	7.8	7.8	U	UJ	Surr-UJ
Soil (µg/kg)							
LL11SB-068-5585-SO	A0C180563	1,1,1-Trichloroethane	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5586-SO	A0C180563	1,1,1-Trichloroethane	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5587-SO	A0C180551	1,1,1-Trichloroethane	5.9	5.9	U	UJ	Surr-UJ
LL11SB-068-5585-SO	A0C180563	1,1,2,2-Tetrachloroethane	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5586-SO	A0C180563	1,1,2,2-Tetrachloroethane	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5587-SO	A0C180551	1,1,2,2-Tetrachloroethane	5.9	5.9	U	UJ	Surr-UJ
LL11SB-068-5585-SO	A0C180563	1,1,2-Trichloroethane	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5586-SO	A0C180563	1,1,2-Trichloroethane	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5587-SO	A0C180551	1,1,2-Trichloroethane	5.9	5.9	U	UJ	Surr-UJ
LL11SB-068-5585-SO	A0C180563	1,1-Dichloroethane	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5586-SO	A0C180563	1,1-Dichloroethane	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5587-SO	A0C180551	1,1-Dichloroethane	5.9	5.9	U	UJ	Surr-UJ
LL11SB-068-5585-SO	A0C180563	1,1-Dichloroethene	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5586-SO	A0C180563	1,1-Dichloroethene	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5587-SO	A0C180551	1,1-Dichloroethene	5.9	5.9	U	UJ	Surr-UJ
LL11SB-068-5585-SO	A0C180563	1,2-Dibromoethane (ethylene dibromide)	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5586-SO	A0C180563	1,2-Dibromoethane (ethylene dibromide)	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5587-SO	A0C180551	1,2-Dibromoethane (ethylene dibromide)	5.9	5.9	U	UJ	Surr-UJ
LL11SB-068-5585-SO	A0C180563	1,2-Dichloroethane	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5586-SO	A0C180563	1,2-Dichloroethane	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5587-SO	A0C180551	1,2-Dichloroethane	5.9	5.9	U	UJ	Surr-UJ
LL11SB-068-5585-SO	A0C180563	1,2-Dichloroethene (total)	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5586-SO	A0C180563	1,2-Dichloroethene (total)	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5587-SO	A0C180551	1,2-Dichloroethene (total)	5.9	5.9	U	UJ	Surr-UJ
LL11SB-068-5585-SO	A0C180563	1,2-Dichloropropane	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5586-SO	A0C180563	1,2-Dichloropropane	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5587-SO	A0C180551	1,2-Dichloropropane	5.9	5.9	U	UJ	Surr-UJ

Table C-5. Detailed Listing of Qualified Results for Samples from Load Line 11 (continued)

Sample ID	Laboratory SDG	Chemical	Results	Reporting Limit	Laboratory Qualifier^a	Validation Qualifier^b	Validation Code^c
LL11SB-068-5585-SO	A0C180563	2-Butanone (MEK)	25	25	U	UJ	Surr-UJ
LL11SB-068-5586-SO	A0C180563	2-Butanone (MEK)	25	25	U	UJ	Surr-UJ
LL11SB-068-5587-SO	A0C180551	2-Butanone (MEK)	23	23	U	UJ	Surr-UJ
LL11SB-068-5585-SO	A0C180563	2-Hexanone	25	25	U	UJ	Surr-UJ
LL11SB-068-5586-SO	A0C180563	2-Hexanone	25	25	U	UJ	Surr-UJ
LL11SB-068-5587-SO	A0C180551	2-Hexanone	23	23	U	UJ	Surr-UJ
LL11SB-068-5585-SO	A0C180563	4-Methyl-2-pentanone (MIBK)	25	25	U	UJ	Surr-UJ
LL11SB-068-5586-SO	A0C180563	4-Methyl-2-pentanone (MIBK)	25	25	U	UJ	Surr-UJ
LL11SB-068-5587-SO	A0C180551	4-Methyl-2-pentanone (MIBK)	23	23	U	UJ	Surr-UJ
LL11SB-068-5585-SO	A0C180563	Acetone	25	25	U	UJ	Surr-UJ
LL11SB-068-5586-SO	A0C180563	Acetone	25	25	U	UJ	Surr-UJ
LL11SB-068-5587-SO	A0C180551	Acetone	23	23	U	UJ	Surr-UJ
LL11SB-068-5585-SO	A0C180563	Benzene	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5586-SO	A0C180563	Benzene	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5587-SO	A0C180551	Benzene	5.9	5.9	U	UJ	Surr-UJ
LL11SB-068-5585-SO	A0C180563	Bromochloromethane	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5586-SO	A0C180563	Bromochloromethane	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5587-SO	A0C180551	Bromochloromethane	5.9	5.9	U	UJ	Surr-UJ
LL11SB-068-5585-SO	A0C180563	Bromodichloromethane	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5586-SO	A0C180563	Bromodichloromethane	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5587-SO	A0C180551	Bromodichloromethane	5.9	5.9	U	UJ	Surr-UJ
LL11SB-068-5585-SO	A0C180563	Bromoform	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5586-SO	A0C180563	Bromoform	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5587-SO	A0C180551	Bromoform	5.9	5.9	U	UJ	Surr-UJ
LL11SB-068-5585-SO	A0C180563	Bromomethane (methyl bromide)	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5586-SO	A0C180563	Bromomethane (methyl bromide)	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5587-SO	A0C180551	Bromomethane (methyl bromide)	5.9	5.9	U	UJ	Surr-UJ
LL11SB-068-5585-SO	A0C180563	Carbon Disulfide	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5586-SO	A0C180563	Carbon Disulfide	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5587-SO	A0C180551	Carbon Disulfide	5.9	5.9	U	UJ	Surr-UJ
LL11SB-068-5585-SO	A0C180563	Carbon Tetrachloride	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5586-SO	A0C180563	Carbon Tetrachloride	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5587-SO	A0C180551	Carbon Tetrachloride	5.9	5.9	U	UJ	Surr-UJ
LL11SB-068-5585-SO	A0C180563	Chlorobenzene	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5586-SO	A0C180563	Chlorobenzene	6.1	6.1	U	UJ	Surr-UJ

Table C-5. Detailed Listing of Qualified Results for Samples from Load Line 11 (continued)

Sample ID	Laboratory SDG	Chemical	Results	Reporting Limit	Laboratory Qualifier^a	Validation Qualifier^b	Validation Code^c
LL11SB-068-5587-SO	A0C180551	Chlorobenzene	5.9	5.9	U	UJ	Surr-UJ
LL11SB-068-5585-SO	A0C180563	Chlorodibromomethane	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5586-SO	A0C180563	Chlorodibromomethane	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5587-SO	A0C180551	Chlorodibromomethane	5.9	5.9	U	UJ	Surr-UJ
LL11SB-068-5585-SO	A0C180563	Chloroethane	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5586-SO	A0C180563	Chloroethane	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5587-SO	A0C180551	Chloroethane	5.9	5.9	U	UJ	Surr-UJ
LL11SB-068-5585-SO	A0C180563	Chloroform	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5586-SO	A0C180563	Chloroform	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5587-SO	A0C180551	Chloroform	5.9	5.9	U	UJ	Surr-UJ
LL11SB-068-5585-SO	A0C180563	Chloromethane	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5586-SO	A0C180563	Chloromethane	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5587-SO	A0C180551	Chloromethane	5.9	5.9	U	UJ	Surr-UJ
LL11SB-068-5585-SO	A0C180563	Ethylbenzene	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5586-SO	A0C180563	Ethylbenzene	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5587-SO	A0C180551	Ethylbenzene	5.9	5.9	U	UJ	Surr-UJ
LL11SB-068-5585-SO	A0C180563	Methylene Chloride	6.1	6.1	J B	UJ	MB-U, Surr-J, RepLimit-J
LL11SB-068-5586-SO	A0C180563	Methylene Chloride	6.1	6.1	J B	UJ	MB-U, Surr-J, RepLimit-J
LL11SB-068-5587-SO	A0C180551	Methylene Chloride	5.9	5.9	J B	UJ	MB-U, Surr-J, RepLimit-J
LL11SB-068-6187-FD	A0C180563	Methylene Chloride	5.9	5.9	J B	UJ	MB-U, RepLimit-J
LL11SB-068-5585-SO	A0C180563	Styrene	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5586-SO	A0C180563	Styrene	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5587-SO	A0C180551	Styrene	5.9	5.9	U	UJ	Surr-UJ
LL11SB-068-5585-SO	A0C180563	Tetrachloroethene	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5586-SO	A0C180563	Tetrachloroethene	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5587-SO	A0C180551	Tetrachloroethene	5.9	5.9	U	UJ	Surr-UJ
LL11SB-068-5585-SO	A0C180563	Toluene	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5586-SO	A0C180563	Toluene	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5587-SO	A0C180551	Toluene	5.9	5.9	U	UJ	Surr-UJ
LL11SB-068-5585-SO	A0C180563	Trichloroethene	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5586-SO	A0C180563	Trichloroethene	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5587-SO	A0C180551	Trichloroethene	5.9	5.9	U	UJ	Surr-UJ

Table C-5. Detailed Listing of Qualified Results for Samples from Load Line 11 (continued)

Sample ID	Laboratory SDG	Chemical	Results	Reporting Limit	Laboratory Qualifier ^a	Validation Qualifier ^b	Validation Code ^c
LL11SB-068-5585-SO	A0C180563	Vinyl Chloride	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5586-SO	A0C180563	Vinyl Chloride	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5587-SO	A0C180551	Vinyl Chloride	5.9	5.9	U	UJ	Surr-UJ
LL11SB-068-5585-SO	A0C180563	Xylene (total)	12	12	U	UJ	Surr-UJ
LL11SB-068-5586-SO	A0C180563	Xylene (total)	12	12	U	UJ	Surr-UJ
LL11SB-068-5587-SO	A0C180551	Xylene (total)	12	12	U	UJ	Surr-UJ
LL11SB-068-5585-SO	A0C180563	<i>cis</i> -1,3-Dichloropropene	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5586-SO	A0C180563	<i>cis</i> -1,3-Dichloropropene	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5587-SO	A0C180551	<i>cis</i> -1,3-Dichloropropene	5.9	5.9	U	UJ	Surr-UJ
LL11SB-068-5585-SO	A0C180563	<i>trans</i> -1,3-Dichloropropene	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5586-SO	A0C180563	<i>trans</i> -1,3-Dichloropropene	6.1	6.1	U	UJ	Surr-UJ
LL11SB-068-5587-SO	A0C180551	<i>trans</i> -1,3-Dichloropropene	5.9	5.9	U	UJ	Surr-UJ
Surface Water (µg/L)							
LL11SW-082-5608-SW	A0B260454	Bromoform	1.0	1.0	U	UJ	CCV-UJ
LL11SW-083-5609-SW	A0B260454	Bromoform	1.0	1.0	U	UJ	CCV-UJ
LL11SW-084-5610-SW	A0B260454	Bromoform	1.0	1.0	U	UJ	CCV-UJ
LL11SW-082-5608-SW	A0B260454	Chloroethane	1.0	1.0	U	UJ	LCS-UJ
LL11SW-083-5609-SW	A0B260454	Chloroethane	1.0	1.0	U	UJ	MS-UJ, LCS-UJ
LL11SW-084-5610-SW	A0B260454	Chloroethane	1.0	1.0	U	UJ	LCS-UJ

^aLaboratory 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, U = not detected, and PG = more than 40% difference between primary and confirmation analysis.

^bValidation Qualifiers: J = estimated, R = rejected, U = not detected, and UJ = not detected and reporting limit estimated.

^cValidation Reason Codes: CalBlk = Calibration Blank, CCV = Continuing Calibration Verification, FldQC = Field Quality Control, HT = Holding Time, LCS = Laboratory Control Sample, MB = Method Blank, MS = Matrix Spike, ProJudge = Professional Judgment, RptLimit = Reporting Limit, and Surr = Surrogate Recovery.

BHC = Hexachlorocyclohexane.

DDD = Dichlorodiphenyldichloroethane.

DDT = Dichlorodiphenyltrichloroethane.

ID = Identification.

µg/L = Micrograms per liter.

µg/mg = Micrograms per milligram.

mg/kg = Milligrams per kilogram.

PETN = Pentaerythritol tetranitrate.

SDG = Sample delivery group.

-- = No qualifier.

For this RVAAP study, five field duplicates were analyzed for soil media. No sediment or surface water field duplicates were collected at Load Line 11. One trip blank for VOC determinations was 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 (PBA08) Sharon Conglomerate Well Installation task. The project goal for blanks is to achieve concentrations less than the reporting levels. Table C-6 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 field blank (PBA08-QC-6000-FB) and it was well below the laboratory reporting limit. The PBA08 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-6. Results for Analytes Detected in Field Blanks or Equipment Rinse Samples

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

Table C-6. Results for Analytes Detected in Field Blanks or Equipment Rinse Samples (continued)

Sample Identification	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)						
Miscellaneous						
Alkalinity	NA	1.0	250 J	NA	NA	NA
Bicarbonate	NA	1.0	250 J	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: FB = source water blank and ER = equipment rinse 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 for sediment and did not impact the data. However, due to soil method blanks, one data point (0.094% soil data) was qualified as not detected “UJ.” Due to instrument blank contamination, 6 data points in sediment (8.7% of sediment data) and 27 data points in soil (2.5% of soil data) were qualified as not detected “U” or “UJ.” All LCS recovery criteria were met for sediment matrices. However, soil LCS recovery deviations caused various analyte results for 43 data points to be qualified as estimated “J” and represented 4% of the soil data. Due to MS/MSD recoveries being outside control limit criteria for several analytes, 7 data points in sediment (10.1% of sediment data) and 179 data points in soil (16.9% of soil data) were qualified as estimated “J” or estimated non-detectable concentration “UJ.” Due to very poor MS/MSD recoveries, two sediment data points (2.9% of sediment data) and one soil data point (0.094% of soil data) were rejected “R.” Rejected data were relegated to non-detectable concentration antimony results. Other metals exhibited acceptable recoveries and were not qualified. Professional judgment (laboratory duplicate or serial dilution deviations) resulted in 17 soil data points (1.6% of soil data) being qualified as estimated “J.” Reporting levels are considered to be acceptable relative to QAPP goals. Due to elevated target levels present, three sediment samples and nine soil samples required dilutions for various analytes to bring them within calibration range. 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 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. Method blank and instrument blank levels did result in the qualification of three data points (4.3% of water data) as estimated non-detectable concentration “UJ.” These qualifications did not impact the project’s ability to consistently meet reporting levels. LCS determinations were acceptable. MS recoveries were satisfactory for most analytes; however, MS recovery deviations did result in three data points (4.3% of water data) being qualified as estimated non-detectable concentrations “UJ.” Serial dilution and duplicate comparisons were acceptable within the data set. Reporting levels are considered to be 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. 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 soil analyses. Initial calibrations for sediment were acceptable. Due to sediment continuing calibration percent differences less than -20%, two sediment data points (1.9% of VOC sediment data) were qualified as estimated non-detectable concentration “UJ.” Due to surrogate recovery failures, 35 sediment results (33% of VOC sediment data) and 105 soil data points (60% of VOC soil data) were qualified as estimated non-detectable concentration “UJ.” 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 three data points in sediment (2.9% of VOC sediment data) and four soil data points (2.3% of VOC soil data) 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 area counts were acceptable. Initial calibration criteria were met for all target analytes. Due to less than -20% continuing calibration percent differences, three data points (2.9% of VOC water data) were qualified as estimated non-detectable concentration “UJ.” 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 4.3 µg/L, but no data were impacted because acetone was not detected. MS/MSD recovery deviation did result in one data point (0.95% of VOC water data) being qualified as estimated non-detectable concentration “UJ.” LCS recovery failures resulted in three data points (2.9% of VOC data) being qualified as estimated non-detectable concentration “UJ.” 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

Exceeded extraction holding times resulted in 50 soil data points (5.1% of soil data) being qualified as estimated “J” or “UJ” as required. All other analytical holding times were met for sediment and soil

samples. Surrogate recovery criteria were met. Internal standard area counts and compound retention times were acceptable throughout the data analyses. Initial and continuing calibration criteria were met for all compounds. Sediment and soil method blanks contained low-level phthalate contamination, which caused three sediment data points (1.5% of sediment data) and two soil data points (0.20% of soil data) to be qualified as not detected “UJ.” LCS recovery deviation resulted in one soil data point (0.10% of soil data) being qualified as estimated non-detectable concentration “UJ.” All other soil and sediment LCS recoveries were within criteria. MS/MSD recoveries and RPD values were acceptable for sediment samples; however, MS/MSD deviations in soil resulted in 15 data points (1.5% of soil data) being qualified as estimated non-detectable concentration “UJ” as required. No soil or sediment samples required dilutions. 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 SVOC water samples. All surrogate recoveries and internal standard area counts/retention times were acceptable. Initial and continuing calibration criteria were met for all analytes. As a result of method blank levels, three data points (1.5% of SVOC water data) were qualified as not detected below the reporting limit “UJ.” LCS recoveries were within criteria. MS/MSD recoveries and RPD deviations resulted in four data points (2% of SVOC water data) being qualified as estimated non-detectable concentration “UJ.” 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 Analyses

C.4.4.1 Sediment and Soil

Analytical holding times were met for all samples. Surrogate recoveries were within acceptance criteria for all sediment and soil samples. Continuing calibrations exceeded the 15% difference limit for several analytes, which caused results for six soil data points (5.7% of soil data) to be qualified as estimated non-detectable concentration “UJ.” All method blanks were free of contamination and had no impact on the sample data. All 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 two pesticide soil data points (1.9% of pesticide soil data), which were qualified as estimated non-detectable concentration “UJ.” Due to matrix interferences or elevated target levels, one pesticide sediment sample was analyzed at a 1:10 dilution and two pesticide soil samples were analyzed at 1:5 dilutions. The elevated reporting limits were below facility-wide cleanup goals (FWCUGs). No 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 initial and continuing calibration criteria were met for all analytes. All method blanks were free of contamination and had no impact on the data. Surrogate recoveries were within acceptance criteria. All LCS recoveries were within criteria. MS/MSD recoveries and RPD values were acceptable. No 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 Analyses

C.4.5.1 Sediment and Soil

One PCB soil sample was re-extracted outside its holding time, which caused seven PCB results (2.2% of PCB soil data) to be qualified as estimated non-detectable concentration “UJ.” All other analytical holding times were met for all sediment and soil samples. Low surrogate recoveries resulted in 14 PCB soil data points (4.3% of PCB soil data) being qualified as estimated non-detectable concentration “UJ.” Initial and continuing calibration criteria were met for all compounds in sediment and soil. All 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 all analytes in sediment and soil. No PCB sediment or soil samples required dilutions. No 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 initial and continuing calibration criteria were met for all analytes. All method blanks were free of contamination and had no impact on the data. Surrogate recoveries were within acceptance criteria. All LCS recoveries were within criteria. MS/MSD recoveries and RPD values were acceptable. No water samples required dilutions. No data were rejected for any reason. Although some analyses were qualified as estimated because values were less than the reporting limits, 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 Analysis

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 greater than 15% difference values, which caused two soil data points (0.27% of explosives soil data) to be qualified as estimated non-detectable concentration “UJ” for the 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, but seven samples were re-analyzed. 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 and soil MS/MSD recoveries and RPD values were acceptable for all applicable analytes. No sediment or soil dilutions were required. No data were rejected for any reason. Although two hexavalent chromium data points were estimated “J” because the results were less than 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.4.7.2 Surface Water

Holding times were acceptable for all analyses. 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 MS

and LCS recoveries were within acceptance criteria. No dilutions were required for any samples. No data were rejected. No data were estimated for any reason. All results 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-7. 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 waters while the absolute difference is set at one times the reporting limit for all matrices. In general, field duplicate comparisons are considered good. Only 10 of 126 comparisons were outside the specified field duplicate criteria. Cobalt and manganese exceeded the RPD criteria at 68 and 91%, respectively, while calcium and potassium exceeded the absolute difference criteria at 3.30 and 1.10, respectively, in soil duplicate pair LL11SB-067-5582-SO/LL11SB-067-6186-FD. The absolute difference criteria also were slightly exceeded for potassium (1.10) in soil duplicate pair LL11SB-062-5559-SO/LL11SB-062-6189-FD and low-level polycyclic aromatic hydrocarbon (PAH) detections for benzo(a)pyrene (1.30), benzo(b)fluoranthene (1.10), benzo(ghi)perylene (1.30), fluoranthene (1.70), and pyrene (1.10) for LL11SS-076-5602-SO/LL11SS-076-6183-FD.

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 pesticide analytes in one sediment and two soil samples due to dilution factors. For these samples, results for undetected analytes remained below FWCUGs. 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, 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-4.

There was only one instance of the VOC acetone detected in the project trip blank. The concentration observed was 4.3 µg/L (reporting level at 10 µg/L). The impact of this value has been assessed during data review. No data have been qualified as a result of the trip blank. It is, therefore, 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.

Table C-7. Field Duplicate Pair Comparisons for Analytes Detected in Samples from Load Line 11

Sample ID	Chemical	Regular Result	Duplicate Result	RPD % or (Absolute Difference) ^a	Test ^b
<i>Metals</i>					
<i>Soil (mg/kg)</i>					
LL11SB-062-5559-SO/ LL11SB-062-6189-FD	Aluminum	11,200	11,300	1%	RPD
LL11SB-062-5559-SO/ LL11SB-062-6189-FD	Antimony	0.1 J	0.12 J	(0.03)	D
LL11SB-062-5559-SO/ LL11SB-062-6189-FD	Arsenic	10.6 J	10.2 J	4%	RPD
LL11SB-062-5559-SO/ LL11SB-062-6189-FD	Barium	73.8 J	66.1 J	11%	RPD
LL11SB-062-5559-SO/ LL11SB-062-6189-FD	Beryllium	0.58	0.55	(0.22)	D
LL11SB-062-5559-SO/ LL11SB-062-6189-FD	Cadmium	0.24 J	0.26 J	(0.08)	D
LL11SB-062-5559-SO/ LL11SB-062-6189-FD	Calcium	2,030	2,220	9%	RPD
LL11SB-062-5559-SO/ LL11SB-062-6189-FD	Chromium	13.5	13.5	0%	RPD
LL11SB-062-5559-SO/ LL11SB-062-6189-FD	Cobalt	13 J	10.5 J	21%	RPD
LL11SB-062-5559-SO/ LL11SB-062-6189-FD	Copper	11	12.6	14%	RPD
LL11SB-062-5559-SO/ LL11SB-062-6189-FD	Iron	22,300	20,600	8%	RPD
LL11SB-062-5559-SO/ LL11SB-062-6189-FD	Lead	21.4 J	23.4 J	9%	RPD
LL11SB-062-5559-SO/ LL11SB-062-6189-FD	Magnesium	2,140	2,210	3%	RPD
LL11SB-062-5559-SO/ LL11SB-062-6189-FD	Manganese	1,320	887	39%	RPD
LL11SB-062-5559-SO/ LL11SB-062-6189-FD	Mercury	0.035 J	0.041 J	(0.04)	D
LL11SB-062-5559-SO/ LL11SB-062-6189-FD	Nickel	15.4	15.7	2%	RPD
LL11SB-062-5559-SO/ LL11SB-062-6189-FD	Potassium	658 J	804 J	(1.10)	D *
LL11SB-062-5559-SO/ LL11SB-062-6189-FD	Selenium	0.9 J	0.94 J	(0.06)	D
LL11SB-062-5559-SO/ LL11SB-062-6189-FD	Sodium	34.8 J	35.9 J	(0.01)	D
LL11SB-062-5559-SO/ LL11SB-062-6189-FD	Thallium	0.17 J	0.16 J	(0.04)	D
LL11SB-062-5559-SO/ LL11SB-062-6189-FD	Vanadium	20.8	19.7	5%	RPD
LL11SB-062-5559-SO/ LL11SB-062-6189-FD	Zinc	49.9	55.7	11%	RPD
LL11SB-062-5559-SO/ LL11SB-062-6189-FD	Benzo(a)pyrene	0.0091	0.0099	(0.09)	D
LL11SB-062-5559-SO/ LL11SB-062-6189-FD	Fluoranthene	0.014	0.017	(0.34)	D
LL11SB-062-5559-SO/ LL11SB-062-6189-FD	Naphthalene	0.0089	0.009 U	(0.01)	D
LL11SB-062-5559-SO/ LL11SB-062-6189-FD	Phenanthrene	0.0088 U	0.011	(0.25)	D
LL11SB-062-5559-SO/ LL11SB-062-6189-FD	Pyrene	0.012	0.014	(0.22)	D
LL11SB-064-5572-SO/ LL11SB-064-6188-FD	Aluminum	4,760	6,110	25%	RPD
LL11SB-064-5572-SO/ LL11SB-064-6188-FD	Arsenic	11.5 J	11.5 J	0%	RPD
LL11SB-064-5572-SO/ LL11SB-064-6188-FD	Barium	23.9	26.4 J	10%	RPD
LL11SB-064-5572-SO/ LL11SB-064-6188-FD	Beryllium	0.25	0.3	(0.40)	D
LL11SB-064-5572-SO/ LL11SB-064-6188-FD	Cadmium	0.065 J	0.054 UJ	(0.04)	D
LL11SB-064-5572-SO/ LL11SB-064-6188-FD	Calcium	5,850 J	5,080 J	14%	RPD

Table C-7. Field Duplicate Pair Comparisons for Analytes Detected in Samples from Load Line 11 (continued)

Sample ID	Chemical	Regular Result	Duplicate Result	RPD % or (Absolute Difference)^a	Test^b
LL11SB-064-5572-SO/ LL11SB-064-6188-FD	Chromium	7.4	9.5	25%	RPD
LL11SB-064-5572-SO/ LL11SB-064-6188-FD	Cobalt	6.4	7.4	14%	RPD
LL11SB-064-5572-SO/ LL11SB-064-6188-FD	Copper	16.7	16.7	0%	RPD
LL11SB-064-5572-SO/ LL11SB-064-6188-FD	Iron	17,300	18,600	7%	RPD
LL11SB-064-5572-SO/ LL11SB-064-6188-FD	Lead	9.7 J	8.8 J	10%	RPD
LL11SB-064-5572-SO/ LL11SB-064-6188-FD	Magnesium	3,460 J	3,740 J	8%	RPD
LL11SB-064-5572-SO/ LL11SB-064-6188-FD	Manganese	282	279	1%	RPD
LL11SB-064-5572-SO/ LL11SB-064-6188-FD	Nickel	14.8	17	14%	RPD
LL11SB-064-5572-SO/ LL11SB-064-6188-FD	Potassium	748	1,000	29%	RPD
LL11SB-064-5572-SO/ LL11SB-064-6188-FD	Selenium	0.55 J	0.81 J	(0.42)	D
LL11SB-064-5572-SO/ LL11SB-064-6188-FD	Silver	0.017 J	0.018 UJ	(0.00)	D
LL11SB-064-5572-SO/ LL11SB-064-6188-FD	Sodium	53 J	61.3 J	(0.07)	D
LL11SB-064-5572-SO/ LL11SB-064-6188-FD	Thallium	0.1 J	0.11 J	(0.04)	D
LL11SB-064-5572-SO/ LL11SB-064-6188-FD	Vanadium	8.7	10.4	18%	RPD
LL11SB-064-5572-SO/ LL11SB-064-6188-FD	Zinc	46.9 J	47.7 J	2%	RPD
LL11SB-067-5582-SO/ LL11SB-067-6186-FD	Aluminum	11,700	11,700	0%	RPD
LL11SB-067-5582-SO/ LL11SB-067-6186-FD	Antimony	0.081 J	0.12 J	(0.07)	D
LL11SB-067-5582-SO/ LL11SB-067-6186-FD	Arsenic	12.5 J	15.5 J	21%	RPD
LL11SB-067-5582-SO/ LL11SB-067-6186-FD	Barium	46.7 J	48.3 J	3%	RPD
LL11SB-067-5582-SO/ LL11SB-067-6186-FD	Beryllium	0.5	0.5	(0.00)	D
LL11SB-067-5582-SO/ LL11SB-067-6186-FD	Cadmium	0.066 J	0.082 J	(0.07)	D
LL11SB-067-5582-SO/ LL11SB-067-6186-FD	Calcium	915 J	1,720 J	(3.30)	D *
LL11SB-067-5582-SO/ LL11SB-067-6186-FD	Chromium	14.8	15	1%	RPD
LL11SB-067-5582-SO/ LL11SB-067-6186-FD	Cobalt	10.6	5.2	68%	RPD*
LL11SB-067-5582-SO/ LL11SB-067-6186-FD	Copper	19.1	18.4	4%	RPD
LL11SB-067-5582-SO/ LL11SB-067-6186-FD	Iron	24,600	27,800	12%	RPD
LL11SB-067-5582-SO/ LL11SB-067-6186-FD	Lead	11.6 J	8.6 J	30%	RPD
LL11SB-067-5582-SO/ LL11SB-067-6186-FD	Magnesium	2,890 J	2,220 J	26%	RPD
LL11SB-067-5582-SO/ LL11SB-067-6186-FD	Manganese	352	132	91%	RPD*
LL11SB-067-5582-SO/ LL11SB-067-6186-FD	Mercury	0.12 U	0.031 J	(0.74)	D
LL11SB-067-5582-SO/ LL11SB-067-6186-FD	Nickel	21.4	13.6	45%	RPD
LL11SB-067-5582-SO/ LL11SB-067-6186-FD	Potassium	891	585	(2.60)	D *
LL11SB-067-5582-SO/ LL11SB-067-6186-FD	Selenium	0.87 J	0.91 J	(0.07)	D
LL11SB-067-5582-SO/ LL11SB-067-6186-FD	Silver	0.0076 J	0.01 UJ	(0.00)	D
LL11SB-067-5582-SO/ LL11SB-067-6186-FD	Sodium	44.6 J	38.9 J	(0.05)	D
LL11SB-067-5582-SO/ LL11SB-067-6186-FD	Thallium	0.15 J	0.26	(0.46)	D

Table C-7. Field Duplicate Pair Comparisons for Analytes Detected in Samples from Load Line 11 (continued)

Sample ID	Chemical	Regular Result	Duplicate Result	RPD % or (Absolute Difference) ^a	Test ^b
LL11SB-067-5582-SO/ LL11SB-067-6186-FD	Vanadium	18.4	23	22%	RPD
LL11SB-067-5582-SO/ LL11SB-067-6186-FD	Zinc	52.2 J	39.6 J	27%	RPD
LL11SB-067-5582-SO/ LL11SB-067-6186-FD	Fluoranthene	0.008 U	0.0098	(0.23)	D
LL11SB-068-5587-SO/ LL11SB-068-6187-FD	Aluminum	6,670	7,580	13%	RPD
LL11SB-068-5587-SO/ LL11SB-068-6187-FD	Antimony	0.082 J	0.076 J	(0.01)	D
LL11SB-068-5587-SO/ LL11SB-068-6187-FD	Arsenic	9	9.5 J	5%	RPD
LL11SB-068-5587-SO/ LL11SB-068-6187-FD	Barium	23.9	26 J	8%	RPD
LL11SB-068-5587-SO/ LL11SB-068-6187-FD	Beryllium	0.25	0.29	(0.33)	D
LL11SB-068-5587-SO/ LL11SB-068-6187-FD	Cadmium	0.037 J	0.036 UJ	(0.00)	D
LL11SB-068-5587-SO/ LL11SB-068-6187-FD	Calcium	426	459 J	(0.14)	D
LL11SB-068-5587-SO/ LL11SB-068-6187-FD	Chromium	8.1	8.5	5%	RPD
LL11SB-068-5587-SO/ LL11SB-068-6187-FD	Cobalt	4.6	4.5	2%	RPD
LL11SB-068-5587-SO/ LL11SB-068-6187-FD	Copper	10.9	12.1	10%	RPD
LL11SB-068-5587-SO/ LL11SB-068-6187-FD	Iron	14,500	14,700	1%	RPD
LL11SB-068-5587-SO/ LL11SB-068-6187-FD	Lead	8.2	8 J	3%	RPD
LL11SB-068-5587-SO/ LL11SB-068-6187-FD	Magnesium	1,390	1,440 J	4%	RPD
LL11SB-068-5587-SO/ LL11SB-068-6187-FD	Manganese	189	194	3%	RPD
LL11SB-068-5587-SO/ LL11SB-068-6187-FD	Nickel	9.8	10.5	7%	RPD
LL11SB-068-5587-SO/ LL11SB-068-6187-FD	Potassium	449	528	(0.68)	D
LL11SB-068-5587-SO/ LL11SB-068-6187-FD	Selenium	0.56 J	0.5 J	(0.10)	D
LL11SB-068-5587-SO/ LL11SB-068-6187-FD	Silver	0.01 J	0.0063 UJ	(0.01)	D
LL11SB-068-5587-SO/ LL11SB-068-6187-FD	Sodium	27.4 J	28.4 J	(0.01)	D
LL11SB-068-5587-SO/ LL11SB-068-6187-FD	Thallium	0.097 J	0.11 J	(0.06)	D
LL11SB-068-5587-SO/ LL11SB-068-6187-FD	Vanadium	12.2	12.6	3%	RPD
LL11SB-068-5587-SO/ LL11SB-068-6187-FD	Zinc	32.5	36 J	10%	RPD
Semi-volatile Organic Compounds					
Soil (mg/kg)					
LL11SB-068-5587-SO/ LL11SB-068-6187-FD	Di-n-butyl phthalate	0.39 UJ	0.019 J	(0.95)	D
Metals					
Soil (mg/kg)					
LL11SS-076-5602-SO/ LL11SS-076-6183-FD	Aluminum	13,000	13,500	4%	RPD
LL11SS-076-5602-SO/ LL11SS-076-6183-FD	Antimony	0.26 J	0.15 J	(0.17)	D
LL11SS-076-5602-SO/ LL11SS-076-6183-FD	Arsenic	26.4	18.7	34%	RPD
LL11SS-076-5602-SO/ LL11SS-076-6183-FD	Barium	44.2	46.1	4%	RPD
LL11SS-076-5602-SO/ LL11SS-076-6183-FD	Beryllium	0.45	0.5	(0.38)	D
LL11SS-076-5602-SO/ LL11SS-076-6183-FD	Cadmium	0.071 J	0.08 J	(0.04)	D

Table C-7. Field Duplicate Pair Comparisons for Analytes Detected in Samples from Load Line 11 (continued)

Sample ID	Chemical	Regular Result	Duplicate Result	RPD % or (Absolute Difference) ^a	Test ^b
LL11SS-076-5602-SO/ LL11SS-076-6183-FD	Calcium	1,030	1,120	(0.36)	D
LL11SS-076-5602-SO/ LL11SS-076-6183-FD	Chromium	15.4	16.6	8%	RPD
LL11SS-076-5602-SO/ LL11SS-076-6183-FD	Cobalt	6	6.1	2%	RPD
LL11SS-076-5602-SO/ LL11SS-076-6183-FD	Copper	17.9 J	18 J	1%	RPD
LL11SS-076-5602-SO/ LL11SS-076-6183-FD	Iron	26,200	31,900	20%	RPD
LL11SS-076-5602-SO/ LL11SS-076-6183-FD	Lead	14.2	14.7	4%	RPD
LL11SS-076-5602-SO/ LL11SS-076-6183-FD	Magnesium	2,490	2,430	2%	RPD
LL11SS-076-5602-SO/ LL11SS-076-6183-FD	Manganese	136	171	23%	RPD
LL11SS-076-5602-SO/ LL11SS-076-6183-FD	Mercury	0.039 J	0.034 J	(0.04)	D
LL11SS-076-5602-SO/ LL11SS-076-6183-FD	Nickel	16.3	16.2	1%	RPD
LL11SS-076-5602-SO/ LL11SS-076-6183-FD	Potassium	675	662	2%	RPD
LL11SS-076-5602-SO/ LL11SS-076-6183-FD	Selenium	0.81 J	0.88 J	(0.11)	D
LL11SS-076-5602-SO/ LL11SS-076-6183-FD	Sodium	36 J	33.2 J	(0.02)	D
LL11SS-076-5602-SO/ LL11SS-076-6183-FD	Thallium	0.16 J	0.16 J	(0.00)	D
LL11SS-076-5602-SO/ LL11SS-076-6183-FD	Vanadium	24	24.4	2%	RPD
LL11SS-076-5602-SO/ LL11SS-076-6183-FD	Zinc	38.8 J	40.8 J	5%	RPD
Polycyclic Aromatic Hydrocarbons					
Soil (mg/kg)					
LL11SS-076-5602-SO/ LL11SS-076-6183-FD	Benz(a)anthracene	0.0096	0.018	(1.00)	D
LL11SS-076-5602-SO/ LL11SS-076-6183-FD	Benzo(a)pyrene	0.011	0.022	(1.30)	D *
LL11SS-076-5602-SO/ LL11SS-076-6183-FD	Benzo(b)fluoranthene	0.016	0.025	(1.10)	D *
LL11SS-076-5602-SO/ LL11SS-076-6183-FD	Benzo(ghi)perylene	0.0085 U	0.019	(1.30)	D *
LL11SS-076-5602-SO/ LL11SS-076-6183-FD	Chrysene	0.0097	0.017	(0.87)	D
LL11SS-076-5602-SO/ LL11SS-076-6183-FD	Fluoranthene	0.016	0.03	(1.70)	D *
LL11SS-076-5602-SO/ LL11SS-076-6183-FD	Indeno(1,2,3-cd)pyrene	0.0085 U	0.015	(0.77)	D
LL11SS-076-5602-SO/ LL11SS-076-6183-FD	Phenanthrene	0.0085 U	0.015	(0.77)	D
LL11SS-076-5602-SO/ LL11SS-076-6183-FD	Pyrene	0.013	0.022	(1.10)	D *

^aRPD 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 absolute difference 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 absolute difference values.

^bThe test used to evaluate the duplicate comparison is the RPD if both sample results were more than 5x the reporting limit or the absolute difference (D) if any result was less than 5x the reporting limit.

*RPD or D outside criteria.

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

ID = Identification.

mg/kg = Milligrams per kilogram.

RPD = Relative percent difference.

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 proper preservation, holding times, use of standard sampling and analytical methods, and determination of 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. Holding times were exceeded for one SVOC soil sample and PCB in one soil sample; however, they were re-extracted within two times the holding time and 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, sample containers and preservation, site surveillance, use of standard sampling devices, uniform training, documentation of sampling, standard analytical protocols/procedures, QC checks with standard control limits, and universally accepted data reporting units to ensure comparability to other data sets. Through the proper implementation and documentation of these standard practices, the project has established the confidence that the data will be comparable to other project and programmatic information. Tables C-8 and C-9 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 99.9% of all sample analyses performed.

C.5 DATA QUALITY ASSESSMENT SUMMARY

In concurrence with the USACE Chemical Data Quality Assessment 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, estimated (“J” or “UJ”), or unusable (“R”). Data that have been estimated provide indications of accuracy, precision, or sensitivity being less than desired but adequate for interpretation. Rejected data were relegated to two sediment and one soil

non-detectable concentration antimony results due to poor MS performance. No other 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 AUGUST 2012 SAMPLING

One sediment sample was collected from Load Line 11 in August 2012 for multiple parameters as noted in Table C-10. As discussed in Section C.3.2, verification staff performed a systematic examination of the reports, including ADR software, and subjected data to a systematic technical review by examining all field and analytical QC results and laboratory documentation. Data were assigned appropriate data qualification flags and reason codes as defined previously and as discussed below.

Sample receipt: The samples were received at the laboratory just above the 6° Centigrade preservation requirement; however, data were not qualified because the samples were received within approximately four hours of sample collection. Samples were packed on ice, but did not have sufficient time to reach the desired temperature.

Metals: Trace method blank contamination was less than 10 times the sample results and therefore did not impact the sample data. Manganese required analysis at a dilution. Other QC analyses were within control limits.

VOC: As a result of surrogate recovery deviations, volatile organic results for the sediment sample (LL11SD-096-5874-SD) were qualified as estimated “J” or estimated non-detectable concentration “UJ.” Other QC analyses were within control limits.

SVOC: QC analyses were within control limits.

Pesticides: The sediment pesticide sample required dilution and resulted in the limit of detection (LOD) and limit of quantification above the QAPP reporting limit (with the exception of toxaphene) and above the FWCUG for dieldrin. Other QC analyses were within control limits.

PCBs: Aroclor 1242 had an LOD greater than the QAPP limit. Other QC analyses were within control limits.

Explosives and Nitroglycerin: All QC analyses were within control limits.

Nitroguanidine, Nitrocellulose, and Hexavalent Chromium: MS recovery deviation resulted in the nitrocellulose sediment result being qualified as estimated concentration “J.” Other QC analyses were within control limits.

No other quality issues were noted during review and data above were qualified as estimated as needed; no other data was qualified.

Table C-8. Container Requirements for Soil and Sediment Samples

Analyte Group	Container	Minimum Sample Size	Preservative	Holding Time
Volatile Organic Compounds	1, 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)
PCBs	4-oz glass	30 g	Cool, 4°C	14 days (extraction) 40 days (analysis)
PAH 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 5000 g	Air tight, cool Cool NA	NA

g = Grams.

Hg = Mercury.

hr –Hour.

K= Permeability.

NA = Not applicable.

oz = Ounce.

PAH = Polycyclic aromatic hydrocarbon.

PCB = Polychlorinated biphenyl.

TAL = Target analyte list.

TOC= Total organic carbon.

Table C-9. Container Requirements for Surface Water Samples

Analyte Group	Container	Minimum Sample Size	Preservative	Holding Time
Volatile Organic Compounds	3, 40-mL glass vial	2, 40 mL	HCl to pH <2 Cool, 4°C	14 days
Semi-volatile Organic Compounds	2, 1-L amber glass	1 L	Cool, 4°C	7 days (extraction) 40 days (analysis)
Pesticide Compounds	2, 1-L amber glass	1 L	Cool, 4°C	7 days (extraction) 40 days (analysis)
PCBs	2, 1-L amber glass	1 L	Cool, 4°C	7 days (extraction) 40 days (analysis)
PAH Compounds	2, 1-L amber glass	1 L	Cool, 4°C	7 days (extraction) 40 days (analysis)
Explosive Compounds	2, 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 ₃ poly	300 mL	HNO ₃ to pH <2 Cool, 4°C	180 days; Hg at 28 days

Hg = Mercury.

HCl = Hydrochloric acid.

HNO₃ = Nitric acid.

hr = Hour.

L = Liter.

mL = Milliliter.

PAH = Polycyclic aromatic hydrocarbon.

PCB = Polychlorinated biphenyl.

TAL = Target analyte list.

Table C-10. Identification of August 2012 Samples Taken at Load Line 11

Environmental Samples	Laboratory Sample Delivery Group	Field Duplicates	USACE Split Samples	Metals + Hg	Explosives	SVOCs	Propellants	VOCs	Pesticides	PCBs	PAHs ^a	Hexavalent Chromium	Total Chromium
<i>Soil</i>													
LL11SD-096-5874-SD	J240-14026	NS	NS	X	X	X	X	X	X	X			
PBA08-QC-6244-TB	J240-14026	NS	NS					X					

blank = Not sampled.

Hg = Mercury.

NS = Not sampled.

PAH = Polycyclic aromatic hydrocarbon.

PCB = Polychlorinated biphenyl.

SVOC = Semi-volatile organic compound.

USACE = U.S. Army Corps of Engineers.

VOC = Volatile organic compound.

X = Sampled.

C.7 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 (United States 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 Assessment Report

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MEMORANDUM FOR RECORD

7 November 2013

SUBJECT: FINAL CHEMICAL DATA USABILITY ASSESSMENT

PROJECT: Ravenna Army Ammunition Plant, Ravenna, Ohio
18 Areas of Concern (PBA08)
Load Line 11 Remedial Investigation

1. Purpose:

This memorandum represents and documents the evaluation of the quality and usability of the analytical data obtained during the Phase II Remedial Investigation (RI) of Load Line 11 (RVAAP-44). 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 Phase II Remedial Investigation Report for Soil, Sediment, and Surface Water at RVAAP-44 Load Line 11*, prepared by SAIC, January 19, 2012.
- 2.2 *Final Data Validation Report, Ravenna Army Ammunition Plant 18 Areas of Concern 2010 Sampling, Ravenna, Ohio*, prepared by MEC^x, 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 PBA08 RI at Load Line 11 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 between February and April 2010 by Science Application International Corporation (SAIC). Fifty 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 rinsate 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 Phase II Remedial Investigation Report and Feasibility Study for Soil, Sediment, and Surface Water at*

RVAAP-44 Load Line 11 (SAIC, 2012) and Section 16 of the *Final Data Validation Report, Ravenna Army Ammunition Plant 18 Areas of Concern 2010 Sampling* (MEC^x, 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^x, 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 Load Line 11. 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 Load Line 11 RI met the project DQOs. Usable definitive data of known and documented quality was produced for 99.9 % 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, rejected data were relegated to one soil and two sediment results for antimony. One additional antimony result and one benzoic acid result

were rejected during the 10% Level IV data validation performed by MEC^x. All rejected results were nondetects.

Load Line 11

Rejected Data

Sample	SDG	Analyte	Reason	Review
LL11SD-082-5593-SD	A0B260454	Antimony	MS Recovery (<10%)	Level III (100%)
LL11SD-084-5595-SD				
LL11SB-062-5560-SO	A0C190535			
LL11SB-064-5572-SO	A0C180563	Antimony	MS Recovery (<30%)	Level IV (10%)
LL11SB-068-5586-SO		Benzoic Acid	LCS Recovery (0%)	

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.

The benzoic acid result rejected in sample LL11SB-068-5786-SO during data validation was based upon professional judgment. The LCS recovery QC limit for benzoic acid is 0 to 110%. It was the validator’s contention that although 0% recovery is technically within the control limit, some recovery should be shown. Therefore, this nondetected result associated with a 0% benzoic acid recovery was rejected.

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 Load Line 11 RI are deemed acceptable for use with some exceptions. Rejected and unusable data are relegated to 5 sample results (all nondetects) out of approximately 4,360 results. Based upon this assessment, 99.9% 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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Sample Qualification Report (All Analytes)

Lab ID : TA CAN

Sample Matrix : SO

Lab Report Batch : 240-14026-1

Analysis Type: RE2/TOT

Client Sample ID : LL11SD-096-5874-SD

Sample Date : 08/09/2012

Lab Sample ID: 240-14026-5

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Dilution: 10																				
Manganese	270		mg/Kg	D	YES															

Analysis Method : 6020

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

Library Used: RVAAP_PB08

Report Date: 2/12/2013 16:31

Page 1 of 37

Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

ADR 8.3

822.20430713.375

Sample Qualification Report (All Analytes)

Lab ID : TA SAC

Lab Report Batch : 240-14026-1

Sample Matrix : SO

Analysis Type: RE2/WET

Client Sample ID : LL11SD-096-5874-SD

Sample Date : 08/09/2012

Lab Sample ID: 240-14026-5

Reviewed By / Date : Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8330B																				
1,3,5-TRINITROBENZENE	0.050		mg/Kg	U	YES	UJ	UJ													
3-NITROTOLUENE	0.050		mg/Kg	U	YES	UJ	UJ													
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.050		mg/Kg	U	YES	UJ	UJ													

Dilution: 1

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

Library Used: RVAAP_PB08

Report Date: 2/12/2013 16:31

Page 2 of 37

ADR 8.3

Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : LL11SD-096-5874-SD

Sample Date : 08/09/2012

Lab Sample ID: 240-14026-5

Lab Report Batch : 240-14026-1

Analysis Type: RES

Lab ID : TA CAN

Sample Matrix : SO

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8081A																				
Dilution: 10																				
4,4'-DDD	9.3		ug/Kg	U	YES	UJ	UJ													
4,4'-DDE	9.3		ug/Kg	U	YES	UJ	UJ													
4,4'-DDT	9.3		ug/Kg	U	YES	UJ	UJ													
ALDRIN	18		ug/Kg	U	YES	UJ	UJ													
ALPHA-BHC	18		ug/Kg	U	YES	UJ	UJ													
alpha-Chordane	18		ug/Kg	U	YES	UJ	UJ													
BETA-BHC	18		ug/Kg	U	YES	UJ	UJ													
DELTA-BHC	18		ug/Kg	U	YES	UJ	UJ													
DIELDRIN	9.3		ug/Kg	U	YES	UJ	UJ													
ENDOSULFAN I	9.3		ug/Kg	U	YES	UJ	UJ													
ENDOSULFAN II	18		ug/Kg	U	YES	UJ	UJ													
ENDOSULFAN SULFATE	18		ug/Kg	U	YES	UJ	UJ													
ENDRIN	9.3		ug/Kg	U	YES	UJ	UJ													
ENDRIN ALDEHYDE	18		ug/Kg	U	YES	UJ	UJ													
ENDRIN KETONE	9.3		ug/Kg	U	YES	UJ	UJ													
gamma-BHC (Lindane)	18		ug/Kg	U	YES	UJ	UJ													
GAMMA-CHLORDANE	9.3		ug/Kg	U	YES	UJ	UJ													
HEPTACHLOR	18		ug/Kg	U	YES	UJ	UJ													
HEPTACHLOR EPOXIDE	18		ug/Kg	U	YES	UJ	UJ													
METHOXYCHLOR	46		ug/Kg	U	YES	UJ	UJ													
TOXAPHENE	280		ug/Kg	U	YES	UJ	UJ													
Analysis Method : 8082																				
Dilution: 1																				
AROCLOR 1016	34		ug/Kg	U	YES	UJ	UJ													
AROCLOR 1221	34		ug/Kg	U	YES	UJ	UJ													
AROCLOR 1232	34		ug/Kg	U	YES	UJ	UJ													
AROCLOR 1242	34		ug/Kg	U	YES	UJ	UJ													
AROCLOR 1248	34		ug/Kg	U	YES	UJ	UJ													
AROCLOR 1254	34		ug/Kg	U	YES	UJ	UJ													

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

Library Used: RVAAP_PB08

Report Date: 2/12/2013 16:31

Page 3 of 37

Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

ADR 8.3

Sample Qualification Report (All Analytes)

Client Sample ID : LL11SD-096-5874-SD

Lab Report Batch : 240-14026-1

Lab ID : TA CAN

Sample Date : 08/09/2012

Analysis Type: RES

Sample Matrix : SO

Lab Sample ID: 240-14026-5

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8082																				
AROCLOR 1260	34		ug/Kg	U	YES	UJ	UJ													
Analysis Method : 8260B																				
1,1,1-TRICHLOROETHANE	1.4		ug/Kg	U	YES	UJ	UJ						UJ							
1,1,2,2-TETRACHLOROETHANE	0.68		ug/Kg	U	YES	UJ	UJ						UJ							
1,1,2-TRICHLOROETHANE	0.68		ug/Kg	U	YES	UJ	UJ						UJ							
1,1,1-DICHLOROETHANE	0.68		ug/Kg	U	YES	UJ	UJ						UJ							
1,1,1-DICHLOROETHENE	1.4		ug/Kg	U	YES	UJ	UJ						UJ							
1,2-Dibromomethane (Ethylene Dibromide)	1.4		ug/Kg	U	YES	UJ	UJ						UJ							
1,2-DICHLOROETHANE	0.68		ug/Kg	U	YES	UJ	UJ						UJ							
1,2-DICHLOROETHENE (TOTAL)	1.4		ug/Kg	U	YES	UJ	UJ						UJ							
1,2-DICHLOROPROPANE	1.4		ug/Kg	U	YES	UJ	UJ						UJ							
2-Butanone (MEK)	2.7		ug/Kg	U	YES	UJ	UJ						UJ							
2-HEXANONE	1.4		ug/Kg	U	YES	UJ	UJ						UJ							
4-Methyl-2-pentanone (MIBK)	1.4		ug/Kg	U	YES	UJ	UJ						UJ							
ACETONE	8.6		ug/Kg	U	YES	UJ	UJ						UJ							
BENZENE	0.68		ug/Kg	U	YES	UJ	UJ						UJ							
BROMOCHLOROMETHANE	1.4		ug/Kg	U	YES	UJ	UJ						UJ							
BROMODICHLOROMETHANE	0.68		ug/Kg	U	YES	UJ	UJ						UJ							
BROMOFORM	0.68		ug/Kg	U	YES	UJ	UJ						UJ							
Bromomethane (Methyl bromide)	1.4		ug/Kg	U	YES	UJ	UJ						UJ							
CARBON DISULFIDE	0.68		ug/Kg	U	YES	UJ	UJ						UJ							
CARBON TETRACHLORIDE	0.68		ug/Kg	U	YES	UJ	UJ						UJ							
CHLOROBENZENE	0.68		ug/Kg	U	YES	UJ	UJ						UJ							
Chlorodibromomethane	1.4		ug/Kg	U	YES	UJ	UJ						UJ							
CHLOROETHANE	1.4		ug/Kg	U	YES	UJ	UJ						UJ							
CHLOROFORM	0.68		ug/Kg	U	YES	UJ	UJ						UJ							
CHLOROMETHANE	0.68		ug/Kg	U	YES	UJ	UJ						UJ							
CIS-1,3-DICHLOROPROPENE	0.68		ug/Kg	U	YES	UJ	UJ						UJ							

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

Library Used: RVAAP_PB08

Report Date: 2/12/2013 16:31

Page 4 of 37

Overall result qualifier summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : LL11SD-096-5874-SD

Lab Report Batch : 240-14026-1

Lab ID : TA CAN

Sample Date : 08/09/2012

Analysis Type: RES

Sample Matrix : SO

Lab Sample ID: 240-14026-5

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8260B																				
Dilution: 1																				
ETHYLBENZENE	0.68		ug/Kg	U	YES	UJ	UJ						UJ							
METHYLENE CHLORIDE	1.4		ug/Kg	U	YES	UJ	UJ						UJ							
STYRENE	0.68		ug/Kg	U	YES	UJ	UJ						UJ							
TETRACHLOROETHENE	1.4		ug/Kg	U	YES	UJ	UJ						UJ							
TOLUENE	0.68		ug/Kg	U	YES	UJ	UJ						UJ							
TRANS-1,3-DICHLOROPROPENE	1.4		ug/Kg	U	YES	UJ	UJ						UJ							
TRICHLOROETHENE	0.68		ug/Kg	U	YES	UJ	UJ						UJ							
VINYL CHLORIDE	0.68		ug/Kg	U	YES	UJ	UJ						UJ							
Xylene (Total)	2.0		ug/Kg	U	YES	UJ	UJ						UJ							
Analysis Method : 8270C																				
Dilution: 1																				
1,2,4-TRICHLOROBENZENE	37		ug/Kg	U	YES	UJ	UJ													
1,2-DICHLOROBENZENE	37		ug/Kg	U	YES	UJ	UJ													
1,3-DICHLOROBENZENE	37		ug/Kg	U	YES	UJ	UJ													
1,4-DICHLOROBENZENE	37		ug/Kg	U	YES	UJ	UJ													
2,4,5-TRICHLOROPHENOL	37		ug/Kg	U	YES	UJ	UJ													
2,4,6-TRICHLOROPHENOL	110		ug/Kg	U	YES	UJ	UJ													
2,4-DICHLOROPHENOL	37		ug/Kg	U	YES	UJ	UJ													
2,4-DIMETHYLPHENOL	110		ug/Kg	U	YES	UJ	UJ													
2,4-DINITROPHENOL	110		ug/Kg	U	YES	UJ	UJ													
2,4-DINITROTOLUENE	37		ug/Kg	U	YES	UJ	UJ													
2,6-DINITROTOLUENE	37		ug/Kg	U	YES	UJ	UJ													
2-CHLORONAPHTHALENE	4.5		ug/Kg	U	YES	UJ	UJ													
2-CHLOROPHENOL	37		ug/Kg	U	YES	UJ	UJ													
2-METHYLNAPHTHALENE	4.5		ug/Kg	U	YES	UJ	UJ													
2-METHYLPHENOL	110		ug/Kg	U	YES	UJ	UJ													
2-NITROANILINE	37		ug/Kg	U	YES	UJ	UJ													
2-NITROPHENOL	37		ug/Kg	U	YES	UJ	UJ													
3 & 4-Methylphenol	110		ug/Kg	U	YES	UJ	UJ													

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

Library Used: RVAAP_PB08

Report Date: 2/12/2013 16:31

Page 5 of 37

DR 8.3

Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : LL11SD-096-5874-SD

Sample Date : 08/09/2012

Lab Sample ID: 240-14026-5

Lab Report Batch : 240-14026-1

Analysis Type: RES

Lab ID : TA CAN

Sample Matrix : SO

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8270C																				
Dilution: 1																				
3,3'-DICHLOOROBENZIDINE	110		ug/Kg	U	YES	UJ	UJ													
3-NITROANILINE	110		ug/Kg	U	YES	UJ	UJ													
4,6-DINITRO-2-METHYLPHENOL	110		ug/Kg	U	YES	UJ	UJ													
4-BROMOPHENYL PHENYL ETHER	37		ug/Kg	U	YES	UJ	UJ													
4-CHLORO-3-METHYLPHENOL	37		ug/Kg	U	YES	UJ	UJ													
4-CHLOROANILINE	37		ug/Kg	U	YES	UJ	UJ													
4-CHLOROPHENYL PHENYL ETHER	37		ug/Kg	U	YES	UJ	UJ													
4-NITROANILINE	37		ug/Kg	U	YES	UJ	UJ													
4-NITROPHENOL	110		ug/Kg	U	YES	UJ	UJ													
ACENAPHTHENE	13		ug/Kg		YES	J	J													
ACENAPHTHYLENE	4.5		ug/Kg	U	YES	UJ	UJ													
ANTHRACENE	20		ug/Kg		YES	J	J													
Benz[a]anthracene	77		ug/Kg		YES	J	J													
Benz[a]pyrene	90		ug/Kg		YES	J	J													
Benz[b]fluoranthene	140		ug/Kg		YES	J	J													
Benz[g,h,i]perylene	68		ug/Kg		YES	J	J													
Benz[k]fluoranthene	66		ug/Kg		YES	J	J													
BENZOIC ACID	450		ug/Kg	M	YES	J	J													
BENZYL ALCOHOL	54		ug/Kg	U	YES	UJ	UJ													
BIS(2-CHLOROETHOXY)METHANE	37		ug/Kg	U	YES	UJ	UJ													
BIS(2-CHLOROETHYL) ETHER	4.5		ug/Kg	U	YES	UJ	UJ													
BIS(2-CHLOROISOPROPYL) ETHER	37		ug/Kg	U	YES	UJ	UJ													
BIS(2-ETHYLHEXYL) PHTHALATE	37		ug/Kg	U	YES	UJ	UJ													
BUTYL BENZYL PHTHALATE	37		ug/Kg	U	YES	UJ	UJ													
CARBAZOLE	37		ug/Kg	U	YES	UJ	UJ													
CHRYSENE	99		ug/Kg		YES	J	J													
Dibenz[a,h]anthracene	16		ug/Kg		YES	J	J													
DIBENZOFURAN	4.5		ug/Kg	U	YES	UJ	UJ													

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

IDR 8.3

Library Used: RVAAP_PB08

Report Date: 2/12/2013 16:31

Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : LL11SD-096-5874-SD

Lab Report Batch : 240-14026-1

Lab ID : TA CAN

Sample Date : 08/09/2012

Analysis Type: RES

Sample Matrix : SO

Lab Sample ID: 240-14026-5

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8270C																				
Dilution: 1																				
DIETHYL PHTHALATE	37		ug/Kg	U	YES	UJ	UJ													
DIMETHYL PHTHALATE	37		ug/Kg	U	YES	UJ	UJ													
DI-N-BUTYL PHTHALATE	37		ug/Kg	U	YES	UJ	UJ													
DI-N-OCTYL PHTHALATE	37		ug/Kg	U	YES	UJ	UJ													
FLUORANTHENE	210		ug/Kg		YES	J	J													
FLUORENE	4.5		ug/Kg	U	YES	UJ	UJ													
HEXACHLOROBENZENE	4.5		ug/Kg	U	YES	UJ	UJ													
HEXACHLOROBUTADIENE	37		ug/Kg	U	YES	UJ	UJ													
HEXACHLOROCYCLOPENTADIENE	37		ug/Kg	U	YES	UJ	UJ													
HEXACHLOROETHANE	37		ug/Kg	U	YES	UJ	UJ													
Indeno[1,2,3-cd]pyrene	61		ug/Kg		YES	J	J													
ISOPHORONE	37		ug/Kg	U	YES	UJ	UJ													
NAPHTHALENE	4.5		ug/Kg	U	YES	UJ	UJ													
NITROBENZENE	4.5		ug/Kg	U	YES	UJ	UJ													
N-NITROSODI-N-PROPYLAMINE	37		ug/Kg	U	YES	UJ	UJ													
N-NITROSODIPHENYLAMINE	37		ug/Kg	U	YES	UJ	UJ													
PENTACHLOROPHENOL	110		ug/Kg	U	YES	UJ	UJ													
PHENANTHRENE	98		ug/Kg		YES	J	J													
PHENOL	37		ug/Kg	U	YES	UJ	UJ													
PYRENE	160		ug/Kg		YES	J	J													

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

Library Used: RVAAP_PB08

Report Date: 2/12/2013 16:32

Page 7 of 37

Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : LL11SD-096-5874-SD

Lab Report Batch : 240-14026-1

Lab ID : TA CAN

Sample Date : 08/09/2012

Analysis Type: RES/TOT

Sample Matrix : SO

Lab Sample ID: 240-14026-5

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 6020																				
Dilution: 1																				
Aluminum	15000		mg/Kg		YES															
Antimony	0.14		mg/Kg	J	YES	J									J					
Arsenic	10		mg/Kg		YES															
Barium	84		mg/Kg		YES															
Beryllium	0.91		mg/Kg		YES															
Cadmium	0.51		mg/Kg		YES															
Calcium	3800		mg/Kg		YES															
Chromium	17		mg/Kg		YES															
Cobalt	9.4		mg/Kg		YES															
Copper	18		mg/Kg		YES															
Iron	23000		mg/Kg		YES															
Lead	27		mg/Kg		YES															
Magnesium	2700		mg/Kg		YES															
Nickel	21		mg/Kg		YES															
Potassium	1100		mg/Kg		YES															
SELENIUM	1.7		mg/Kg		YES															
Silver	0.072		mg/Kg	J	YES	J									J					
Sodium	35		mg/Kg	J	YES	J									J					
Thallium	0.21		mg/Kg	J	YES	J									J					
Vanadium	25		mg/Kg		YES															
Zinc	120		mg/Kg		YES															
Analysis Method : 7471A																				
Dilution: 1																				
Mercury	0.10		mg/Kg	J	YES	J									J					
Analysis Method : WS-WC-0050																				
Dilution: 1																				
Nitrocellulose	1.4		mg/Kg	J	YES	J						J			J					

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

Library Used: RVAAP_PB08

Report Date: 2/12/2013 16:32

Page 8 of 37

DR 8.3

Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : LL11SD-096-5874-SD

Lab Report Batch : 240-14026-1

Lab ID : TA SAC

Sample Date : 08/09/2012

Analysis Type: RES/WET

Sample Matrix : SO

Lab Sample ID: 240-14026-5

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8330B																				
1,3-DINITROBENZENE	0.050		mg/Kg	U	YES	UJ	UJ													
2,4,6-Trinitrotoluene (TNT)	0.050		mg/Kg	U	YES	UJ	UJ													
2,4-DINITROTOLUENE	0.050		mg/Kg	U	YES	UJ	UJ													
2,6-DINITROTOLUENE	0.050		mg/Kg	U	YES	UJ	UJ													
2-AMINO-4,6-DINITROTOLUENE	0.050		mg/Kg	U	YES	UJ	UJ													
2-NITROTOLUENE	0.050		mg/Kg	U	YES	UJ	UJ													
4-AMINO-2,6-DINITROTOLUENE	0.050		mg/Kg	U	YES	UJ	UJ													
4-NITROTOLUENE	0.050		mg/Kg	U	YES	UJ	UJ													
Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	0.050		mg/Kg	U	YES	UJ	UJ													
Methyl-2,4,6-Trinitrophenylnitramine (Tetryl)	0.050		mg/Kg	U	YES	UJ	UJ													
NITROBENZENE	0.050		mg/Kg	U	YES	UJ	UJ													
Nitroglycerin	0.25		mg/Kg	U	YES	UJ	UJ													
PETN	0.25		mg/Kg	U	YES	UJ	UJ													
Analysis Method : 8330M																				
Nitroguanidine	0.040		mg/Kg	U	YES	UJ	UJ													

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

Library Used: RVAAP_PB08

Report Date: 2/12/2013 16:32

Page 9 of 37

DR 8.3

Overall result qualifier summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : LL5SD-086-5872-SD

Sample Date : 08/09/2012

Lab Sample ID: 240-14026-4

Lab Report Batch : 240-14026-1

Analysis Type: RE2/TOT

Lab ID : TA CAN

Sample Matrix : SO

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Manganese	690		mg/Kg	D	YES															
Analysis Method : 6020																				
Dilution: 10																				

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

DR 8.3

Library Used: RVAAP_PB08

Report Date: 2/12/2013 16:32

Page 10 of 37

Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : LL5SD-086-5872-SD

Sample Date : 08/09/2012

Lab Sample ID: 240-14026-4

Lab Report Batch : 240-14026-1

Analysis Type: RE2/WET

Lab ID : TA SAC

Sample Matrix : SO

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Lab Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8330B																				
Dilution: 1																				
1,3,5-TRINITROBENZENE	0.050		mg/Kg	U	YES	UJ	UJ													
1,3-DINITROBENZENE	0.050		mg/Kg	U	YES	UJ	UJ													

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

DR 8.3

Library Used: RVAAP_PB08

Report Date: 2/12/2013 16:32

Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : LL5SD-086-5872-SD

Lab Report Batch : 240-14026-1

Lab ID : TA CAN

Sample Date : 08/09/2012

Analysis Type: RES

Sample Matrix : SO

Lab Sample ID: 240-14026-4

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8081A																				
4,4'-DDD	4.4		ug/Kg	U	YES	UJ	UJ													
4,4'-DDE	4.4		ug/Kg	U	YES	UJ	UJ													
4,4'-DDT	4.4		ug/Kg	U	YES	UJ	UJ													
ALDRIN	8.8		ug/Kg	U	YES	UJ	UJ													
ALPHA-BHC	8.8		ug/Kg	U	YES	UJ	UJ													
alpha-Chordane	8.8		ug/Kg	U	YES	UJ	UJ													
BETA-BHC	8.8		ug/Kg	U	YES	UJ	UJ													
DELTA-BHC	8.8		ug/Kg	U	YES	UJ	UJ													
DIELDRIN	4.4		ug/Kg	U	YES	UJ	UJ													
ENDOSULFAN I	4.4		ug/Kg	U	YES	UJ	UJ													
ENDOSULFAN II	8.8		ug/Kg	U	YES	UJ	UJ													
ENDOSULFAN SULFATE	8.8		ug/Kg	U	YES	UJ	UJ													
ENDRIN	4.4		ug/Kg	U	YES	UJ	UJ													
ENDRIN ALDEHYDE	8.8		ug/Kg	U	YES	UJ	UJ													
ENDRIN KETONE	4.4		ug/Kg	U	YES	UJ	UJ													
gamma-BHC (Lindane)	8.8		ug/Kg	U	YES	UJ	UJ													
GAMMA-CHLORDANE	4.4		ug/Kg	U	YES	UJ	UJ													
HEPTACHLOR	8.8		ug/Kg	U	YES	UJ	UJ													
HEPTACHLOR EPOXIDE	8.8		ug/Kg	U	YES	UJ	UJ													
METHOXYCHLOR	22		ug/Kg	U	YES	UJ	UJ													
TOXAPHENE	130		ug/Kg	U	YES	UJ	UJ													
Analysis Method : 8082																				
AROCLOR 1016	33		ug/Kg	U	YES	UJ	UJ													
AROCLOR 1221	33		ug/Kg	U	YES	UJ	UJ													
AROCLOR 1232	33		ug/Kg	U	YES	UJ	UJ													
AROCLOR 1242	33		ug/Kg	U	YES	UJ	UJ													
AROCLOR 1248	33		ug/Kg	U	YES	UJ	UJ													
AROCLOR 1254	33		ug/Kg	U	YES	UJ	UJ													

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

DR 8.3

Library Used: RVAAP_PB08

Report Date: 2/12/2013 16:32

Page 12 of 37

Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : LL5SD-086-5872-SD

Lab Report Batch : 240-14026-1

Lab ID : TA CAN

Sample Date : 08/09/2012

Analysis Type: RES

Sample Matrix : SO

Lab Sample ID: 240-14026-4

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8082																				
AROCLOR 1260	33		ug/Kg	U	YES	UJ	UJ													
Analysis Method : 8260B																				
1,1,1-TRICHLOROETHANE	1.3		ug/Kg	U	YES	UJ	UJ							UJ						
1,1,2,2-TETRACHLOROETHANE	0.67		ug/Kg	U	YES	UJ	UJ							UJ						
1,1,2-TRICHLOROETHANE	0.67		ug/Kg	U	YES	UJ	UJ							UJ						
1,1-DICHLOROETHANE	0.67		ug/Kg	U	YES	UJ	UJ							UJ						
1,1-DICHLOROETHENE	1.3		ug/Kg	U	YES	UJ	UJ							UJ						
1,2-Dibromoethane (Ethylene Dibromide)	1.3		ug/Kg	U	YES	UJ	UJ							UJ						
1,2-DICHLOROETHANE	0.67		ug/Kg	U	YES	UJ	UJ							UJ						
1,2-DICHLOROETHENE (TOTAL)	1.3		ug/Kg	U	YES	UJ	UJ							UJ						
1,2-DICHLOROPROPANE	1.3		ug/Kg	U	YES	UJ	UJ							UJ						
2-Butanone (MEK)	2.7		ug/Kg	U	YES	UJ	UJ							UJ						
2-HEXANONE	1.3		ug/Kg	U	YES	UJ	UJ							UJ						
4-Methyl-2-pentanone (MIBK)	1.3		ug/Kg	U	YES	UJ	UJ							UJ						
ACETONE	8.4		ug/Kg	U	YES	UJ	UJ							UJ						
BENZENE	0.67		ug/Kg	U	YES	UJ	UJ							UJ						
BROMOCHLOROMETHANE	1.3		ug/Kg	U	YES	UJ	UJ							UJ						
BROMODICHLOROMETHANE	0.67		ug/Kg	U	YES	UJ	UJ							UJ						
BROMOFORM	0.67		ug/Kg	U	YES	UJ	UJ							UJ						
Bromomethane (Methyl bromide)	1.3		ug/Kg	U	YES	UJ	UJ							UJ						
CARBON DISULFIDE	0.67		ug/Kg	U	YES	UJ	UJ							UJ						
CARBON TETRACHLORIDE	0.67		ug/Kg	U	YES	UJ	UJ							UJ						
CHLOROETHANE	0.67		ug/Kg	U	YES	UJ	UJ							UJ						
Chlorodibromomethane	1.3		ug/Kg	U	YES	UJ	UJ							UJ						
CHLOROETHANE	1.3		ug/Kg	U	YES	UJ	UJ							UJ						
CHLOROFORM	0.67		ug/Kg	U	YES	UJ	UJ							UJ						
CHLOROMETHANE	0.67		ug/Kg	U	YES	UJ	UJ							UJ						
CIS-1,3-DICHLOROPROPENE	0.67		ug/Kg	U	YES	UJ	UJ							UJ						

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

Library Used: RVAAP_PB08

Report Date: 2/12/2013 16:32

Page 13 of 37

Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

DR 8.3

Sample Qualification Report (All Analytes)

Client Sample ID : LL5SD-086-5872-SD

Lab Report Batch : 240-14026-1

Lab ID : TA CAN

Sample Date : 08/09/2012

Analysis Type: RES

Sample Matrix : SO

Lab Sample ID: 240-14026-4

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8260B																				
Dilution: 1																				
ETHYLBENZENE	0.67		ug/Kg	U	YES	UJ	UJ						UJ							
METHYLENE CHLORIDE	1.3		ug/Kg	U	YES	UJ	UJ						UJ							
STYRENE	0.67		ug/Kg	U	YES	UJ	UJ						UJ							
TETRACHLOROETHENE	1.3		ug/Kg	U	YES	UJ	UJ						UJ							
TOLUENE	0.67		ug/Kg	U	YES	UJ	UJ						UJ							
TRANS-1,3-DICHLOROPROPENE	1.3		ug/Kg	U	YES	UJ	UJ						UJ							
TRICHLOROETHENE	0.67		ug/Kg	U	YES	UJ	UJ						UJ							
VINYL CHLORIDE	0.67		ug/Kg	U	YES	UJ	UJ						UJ							
Xylene (Total)	2.0		ug/Kg	U	YES	UJ	UJ						UJ							
Analysis Method : 8270C																				
Dilution: 1																				
1,2,4-TRICHLOROBENZENE	37		ug/Kg	U	YES	UJ	UJ													
1,2-DICHLOROBENZENE	37		ug/Kg	U	YES	UJ	UJ													
1,3-DICHLOROBENZENE	37		ug/Kg	U	YES	UJ	UJ													
1,4-DICHLOROBENZENE	37		ug/Kg	U	YES	UJ	UJ													
2,4,5-TRICHLOROPHENOL	37		ug/Kg	U	YES	UJ	UJ													
2,4,6-TRICHLOROPHENOL	110		ug/Kg	U	YES	UJ	UJ													
2,4-DICHLOROPHENOL	37		ug/Kg	U	YES	UJ	UJ													
2,4-DIMETHYLPHENOL	110		ug/Kg	U	YES	UJ	UJ													
2,4-DINITROPHENOL	110		ug/Kg	U	YES	UJ	UJ													
2,4-DINITROTOLUENE	37		ug/Kg	U	YES	UJ	UJ													
2,6-DINITROTOLUENE	37		ug/Kg	U	YES	UJ	UJ													
2-CHLORONAPHTHALENE	4.5		ug/Kg	U	YES	UJ	UJ													
2-CHLOROPHENOL	37		ug/Kg	U	YES	UJ	UJ													
2-METHYLNAPHTHALENE	4.5		ug/Kg	U	YES	UJ	UJ													
2-METHYLPHENOL	110		ug/Kg	U	YES	UJ	UJ													
2-NITROANILINE	37		ug/Kg	U	YES	UJ	UJ													
2-NITROPHENOL	37		ug/Kg	U	YES	UJ	UJ													
3 & 4-Methylphenol	110		ug/Kg	U	YES	UJ	UJ													

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

Library Used: RVAAP_PB08

DR 8.3

Report Date: 2/12/2013 16:32

Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : LL5SD-086-5872-SD

Lab Report Batch : 240-14026-1

Lab ID : TA CAN

Sample Date : 08/09/2012

Analysis Type: RES

Sample Matrix : SO

Lab Sample ID: 240-14026-4

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8270C																				
Dilution: 1																				
3,3'-DICHLOOROBENZIDINE	110		ug/Kg	U	YES	UJ	UJ													
3-NITROANILINE	110		ug/Kg	U	YES	UJ	UJ													
4,6-DINITRO-2-METHYLPHENOL	110		ug/Kg	U	YES	UJ	UJ													
4-BROMOPHENYL PHENYL ETHER	37		ug/Kg	U	YES	UJ	UJ													
4-CHLORO-3-METHYLPHENOL	37		ug/Kg	U	YES	UJ	UJ													
4-CHLOROANILINE	37		ug/Kg	U	YES	UJ	UJ													
4-CHLOROPHENYL PHENYL ETHER	37		ug/Kg	U	YES	UJ	UJ													
4-NITROANILINE	37		ug/Kg	U	YES	UJ	UJ													
4-NITROPHENOL	110		ug/Kg	U	YES	UJ	UJ													
ACENAPHTHENE	4.5		ug/Kg	U	YES	UJ	UJ													
ACENAPHTHYLENE	4.5		ug/Kg	U	YES	UJ	UJ													
ANTHRACENE	4.5		ug/Kg	U	YES	UJ	UJ													
Benz[a]anthracene	4.5		ug/Kg	U	YES	UJ	UJ													
Benz[a]pyrene	4.5		ug/Kg	U	YES	UJ	UJ													
Benz[b]fluoranthene	4.5		ug/Kg	U	YES	UJ	UJ													
Benz[g,h,i]perylene	4.5		ug/Kg	U	YES	UJ	UJ													
Benz[k]fluoranthene	4.5		ug/Kg	U	YES	UJ	UJ													
BENZOIC ACID	450		ug/Kg	U	YES	UJ	UJ													
BENZYL ALCOHOL	37		ug/Kg	U	YES	UJ	UJ													
BIS(2-CHLOROETHOXY)METHANE	37		ug/Kg	U	YES	UJ	UJ													
BIS(2-CHLOROETHYL) ETHER	4.5		ug/Kg	U	YES	UJ	UJ													
BIS(2-CHLOROISOPROPYL) ETHER	37		ug/Kg	U	YES	UJ	UJ													
BIS(2-ETHYLHEXYL) PHTHALATE	37		ug/Kg	U	YES	UJ	UJ													
BUTYL BENZYL PHTHALATE	37		ug/Kg	U	YES	UJ	UJ													
CARBAZOLE	37		ug/Kg	U	YES	UJ	UJ													
CHRYSENE	4.5		ug/Kg	U	YES	UJ	UJ													
Dibenz[a,h]anthracene	4.5		ug/Kg	U	YES	UJ	UJ													
DIBENZOFURAN	4.5		ug/Kg	U	YES	UJ	UJ													

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

Library Used: RVAAP_PB08

Report Date: 2/12/2013 16:32

Page 15 of 37

Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : LL5SD-086-5872-SD

Lab Report Batch : 240-14026-1

Lab ID : TA CAN

Sample Date : 08/09/2012

Analysis Type: RES

Sample Matrix : SO

Lab Sample ID: 240-14026-4

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8270C																				
Dilution: 1																				
DIETHYL PHTHALATE	37		ug/Kg	U	YES	UJ	UJ													
DIMETHYL PHTHALATE	37		ug/Kg	U	YES	UJ	UJ													
DI-N-BUTYL PHTHALATE	37		ug/Kg	U	YES	UJ	UJ													
DI-N-OCTYL PHTHALATE	37		ug/Kg	U	YES	UJ	UJ													
FLUORANTHENE	19		ug/Kg		YES	J	J													
FLUORENE	4.5		ug/Kg	U	YES	UJ	UJ													
HEXACHLOROBENZENE	39		ug/Kg		YES	J	J													
HEXACHLOROBUTADIENE	37		ug/Kg	U	YES	UJ	UJ													
HEXACHLOROCYCLOPENTADIENE	37		ug/Kg	U	YES	UJ	UJ													
HEXACHLOROETHANE	37		ug/Kg	U	YES	UJ	UJ													
Indeno[1,2,3-cd]pyrene	4.5		ug/Kg	U	YES	UJ	UJ													
ISOPHORONE	37		ug/Kg	U	YES	UJ	UJ													
NAPHTHALENE	4.5		ug/Kg	U	YES	UJ	UJ													
NITROBENZENE	4.5		ug/Kg	U	YES	UJ	UJ													
N-NITROSODI-N-PROPYLAMINE	37		ug/Kg	U	YES	UJ	UJ													
N-NITROSODIPHENYLAMINE	37		ug/Kg	U	YES	UJ	UJ													
PENTACHLOROPHENOL	110		ug/Kg	U	YES	UJ	UJ													
PHENANTHRENE	9.7		ug/Kg		YES	J	J													
PHENOL	37		ug/Kg	U	YES	UJ	UJ													
PYRENE	14		ug/Kg		YES	J	J													

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

Library Used: RVAAP_PB08

Report Date: 2/12/2013 16:32

Page 16 of 37

DR 8.3

Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : LL5SD-086-5872-SD

Sample Date : 08/09/2012

Lab Sample ID: 240-14026-4

Lab Report Batch : 240-14026-1

Analysis Type: RES/TOT

Lab ID : TA CAN

Sample Matrix : SO

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 6020																				
Dilution: 1																				
Aluminum	13000		mg/Kg		YES															
Antimony	0.074		mg/Kg	J	YES	J									J					
Arsenic	5.3		mg/Kg		YES															
Barium	85		mg/Kg		YES															
Beryllium	0.71		mg/Kg		YES															
Cadmium	0.22		mg/Kg	J	YES	J									J					
Calcium	1300		mg/Kg		YES															
Chromium	11		mg/Kg		YES															
Cobalt	7.9		mg/Kg		YES															
Copper	7.4		mg/Kg		YES															
Iron	15000		mg/Kg		YES															
Lead	15		mg/Kg		YES															
Magnesium	1500		mg/Kg		YES															
Nickel	10		mg/Kg		YES															
Potassium	670		mg/Kg		YES															
SELENIUM	1.1		mg/Kg		YES															
Silver	0.094		mg/Kg	J	YES	J									J					
Sodium	25		mg/Kg	J	YES	J									J					
Thallium	0.20		mg/Kg	J	YES	J									J					
Titanium	17		mg/Kg		YES															
Zinc	50		mg/Kg		YES															
Analysis Method : 7471A																				
Dilution: 1																				
Mercury	0.053		mg/Kg	J	YES	J									J					
Analysis Method : WS-WC-0050																				
Dilution: 1																				
Nitrocellulose	2.1		mg/Kg	J	YES	J						J			J					

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

Library Used: RVAAP_PB08

DR 8.3

Report Date: 2/12/2013 16:32

Page 17 of 37

Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : LL5SD-086-5872-SD

Lab Report Batch : 240-14026-1

Lab ID : TA SAC

Sample Date : 08/09/2012

Analysis Type: RES/WET

Sample Matrix : SO

Lab Sample ID: 240-14026-4

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8330B																				
Dilution: 1																				
2,4,6-Trinitrotoluene (TNT)	0.050		mg/Kg	U	YES	UJ	UJ													
2,4-DINITROTOLUENE	0.050		mg/Kg	U	YES	UJ	UJ													
2,6-DINITROTOLUENE	0.050		mg/Kg	U	YES	UJ	UJ													
2-AMINO-4,6-DINITROTOLUENE	0.050		mg/Kg	U	YES	UJ	UJ													
2-NITROTOLUENE	0.050		mg/Kg	U	YES	UJ	UJ													
3-NITROTOLUENE	0.050		mg/Kg	U	YES	UJ	UJ													
4-AMINO-2,6-DINITROTOLUENE	0.050		mg/Kg	U	YES	UJ	UJ													
4-NITROTOLUENE	0.050		mg/Kg	U	YES	UJ	UJ													
Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	0.050		mg/Kg	U	YES	UJ	UJ													
Methyl-2,4,6-Trinitrophenylhydrazine (Tetryl)	0.050		mg/Kg	U	YES	UJ	UJ													
NITROBENZENE	0.050		mg/Kg	U	YES	UJ	UJ													
Nitroglycerin	0.25		mg/Kg	U	YES	UJ	UJ													
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.050		mg/Kg	U	YES	UJ	UJ													
PETN	0.25		mg/Kg	U	YES	UJ	UJ													
Analysis Method : 8330M																				
Dilution: 1																				
Nitroguanidine	0.040		mg/Kg	U	YES	UJ	UJ													

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

Library Used: RVAAP_PB08

Report Date: 2/12/2013 16:32

Page 18 of 37

IDR 8.3

Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : LL6SD-096-5870-SD

Sample Date : 08/09/2012

Lab Sample ID: 240-14026-3

Lab Report Batch : 240-14026-1

Analysis Type: RE2/WET

Lab ID : TA SAC

Sample Matrix : SO

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
1,3,5-TRINITROBENZENE	0.049		mg/Kg	U	YES	UJ	UJ													
Analysis Method : 8330B																				
Dilution: 1																				

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

ADR 8.3

Library Used: RVAAP_PB08

Report Date: 2/12/2013 16:32

Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : LL6SD-096-5870-SD

Sample Date : 08/09/2012

Lab Sample ID: 240-14026-3

Lab Report Batch : 240-14026-1

Analysis Type: RES

Lab ID : TA CAN

Sample Matrix : SO

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8081A																				
Dilution: 5																				
4,4'-DDD	5.0		ug/Kg	U	YES	UJ	UJ													
4,4'-DDE	5.0		ug/Kg	U	YES	UJ	UJ													
4,4'-DDT	5.0		ug/Kg	U	YES	UJ	UJ													
ALDRIN	10		ug/Kg	U	YES	UJ	UJ													
ALPHA-BHC	10		ug/Kg	U	YES	UJ	UJ													
alpha-Chordane	10		ug/Kg	U	YES	UJ	UJ													
BETA-BHC	10		ug/Kg	U	YES	UJ	UJ													
DELTA-BHC	10		ug/Kg	U	YES	UJ	UJ													
DIELDRIN	5.0		ug/Kg	U	YES	UJ	UJ													
ENDOSULFAN I	5.0		ug/Kg	U	YES	UJ	UJ													
ENDOSULFAN II	10		ug/Kg	U	YES	UJ	UJ													
ENDOSULFAN SULFATE	10		ug/Kg	U	YES	UJ	UJ													
ENDRIN	5.0		ug/Kg	U	YES	UJ	UJ													
ENDRIN ALDEHYDE	10		ug/Kg	U	YES	UJ	UJ													
ENDRIN KETONE	5.0		ug/Kg	U	YES	UJ	UJ													
gamma-BHC (Lindane)	10		ug/Kg	U	YES	UJ	UJ													
GAMMA-CHLORDANE	5.0		ug/Kg	U	YES	UJ	UJ													
HEPTACHLOR	10		ug/Kg	U	YES	UJ	UJ													
HEPTACHLOR EPOXIDE	10		ug/Kg	U	YES	UJ	UJ													
METHOXYCHLOR	25		ug/Kg	U	YES	UJ	UJ													
TOXAPHENE	150		ug/Kg	U	YES	UJ	UJ													
Analysis Method : 8082																				
Dilution: 1																				
AROCLOR 1016	37		ug/Kg	U	YES	UJ	UJ													
AROCLOR 1221	37		ug/Kg	U	YES	UJ	UJ													
AROCLOR 1232	37		ug/Kg	U	YES	UJ	UJ													
AROCLOR 1242	37		ug/Kg	U	YES	UJ	UJ													
AROCLOR 1248	37		ug/Kg	U	YES	UJ	UJ													
AROCLOR 1254	37		ug/Kg	U	YES	UJ	UJ													

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

DR 8.3

Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Library Used: RVAAP_PB08

Report Date: 2/12/2013 16:32

Page 20 of 37

Sample Qualification Report (All Analytes)

Client Sample ID : LL6SD-096-5870-SD

Lab Report Batch : 240-14026-1

Lab ID : TA CAN

Sample Date : 08/09/2012

Analysis Type: RES

Sample Matrix : SO

Lab Sample ID: 240-14026-3

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8082																				
AROCOR 1280	37		ug/Kg	U	YES	UJ	UJ													
Dilution: 1																				
Analysis Method : 8260B																				
Dilution: 1																				
1,1,1,1-TRICHLOROETHANE	1.5		ug/Kg	U	YES	UJ	UJ						UJ							
1,1,1,2,2-TETRACHLOROETHANE	0.75		ug/Kg	U	YES	UJ	UJ						UJ							
1,1,1,2-TRICHLOROETHANE	0.75		ug/Kg	U	YES	UJ	UJ						UJ							
1,1,1,1-DICHLOROETHANE	0.75		ug/Kg	U	YES	UJ	UJ						UJ							
1,1,1,1-DICHLOROETHENE	1.5		ug/Kg	U	YES	UJ	UJ						UJ							
1,2-Dibromoethane (Ethylene Dibromide)	1.5		ug/Kg	U	YES	UJ	UJ						UJ							
1,2-DICHLOROETHANE	0.75		ug/Kg	U	YES	UJ	UJ						UJ							
1,2-DICHLOROETHENE (TOTAL)	1.5		ug/Kg	U	YES	UJ	UJ						UJ							
1,2-DICHLOROPROPANE	1.5		ug/Kg	U	YES	UJ	UJ						UJ							
2-Butanone (MEK)	5.3		ug/Kg	J	YES	J	J						J							
2-HEXANONE	1.5		ug/Kg	U	YES	UJ	UJ						UJ							
4-Methyl-2-pentanone (MIBK)	1.5		ug/Kg	U	YES	UJ	UJ						UJ							
ACETONE	41		ug/Kg		YES	J	J						J							
BENZENE	0.75		ug/Kg	U	YES	UJ	UJ						UJ							
BROMOCHLOROMETHANE	1.5		ug/Kg	U	YES	UJ	UJ						UJ							
BROMODICHLOROMETHANE	0.75		ug/Kg	U	YES	UJ	UJ						UJ							
BROMOFORM	0.75		ug/Kg	U	YES	UJ	UJ						UJ							
Bromomethane (Methyl bromide)	1.5		ug/Kg	U	YES	UJ	UJ						UJ							
CARBON DISULFIDE	0.75		ug/Kg	U	YES	UJ	UJ						UJ							
CARBON TETRACHLORIDE	0.75		ug/Kg	U	YES	UJ	UJ						UJ							
CHLOROBENZENE	0.75		ug/Kg	U	YES	UJ	UJ						UJ							
Chlorobromomethane	1.5		ug/Kg	U	YES	UJ	UJ						UJ							
CHLOROETHANE	1.5		ug/Kg	U	YES	UJ	UJ						UJ							
CHLOROFORM	0.75		ug/Kg	U	YES	UJ	UJ						UJ							
CHLOROMETHANE	0.75		ug/Kg	U	YES	UJ	UJ						UJ							
CIS-1,3-DICHLOROPROPENE	0.75		ug/Kg	U	YES	UJ	UJ						UJ							

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

Library Used: RVAAP_PB08

DDR 8.3

Report Date: 2/12/2013 16:32

Page 21 of 37

Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : LL6SD-096-5870-SD

Lab Report Batch : 240-14026-1

Lab ID : TA CAN

Sample Date : 08/09/2012

Analysis Type: RES

Sample Matrix : SO

Lab Sample ID: 240-14026-3

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8260B																				
Dilution: 1																				
ETHYLBENZENE	0.75		ug/Kg	U	YES	UJ	UJ						UJ							
METHYLENE CHLORIDE	2.3		ug/Kg	J	YES	J	J						J	J						
STYRENE	0.75		ug/Kg	U	YES	UJ	UJ						UJ							
TETRACHLOROETHENE	1.5		ug/Kg	U	YES	UJ	UJ						UJ							
TOLUENE	0.75		ug/Kg	U	YES	UJ	UJ						UJ							
TRANS-1,3-DICHLOROPROPENE	1.5		ug/Kg	U	YES	UJ	UJ						UJ							
TRICHLOROETHENE	0.75		ug/Kg	U	YES	UJ	UJ						UJ							
VINYL CHLORIDE	0.75		ug/Kg	U	YES	UJ	UJ						UJ							
Xylene (Total)	2.3		ug/Kg	U	YES	UJ	UJ						UJ							
Analysis Method : 8270C																				
Dilution: 1																				
1,2,4-TRICHLOROBENZENE	40		ug/Kg	U	YES	UJ	UJ													
1,2-DICHLOROBENZENE	40		ug/Kg	U	YES	UJ	UJ													
1,3-DICHLOROBENZENE	40		ug/Kg	U	YES	UJ	UJ													
1,4-DICHLOROBENZENE	40		ug/Kg	U	YES	UJ	UJ													
2,4,5-TRICHLOROPHENOL	40		ug/Kg	U	YES	UJ	UJ													
2,4,6-TRICHLOROPHENOL	120		ug/Kg	U	YES	UJ	UJ													
2,4-DICHLOROPHENOL	40		ug/Kg	U	YES	UJ	UJ													
2,4-DIMETHYLPHENOL	120		ug/Kg	U	YES	UJ	UJ													
2,4-DINITROPHENOL	120		ug/Kg	U	YES	UJ	UJ													
2,4-DINITROTOLUENE	40		ug/Kg	U	YES	UJ	UJ													
2,6-DINITROTOLUENE	40		ug/Kg	U	YES	UJ	UJ													
2-CHLORONAPHTHALENE	4.9		ug/Kg	U	YES	UJ	UJ													
2-CHLOROPHENOL	40		ug/Kg	U	YES	UJ	UJ													
2-METHYLNAPHTHALENE	4.9		ug/Kg	U	YES	UJ	UJ													
2-METHYLPHENOL	120		ug/Kg	U	YES	UJ	UJ													
2-NITROANILINE	40		ug/Kg	U	YES	UJ	UJ													
2-NITROPHENOL	40		ug/Kg	U	YES	UJ	UJ													
3 & 4-Methylphenol	120		ug/Kg	U	YES	UJ	UJ													

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

Library Used: RVAAP_PB08

DR 8.3

Report Date: 2/12/2013 16:32

Page 22 of 37

Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : LL6SD-096-5870-SD

Lab Report Batch : 240-14026-1

Lab ID : TA CAN

Sample Date : 08/09/2012

Analysis Type: RES

Sample Matrix : SO

Lab Sample ID: 240-14026-3

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8270C																				
Dilution: 1																				
3,3'-DICHLOROBENZIDINE	120		ug/Kg	U	YES	UJ	UJ													
3-NITROANILINE	120		ug/Kg	U	YES	UJ	UJ													
4,6-DINITRO-2-METHYLPHENOL	120		ug/Kg	U	YES	UJ	UJ													
4-BROMOPHENYL PHENYL ETHER	40		ug/Kg	U	YES	UJ	UJ													
4-CHLORO-3-METHYLPHENOL	40		ug/Kg	U	YES	UJ	UJ													
4-CHLOROANILINE	40		ug/Kg	U	YES	UJ	UJ													
4-CHLOROPHENYL PHENYL ETHER	40		ug/Kg	U	YES	UJ	UJ													
4-NITROANILINE	40		ug/Kg	U	YES	UJ	UJ													
4-NITROPHENOL	120		ug/Kg	U	YES	UJ	UJ													
ACENAPHTHENE	4.9		ug/Kg	U	YES	UJ	UJ													
ACENAPHTHYLENE	4.9		ug/Kg	U	YES	UJ	UJ													
ANTHRACENE	4.9		ug/Kg	U	YES	UJ	UJ													
Benz[a]anthracene	4.9		ug/Kg	U	YES	UJ	UJ													
Benz[a]pyrene	4.9		ug/Kg	U	YES	UJ	UJ													
Benz[b]fluoranthene	4.9		ug/Kg	U	YES	UJ	UJ													
Benz[g,h,i]perylene	4.9		ug/Kg	U	YES	UJ	UJ													
Benz[k]fluoranthene	4.9		ug/Kg	U	YES	UJ	UJ													
BENZOIC ACID	490		ug/Kg	U	YES	UJ	UJ													
BENZYL ALCOHOL	40		ug/Kg	U	YES	UJ	UJ													
BIS(2-CHLOROETHOXY)METHANE	40		ug/Kg	U	YES	UJ	UJ													
BIS(2-CHLOROETHYL) ETHER	4.9		ug/Kg	U	YES	UJ	UJ													
BIS(2-CHLOROISOPROPYL) ETHER	40		ug/Kg	U	YES	UJ	UJ													
BIS(2-ETHYLHEXYL) PHTHALATE	40		ug/Kg	U	YES	UJ	UJ													
8UTYL BENZYL PHTHALATE	40		ug/Kg	U	YES	UJ	UJ													
CARBAZOLE	40		ug/Kg	U	YES	UJ	UJ													
CHRYSENE	4.9		ug/Kg	U	YES	UJ	UJ													
Dibenz[a,h]anthracene	4.9		ug/Kg	U	YES	UJ	UJ													
DIBENZOFURAN	4.9		ug/Kg	U	YES	UJ	UJ													

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

Library Used: RVAAP_PB08

DR 8.3

Report Date: 2/12/2013 16:32

Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : LL6SD-096-5870-SD

Lab Report Batch : 240-14026-1

Lab ID : TA CAN

Sample Date : 08/09/2012

Analysis Type: RES

Sample Matrix : SO

Lab Sample ID: 240-14026-3

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8270C																				
Dilution: 1																				
DIETHYL PHTHALATE	40		ug/Kg	U	YES	UJ	UJ													
DIMETHYL PHTHALATE	40		ug/Kg	U	YES	UJ	UJ													
DI-N-BUTYL PHTHALATE	40		ug/Kg	U	YES	UJ	UJ													
DI-N-OCTYL PHTHALATE	40		ug/Kg	U	YES	UJ	UJ													
FLUORANTHENE	9.8		ug/Kg	J	YES	J	J							J						
FLUORENE	4.9		ug/Kg	U	YES	UJ	UJ													
HEXACHLOROBENZENE	4.9		ug/Kg	U	YES	UJ	UJ													
HEXACHLOROBUTADIENE	40		ug/Kg	U	YES	UJ	UJ													
HEXACHLOROCYCLOPENTADIENE	40		ug/Kg	U	YES	UJ	UJ													
HEXACHLOROETHANE	40		ug/Kg	U	YES	UJ	UJ													
Indeno[1,2,3-cd]pyrene	4.9		ug/Kg	U	YES	UJ	UJ													
ISOPHORONE	40		ug/Kg	U	YES	UJ	UJ													
NAPHTHALENE	4.9		ug/Kg	U	YES	UJ	UJ													
NITROBENZENE	4.9		ug/Kg	U	YES	UJ	UJ													
N-NITROSODI-N-PROPYLAMINE	40		ug/Kg	U	YES	UJ	UJ													
N-NITROSODIPHENYLAMINE	40		ug/Kg	U	YES	UJ	UJ													
PENTACHLOROPHENOL	120		ug/Kg	U	YES	UJ	UJ													
PHENANTHRENE	4.9		ug/Kg	U	YES	UJ	UJ													
PHENOL	40		ug/Kg	U	YES	UJ	UJ													
PYRENE	4.9		ug/Kg	U	YES	UJ	UJ													

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

Library Used: RVAAP_PB08

Report Date: 2/12/2013 16:32

Page 24 of 37

ADR 8.3

Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : LL6SD-096-5870-SD

Lab Report Batch : 240-14026-1

Lab ID : TA CAN

Sample Date : 08/09/2012

Analysis Type: RES/TOT

Sample Matrix : SO

Lab Sample ID: 240-14026-3

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 6020																				
Dilution: 1																				
Aluminum	12000		mg/Kg		YES															
Antimony	0.37		mg/Kg		YES															
Arsenic	3.5		mg/Kg		YES															
Barium	53		mg/Kg		YES															
Beryllium	0.51		mg/Kg		YES															
Cadmium	0.075		mg/Kg	J	YES	J								J						
Calcium	1300		mg/Kg		YES															
Chromium	15		mg/Kg		YES															
Cobalt	5.9		mg/Kg		YES															
Copper	25		mg/Kg		YES															
Iron	18000		mg/Kg		YES															
Lead	27		mg/Kg		YES															
Magnesium	2100		mg/Kg		YES															
Manganese	160		mg/Kg		YES															
Nickel	13		mg/Kg		YES															
Potassium	930		mg/Kg		YES															
SELENIUM	0.87		mg/Kg		YES															
Silver	0.037		mg/Kg	J	YES	J								J						
Sodium	24		mg/Kg	J	YES	J								J						
Thallium	0.15		mg/Kg	J	YES	J								J						
Vanadium	27		mg/Kg		YES															
Zinc	37		mg/Kg		YES															
Analysis Method : 7471A																				
Dilution: 1																				
Mercury	0.045		mg/Kg	U	YES															
Analysis Method : WS-WC-0050																				
Dilution: 1																				
Nitrocellulose	2.7		mg/Kg	U	YES	UJ						UJ								

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

Library Used: RVAAP_PB08

Report Date: 2/12/2013 16:32

Page 25 of 37

DR 8.3

Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : LL6SD-096-5870-SD

Lab Report Batch : 240-14026-1

Lab ID : TA SAC

Sample Date : 08/09/2012

Analysis Type: RES/WET

Sample Matrix : SO

Lab Sample ID: 240-14026-3

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8330B																				
Dilution: 1																				
1,3-DINITROBENZENE	0.049		mg/Kg	U	YES	UJ	UJ													
2,4,6-Trinitrotoluene (TNT)	0.049		mg/Kg	U	YES	UJ	UJ													
2,4-DINITROTOLUENE	0.049		mg/Kg	U	YES	UJ	UJ													
2,6-DINITROTOLUENE	0.049		mg/Kg	U	YES	UJ	UJ													
2-AMINO-4,6-DINITROTOLUENE	0.049		mg/Kg	U	YES	UJ	UJ													
2-NITROTOLUENE	0.049		mg/Kg	U	YES	UJ	UJ													
3-NITROTOLUENE	0.049		mg/Kg	U	YES	UJ	UJ													
4-AMINO-2,6-DINITROTOLUENE	0.049		mg/Kg	U	YES	UJ	UJ													
4-NITROTOLUENE	0.049		mg/Kg	U	YES	UJ	UJ													
Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	0.049		mg/Kg	U	YES	UJ	UJ													
Methyl-2,4,6-Trinitrophenylnitramine (Tetryl)	0.049		mg/Kg	U	YES	UJ	UJ													
NITROBENZENE	0.049		mg/Kg	U	YES	UJ	UJ													
Nitroglycerin	0.24		mg/Kg	U	YES	UJ	UJ													
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.049		mg/Kg	U	YES	UJ	UJ													
PETN	0.24		mg/Kg	U	YES	UJ	UJ													
Analysis Method : 8330M																				
Dilution: 1																				
Nitroguanidine	0.039		mg/Kg	U	YES	UJ	UJ													

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

Library Used: RVAAP_PB08

DR 8.3

Report Date: 2/12/2013 16:32

Page 26 of 37

Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : LL6SW-096-5871-SW

Lab Report Batch : 240-14026-1

Lab ID : TA SAC

Sample Date : 08/09/2012

Analysis Type: RE2

Sample Matrix : AQ

Lab Sample ID: 240-14026-2

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
1,3,5-TRINITROBENZENE	0.051		ug/L	U	YES	UJ	UJ													
Analysis Method : 8330B																				
Dilution: 1																				

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

Library Used: RVAAP_PB08

ADR 8.3

Report Date: 2/12/2013 16:32

Page 27 of 37

Overall result qualifier summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : LL6SW-096-5871-SW Lab Report Batch : 240-14026-1 Lab ID : TA CAN
 Sample Date : 08/09/2012 Analysis Type: RE2/TOT Sample Matrix : AQ
 Lab Sample ID: 240-14026-2

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 6020 Dilution: 1																				
Beryllium	0.27		ug/L	J	YES	J								J						
Cadmium	0.17		ug/L	J	YES	J								J						
Cobalt	0.35		ug/L	J	YES	J								J						
Sodium	520		ug/L	J	YES	J								J						

Sample Qualification Report (All Analytes)

Client Sample ID : LL6SW-096-5871-SW

Lab Report Batch : 240-14026-1

Lab ID : TA CAN

Sample Date : 08/09/2012

Analysis Type: RES

Sample Matrix : AQ

Lab Sample ID: 240-14026-2

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8081A																				
Dilution: 1																				
4,4'-DDD	0.0096		ug/L	U	YES	UJ	UJ													
4,4'-DDE	0.0096		ug/L	U	YES	UJ	UJ													
4,4'-DDT	0.029		ug/L	U	YES	UJ	UJ													
ALDRIN	0.0096		ug/L	U	YES	UJ	UJ													
ALPHA-BHC	0.0096		ug/L	U	YES	UJ	UJ													
alpha-Chordane	0.013		ug/L	U	YES	UJ	UJ													
BETA-BHC	0.0096		ug/L	U	YES	UJ	UJ													
DELTA-BHC	0.0096		ug/L	U	YES	UJ	UJ													
DIELDRIN	0.0096		ug/L	U	YES	UJ	UJ													
ENDOSULFAN I	0.013		ug/L	U	YES	UJ	UJ													
ENDOSULFAN II	0.012		ug/L	U	YES	UJ	UJ													
ENDOSULFAN SULFATE	0.011		ug/L	U	YES	UJ	UJ													
ENDRIN	0.011		ug/L	U	YES	UJ	UJ													
ENDRIN ALDEHYDE	0.011		ug/L	U	YES	UJ	UJ													
ENDRIN KETONE	0.0096		ug/L	U	YES	UJ	UJ													
gamma-BHC (lindane)	0.0096		ug/L	U	YES	UJ	UJ													
GAMMA-CHLORDANE	0.012		ug/L	U	YES	UJ	UJ													
HEPTACHLOR	0.0096		ug/L	U	YES	UJ	UJ													
HEPTACHLOR EPOXIDE	0.0096		ug/L	U	YES	UJ	UJ													
METHOXYCHLOR	0.031		ug/L	U	YES	UJ	UJ													
TOXAPHENE	0.48		ug/L	U	YES	UJ	UJ													
Analysis Method : 8082																				
Dilution: 1																				
AROCLOR 1016	0.19		ug/L	U	YES	UJ	UJ													
AROCLOR 1221	0.19		ug/L	U	YES	UJ	UJ													
AROCLOR 1232	0.19		ug/L	U	YES	UJ	UJ													
AROCLOR 1242	0.38		ug/L	U	YES	UJ	UJ													
AROCLOR 1248	0.19		ug/L	U	YES	UJ	UJ													
AROCLOR 1254	0.19		ug/L	U	YES	UJ	UJ													

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

Library Used: RVAAP_PB08

DR 8.3

Report Date: 2/12/2013 16:32

Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : LL6SW-096-5871-SW

Lab Report Batch : 240-14026-1

Lab ID : TA CAN

Sample Date : 08/09/2012

Analysis Type: RES

Sample Matrix : AQ

Lab Sample ID: 240-14026-2

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8082																				
AROCLOR 1260	0.19		ug/L	U	YES	UJ	UJ													
Analysis Method : 8260B																				
1,1,1-TRICHLOROETHANE	0.25		ug/L	U	YES	UJ	UJ													
1,1,2,2-TETRACHLOROETHANE	0.25		ug/L	U	YES	UJ	UJ													
1,1,2-TRICHLOROETHANE	0.50		ug/L	U	YES	UJ	UJ													
1,1,2-DICHLOROETHANE	0.25		ug/L	U	YES	UJ	UJ													
1,1-DICHLOROETHENE	0.25		ug/L	U	YES	UJ	UJ													
1,2-Dibromoethane (Ethyleno Dibromide)	0.25		ug/L	U	YES	UJ	UJ													
1,2-DICHLOROETHANE	0.25		ug/L	U	YES	UJ	UJ													
1,2-DICHLOROETHENE (TOTAL)	0.50		ug/L	U	YES	UJ	UJ													
1,2-DICHLOROPROPANE	0.25		ug/L	U	YES	UJ	UJ													
2-Butanone (MEK)	0.72		ug/L	J	YES	J	J													
2-HEXANONE	0.50		ug/L	U	YES	UJ	UJ													
4-Methyl-2-pentanone (MIBK)	0.50		ug/L	U	YES	UJ	UJ													
ACETONE	1.1		ug/L	U	YES	UJ	UJ													
BENZENE	0.25		ug/L	U	YES	UJ	UJ													
BROMOCHLOROMETHANE	0.50		ug/L	U	YES	UJ	UJ													
BROMODICHLOROMETHANE	0.25		ug/L	U	YES	UJ	UJ													
BROMOFORM	0.64		ug/L	U	YES	UJ	UJ													
Bromomethane (Methyl bromide)	0.50		ug/L	U	YES	UJ	UJ													
CARBON DISULFIDE	0.25		ug/L	U	YES	UJ	UJ													
CARBON TETRACHLORIDE	0.25		ug/L	U	YES	UJ	UJ													
CHLOROBENZENE	0.25		ug/L	U	YES	UJ	UJ													
Chlorodibromomethane	0.25		ug/L	U	YES	UJ	UJ													
CHLOROETHANE	0.50		ug/L	U	YES	UJ	UJ													
CHLOROFORM	0.25		ug/L	U	YES	UJ	UJ													
CHLOROMETHANE	0.50		ug/L	U	YES	UJ	UJ													
CIS-1,3-DICHLOROPROPENE	0.25		ug/L	U	YES	UJ	UJ													

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

Library Used: RVAAP_PB08

Report Date: 2/12/2013 16:32

Page 30 of 37

Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : LL6SW-096-5871-SW

Sample Date : 08/09/2012

Lab Sample ID: 240-14026-2

Lab Report Batch : 240-14026-1

Analysis Type: RES

Lab ID : TA CAN

Sample Matrix : AQ

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8260B																				
Dilution: 1																				
ETHYLBENZENE	0.25		ug/L	U	YES	UJ	UJ													
METHYLENE CHLORIDE	0.50		ug/L	U	YES	UJ	UJ													
STYRENE	0.25		ug/L	U	YES	UJ	UJ													
TETRACHLOROETHENE	0.50		ug/L	U	YES	UJ	UJ													
TOLUENE	0.25		ug/L	U	YES	UJ	UJ													
TRANS-1,3-DICHLOROPROPENE	0.25		ug/L	U	YES	UJ	UJ													
TRICHLOROETHENE	0.25		ug/L	U	YES	UJ	UJ													
VINYL CHLORIDE	0.25		ug/L	U	YES	UJ	UJ													
Xylene (Total)	0.75		ug/L	U	YES	UJ	UJ													
Analysis Method : 8270C																				
Dilution: 1																				
1,2,4-TRICHLOROBENZENE	0.76		ug/L	U H	YES	UJ	UJ													
1,2-DICHLOROBENZENE	0.76		ug/L	U H	YES	UJ	UJ													
1,3-DICHLOROBENZENE	0.76		ug/L	U H	YES	UJ	UJ													
1,4-DICHLOROBENZENE	0.76		ug/L	U H	YES	UJ	UJ													
2,4,5-TRICHLOROPHENOL	0.76		ug/L	U H	YES	UJ	UJ													
2,4,6-TRICHLOROPHENOL	0.76		ug/L	U H	YES	UJ	UJ													
2,4-DICHLOROPHENOL	0.76		ug/L	U H	YES	UJ	UJ													
2,4-DIMETHYLPHENOL	0.76		ug/L	U H	YES	UJ	UJ													
2,4-DINITROPHENOL	2.3		ug/L	U H	YES	UJ	UJ													
2,4-DINITROTOLUENE	0.76		ug/L	U H	YES	UJ	UJ													
2,6-DINITROTOLUENE	0.76		ug/L	U H	YES	UJ	UJ													
2-CHLORONAPHTHALENE	0.095		ug/L	U H	YES	UJ	UJ													
2-CHLOROPHENOL	0.76		ug/L	U H	YES	UJ	UJ													
2-METHYLNAPHTHALENE	0.095		ug/L	U H	YES	UJ	UJ													
2-METHYLPHENOL	0.76		ug/L	U H	YES	UJ	UJ													
2-NITROANILINE	0.76		ug/L	U H	YES	UJ	UJ													
2-NITROPHENOL	0.76		ug/L	U H	YES	UJ	UJ													
3 & 4-Methylphenol	0.76		ug/L	U H	YES	UJ	UJ													

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

Library Used: RVAAP_PB08

Report Date: 2/12/2013 16:32

Page 31 of 37

Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : LL6SW-096-5871-SW

Lab Report Batch : 240-14026-1

Lab ID : TA CAN

Sample Date : 08/09/2012

Analysis Type: RES

Sample Matrix : AQ

Lab Sample ID: 240-14026-2

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8270C																				
Dilution: 1																				
3,3'-DICHLOROBENZIDINE	0.76		ug/L	U H	YES	UJ	UJ	UJ												
3-NITROANILINE	0.76		ug/L	U H	YES	UJ	UJ	UJ												
4,6-DINITRO-2-METHYLPHENOL	2.3		ug/L	U H	YES	UJ	UJ	UJ												
4-BROMOPHENYL PHENYL ETHER	0.76		ug/L	U H	YES	UJ	UJ	UJ												
4-CHLORO-3-METHYLPHENOL	0.76		ug/L	U H	YES	UJ	UJ	UJ												
4-CHLOROANILINE	0.76		ug/L	U H	YES	UJ	UJ	UJ												
4-CHLOROPHENYL PHENYL ETHER	0.76		ug/L	U H	YES	UJ	UJ	UJ												
4-NITROANILINE	0.76		ug/L	U H	YES	UJ	UJ	UJ												
4-NITROPHENOL	2.3		ug/L	U H	YES	UJ	UJ	UJ												
ACENAPHTHENE	0.095		ug/L	U H	YES	UJ	UJ	UJ												
ACENAPHTHYLENE	0.095		ug/L	U H	YES	UJ	UJ	UJ												
ANTHRACENE	0.095		ug/L	U H	YES	UJ	UJ	UJ												
Benz[a]anthracene	0.095		ug/L	U H	YES	UJ	UJ	UJ												
Benzo[a]pyrene	0.095		ug/L	U H	YES	UJ	UJ	UJ												
Benzo[b]fluoranthene	0.095		ug/L	U H	YES	UJ	UJ	UJ												
Benzo[g,h,i]perylene	0.095		ug/L	U H	YES	UJ	UJ	UJ												
Benzo[k]fluoranthene	0.095		ug/L	U H	YES	UJ	UJ	UJ												
BENZOIC ACID	9.5		ug/L	U H	YES	UJ	UJ	UJ												
BENZYL ALCOHOL	0.76		ug/L	U H	YES	UJ	UJ	UJ												
BIS(2-CHLOROETHOXY)METHANE	0.76		ug/L	U H	YES	UJ	UJ	UJ												
BIS(2-CHLOROETHYL) ETHER	0.095		ug/L	U H	YES	UJ	UJ	UJ												
BIS(2-CHLOROISOPROPYL) ETHER	0.76		ug/L	U H	YES	UJ	UJ	UJ												
BIS(2-ETHYLHEXYL) PHTHALATE	0.90		ug/L	J H	YES	J	J	J							J					
BUTYL BENZYL PHTHALATE	0.76		ug/L	U H	YES	UJ	UJ	UJ												
CARBAZOLE	0.76		ug/L	U H	YES	UJ	UJ	UJ												
CHRYSENE	0.095		ug/L	U H	YES	UJ	UJ	UJ												
Dibenz[a,h]anthracene	0.095		ug/L	U H	YES	UJ	UJ	UJ												
DIBENZOFURAN	0.095		ug/L	U H	YES	UJ	UJ	UJ												

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

Library Used: RVAAP_PB08

Report Date: 2/12/2013 16:32

Page 32 of 37

Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : LL6SW-096-5871-SW

Lab Report Batch : 240-14026-1

Lab ID : TA CAN

Sample Date : 08/09/2012

Analysis Type: RES

Sample Matrix : AQ

Lab Sample ID: 240-14026-2

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8270C																				
Dilution: 1																				
DIETHYL PHTHALATE	0.76		ug/L	U H	YES	UJ	UJ	UJ												
DIMETHYL PHTHALATE	0.76		ug/L	U H	YES	UJ	UJ	UJ												
DI-N-BUTYL PHTHALATE	0.76		ug/L	U H	YES	UJ	UJ	UJ												
DI-N-OCTYL PHTHALATE	0.76		ug/L	U H	YES	UJ	UJ	UJ												
FLUORANTHENE	0.095		ug/L	U H	YES	UJ	UJ	UJ												
FLUORENE	0.095		ug/L	U H	YES	UJ	UJ	UJ												
HEXACHLOROBENZENE	0.095		ug/L	U H	YES	UJ	UJ	UJ												
HEXACHLOROBUTADIENE	0.76		ug/L	U H	YES	UJ	UJ	UJ												
HEXACHLOROCYCLOPENTADIENE	0.76		ug/L	U H	YES	UJ	UJ	UJ												
HEXACHLOROETHANE	0.76		ug/L	U H	YES	UJ	UJ	UJ												
Indeno[1,2,3-cd]pyrene	0.095		ug/L	U H	YES	UJ	UJ	UJ												
ISOPHORONE	0.76		ug/L	U H	YES	UJ	UJ	UJ												
NAPHTHALENE	0.095		ug/L	U H	YES	UJ	UJ	UJ												
NITROBENZENE	0.095		ug/L	U H	YES	UJ	UJ	UJ												
N-NITROSODI-N-PROPYLAMINE	0.76		ug/L	U H	YES	UJ	UJ	UJ												
N-NITROSODIPHENYLAMINE	0.76		ug/L	U H	YES	UJ	UJ	UJ												
PENTACHLOROPHENOL	2.3		ug/L	U H	YES	UJ	UJ	UJ												
PHENANTHRENE	0.095		ug/L	U H	YES	UJ	UJ	UJ												
PHENOL	0.76		ug/L	U H	YES	UJ	UJ	UJ												
PYRENE	0.095		ug/L	U H	YES	UJ	UJ	UJ												
Analysis Method : 8330B																				
Dilution: 1																				
1,3-DINITROBENZENE	0.10		ug/L	U	YES	UJ	UJ	UJ												
2,4,6-Trinitrotoluene (TNT)	0.10		ug/L	U	YES	UJ	UJ	UJ												
2,4-DINITROTOLUENE	0.10		ug/L	U	YES	UJ	UJ	UJ												
2,6-DINITROTOLUENE	0.10		ug/L	U	YES	UJ	UJ	UJ												
2-AMINO-4,6-DINITROTOLUENE	0.10		ug/L	U	YES	UJ	UJ	UJ												
2-NITROTOLUENE	0.10		ug/L	U	YES	UJ	UJ	UJ												
3-NITROTOLUENE	0.10		ug/L	U	YES	UJ	UJ	UJ												

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

Library Used: RVAAP_PB08

Report Date: 2/12/2013 16:32

Page 33 of 37

Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

ADR 8.3

Sample Qualification Report (All Analytes)

Client Sample ID : LL6SW-096-5871-SW

Lab Report Batch : 240-14026-1

Lab ID : TA SAC

Sample Date : 08/09/2012

Analysis Type: RES

Sample Matrix : AQ

Lab Sample ID: 240-14026-2

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8330B																				
4-AMINO-2,6-DINITROTOLUENE	0.10		ug/L	U	YES	UJ	UJ													
4-NITROTOLUENE	0.10		ug/L	U	YES	UJ	UJ													
Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	0.051		ug/L	U	YES	UJ	UJ													
Methyl-2,4,6-Trinitrophenylnitramine (Tetryl)	0.10		ug/L	U	YES	UJ	UJ													
NITROBENZENE	0.10		ug/L	U	YES	UJ	UJ													
Nitroglycerin	0.51		ug/L	U	YES	UJ	UJ													
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.051		ug/L	U	YES	UJ	UJ													
PETN	0.51		ug/L	U	YES	UJ	UJ													
Analysis Method : 8330M																				
Nitroguanidine	6.0		ug/L	U	YES	UJ	UJ													

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

Library Used: RVAAP_PB08

Report Date: 2/12/2013 16:32

Page 34 of 37

DR 8.3

Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : LL6SW-096-5871-SW

Lab Report Batch : 240-14026-1

Lab ID : TA CAN

Sample Date : 08/09/2012

Analysis Type: RES/TOT

Sample Matrix : AQ

Lab Sample ID: 240-14026-2

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 6020																				
Dilution: 1																				
Aluminum	60		ug/L	U	YES															
Antimony	0.45		ug/L	J	YES	J								J						
Arsenic	1.2		ug/L	J	YES	J								J						
Barium	13		ug/L		YES															
Calcium	26000		ug/L		YES															
Chromium	1.5		ug/L	U	YES															
Copper	4.0		ug/L	U	YES															
Iron	170		ug/L		YES															
Lead	0.50		ug/L	U	YES															
Magnesium	5000		ug/L		YES															
Manganese	34		ug/L		YES															
Nickel	1.5		ug/L	U	YES															
Potassium	1500		ug/L		YES															
SELENIUM	0.32		ug/L	J	YES	J								J						
Silver	0.25		ug/L	U	YES															
Thallium	0.35		ug/L	J	YES	J								J						
Vanadium	1.5		ug/L	U	YES															
Zinc	20		ug/L	U	YES															
Analysis Method : 7470A																				
Dilution: 1																				
Mercury	0.20		ug/L	U	YES															
Analysis Method : WS-WC-0050																				
Dilution: 1																				
Nitrocellulose	1.0		mg/L	U	YES															

Sample Qualification Report (All Analytes)

Client Sample ID : PBA08-QC-6244-TB

Lab Report Batch : 240-14026-1

Lab ID : TA CAN

Sample Date : 08/09/2012

Analysis Type: RES

Sample Matrix : AQ

Lab Sample ID: 240-14026-1

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8260B																				
Dilution: 1																				
1,1,1-TRICHLOROETHANE	0.25		ug/L	U	YES	UJ	UJ													
1,1,2,2-TETRACHLOROETHANE	0.25		ug/L	U	YES	UJ	UJ													
1,1,2-TRICHLOROETHANE	0.50		ug/L	U	YES	UJ	UJ													
1,1-DICHLOROETHANE	0.25		ug/L	U	YES	UJ	UJ													
1,1-DICHLOROETHENE	0.25		ug/L	U	YES	UJ	UJ													
1,2-Dibromoethane (Ethylene Dibromide)	0.25		ug/L	U	YES	UJ	UJ													
1,2-DICHLOROETHANE	0.25		ug/L	U	YES	UJ	UJ													
1,2-DICHLOROETHENE (TOTAL)	0.50		ug/L	U	YES	UJ	UJ													
1,2-DICHLOROPROPANE	0.25		ug/L	U	YES	UJ	UJ													
2-Butanone (MEK)	0.57		ug/L	U	YES	UJ	UJ													
2-HEXANONE	0.50		ug/L	U	YES	UJ	UJ													
4-Methyl-2-pentanone (MIBK)	0.50		ug/L	U	YES	UJ	UJ													
ACETONE	1.9		ug/L	J	YES	J	J													
BENZENE	0.25		ug/L	U	YES	UJ	UJ													
BROMOCHLOROMETHANE	0.50		ug/L	U	YES	UJ	UJ													
BROMODICHLOROMETHANE	0.25		ug/L	U	YES	UJ	UJ													
BROMOFORM	0.64		ug/L	U	YES	UJ	UJ													
Bromomethane (Methyl bromide)	0.50		ug/L	U	YES	UJ	UJ													
CARBON DISULFIDE	0.25		ug/L	U	YES	UJ	UJ													
CARBON TETRACHLORIDE	0.25		ug/L	U	YES	UJ	UJ													
CHLOROETHANE	0.25		ug/L	U	YES	UJ	UJ													
Chlorodibromomethane	0.25		ug/L	U	YES	UJ	UJ													
CHLOROETHANE	0.50		ug/L	U	YES	UJ	UJ													
CHLOROFORM	0.25		ug/L	U	YES	UJ	UJ													
CHLOROMETHANE	0.50		ug/L	U	YES	UJ	UJ													
CIS-1,3-DICHLOROPROPENE	0.25		ug/L	U	YES	UJ	UJ													
ETHYLBENZENE	0.25		ug/L	U	YES	UJ	UJ													
METHYLENE CHLORIDE	0.47		ug/L	J	YES	J	J													

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

Library Used: RVAAP_PB08

Report Date: 2/12/2013 16:32

Page 36 of 37

Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : PBA08-QC-6244-TB

Lab Report Batch : 240-14026-1

Lab ID : TA CAN

Sample Date : 08/09/2012

Analysis Type: RES

Sample Matrix : AQ

Lab Sample ID: 240-14026-1

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist TotDis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8260B																				
Dilution: 1																				
STYRENE	0.25		ug/L	U	YES	UJ	UJ													
TETRACHLOROETHENE	0.50		ug/L	U	YES	UJ	UJ													
TOLUENE	0.25		ug/L	U	YES	UJ	UJ													
TRANS-1,3-DICHLOROPROPENE	0.25		ug/L	U	YES	UJ	UJ													
TRICHLOROETHENE	0.25		ug/L	U	YES	UJ	UJ													
VINYL CHLORIDE	0.25		ug/L	U	YES	UJ	UJ													
Xylene (Total)	0.75		ug/L	U	YES	UJ	UJ													

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

Library Used: RVAAP_PB08

Report Date: 2/12/2013 16:32

Page 37 of 37

Overall result qualifier summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Temperature Outlier Report

Lab Report Batch: 240-14026-1

Lab ID: TA CAN

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	
LL11SD-096-5874-SD	240-14026-5	8081A	SO	6.1	2	6	10	J	J-	UJ	J	J-	R
LL5SD-086-5872-SD	240-14026-4	8081A	SO	6.1	2	6	10	J	J-	UJ	J	J-	R
LL6SD-096-5870-SD	240-14026-3	8081A	SO	6.1	2	6	10	J	J-	UJ	J	J-	R
LL6SW-096-5871-SW	240-14026-2	8081A	AQ	6.1	2	6	10	J	J-	UJ	J	J-	R
LL11SD-096-5874-SD	240-14026-5	8082	SO	6.1	2	6	10	J	J-	UJ	J	J-	R
LL5SD-086-5872-SD	240-14026-4	8082	SO	6.1	2	6	10	J	J-	UJ	J	J-	R
LL6SD-096-5870-SD	240-14026-3	8082	SO	6.1	2	6	10	J	J-	UJ	J	J-	R
LL6SW-096-5871-SW	240-14026-2	8082	AQ	6.1	2	6	10	J	J-	UJ	J	J-	R
LL11SD-096-5874-SD	240-14026-5	8260B	SO	6.1	2	6	10	J	J-	UJ	J	J-	R
LL5SD-086-5872-SD	240-14026-4	8260B	SO	6.1	2	6	10	J	J-	UJ	J	J-	R
LL6SD-096-5870-SD	240-14026-3	8260B	SO	6.1	2	6	10	J	J-	UJ	J	J-	R
LL6SW-096-5871-SW	240-14026-2	8260B	AQ	6.1	2	6	10	J	J-	UJ	J	J-	R
PBA08-QC-6244-TB	240-14026-1	8260B	AQ	6.1	2	6	10	J	J-	UJ	J	J-	R
LL11SD-096-5874-SD	240-14026-5	8270C	SO	6.1	2	6	10	J	J-	UJ	J	J-	R
LL5SD-086-5872-SD	240-14026-4	8270C	SO	6.1	2	6	10	J	J-	UJ	J	J-	R
LL6SD-096-5870-SD	240-14026-3	8270C	SO	6.1	2	6	10	J	J-	UJ	J	J-	R
LL6SW-096-5871-SW	240-14026-2	8270C	AQ	6.1	2	6	10	J	J-	UJ	J	J-	R
LL11SD-096-5874-SD	240-14026-5	8330B	SO	6.1	2	6	10	J	J-	UJ	J	J-	R
LL5SD-086-5872-SD	240-14026-4	8330B	SO	6.1	2	6	10	J	J-	UJ	J	J-	R
LL6SD-096-5870-SD	240-14026-3	8330B	SO	6.1	2	6	10	J	J-	UJ	J	J-	R
LL6SW-096-5871-SW	240-14026-2	8330B	AQ	6.1	2	6	10	J	J-	UJ	J	J-	R
LL11SD-096-5874-SD	240-14026-5	8330M	SO	6.1	2	6	10	J	J-	UJ	J	J-	R
LL5SD-086-5872-SD	240-14026-4	8330M	SO	6.1	2	6	10	J	J-	UJ	J	J-	R
LL6SD-096-5870-SD	240-14026-3	8330M	SO	6.1	2	6	10	J	J-	UJ	J	J-	R
LL6SW-096-5871-SW	240-14026-2	8330M	AQ	6.1	2	6	10	J	J-	UJ	J	J-	R

QC Outlier Report: Holding Times

Lab Report Batch: 240-14026-1

Lab ID: TA CAN

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	Coll To Prep	Unit of Meas	Collection Date	Preparation Date	Analysis Date	
LL6SW-096-5871-SW 240-14026-2		8270C	AQ	3520C	13.0	15.0	7	40	Days				08/09/2012	08/22/2012	09/06/2012	

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 320-2943
Preparation Batch : 320-2943
Lab Reporting Batch : 240-14026-1

Analysis Method : WS-WC-0050
Preparation Type : METHOD
Lab ID: TA SAC

Analysis Date : 08/23/2012
Preparation Date : 08/23/2012

Client Sample ID	Lab Sample ID	Matrix	Analyte Name	Reported *		Project Limits (Percent)			
				Percent Recovery	RPD	Rejection Point**	Lower Limit	Upper Limit	RPD
LL5SD-086-5872-SDMS	240-14026-4MS	SO	Nitrocellulose	33		10.00	34.00	115.00	71.00

Associated Samples: All samples in Method Batch

Client Sample ID	Lab Sample ID
LL11SD-096-5874-SD	240-14026-5
LL5SD-086-5872-SD	240-14026-4
LL6SD-096-5870-SD	240-14026-3

* 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

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: 240-14026-1

Lab ID: TA CAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
LL11SD-096-5874-SD	240-14026-5	8082	SO	AROCLOR 1016	U	34	2.31923602	ug/Kg
				AROCLOR 1221	U	34	2.31923602	ug/Kg
				AROCLOR 1232	U	34	2.31923602	ug/Kg
				AROCLOR 1242	U	34	2.31923602	ug/Kg
				AROCLOR 1248	U	34	2.31923602	ug/Kg
				AROCLOR 1254	U	34	2.31923602	ug/Kg
				AROCLOR 1260	U	34	2.31923602	ug/Kg
LL5SD-086-5872-SD	240-14026-4	8082	SO	AROCLOR 1016	U	33	2.27576975	ug/Kg
				AROCLOR 1221	U	33	2.27576975	ug/Kg
				AROCLOR 1232	U	33	2.27576975	ug/Kg
				AROCLOR 1242	U	33	2.27576975	ug/Kg
				AROCLOR 1248	U	33	2.27576975	ug/Kg
				AROCLOR 1254	U	33	2.27576975	ug/Kg
				AROCLOR 1260	U	33	2.27576975	ug/Kg
LL6SD-096-5870-SD	240-14026-3	8082	SO	AROCLOR 1016	U	37	2.55255255	ug/Kg
				AROCLOR 1221	U	37	2.55255255	ug/Kg
				AROCLOR 1232	U	37	2.55255255	ug/Kg
				AROCLOR 1242	U	37	2.55255255	ug/Kg
				AROCLOR 1248	U	37	2.55255255	ug/Kg
				AROCLOR 1254	U	37	2.55255255	ug/Kg
				AROCLOR 1260	U	37	2.55255255	ug/Kg
LL6SW-096-5871-SW	240-14026-2	6020	AQ	Zinc	U	20	10	ug/L
		8082		AROCLOR 1016	U	0.19	0.05	ug/L
		AROCLOR 1221		U	0.19	0.05	ug/L	
		AROCLOR 1232		U	0.19	0.05	ug/L	
		AROCLOR 1242		U	0.38	0.05	ug/L	
		AROCLOR 1248		U	0.19	0.05	ug/L	
		AROCLOR 1254		U	0.19	0.05	ug/L	
		AROCLOR 1260		U	0.19	0.05	ug/L	

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

Percent Moisture Correction:

Soil: 100 / (100 - Percent Moisture)

Water: 1

Project Number and Name: 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: 240-14026-1

Lab ID: TA CAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
LL11SD-096-5874-SD	240-14026-5	6020	SO	Antimony	J	0.14	0.24	mg/Kg
				Silver	J	0.072	0.12	mg/Kg
				Sodium	J	35	120	mg/Kg
				Thallium	J	0.21	0.24	mg/Kg
		7471A		Mercury	J	0.10	0.12	mg/Kg
		8270C		BENZYL ALCOHOL	J	54	450	ug/Kg
		WS-WC-0050		Nitrocellulose	J	1.4	6.7	mg/Kg
LL5SD-086-5872-SD	240-14026-4	6020		Antimony	J	0.074	0.23	mg/Kg
				Cadmium	J	0.22	0.23	mg/Kg
				Silver	J	0.094	0.11	mg/Kg
				Sodium	J	25	110	mg/Kg
				Thallium	J	0.20	0.23	mg/Kg
		7471A		Mercury	J	0.053	0.13	mg/Kg
		WS-WC-0050		Nitrocellulose	J	2.1	6.6	mg/Kg
LL6SD-096-5870-SD	240-14026-3	6020		Cadmium	J	0.075	0.25	mg/Kg
				Silver	J	0.037	0.12	mg/Kg
				Sodium	J	24	120	mg/Kg
				Thallium	J	0.15	0.25	mg/Kg
		8260B		2-Butanone (MEK)	J	5.3	30	ug/Kg
				METHYLENE CHLORIDE	J	2.3	7.5	ug/Kg
		8270C		FLUORANTHENE	J	9.8	9.9	ug/Kg
LL6SW-096-5871-SW	240-14026-2	6020	AQ	Antimony	J	0.45	2.0	ug/L
				Arsenic	J	1.2	5.0	ug/L
				Beryllium	J	0.27	1.0	ug/L
				Cadmium	J	0.17	2.0	ug/L
				Cobalt	J	0.35	1.0	ug/L
				SELENIUM	J	0.32	5.0	ug/L
				Sodium	J	520	1000	ug/L
PBA08-QC-6244-TB	240-14026-1	8260B		Thallium	J	0.35	2.0	ug/L
				2-Butanone (MEK)	J	0.72	10	ug/L
				BIS(2-ETHYLHEXYL) PHTHALATE	J H	0.90	1.9	ug/L
				ACETONE	J	1.9	10	ug/L
				METHYLENE CHLORIDE	J	0.47	1.0	ug/L

Surrogate Recovery Outlier Report

Lab Report Batch: 240-14026-1

Lab ID: TA CAN

Client Sample ID	Lab Sample ID	Analysis Method	Dilution	Matrix	Surrogate	Percent Recovery	Criteria (percent)			Associated Target Analytes
							Lower Limit	Upper Limit	Reject Point	
LL11SD-096-5874-SD	240-14026-5	8260B	1	SO	4-Bromofluorobenzene	79	85.0	120.0	10.0	All Target
LL5SD-086-5872-SD	240-14026-4	8260B	1	SO	4-Bromofluorobenzene	81	85.0	120.0	10.0	All Target
LL6SD-096-5870-SD	240-14026-3	8260B	1	SO	4-Bromofluorobenzene	83	85.0	120.0	10.0	All Target

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

DR 8.3

Report Date: 2/12/2013 16:32

Page 1 of 1

Laboratory Control Sample / Laboratory Control Sample Duplicate Outlier Report

Method Batch : 0064134	Analysis Method : 8260B	Analysis Date : 03/04/2010
Preparation Batch : 0064134	Preparation Type : 5030B	Preparation Date : 03/04/2010
Lab Reporting Batch : A0B260454	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
A0C050000134C	AQ	Chloroethane	54		10.00	60.00	135.00	30.00
A0C050000134L		Chloroethane	59	7.4	10.00	60.00	135.00	30.00

Associated Samples	
Client Sample ID	Lab Sample ID
FWSSW-101-5008-SW	A0B260454017
LL11SW-082-5608-SW	A0B260454012
LL11SW-083-5609-SW	A0B260454013
LL11SW-084-5610-SW	A0B260454014
NTASW-145-5342-SW	A0B260454007
PBA08-QC-6012-TB	A0B260454015

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

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 0058013	Analysis Method : 8270C	Analysis Date : 03/11/2010
Preparation Batch : 0058013	Preparation Type : 3520C	Preparation Date : 02/27/2010
Lab Reporting Batch : A0B260454	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
LL11SW-083-5609-SWM	A0B260454013S	AQ	3,3'-Dichlorobenzidine	5.0		0.00	20.00	110.00	56.00
LL11SW-083-5609-SWM	A0B260454013D		2,4-Dinitrophenol		54	0.00	15.00	140.00	34.00
			3,3'-Dichlorobenzidine	4.0		0.00	20.00	110.00	56.00

Associated Samples: Parent sample only	
Client Sample ID	Lab Sample ID
LL11SW-083-5609-SW	A0B260454013

* 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 : 0060019	Analysis Method : 7470A	Analysis Date : 03/02/2010
Preparation Batch : 0060019	Preparation Type : 7470A	Preparation Date : 03/01/2010
Lab Reporting Batch : A0B260454	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
LL11SW-083-5609-SWM	A0B260454013D	AQ	Mercury		25	30.00	80.00	120.00	20.00

Associated Samples: All samples in Method Batch	
Client Sample ID	Lab Sample ID
FWSSW-101-5008-SW	A0B260454017
LL11SW-082-5608-SW	A0B260454012
LL11SW-083-5609-SW	A0B260454013
LL11SW-084-5610-SW	A0B260454014
NTASW-145-5342-SW	A0B260454007

* 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 : 0060020	Analysis Method : 6020	Analysis Date : 03/02/2010
Preparation Batch : 0060020	Preparation Type : 3050B	Preparation Date : 03/01/2010
Lab Reporting Batch : A0B260454	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
LL6SB-069-5219-SOMS	A0B260454001S	SO	Antimony	26		30.00	75.00	125.00	20.00
			Calcium	182		30.00	70.00	130.00	20.00
			Potassium	64		30.00	70.00	130.00	20.00
LL6SB-069-5219-SOMS	A0B260454001D		Antimony	23		30.00	75.00	125.00	20.00
			Potassium	63		30.00	70.00	130.00	20.00

Associated Samples: All samples in Method Batch	
Client Sample ID	Lab Sample ID
FWSSD-101-5009-SD	A0B260454016
LL11SD-082-5593-SD	A0B260454009
LL11SD-083-5594-SD	A0B260454010
LL11SD-084-5595-SD	A0B260454011
LL6SB-069-5219-SO	A0B260454001
LL6SB-069-5220-SO	A0B260454002
LL6SB-077-5247-SO	A0B260454006
LL6SB-083-5233-SO	A0B260454003
LL6SB-083-5234-SO	A0B260454004
LL6SB-083-5235-SO	A0B260454005
NTASD-145-5345-SD	A0B260454008

* 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 : 0062288	Analysis Method : 8260B	Analysis Date : 03/02/2010
Preparation Batch : 0062288	Preparation Type : 5030B	Preparation Date : 03/02/2010
Lab Reporting Batch : A0B260454	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
FWSSD-101-5009-SDMS	A0B260454016S	SO	Styrene	44		0.00	75.00	125.00	30.00
FWSSD-101-5009-SDMS	A0B260454016D		2-Butanone (MEK)		38	0.00	30.00	160.00	33.00
			2-Hexanone	43	50	0.00	45.00	145.00	31.00
			4-methyl-2-pentanone (MIBK)		57	0.00	45.00	145.00	39.00
			Styrene		73	0.00	75.00	125.00	30.00

Associated Samples: Parent sample only	
Client Sample ID	Lab Sample ID
FWSSD-101-5009-SD	A0B260454016

* 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 : 0064134	Analysis Method : 8260B	Analysis Date : 03/04/2010
Preparation Batch : 0064134	Preparation Type : 5030B	Preparation Date : 03/04/2010
Lab Reporting Batch : A0B260454	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
LL11SW-083-5609-SWM	A0B260454013S	AQ	Chloroethane	53		0.00	60.00	135.00	30.00

Associated Samples: Parent sample only	
Client Sample ID	Lab Sample ID
LL11SW-083-5609-SW	A0B260454013

* 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 : A0B260454

Lab ID: TALCAN

Analysis Method : 8270C

Analysis Date : 03/11/2010

Preparation Type : 3520C

Preparation Date : 02/27/2010

Method Blank Lab Sample ID : A0B270000013B

Preparation Batch : 0058013

bis(2-Ethylhexyl) phthalate	Result	Reporting Limit	Units	Lab Qual	Comments
	2.0	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
LL11SW-082-5608-SW	A0B260454012	1	2.4	J B	ug/L
LL11SW-083-5609-SW	A0B260454013	1	1.3	J B	ug/L
LL11SW-084-5610-SW	A0B260454014	1	1.3	J B	ug/L

Method Blank Outlier Report

Lab Reporting Batch : A0B260454

Lab ID: TALCAN

Analysis Method : 6020

Analysis Date : 03/05/2010

Preparation Type : 3005A

Preparation Date : 03/01/2010

Method Blank Lab Sample ID : A0C010000019B

Preparation Batch : 0060019

Manganese	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	1.5	10.0	ug/L	J	

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

Potassium	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	52.4	1000	ug/L	J	

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

Zinc	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	23.2	40.0	ug/L	J	

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

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
LL11SW-082-5608-SW	A0B260454012	1	15.3	J B	ug/L
LL11SW-084-5610-SW	A0B260454014	1	30.0	J B	ug/L
NTASW-145-5342-SW	A0B260454007	1	11.5	J B	ug/L

Method Blank Outlier Report

Lab Reporting Batch : A0B260454

Lab ID: TALCAN

Analysis Method : 8270C

Analysis Date : 03/12/2010

Preparation Type : 3540C

Preparation Date : 03/01/2010

Method Blank Lab Sample ID : A0C010000040B

Preparation Batch : 0060040

bis(2-Ethylhexyl) phthalate	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	20	330	ug/kg	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
FWSSD-101-5009-SD	A0B260454016	1	81	J B	ug/kg
LL11SD-082-5593-SD	A0B260454009	1	160	J B	ug/kg
LL11SD-083-5594-SD	A0B260454010	1	66	J B	ug/kg
LL11SD-084-5595-SD	A0B260454011	1	74	J B	ug/kg
LL6SB-069-5219-SO	A0B260454001	1	53	J B	ug/kg
LL6SB-069-5220-SO	A0B260454002	1	48	J B	ug/kg

Method Blank Outlier Report

Lab Reporting Batch : A0B260454

Lab ID: TALCAN

Analysis Method : 8260B

Analysis Date : 03/01/2010

Preparation Type : 5030B

Preparation Date : 03/01/2010

Method Blank Lab Sample ID : A0C020000193B

Preparation Batch : 0061193

2-Butanone (MEK)	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	3.2	20	ug/kg	J	Common Contaminant

2-Butanone (MEK) was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
LL11SD-082-5593-SD	A0B260454009	1	3.7	J B	ug/kg

2-Hexanone	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	2.0	20	ug/kg	J	

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

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	8.2	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
LL11SD-082-5593-SD	A0B260454009	1	12	J B	ug/kg

Method Blank Outlier Report

Lab Reporting Batch : A0B260454

Lab ID: TALCAN

Analysis Method : 8260B

Analysis Date : 03/02/2010

Preparation Type : 5030B

Preparation Date : 03/02/2010

Method Blank Lab Sample ID : A0C030000288B

Preparation Batch : 0062288

2-Butanone (MEK)	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	4.6	20	ug/kg	J	Common Contaminant

2-Butanone (MEK) was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
FWSSD-101-5009-SD	A0B260454016	1	4.8	J B	ug/kg

2-Hexanone	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	2.7	20	ug/kg	J	

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

4-methyl-2-pentanone (MIBK)	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	0.62	20	ug/kg	J	

4-methyl-2-pentanone (MIBK) contamination found in the method blank did not qualify any samples.

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	11	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
FWSSD-101-5009-SD	A0B260454016	1	15	J B	ug/kg

Methylene chloride	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	2.1	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
FWSSD-101-5009-SD	A0B260454016	1	11	B	ug/kg
LL11SD-084-5595-SD	A0B260454011	1	7.3	J B	ug/kg
LL6SB-069-5219-SO	A0B260454001	1	6.0	J B	ug/kg
NTASD-145-5345-SD	A0B260454008	1	6.4	J B	ug/kg

Method Blank Outlier Report

Lab Reporting Batch : A0B260454

Lab ID: TALCAN

Analysis Method : 8260B

Analysis Date : 03/04/2010

Preparation Type : 5030B

Preparation Date : 03/04/2010

Method Blank Lab Sample ID : A0C050000134B

Preparation Batch : 0064134

Methylene chloride					
	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	0.40	1.0	ug/L	J	Common Contaminant

Methylene chloride 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: A0B260454

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWSSD-101-5009-SD	A0B260454016	6020	SO	Cadmium	J	0.097	0.28	mg/kg
				Silver	J	0.026	0.69	mg/kg
				Sodium	J	23.7	138	mg/kg
		8260B		2-Butanone (MEK)	J B	4.8	28	ug/kg
				Acetone	J B	15	28	ug/kg
		8270C		bis(2-Ethylhexyl) phthalate	J B	81	450	ug/kg
FWSSW-101-5008-SW	A0B260454017	6020	AQ	Cadmium	J	0.027	2.0	ug/L
				Cobalt	J	0.14	5.0	ug/L
				Copper	J	1.4	5.0	ug/L
				Lead	J	0.28	3.0	ug/L
				Nickel	J	1.6	10.0	ug/L
				Selenium	J	0.28	5.0	ug/L
		8081A		gamma-Chlordane	J	0.048	0.050	ug/L
		8330B		Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetr	J	0.088	0.15	ug/L
LL11SD-082-5593-SD	A0B260454009	6020	SO	Cadmium	J	0.056	0.26	mg/kg
				Selenium	J	0.48	0.65	mg/kg
				Silver	J	0.027	0.65	mg/kg
				Sodium	J	33.2	130	mg/kg
		8260B		2-Butanone (MEK)	J B	3.7	26	ug/kg
				Acetone	J B	12	26	ug/kg
				Carbon disulfide	J	0.63	6.5	ug/kg
		8270C		Toluene	J	0.40	6.5	ug/kg
				2-Methylnaphthalene	J	9.7	430	ug/kg
				bis(2-Ethylhexyl) phthalate	J B	160	430	ug/kg
LL11SD-083-5594-SD	A0B260454010	6020		Antimony	J	0.13	0.75	mg/kg
				Cadmium	J	0.13	0.30	mg/kg
				Silver	J	0.022	0.75	mg/kg
				Sodium	J	68.1	151	mg/kg
				Thallium	J	0.14	0.30	mg/kg
		8270C		2-Methylnaphthalene	J	13	500	ug/kg
				bis(2-Ethylhexyl) phthalate	J B	66	500	ug/kg
LL11SD-084-5595-SD	A0B260454011	6020		Silver	J	0.062	0.78	mg/kg
				Sodium	J	36.0	156	mg/kg
				Thallium	J	0.13	0.31	mg/kg
		7471A		Mercury	J	0.049	0.16	mg/kg
		8260B		Methylene chloride	J B	7.3	7.8	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: A0B260454

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
LL11SD-084-5595-SD	A0B260454011	8270C	SO	bis(2-Ethylhexyl) phthalate	J B	74	510	ug/kg
LL11SW-082-5608-SW	A0B260454012	6020	AQ	Arsenic	J	0.66	5.0	ug/L
				Cadmium	J	0.035	2.0	ug/L
				Chromium	J	0.79	5.0	ug/L
				Cobalt	J	0.26	5.0	ug/L
				Copper	J	2.4	5.0	ug/L
				Lead	J	0.43	3.0	ug/L
				Nickel	J	1.2	10.0	ug/L
				Vanadium	J	0.86	10.0	ug/L
				Zinc	J B	15.3	40.0	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	2.4	10	ug/L
LL11SW-083-5609-SW	A0B260454013	6020		Arsenic	J	0.58	5.0	ug/L
				Chromium	J	0.78	5.0	ug/L
				Cobalt	J	0.17	5.0	ug/L
				Copper	J	1.4	5.0	ug/L
				Lead	J	0.44	3.0	ug/L
				Nickel	J	0.91	10.0	ug/L
				Selenium	J	0.26	5.0	ug/L
				Vanadium	J	1.1	10.0	ug/L
		8081A		beta-BHC	J	0.013	0.050	ug/L
				gamma-Chlordane	J	0.015	0.050	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	1.3	10	ug/L
LL11SW-084-5610-SW	A0B260454014	6020		Antimony	J	0.36	5.0	ug/L
				Arsenic	J	4.3	5.0	ug/L
				Beryllium	J	0.11	1.0	ug/L
				Cadmium	J	0.24	2.0	ug/L
				Chromium	J	3.3	5.0	ug/L
				Cobalt	J	1.9	5.0	ug/L
				Nickel	J	3.9	10.0	ug/L
				Selenium	J	0.73	5.0	ug/L
				Silver	J	0.078	5.0	ug/L
				Vanadium	J	5.1	10.0	ug/L
				Zinc	J B	30.0	40.0	ug/L
		8081A		beta-BHC	J	0.0096	0.050	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	1.3	10	ug/L
LL6SB-069-5219-SO	A0B260454001	6020	SO	Antimony	J	0.11	0.62	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: A0B260454

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
LL6SB-069-5219-SO	A0B260454001	6020	SO	Cadmium	J	0.10	0.25	mg/kg
				Silver	J	0.034	0.62	mg/kg
				Sodium	J	64.9	123	mg/kg
				Thallium	J	0.21	0.25	mg/kg
		7471A		Mercury	J	0.025	0.12	mg/kg
		8260B		Methylene chloride	J B	6.0	6.2	ug/kg
		8270C		bis(2-Ethylhexyl) phthalate	J B	53	410	ug/kg
LL6SB-069-5220-SO	A0B260454002	6020		Cadmium	J	0.078	0.24	mg/kg
				Silver	J	0.017	0.59	mg/kg
				Sodium	J	79.5	118	mg/kg
				Thallium	J	0.19	0.24	mg/kg
		8270C		bis(2-Ethylhexyl) phthalate	J B	48	390	ug/kg
LL6SB-083-5233-SO	A0B260454003	6020		Cadmium	J	0.058	0.27	mg/kg
				Silver	J	0.035	0.68	mg/kg
				Sodium	J	28.4	136	mg/kg
				Thallium	J	0.14	0.27	mg/kg
LL6SB-083-5234-SO	A0B260454004			Cadmium	J	0.055	0.27	mg/kg
				Silver	J	0.030	0.68	mg/kg
				Sodium	J	86.4	136	mg/kg
				Thallium	J	0.20	0.27	mg/kg
LL6SB-083-5235-SO	A0B260454005			Cadmium	J	0.055	0.26	mg/kg
				Silver	J	0.023	0.65	mg/kg
				Sodium	J	67.5	130	mg/kg
				Thallium	J	0.16	0.26	mg/kg
		7471A		Mercury	J	0.021	0.13	mg/kg
NTASD-145-5345-SD	A0B260454008	6020		Cadmium	J	0.053	0.26	mg/kg
				Silver	J	0.032	0.65	mg/kg
				Sodium	J	91.4	130	mg/kg
				Thallium	J	0.18	0.26	mg/kg
		8260B		Methylene chloride	J B	6.4	6.5	ug/kg
		8270C		bis(2-Ethylhexyl) phthalate	J B	350	430	ug/kg
NTASW-145-5342-SW	A0B260454007	6020	AQ	Antimony	J	0.26	5.0	ug/L
				Arsenic	J	0.67	5.0	ug/L
				Cadmium	J	0.048	2.0	ug/L
				Chromium	J	0.61	5.0	ug/L
				Cobalt	J	0.27	5.0	ug/L

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: A0B260454

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
NTASW-145-5342-SW	A0B260454007	6020	AQ	Copper	J	2.4	5.0	ug/L
				Lead	J	0.52	3.0	ug/L
				Nickel	J	1.3	10.0	ug/L
				Selenium	J	0.37	5.0	ug/L
				Vanadium	J	0.67	10.0	ug/L
				Zinc	J B	11.5	40.0	ug/L
PBA08-QC-6012-TB	A0B260454015	8260B		Acetone	J	4.3	10	ug/L

QC Outlier Report: Non-Qualified Outliers for Reporting Limits (Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: A0B260454

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWSSD-101-5009-SD	A0B260454016	353.2 Modified SO		Nitrocellulose	U	6.9	6.84931507	mg/kg
				Antimony	U	0.69	0.68493151	mg/kg
				Thallium	U	0.28	0.27397260	mg/kg
				Mercury	U	0.14	0.13698630	mg/kg
				4,4'-DDD	U	28	27.3972603	ug/kg
				4,4'-DDT	U	28	27.3972603	ug/kg
				Aldrin	U	55	54.7945205	ug/kg
				beta-BHC	U	48	47.9452055	ug/kg
				delta-BHC	U	55	54.7945205	ug/kg
				Endrin ketone	U	28	27.3972603	ug/kg
				Heptachlor	U	48	47.9452055	ug/kg
				Methoxychlor	U	69	68.4931507	ug/kg
				Toxaphene	U	920	917.808219	ug/kg
				1,1,1-Trichloroethane	U	6.9	6.84931507	ug/kg
				1,1,2,2-Tetrachloroethane	U	6.9	6.84931507	ug/kg
				1,1,2-Trichloroethane	U	6.9	6.84931507	ug/kg
				1,1-Dichloroethane	U	6.9	6.84931507	ug/kg
				1,1-Dichloroethene	U	6.9	6.84931507	ug/kg
				1,2-Dibromoethane (Ethylene Dibro	U	6.9	6.84931507	ug/kg
				1,2-Dichloroethane	U	6.9	6.84931507	ug/kg
				1,2-Dichloroethene (total)	U	6.9	6.84931507	ug/kg
				1,2-Dichloropropane	U	6.9	6.84931507	ug/kg
				2-Hexanone	U	28	27.3972603	ug/kg
				4-methyl-2-pentanone (MIBK)	U	28	27.3972603	ug/kg
				Benzene	U	6.9	6.84931507	ug/kg
				Bromochloromethane	U	6.9	6.84931507	ug/kg
				Bromodichloromethane	U	6.9	6.84931507	ug/kg
				Bromoform	U	6.9	6.84931507	ug/kg
				Bromomethane (Methyl bromide)	U	6.9	6.84931507	ug/kg
				Carbon disulfide	U	6.9	6.84931507	ug/kg
				Carbon tetrachloride	U	6.9	6.84931507	ug/kg
				Chlorobenzene	U	6.9	6.84931507	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: A0B260454

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWSSD-101-5009-SD	A0B260454016	8260B	SO	Chlorodibromomethane	U	6.9	6.84931507	ug/kg
				Chloroethane	U	6.9	6.84931507	ug/kg
				Chloroform	U	6.9	6.84931507	ug/kg
				Chloromethane	U	6.9	6.84931507	ug/kg
				cis-1,3-Dichloropropene	U	6.9	6.84931507	ug/kg
				Ethylbenzene	U	6.9	6.84931507	ug/kg
				Styrene	U	6.9	6.84931507	ug/kg
				Tetrachloroethene	U	6.9	6.84931507	ug/kg
				Toluene	U	6.9	6.84931507	ug/kg
				trans-1,3-Dichloropropene	U	6.9	6.84931507	ug/kg
				Trichloroethene	U	6.9	6.84931507	ug/kg
				Vinyl chloride	U	6.9	6.84931507	ug/kg
				Xylene (Total)	U	14	13.6986301	ug/kg
		8270C		2,4-Dinitrophenol	U	1100	1095.89041	ug/kg
				2-Nitroaniline	U	1100	1095.89041	ug/kg
				3-Nitroaniline	U	1100	1095.89041	ug/kg
				4,6-Dinitro-2-methylphenol	U	1100	1095.89041	ug/kg
				4-Nitroaniline	U	1100	1095.89041	ug/kg
				4-Nitrophenol	U	1100	1095.89041	ug/kg
				Benzoic acid	U	1100	1095.89041	ug/kg
				Carbazole	U	69	68.4931507	ug/kg
		8330B		1,3,5-Trinitrobenzene	U	0.25	0.3390411	mg/kg
				1,3-Dinitrobenzene	U	0.25	0.3390411	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.25	0.3390411	mg/kg
				2,4-Dinitrotoluene	U	0.25	0.3390411	mg/kg
				2,6-Dinitrotoluene	U	0.25	0.3390411	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.25	0.3390411	mg/kg
				2-Nitrotoluene	U	0.25	0.3390411	mg/kg
				3-Nitrotoluene	U	0.25	0.3390411	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.25	0.3390411	mg/kg
				4-Nitrotoluene	U	0.50	0.67808219	mg/kg
				Nitrobenzene	U	0.25	0.3390411	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: A0B260454

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWSSW-101-5008-SW	A0B260454017	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
LL11SD-082-5593-SD	A0B260454009	6020	SO	Antimony	U	0.65	0.64935065	mg/kg
				Thallium	U	0.26	0.25974026	mg/kg
				Mercury	U	0.13	0.12987013	mg/kg
		8260B		1,1,1-Trichloroethane	U	6.5	6.49350649	ug/kg
				1,1,2,2-Tetrachloroethane	U	6.5	6.49350649	ug/kg
				1,1,2-Trichloroethane	U	6.5	6.49350649	ug/kg
				1,1-Dichloroethane	U	6.5	6.49350649	ug/kg
				1,1-Dichloroethene	U	6.5	6.49350649	ug/kg
				1,2-Dibromoethane (Ethylene Dibro	U	6.5	6.49350649	ug/kg
				1,2-Dichloroethane	U	6.5	6.49350649	ug/kg
				1,2-Dichloroethene (total)	U	6.5	6.49350649	ug/kg
				1,2-Dichloropropane	U	6.5	6.49350649	ug/kg
				2-Hexanone	U	26	25.974026	ug/kg
				4-methyl-2-pentanone (MIBK)	U	26	25.974026	ug/kg
				Benzene	U	6.5	6.49350649	ug/kg
				Bromochloromethane	U	6.5	6.49350649	ug/kg
				Bromodichloromethane	U	6.5	6.49350649	ug/kg
				Bromoform	U	6.5	6.49350649	ug/kg
				Bromomethane (Methyl bromide)	U	6.5	6.49350649	ug/kg
				Carbon tetrachloride	U	6.5	6.49350649	ug/kg
				Chlorobenzene	U	6.5	6.49350649	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: A0B260454

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit	
							Criteria*	Units
LL11SD-082-5593-SD	A0B260454009	8260B	SO	Chlorodibromomethane	U	6.5	6.49350649	ug/kg
				Chloroethane	U	6.5	6.49350649	ug/kg
				Chloroform	U	6.5	6.49350649	ug/kg
				Chloromethane	U	6.5	6.49350649	ug/kg
				cis-1,3-Dichloropropene	U	6.5	6.49350649	ug/kg
				Ethylbenzene	U	6.5	6.49350649	ug/kg
				Methylene chloride	U	6.5	6.49350649	ug/kg
				Styrene	U	6.5	6.49350649	ug/kg
				Tetrachloroethene	U	6.5	6.49350649	ug/kg
				trans-1,3-Dichloropropene	U	6.5	6.49350649	ug/kg
				Trichloroethene	U	6.5	6.49350649	ug/kg
				Vinyl chloride	U	6.5	6.49350649	ug/kg
				Xylene (Total)	U	13	12.987013	ug/kg
		8270C		1,2,4-Trichlorobenzene	U	430	428.571429	ug/kg
				1,2-Dichlorobenzene	U	430	428.571429	ug/kg
				1,3-Dichlorobenzene	U	430	428.571429	ug/kg
				1,4-Dichlorobenzene	U	430	428.571429	ug/kg
				2,4,5-Trichlorophenol	U	430	428.571429	ug/kg
				2,4,6-Trichlorophenol	U	430	428.571429	ug/kg
				2,4-Dichlorophenol	U	430	428.571429	ug/kg
				2,4-Dimethylphenol	U	430	428.571429	ug/kg
				2,4-Dinitrotoluene	U	430	428.571429	ug/kg
				2,6-Dinitrotoluene	U	430	428.571429	ug/kg
				2-Chloronaphthalene	U	430	428.571429	ug/kg
				2-Chlorophenol	U	430	428.571429	ug/kg
				2-Methylphenol	U	430	428.571429	ug/kg
				2-Nitrophenol	U	430	428.571429	ug/kg
				3,3'-Dichlorobenzidine	U	430	428.571429	ug/kg
				3-methylphenol/4-methylphenol	U	430	428.571429	ug/kg
				4-Bromophenyl phenyl ether	U	430	428.571429	ug/kg
				4-Chloro-3-methylphenol	U	430	428.571429	ug/kg
				4-Chloroaniline	U	430	428.571429	ug/kg
				4-Chlorophenyl phenyl ether	U	430	428.571429	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: A0B260454

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit	
							Criteria*	Units
LL11SD-082-5593-SD	A0B260454009	8270C	SO	Benzyl alcohol	U	430	428.571429	ug/kg
				bis(2-Chloroethoxy)methane	U	430	428.571429	ug/kg
				bis(2-Chloroethyl) ether	U	430	428.571429	ug/kg
				Bis(2-chloroisopropyl) ether	U	430	428.571429	ug/kg
				Butyl benzyl phthalate	U	430	428.571429	ug/kg
				Carbazole	U	65	64.9350649	ug/kg
				Dibenzofuran	U	430	428.571429	ug/kg
				Diethyl phthalate	U	430	428.571429	ug/kg
				Dimethyl phthalate	U	430	428.571429	ug/kg
				Di-n-butyl phthalate	U	430	428.571429	ug/kg
				Di-n-octyl phthalate	U	430	428.571429	ug/kg
				Hexachlorobenzene	U	430	428.571429	ug/kg
				Hexachlorobutadiene	U	430	428.571429	ug/kg
				HEXACHLOROCYCLOPENTADIE	U	430	428.571429	ug/kg
				Hexachloroethane	U	430	428.571429	ug/kg
				Isophorone	U	430	428.571429	ug/kg
				Nitrobenzene	U	430	428.571429	ug/kg
				N-Nitrosodi-n-propylamine	U	430	428.571429	ug/kg
				N-Nitrosodiphenylamine	U	430	428.571429	ug/kg
				Pentachlorophenol	U	430	428.571429	ug/kg
				Phenol	U	430	428.571429	ug/kg
LL11SD-083-5594-SD	A0B260454010	8081A	SO	4,4'-DDE	U	26	25.7575758	ug/kg
				alpha-BHC	U	38	37.8787879	ug/kg
				Dieldrin	U	26	25.7575758	ug/kg
				Endosulfan I	U	26	25.7575758	ug/kg
				Endosulfan II	U	38	37.8787879	ug/kg
				Endrin	U	26	25.7575758	ug/kg
				gamma-BHC (Lindane)	U	38	37.8787879	ug/kg
				gamma-Chlordane	U	26	25.7575758	ug/kg
LL11SD-084-5595-SD	A0B260454011	8260B	SO	Xylene (Total)	U	16	15.625	ug/kg
				Heptachlor epoxide	U	38	37.8787879	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: A0B260454

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
LL11SD-084-5595-SD	A0B260454011	8330B	SO	1,3,5-Trinitrobenzene	U	0.24	0.37109375	mg/kg
				1,3-Dinitrobenzene	U	0.24	0.37109375	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.24	0.37109375	mg/kg
				2,4-Dinitrotoluene	U	0.24	0.37109375	mg/kg
				2,6-Dinitrotoluene	U	0.24	0.37109375	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.24	0.37109375	mg/kg
				2-Nitrotoluene	U	0.24	0.37109375	mg/kg
				3-Nitrotoluene	U	0.24	0.37109375	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.24	0.37109375	mg/kg
				4-Nitrotoluene	U	0.48	0.7421875	mg/kg
				Nitrobenzene	U	0.24	0.37109375	mg/kg
LL11SW-082-5608-SW	A0B260454012	8330B	AQ	1,3-Dinitrobenzene	U	0.15	0.1455	ug/L
				2,4,6-Trinitrotoluene (TNT)	U	0.15	0.1455	ug/L
				2,4-Dinitrotoluene	U	0.15	0.1455	ug/L
				2,6-Dinitrotoluene	U	0.15	0.1455	ug/L
				2-Nitrotoluene	U	0.15	0.1455	ug/L
				4-Amino-2,6-Dinitrotoluene	U	0.15	0.1455	ug/L
				Methyl-2,4,6-Trinitrophenylnitramin	U	0.15	0.1455	ug/L
				Nitrobenzene	U	0.15	0.1455	ug/L
				Octahydro-1,3,5,7-tetranitro-1,3,5,7	U	0.15	0.1455	ug/L
LL11SW-083-5609-SW	A0B260454013	8330B	AQ	2-Amino-4,6-dinitrotoluene	U	0.31	0.306	ug/L
				Hexahydro-1,3,5-Trinitro-1,3,5-Triaz	U	0.26	0.255	ug/L
LL11SW-084-5610-SW	A0B260454014	8330B	AQ	2-Amino-4,6-dinitrotoluene	U	0.31	0.306	ug/L
				Hexahydro-1,3,5-Trinitro-1,3,5-Triaz	U	0.26	0.255	ug/L
LL6SB-069-5219-SO	A0B260454001	353.2 Modified	SO	Nitrocellulose	U	6.2	6.17283951	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
				alpha-BHC	U	3.1	3.08641975	ug/kg
				Dieldrin	U	2.1	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 - 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: A0B260454

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit		
							Criteria*	Units	
LL6SB-069-5219-SO	A0B260454001	8081A	SO	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	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	
		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		

* 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: A0B260454

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit	
							Criteria*	Units
LL6SB-069-5219-SO	A0B260454001	8260B	SO	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
				2-Methylphenol	U	410	407.407407	ug/kg
				2-Nitroaniline	U	990	987.654321	ug/kg
				2-Nitrophenol	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: A0B260454

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit	
							Criteria*	Units
LL6SB-069-5219-SO	A0B260454001	8270C	SO	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
				Pentachlorophenol	U	410	407.407407	ug/kg
				Phenol	U	410	407.407407	ug/kg
		8330B		1,3,5-Trinitrobenzene	U	0.25	0.30555556	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: A0B260454

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
LL6SB-069-5219-SO	A0B260454001	8330B	SO	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
LL6SB-069-5220-SO	A0B260454002	353.2 Modified SO	6020	Nitrocellulose	U	5.9	5.88235294	mg/kg
				Antimony	U	0.59	0.58823529	mg/kg
				7471A	U	0.12	0.11764706	mg/kg
				8081A	U	2.4	2.35294118	ug/kg
				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	38.8235294	ug/kg
				Aroclor 1221	U	39	38.8235294	ug/kg
				Aroclor 1232	U	39	38.8235294	ug/kg
				Aroclor 1242	U	39	38.8235294	ug/kg
				Aroclor 1248	U	39	38.8235294	ug/kg
				Aroclor 1254	U	39	38.8235294	ug/kg
				Aroclor 1260	U	39	38.8235294	ug/kg
			8260B	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 - 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: A0B260454

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
LL6SB-069-5220-SO	A0B260454002	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
				Methylene chloride	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

* 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: A0B260454

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit	
							Criteria*	Units
LL6SB-069-5220-SO	A0B260454002	8270C	SO	1,2-Dichlorobenzene	U	390	388.235294	ug/kg
				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	388.235294	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
				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 - 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: A0B260454

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
LL6SB-069-5220-SO	A0B260454002	8270C	SO	HEXACHLOROCYCLOPENTADIE	U	390	388.235294	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
LL6SB-077-5247-SO	A0B260454006	7196A	SO	Chromium, hexavalent	U	1.1	1.06666667	mg/kg
LL6SB-083-5233-SO	A0B260454003	6020	SO	Antimony	U	0.68	0.67567568	mg/kg
		7471A		Mercury	U	0.14	0.13513514	mg/kg
LL6SB-083-5234-SO	A0B260454004	6020	SO	Antimony	U	0.68	0.67567568	mg/kg
		7471A		Mercury	U	0.14	0.13513514	mg/kg
LL6SB-083-5235-SO	A0B260454005	6020	SO	Antimony	U	0.65	0.64935065	mg/kg
		8330B		1,3,5-Trinitrobenzene	U	0.25	0.32142857	mg/kg
				1,3-Dinitrobenzene	U	0.25	0.32142857	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.25	0.32142857	mg/kg
				2,4-Dinitrotoluene	U	0.25	0.32142857	mg/kg
				2,6-Dinitrotoluene	U	0.25	0.32142857	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.25	0.32142857	mg/kg
				2-Nitrotoluene	U	0.25	0.32142857	mg/kg
				3-Nitrotoluene	U	0.25	0.32142857	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.25	0.32142857	mg/kg
				4-Nitrotoluene	U	0.50	0.64285714	mg/kg
				Nitrobenzene	U	0.25	0.32142857	mg/kg
NTASD-145-5345-SD	A0B260454008	353.2 Modified	SO	Nitrocellulose	U	6.5	6.49350649	mg/kg
		6020		Antimony	U	0.65	0.64935065	mg/kg
		7471A		Mercury	U	0.13	0.12987013	mg/kg
		8081A		4,4'-DDD	U	26	25.974026	ug/kg
				4,4'-DDT	U	26	25.974026	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: A0B260454

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit	
							Criteria*	Units
NTASD-145-5345-SD	A0B260454008	8081A	SO	Aldrin	U	52	51.9480519	ug/kg
				alpha-BHC	U	33	32.4675325	ug/kg
				alpha-Chordane	U	39	38.961039	ug/kg
				beta-BHC	U	46	45.4545455	ug/kg
				delta-BHC	U	52	51.9480519	ug/kg
				Endosulfan II	U	33	32.4675325	ug/kg
				Endosulfan sulfate	U	39	38.961039	ug/kg
				Endrin aldehyde	U	39	38.961039	ug/kg
				Endrin ketone	U	26	25.974026	ug/kg
				gamma-BHC (Lindane)	U	33	32.4675325	ug/kg
				Heptachlor	U	46	45.4545455	ug/kg
				Heptachlor epoxide	U	33	32.4675325	ug/kg
				Methoxychlor	U	65	64.9350649	ug/kg
		8082		Aroclor 1016	U	43	42.8571429	ug/kg
				Aroclor 1221	U	43	42.8571429	ug/kg
				Aroclor 1232	U	43	42.8571429	ug/kg
				Aroclor 1242	U	43	42.8571429	ug/kg
				Aroclor 1248	U	43	42.8571429	ug/kg
				Aroclor 1254	U	43	42.8571429	ug/kg
				Aroclor 1260	U	43	42.8571429	ug/kg
		8260B		1,1,1-Trichloroethane	U	6.5	6.49350649	ug/kg
				1,1,2,2-Tetrachloroethane	U	6.5	6.49350649	ug/kg
				1,1,2-Trichloroethane	U	6.5	6.49350649	ug/kg
				1,1-Dichloroethane	U	6.5	6.49350649	ug/kg
				1,1-Dichloroethene	U	6.5	6.49350649	ug/kg
				1,2-Dibromoethane (Ethylene Dibro	U	6.5	6.49350649	ug/kg
				1,2-Dichloroethane	U	6.5	6.49350649	ug/kg
				1,2-Dichloroethene (total)	U	6.5	6.49350649	ug/kg
				1,2-Dichloropropane	U	6.5	6.49350649	ug/kg
				2-Butanone (MEK)	U	26	25.974026	ug/kg
				2-Hexanone	U	26	25.974026	ug/kg
				4-methyl-2-pentanone (MIBK)	U	26	25.974026	ug/kg
				Acetone	U	26	25.974026	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: A0B260454

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit	
							Criteria*	Units
NTASD-145-5345-SD	A0B260454008	8260B	SO	Benzene	U	6.5	6.49350649	ug/kg
				Bromochloromethane	U	6.5	6.49350649	ug/kg
				Bromodichloromethane	U	6.5	6.49350649	ug/kg
				Bromoform	U	6.5	6.49350649	ug/kg
				Bromomethane (Methyl bromide)	U	6.5	6.49350649	ug/kg
				Carbon disulfide	U	6.5	6.49350649	ug/kg
				Carbon tetrachloride	U	6.5	6.49350649	ug/kg
				Chlorobenzene	U	6.5	6.49350649	ug/kg
				Chlorodibromomethane	U	6.5	6.49350649	ug/kg
				Chloroethane	U	6.5	6.49350649	ug/kg
				Chloroform	U	6.5	6.49350649	ug/kg
				Chloromethane	U	6.5	6.49350649	ug/kg
				cis-1,3-Dichloropropene	U	6.5	6.49350649	ug/kg
				Ethylbenzene	U	6.5	6.49350649	ug/kg
				Styrene	U	6.5	6.49350649	ug/kg
				Tetrachloroethene	U	6.5	6.49350649	ug/kg
				Toluene	U	6.5	6.49350649	ug/kg
				trans-1,3-Dichloropropene	U	6.5	6.49350649	ug/kg
				Trichloroethene	U	6.5	6.49350649	ug/kg
				Vinyl chloride	U	6.5	6.49350649	ug/kg
				Xylene (Total)	U	13	12.987013	ug/kg
		8270C		1,2,4-Trichlorobenzene	U	430	428.571429	ug/kg
				1,2-Dichlorobenzene	U	430	428.571429	ug/kg
				1,3-Dichlorobenzene	U	430	428.571429	ug/kg
				1,4-Dichlorobenzene	U	430	428.571429	ug/kg
				2,4,5-Trichlorophenol	U	430	428.571429	ug/kg
				2,4,6-Trichlorophenol	U	430	428.571429	ug/kg
				2,4-Dichlorophenol	U	430	428.571429	ug/kg
				2,4-Dimethylphenol	U	430	428.571429	ug/kg
				2,4-Dinitrotoluene	U	430	428.571429	ug/kg
				2,6-Dinitrotoluene	U	430	428.571429	ug/kg
				2-Chloronaphthalene	U	430	428.571429	ug/kg
				2-Chlorophenol	U	430	428.571429	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: A0B260454

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit			
							Criteria*	Units		
NTASD-145-5345-SD	A0B260454008	8270C	SO	2-Methylnaphthalene	U	430	428.571429	ug/kg		
				2-Methylphenol	U	430	428.571429	ug/kg		
				2-Nitrophenol	U	430	428.571429	ug/kg		
				3,3'-Dichlorobenzidine	U	430	428.571429	ug/kg		
				3-methylphenol/4-methylphenol	U	430	428.571429	ug/kg		
				4-Bromophenyl phenyl ether	U	430	428.571429	ug/kg		
				4-Chloro-3-methylphenol	U	430	428.571429	ug/kg		
				4-Chloroaniline	U	430	428.571429	ug/kg		
				4-Chlorophenyl phenyl ether	U	430	428.571429	ug/kg		
				Benzyl alcohol	U	430	428.571429	ug/kg		
				bis(2-Chloroethoxy)methane	U	430	428.571429	ug/kg		
				bis(2-Chloroethyl) ether	U	430	428.571429	ug/kg		
				Bis(2-chloroisopropyl) ether	U	430	428.571429	ug/kg		
				Butyl benzyl phthalate	U	430	428.571429	ug/kg		
				Carbazole	U	65	64.9350649	ug/kg		
				Dibenzofuran	U	430	428.571429	ug/kg		
				Diethyl phthalate	U	430	428.571429	ug/kg		
				Dimethyl phthalate	U	430	428.571429	ug/kg		
				Di-n-butyl phthalate	U	430	428.571429	ug/kg		
				Di-n-octyl phthalate	U	430	428.571429	ug/kg		
				Hexachlorobenzene	U	430	428.571429	ug/kg		
				Hexachlorobutadiene	U	430	428.571429	ug/kg		
				HEXACHLOROCYCLOPENTADIE	U	430	428.571429	ug/kg		
				Hexachloroethane	U	430	428.571429	ug/kg		
				Isophorone	U	430	428.571429	ug/kg		
				Nitrobenzene	U	430	428.571429	ug/kg		
				N-Nitrosodi-n-propylamine	U	430	428.571429	ug/kg		
				N-Nitrosodiphenylamine	U	430	428.571429	ug/kg		
				Pentachlorophenol	U	430	428.571429	ug/kg		
				Phenol	U	430	428.571429	ug/kg		
				8330B	1,3,5-Trinitrobenzene	U	0.25	0.32142857	mg/kg	
					1,3-Dinitrobenzene	U	0.25	0.32142857	mg/kg	
					2,4,6-Trinitrotoluene (TNT)	U	0.25	0.32142857	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: A0B260454

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
NTASD-145-5345-SD	A0B260454008	8330B	SO	2,4-Dinitrotoluene	U	0.25	0.32142857	mg/kg
				2,6-Dinitrotoluene	U	0.25	0.32142857	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.25	0.32142857	mg/kg
				2-Nitrotoluene	U	0.25	0.32142857	mg/kg
				3-Nitrotoluene	U	0.25	0.32142857	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.25	0.32142857	mg/kg
				4-Nitrotoluene	U	0.50	0.64285714	mg/kg
				Nitrobenzene	U	0.25	0.32142857	mg/kg
NTASW-145-5342-SW	A0B260454007	8330B	AQ	1,3-Dinitrobenzene	U	0.15	0.1455	ug/L
				2,4,6-Trinitrotoluene (TNT)	U	0.15	0.1455	ug/L
				2,4-Dinitrotoluene	U	0.15	0.1455	ug/L
				2,6-Dinitrotoluene	U	0.15	0.1455	ug/L
				2-Nitrotoluene	U	0.15	0.1455	ug/L
				4-Amino-2,6-Dinitrotoluene	U	0.15	0.1455	ug/L
				Methyl-2,4,6-Trinitrophenylnitramin	U	0.15	0.1455	ug/L
				Nitrobenzene	U	0.15	0.1455	ug/L
				Octahydro-1,3,5,7-tetranitro-1,3,5,7	U	0.15	0.1455	ug/L

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

Percent Moisture Correction:

Soil: 100 / (100 - Percent Moisture)

Water: 1

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

Surrogate Recovery Outlier Report

Lab Report Batch: A0B260454

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	
FWSSD-101-5009-SD	A0B260454016	8260B	1	SO	4-Bromofluorobenzene	82	85.0	120.0	10.0	All Target
FWSSD-101-5009-SDMS	A0B260454016S	8260B	1	SO	4-Bromofluorobenzene	81	85.0	120.0	10.0	All Target
FWSSD-101-5009-SDMSD	A0B260454016D	8260B	1	SO	4-Bromofluorobenzene	79	85.0	120.0	10.0	All Target
LL11SD-084-5595-SD	A0B260454011	8260B	1	SO	4-Bromofluorobenzene	78	85.0	120.0	10.0	All Target
LL6SB-069-5219-SO	A0B260454001	8260B	1	SO	4-Bromofluorobenzene	82	85.0	120.0	10.0	All Target
NTASD-145-5345-SD	A0B260454008	8260B	1	SO	4-Bromofluorobenzene	71	85.0	120.0	10.0	All Target

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: A0B260454

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Sample Temperature (C)	Criteria	
					Lower Limit	Upper Limit
FWSSW-101-5008-SW	A0B260454017	353.2 Modified	AQ	0.3	2.0	6.0
LL11SW-082-5608-SW	A0B260454012	353.2 Modified	AQ	0.0	2.0	6.0
LL11SW-083-5609-SW	A0B260454013	353.2 Modified	AQ	1.7	2.0	6.0
LL11SW-083-5609-SWMS	A0B260454013S	353.2 Modified	AQ	1.7	2.0	6.0
LL11SW-083-5609-SWMS	A0B260454013D	353.2 Modified	AQ	1.7	2.0	6.0
LL11SW-084-5610-SW	A0B260454014	353.2 Modified	AQ	1.1	2.0	6.0
NTASD-145-5345-SD	A0B260454008	353.2 Modified	SO	0.3	2.0	6.0
NTASW-145-5342-SW	A0B260454007	353.2 Modified	AQ	0.3	2.0	6.0
FWSSW-101-5008-SW	A0B260454017	8081A	AQ	0.3	2.0	
LL11SW-082-5608-SW	A0B260454012	8081A	AQ	0.0	2.0	
LL11SW-083-5609-SW	A0B260454013	8081A	AQ	1.7	2.0	
LL11SW-083-5609-SWMS	A0B260454013S	8081A	AQ	1.7	2.0	
LL11SW-083-5609-SWMS	A0B260454013D	8081A	AQ	1.7	2.0	
LL11SW-084-5610-SW	A0B260454014	8081A	AQ	1.1	2.0	
NTASD-145-5345-SD	A0B260454008	8081A	SO	0.3	2.0	
NTASW-145-5342-SW	A0B260454007	8081A	AQ	0.3	2.0	
FWSSW-101-5008-SW	A0B260454017	8082	AQ	0.3	2.0	
LL11SW-082-5608-SW	A0B260454012	8082	AQ	0.0	2.0	
LL11SW-083-5609-SW	A0B260454013	8082	AQ	1.7	2.0	
LL11SW-083-5609-SWMS	A0B260454013S	8082	AQ	1.7	2.0	
LL11SW-083-5609-SWMS	A0B260454013D	8082	AQ	1.7	2.0	
LL11SW-084-5610-SW	A0B260454014	8082	AQ	1.1	2.0	
NTASD-145-5345-SD	A0B260454008	8082	SO	0.3	2.0	
NTASW-145-5342-SW	A0B260454007	8082	AQ	0.3	2.0	
FWSSW-101-5008-SW	A0B260454017	8260B	AQ	0.3	2.0	
LL11SW-082-5608-SW	A0B260454012	8260B	AQ	0.0	2.0	
LL11SW-083-5609-SW	A0B260454013	8260B	AQ	1.7	2.0	
LL11SW-083-5609-SWMS	A0B260454013S	8260B	AQ	1.7	2.0	
LL11SW-083-5609-SWMS	A0B260454013D	8260B	AQ	1.7	2.0	
LL11SW-084-5610-SW	A0B260454014	8260B	AQ	1.1	2.0	
NTASD-145-5345-SD	A0B260454008	8260B	SO	0.3	2.0	

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: A0B260454

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Sample Temperature (C)	Criteria	
					Lower Limit	Upper Limit
NTASW-145-5342-SW	A0B260454007	8260B	AQ	0.3	2.0	
FWSSW-101-5008-SW	A0B260454017	8270C	AQ	0.3	2.0	
LL11SW-082-5608-SW	A0B260454012	8270C	AQ	0.0	2.0	
LL11SW-083-5609-SW	A0B260454013	8270C	AQ	1.7	2.0	
LL11SW-083-5609-SWMS	A0B260454013S	8270C	AQ	1.7	2.0	
LL11SW-083-5609-SWMS	A0B260454013D	8270C	AQ	1.7	2.0	
LL11SW-084-5610-SW	A0B260454014	8270C	AQ	1.1	2.0	
NTASD-145-5345-SD	A0B260454008	8270C	SO	0.3	2.0	
NTASW-145-5342-SW	A0B260454007	8270C	AQ	0.3	2.0	
FWSSW-101-5008-SW	A0B260454017	8330B	AQ	0.3	2.0	
LL11SW-082-5608-SW	A0B260454012	8330B	AQ	0.0	2.0	
LL11SW-083-5609-SW	A0B260454013	8330B	AQ	1.7	2.0	
LL11SW-083-5609-SWMS	A0B260454013S	8330B	AQ	1.7	2.0	
LL11SW-083-5609-SWMS	A0B260454013D	8330B	AQ	1.7	2.0	
LL11SW-084-5610-SW	A0B260454014	8330B	AQ	1.1	2.0	
NTASD-145-5345-SD	A0B260454008	8330B	SO	0.3	2.0	
NTASW-145-5342-SW	A0B260454007	8330B	AQ	0.3	2.0	
FWSSW-101-5008-SW	A0B260454017	8330M	AQ	0.3	2.0	
LL11SW-082-5608-SW	A0B260454012	8330M	AQ	0.0	2.0	
LL11SW-083-5609-SW	A0B260454013	8330M	AQ	1.7	2.0	
LL11SW-083-5609-SWMS	A0B260454013S	8330M	AQ	1.7	2.0	
LL11SW-083-5609-SWMS	A0B260454013D	8330M	AQ	1.7	2.0	
LL11SW-084-5610-SW	A0B260454014	8330M	AQ	1.1	2.0	
NTASD-145-5345-SD	A0B260454008	8330M	SO	0.3	2.0	
NTASW-145-5342-SW	A0B260454007	8330M	AQ	0.3	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	

Continuing Calibration (CCV) Outlier Report (Organics)

There are no Organic Continuing Calibrations with outliers

Continuing Calibration (CCAL) Outlier Report (Inorganics)

There are no Inorganic Continuing Calibrations with outliers

QC Outlier Report: Trip Blank

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.

QC Outlier Report: Temperature (Non-qualified Outliers)

Lab Report Batch: A0C180551

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Sample Temperature (C)	Criteria	
					Lower Limit	Upper Limit
LL11SB-068-5587-SO	A0C180551003	8081A	SO	1.3	2.0	
LL11SB-061-5557-SO	A0C180551001	8082	SO	1.3	2.0	
LL11SB-064-5571-SO	A0C180551004	8082	SO	1.3	2.0	
LL11SB-064-5571-SOMS	A0C180551004S	8082	SO	1.3	2.0	
LL11SB-064-5571-SOMSD	A0C180551004D	8082	SO	1.3	2.0	
LL11SB-067-5583-SO	A0C180551002	8082	SO	1.3	2.0	
LL11SB-068-5587-SO	A0C180551003	8082	SO	1.3	2.0	
		8260B	SO	1.3	2.0	
LL11SB-061-5557-SO	A0C180551001	8270C	SO	1.3	2.0	
LL11SB-064-5571-SO	A0C180551004	8270C	SO	1.3	2.0	
LL11SB-064-5571-SOMS	A0C180551004S	8270C	SO	1.3	2.0	
LL11SB-064-5571-SOMSD	A0C180551004D	8270C	SO	1.3	2.0	
LL11SB-067-5583-SO	A0C180551002	8270C	SO	1.3	2.0	
LL11SB-068-5587-SO	A0C180551003	8270C	SO	1.3	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 : 0078024	Analysis Method : 6020	Analysis Date : 03/23/2010
Preparation Batch : 0078024	Preparation Type : 3050B	Preparation Date : 03/19/2010
Lab Reporting Batch : A0C180551	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
LL11SB-064-5571-SOMS	A0C180551004S	SO	Antimony	35		30.00	75.00	125.00	20.00
LL11SB-064-5571-SOMS	A0C180551004D		Antimony	34		30.00	75.00	125.00	20.00

Associated Samples: All samples in Method Batch	
Client Sample ID	Lab Sample ID
LL11SB-061-5557-SO	A0C180551001
LL11SB-064-5571-SO	A0C180551004
LL11SB-067-5583-SO	A0C180551002
LL11SB-068-5587-SO	A0C180551003

* 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 : 0078047	Analysis Method : 8270C	Analysis Date : 03/24/2010
Preparation Batch : 0078047	Preparation Type : 3540C	Preparation Date : 03/19/2010
Lab Reporting Batch : A0C180551	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
LL11SB-064-5571-SOMS	A0C180551004S	SO	Carbazole	17		0.00	45.00	115.00	20.00
LL11SB-064-5571-SOMS	A0C180551004D		Carbazole	20		0.00	45.00	115.00	20.00

Associated Samples: Parent sample only	
Client Sample ID	Lab Sample ID
LL11SB-064-5571-SO	A0C180551004

* 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 : 0078047

Analysis Method : 8270C

Analysis Date : 03/24/2010

Preparation Batch : 0078047

Preparation Type : 3540C

Preparation Date : 03/19/2010

Lab Reporting Batch : A0C180551

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
A0C190000047C	SO	Carbazole	26		10.00	45.00	115.00	20.00

Associated Samples	
Client Sample ID	Lab Sample ID
LL11SB-061-5557-SO	A0C180551001
LL11SB-064-5571-SO	A0C180551004
LL11SB-067-5583-SO	A0C180551002
LL11SB-068-5587-SO	A0C180551003

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: A0C180551

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
LL11SB-061-5557-SO	A0C180551001	7471A	SO	Mercury	U	0.12	0.11494253	mg/kg
				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
				Aroclor 1260	U	38	1.95402299	ug/kg
LL11SB-064-5571-SO	A0C180551004	7471A	SO	Mercury	U	0.12	0.11904762	mg/kg
LL11SB-067-5583-SO	A0C180551002	7471A	SO	Mercury	U	0.12	0.11764706	mg/kg
				Aroclor 1016	U	39	2	ug/kg
				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
				Aroclor 1260	U	39	2	ug/kg
LL11SB-068-5587-SO	A0C180551003	7471A	SO	Mercury	U	0.12	0.11764706	mg/kg
				8081A	U	5.9	5.88235294	ug/kg
				Toxaphene	U	79	78.8235294	ug/kg
				8082	U	39	2	ug/kg
				Aroclor 1016	U	39	2	ug/kg
				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
				Aroclor 1260	U	39	2	ug/kg
				8260B	U	5.9	5.88235294	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 - 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: A0C180551

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit		
							Criteria*	Units	
LL11SB-068-5587-SO	A0C180551003	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	
				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
					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

* 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: A0C180551

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit	
							Criteria*	Units
LL11SB-068-5587-SO	A0C180551003	8270C	SO	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
				Acenaphthene	U	59	58.8235294	ug/kg
				Acenaphthylene	U	59	58.8235294	ug/kg
				Anthracene	U	59	58.8235294	ug/kg
				Benz[a]anthracene	U	59	58.8235294	ug/kg
				Benzo[a]pyrene	U	59	58.8235294	ug/kg
				Benzo[b]fluoranthene	U	59	58.8235294	ug/kg
				Benzo[g,h,i]perylene	U	59	58.8235294	ug/kg
				Benzo[k]fluoranthene	U	59	58.8235294	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
				Butyl benzyl phthalate	U	390	388.235294	ug/kg
				Carbazole	U	59	58.8235294	ug/kg
				Chrysene	U	59	58.8235294	ug/kg
				dibenz[a,h]anthracene	U	59	58.8235294	ug/kg
				Dibenzofuran	U	390	388.235294	ug/kg
				Diethyl phthalate	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 - 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: A0C180551

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
LL11SB-068-5587-SO	A0C180551003	8270C	SO	Dimethyl phthalate	U	390	388.235294	ug/kg
				Di-n-octyl phthalate	U	390	388.235294	ug/kg
				Fluoranthene	U	59	58.8235294	ug/kg
				Fluorene	U	59	58.8235294	ug/kg
				Hexachlorobenzene	U	390	388.235294	ug/kg
				Hexachlorobutadiene	U	390	388.235294	ug/kg
				HEXACHLOROCYCLOPENTADIE	U	390	#Error	ug/kg
				Hexachloroethane	U	390	388.235294	ug/kg
				Indeno[1,2,3-cd]pyrene	U	59	58.8235294	ug/kg
				Isophorone	U	390	388.235294	ug/kg
				Naphthalene	U	59	58.8235294	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
				Phenanthrene	U	59	58.8235294	ug/kg
				Phenol	U	390	388.235294	ug/kg
				Pyrene	U	59	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 - 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: A0C180551

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
LL11SB-061-5557-SO	A0C180551001	6020	SO	Antimony	J	0.079	0.58	mg/kg
				Cadmium	J	0.053	0.23	mg/kg
				Silver	J	0.021	0.58	mg/kg
				Sodium	J	56.6	115	mg/kg
				Thallium	J	0.13	0.23	mg/kg
LL11SB-064-5571-SO	A0C180551004			Antimony	J	0.077	0.60	mg/kg
				Cadmium	J	0.064	0.24	mg/kg
				Selenium	J	0.59	0.60	mg/kg
				Silver	J	0.019	0.60	mg/kg
				Sodium	J	34.8	119	mg/kg
LL11SB-067-5583-SO	A0C180551002			Thallium	J	0.11	0.24	mg/kg
				Antimony	J	0.082	0.59	mg/kg
				Cadmium	J	0.051	0.24	mg/kg
				Calcium	J	205	236	mg/kg
				Silver	J	0.0059	0.59	mg/kg
LL11SB-068-5587-SO	A0C180551003			Sodium	J	31.4	118	mg/kg
				Thallium	J	0.12	0.24	mg/kg
				Antimony	J	0.082	0.59	mg/kg
				Cadmium	J	0.037	0.23	mg/kg
				Selenium	J	0.56	0.59	mg/kg
				Silver	J	0.010	0.59	mg/kg
				Sodium	J	27.4	117	mg/kg
				Thallium	J	0.097	0.23	mg/kg
		8260B		Methylene chloride	J B	2.9	5.9	ug/kg
		8270C		bis(2-Ethylhexyl) phthalate	J B	34	390	ug/kg
				Di-n-butyl phthalate	J B	30	390	ug/kg

Method Blank Outlier Report

Lab Reporting Batch : A0C180551

Lab ID: TALCAN

Analysis Method : 8270C

Analysis Date : 03/24/2010

Preparation Type : 3540C

Preparation Date : 03/19/2010

Method Blank Lab Sample ID : A0C190000047B

Preparation Batch : 0078047

bis(2-Ethylhexyl) phthalate	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	23	330	ug/kg	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
LL11SB-068-5587-SO	A0C180551003	1	34	J B	ug/kg

Di-n-butyl phthalate	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	15	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
LL11SB-068-5587-SO	A0C180551003	1	30	J B	ug/kg

Method Blank Outlier Report

Lab Reporting Batch : A0C180551

Lab ID: TALCAN

Analysis Method : 8260B

Analysis Date : 03/19/2010

Preparation Type : 5030B

Preparation Date : 03/19/2010

Method Blank Lab Sample ID : A0C190000361B

Preparation Batch : 0078361

Methylene chloride	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	1.1	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
LL11SB-068-5587-SO	A0C180551003	1	2.9	J B	ug/kg

Surrogate Recovery Outlier Report

Lab Report Batch: A0C180551

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	
LL11SB-068-5587-SO	A0C180551003	8260B	1	SO	4-Bromofluorobenzene	82	85.0	120.0	10.0	All Target

QC Outlier Report: Temperature (Non-qualified Outliers)

Lab Report Batch: A0C180555

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Sample Temperature (C)	Criteria	
					Lower Limit	Upper Limit
LL11SB-068-5587-SO	A0C180555003	353.2 Modified	SO	1.3	2.0	6.0
LL11SB-061-5557-SO	A0C180555001	8330B	SO	1.3	2.0	
LL11SB-064-5571-SO	A0C180555004	8330B	SO	1.3	2.0	
LL11SB-064-5571-SOMS	A0C180555004S	8330B	SO	1.3	2.0	
LL11SB-064-5571-SOMSD	A0C180555004D	8330B	SO	1.3	2.0	
LL11SB-067-5583-SO	A0C180555002	8330B	SO	1.3	2.0	
LL11SB-068-5587-SO	A0C180555003	8330B	SO	1.3	2.0	
		8330M	SO	1.3	2.0	
LL11SB-068-5587-SOMS	A0C180555003S	8330M	SO	1.3	2.0	
LL11SB-068-5587-SOMSD	A0C180555003D	8330M	SO	1.3	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: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: A0C180555

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
LL11SB-064-5571-SO	A0C180555004	8330B	SO	1,3,5-Trinitrobenzene	U	0.23	0.01083333	mg/kg
				1,3-Dinitrobenzene	U	0.23	0.27083333	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.23	0.27083333	mg/kg
				2,4-Dinitrotoluene	U	0.23	0.27083333	mg/kg
				2,6-Dinitrotoluene	U	0.23	0.27083333	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.23	0.27083333	mg/kg
				2-Nitrotoluene	U	0.23	0.27083333	mg/kg
				3-Nitrotoluene	U	0.23	0.27083333	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.23	0.27083333	mg/kg
				4-Nitrotoluene	U	0.46	0.54166667	mg/kg
				Nitrobenzene	U	0.23	0.27083333	mg/kg
LL11SB-068-5587-SO	A0C180555003	353.2 Modified	SO	Nitrocellulose	U	5.9	5.88235294	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: Temperature (Non-qualified Outliers)

Lab Report Batch: A0C180563

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Sample Temperature (C)	Criteria	
					Lower Limit	Upper Limit
LL11SB-068-5585-SO	A0C180563009	353.2 Modified	SO	1.3	2.0	6.0
LL11SB-068-5586-SO	A0C180563010	353.2 Modified	SO	1.3	2.0	6.0
LL11SB-068-5586-SOMS	A0C180563010S	353.2 Modified	SO	1.3	2.0	6.0
LL11SB-068-5586-SOMSD	A0C180563010D	353.2 Modified	SO	1.3	2.0	6.0
LL11SB-068-6187-FD	A0C180563012	353.2 Modified	SO	1.3	2.0	6.0
LL8SS-074M-5389-SO	A0C180563015	353.2 Modified	SO	1.2	2.0	6.0
LL8SS-074M-6117-FD	A0C180563017	353.2 Modified	SO	1.2	2.0	6.0
LL8SS-088M-5403-SO	A0C180563033	353.2 Modified	SO	0.8	2.0	6.0
LL11SB-068-5585-SO	A0C180563009	8081A	SO	1.3	2.0	
LL11SB-068-5586-SO	A0C180563010	8081A	SO	1.3	2.0	
LL11SB-068-5586-SOMS	A0C180563010S	8081A	SO	1.3	2.0	
LL11SB-068-5586-SOMSD	A0C180563010D	8081A	SO	1.3	2.0	
LL11SB-068-6187-FD	A0C180563012	8081A	SO	1.3	2.0	
LL8SS-074M-5389-SO	A0C180563015	8081A	SO	1.2	2.0	
LL8SS-074M-6117-FD	A0C180563017	8081A	SO	1.2	2.0	
LL8SS-088M-5403-SO	A0C180563033	8081A	SO	0.8	2.0	
LL11SB-061-5555-SO	A0C180563001	8082	SO	1.3	2.0	
LL11SB-061-5556-SO	A0C180563002	8082	SO	1.3	2.0	
LL11SB-064-5569-SO	A0C180563003	8082	SO	1.3	2.0	
LL11SB-064-5570-SO	A0C180563004	8082	SO	1.3	2.0	
LL11SB-064-5572-SO	A0C180563006	8082	SO	1.3	2.0	
LL11SB-064-6188-FD	A0C180563013	8082	SO	1.3	2.0	
LL11SB-067-5581-SO	A0C180563007	8082	SO	1.3	2.0	
LL11SB-067-5582-SO	A0C180563008	8082	SO	1.3	2.0	
LL11SB-067-6186-FD	A0C180563011	8082	SO	1.3	2.0	
LL11SB-068-5585-SO	A0C180563009	8082	SO	1.3	2.0	
LL11SB-068-5586-SO	A0C180563010	8082	SO	1.3	2.0	
LL11SB-068-5586-SOMS	A0C180563010S	8082	SO	1.3	2.0	
LL11SB-068-5586-SOMSD	A0C180563010D	8082	SO	1.3	2.0	

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: A0C180563

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Sample Temperature (C)	Criteria	
					Lower Limit	Upper Limit
LL11SB-068-6187-FD	A0C180563012	8082	SO	1.3	2.0	
LL8SS-074M-5389-SO	A0C180563015	8082	SO	1.2	2.0	
LL8SS-074M-6117-FD	A0C180563017	8082	SO	1.2	2.0	
LL8SS-088M-5403-SO	A0C180563033	8082	SO	0.8	2.0	
LL11SB-068-5585-SO	A0C180563009	8260B	SO	1.3	2.0	
LL11SB-068-5586-SO	A0C180563010	8260B	SO	1.3	2.0	
LL11SB-068-5586-SOMS	A0C180563010S	8260B	SO	1.3	2.0	
LL11SB-068-5586-SOMSD	A0C180563010D	8260B	SO	1.3	2.0	
LL11SB-068-6187-FD	A0C180563012	8260B	SO	1.3	2.0	
LL8SS-074M-5389-SO(VO	A0C180563016	8260B	SO	1.2	2.0	
LL8SS-074M-6117-FD(VO	A0C180563018	8260B	SO	1.2	2.0	
LL8SS-088M-5403-SO(VO	A0C180563034	8260B	SO	0.8	2.0	
LL11SB-068-5585-SO	A0C180563009	8270C	SO	1.3	2.0	
LL11SB-068-5586-SO	A0C180563010	8270C	SO	1.3	2.0	
LL11SB-068-5586-SOMS	A0C180563010S	8270C	SO	1.3	2.0	
LL11SB-068-5586-SOMSD	A0C180563010D	8270C	SO	1.3	2.0	
LL11SB-068-6187-FD	A0C180563012	8270C	SO	1.3	2.0	
LL8SS-074M-5389-SO	A0C180563015	8270C	SO	1.2	2.0	
LL8SS-074M-6117-FD	A0C180563017	8270C	SO	1.2	2.0	
LL8SS-088M-5403-SO	A0C180563033	8270C	SO	0.8	2.0	
LL11SB-061-5555-SO	A0C180563001	8270C PAH	SO	1.3	2.0	
LL11SB-061-5556-SO	A0C180563002	8270C PAH	SO	1.3	2.0	
LL11SB-064-5569-SO	A0C180563003	8270C PAH	SO	1.3	2.0	
LL11SB-064-5570-SO	A0C180563004	8270C PAH	SO	1.3	2.0	
LL11SB-064-5572-SO	A0C180563006	8270C PAH	SO	1.3	2.0	
LL11SB-064-6188-FD	A0C180563013	8270C PAH	SO	1.3	2.0	
LL11SB-067-5581-SO	A0C180563007	8270C PAH	SO	1.3	2.0	
LL11SB-067-5582-SO	A0C180563008	8270C PAH	SO	1.3	2.0	
LL11SB-067-6186-FD	A0C180563011	8270C PAH	SO	1.3	2.0	

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: A0C180563

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Sample Temperature (C)	Criteria	
					Lower Limit	Upper Limit
LL11SB-068-5585-SO	A0C180563009	8270C PAH	SO	1.3	2.0	
LL11SB-068-5586-SO	A0C180563010	8270C PAH	SO	1.3	2.0	
LL11SB-068-5586-SOMS	A0C180563010S	8270C PAH	SO	1.3	2.0	
LL11SB-068-5586-SOMSD	A0C180563010D	8270C PAH	SO	1.3	2.0	
LL11SB-068-6187-FD	A0C180563012	8270C PAH	SO	1.3	2.0	
LL8SS-073M-5388-SO	A0C180563014	8270C PAH	SO	1.2	2.0	
LL8SS-074M-5389-SO	A0C180563015	8270C PAH	SO	1.2	2.0	
LL8SS-074M-6117-FD	A0C180563017	8270C PAH	SO	1.2	2.0	
LL8SS-075M-5390-SO	A0C180563019	8270C PAH	SO	1.2	2.0	
LL8SS-076M-5392-SO	A0C180563020	8270C PAH	SO	1.2	2.0	
LL8SS-077M-5393-SO	A0C180563021	8270C PAH	SO	1.2	2.0	
LL8SS-084M-5400-SO	A0C180563029	8270C PAH	SO	0.8	2.0	
LL8SS-086M-5401-SO	A0C180563030	8270C PAH	SO	0.8	2.0	
LL8SS-086M-6119-FD	A0C180563031	8270C PAH	SO	0.8	2.0	
LL8SS-087M-5402-SO	A0C180563032	8270C PAH	SO	0.8	2.0	
LL8SS-088M-5403-SO	A0C180563033	8270C PAH	SO	0.8	2.0	
LL8SS-089M-5404-SO	A0C180563035	8270C PAH	SO	0.8	2.0	
LL11SB-061-5555-SO	A0C180563001	8330B	SO	1.3	2.0	
LL11SB-061-5556-SO	A0C180563002	8330B	SO	1.3	2.0	
LL11SB-064-5569-SO	A0C180563003	8330B	SO	1.3	2.0	
LL11SB-064-5570-SO	A0C180563004	8330B	SO	1.3	2.0	
LL11SB-064-5572-SO	A0C180563006	8330B	SO	1.3	2.0	
LL11SB-064-6188-FD	A0C180563013	8330B	SO	1.3	2.0	
LL11SB-067-5581-SO	A0C180563007	8330B	SO	1.3	2.0	
LL11SB-067-5582-SO	A0C180563008	8330B	SO	1.3	2.0	
LL11SB-067-6186-FD	A0C180563011	8330B	SO	1.3	2.0	
LL11SB-068-5585-SO	A0C180563009	8330B	SO	1.3	2.0	
LL11SB-068-5586-SO	A0C180563010	8330B	SO	1.3	2.0	
LL11SB-068-5586-SOMS	A0C180563010S	8330B	SO	1.3	2.0	

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: A0C180563

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Sample Temperature (C)	Criteria	
					Lower Limit	Upper Limit
LL11SB-068-5586-SOMSD	A0C180563010D	8330B	SO	1.3	2.0	
LL11SB-068-6187-FD	A0C180563012	8330B	SO	1.3	2.0	
LL8SS-073M-5388-SO	A0C180563014	8330B	SO	1.2	2.0	
LL8SS-074M-5389-SO	A0C180563015	8330B	SO	1.2	2.0	
LL8SS-074M-6117-FD	A0C180563017	8330B	SO	1.2	2.0	
LL8SS-075M-5390-SO	A0C180563019	8330B	SO	1.2	2.0	
LL8SS-076M-5392-SO	A0C180563020	8330B	SO	1.2	2.0	
LL8SS-077M-5393-SO	A0C180563021	8330B	SO	1.2	2.0	
LL8SS-084M-5400-SO	A0C180563029	8330B	SO	0.8	2.0	
LL8SS-086M-5401-SO	A0C180563030	8330B	SO	0.8	2.0	
LL8SS-086M-6119-FD	A0C180563031	8330B	SO	0.8	2.0	
LL8SS-087M-5402-SO	A0C180563032	8330B	SO	0.8	2.0	
LL8SS-088M-5403-SO	A0C180563033	8330B	SO	0.8	2.0	
LL8SS-089M-5404-SO	A0C180563035	8330B	SO	0.8	2.0	
LL11SB-068-5585-SO	A0C180563009	8330M	SO	1.3	2.0	
LL11SB-068-5586-SO	A0C180563010	8330M	SO	1.3	2.0	
LL11SB-068-5586-SOMS	A0C180563010S	8330M	SO	1.3	2.0	
LL11SB-068-5586-SOMSD	A0C180563010D	8330M	SO	1.3	2.0	
LL11SB-068-6187-FD	A0C180563012	8330M	SO	1.3	2.0	
LL8SS-074M-5389-SO	A0C180563015	8330M	SO	1.2	2.0	
LL8SS-074M-6117-FD	A0C180563017	8330M	SO	1.2	2.0	
LL8SS-088M-5403-SO	A0C180563033	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: A0C180563

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
LL11SB-068-5586-SO	A0C180563010	8270C	SO	3540C	22.0	3.0		14	40		Days	03/18/2010	04/09/2010	04/12/2010
LL11SB-068-5586-SO	A0C180563010S	8270C	SO	3540C	22.0	3.0		14	40		Days	03/18/2010	04/09/2010	04/12/2010
LL11SB-068-5586-SO	A0C180563010D	8270C	SO	3540C	22.0	3.0		14	40		Days	03/18/2010	04/09/2010	04/12/2010
LL8SS-074M-5389-S	A0C180563015	8270C	SO	3540C	27.0	3.0		14	40		Days	03/17/2010	04/13/2010	04/16/2010
LL8SS-074M-6117-F	A0C180563017	8270C	SO	3540C	27.0	3.0		14	40		Days	03/17/2010	04/13/2010	04/16/2010
LL8SS-080M-5396-S	A0C180563024	8270C	SO	3540C	27.0	3.0		14	40		Days	03/17/2010	04/13/2010	04/16/2010
LL8SS-088M-5403-S	A0C180563033	8270C	SO	3540C	26.0	3.0		14	40		Days	03/18/2010	04/13/2010	04/16/2010

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 0078024	Analysis Method : 6020	Analysis Date : 03/23/2010
Preparation Batch : 0078024	Preparation Type : 3050B	Preparation Date : 03/19/2010
Lab Reporting Batch : A0C180563	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
LL11SB-068-5586-SOMS	A0C180563010S	SO	Antimony	32		30.00	75.00	125.00	20.00
LL11SB-068-5586-SOMS	A0C180563010D		Antimony	27		30.00	75.00	125.00	20.00
			Calcium	181	38	30.00	70.00	130.00	20.00
			Zinc	206		30.00	10.00	199.00	20.00

Associated Samples: All samples in Method Batch	
Client Sample ID	Lab Sample ID
LL11SB-061-5555-SO	A0C180563001
LL11SB-061-5556-SO	A0C180563002
LL11SB-064-5569-SO	A0C180563003
LL11SB-064-5570-SO	A0C180563004
LL11SB-064-5572-SO	A0C180563006
LL11SB-064-6188-FD	A0C180563013
LL11SB-067-5581-SO	A0C180563007
LL11SB-067-5582-SO	A0C180563008
LL11SB-067-6186-FD	A0C180563011
LL11SB-068-5585-SO	A0C180563009
LL11SB-068-5586-SO	A0C180563010
LL11SB-068-6187-FD	A0C180563012

* 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 : 0078031	Analysis Method : 8081A	Analysis Date : 03/22/2010
Preparation Batch : 0078031	Preparation Type : 3540C	Preparation Date : 03/19/2010
Lab Reporting Batch : A0C180563	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
LL11SB-068-5586-SOMS	A0C180563010S	SO	Dieldrin	133		0.00	65.00	125.00	33.00
LL11SB-068-5586-SOMS	A0C180563010D		Dieldrin	268	67	0.00	65.00	125.00	33.00

Associated Samples: Parent sample only	
Client Sample ID	Lab Sample ID
LL11SB-068-5586-SO	A0C180563010

* 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 : 0083036	Analysis Method : 8270C	Analysis Date : 03/29/2010
Preparation Batch : 0083036	Preparation Type : 3540C	Preparation Date : 03/24/2010
Lab Reporting Batch : A0C180563	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
LL8SS-082M-5398-SOM	A0C180563027S	SO	3,3'-Dichlorobenzidine	0.0		0.00	10.00	130.00	56.00
			4-Chloroaniline	4.8		0.00	10.00	95.00	30.00
			4-Nitroaniline	34		0.00	35.00	115.00	30.00
LL8SS-082M-5398-SOM	A0C180563027D		3,3'-Dichlorobenzidine	0.0		0.00	10.00	130.00	56.00
			4-Chloroaniline	4.4		0.00	10.00	95.00	30.00

Associated Samples: Parent sample only	
Client Sample ID	Lab Sample ID
LL8SS-082M-5398-SO	A0C180563027

* 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 : 0084021	Analysis Method : 6020	Analysis Date : 03/30/2010
Preparation Batch : 0084021	Preparation Type : 3050B	Preparation Date : 03/25/2010
Lab Reporting Batch : A0C180563	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
LL8SS-082M-5398-SOM	A0C180563027S	SO	Antimony	20		30.00	75.00	125.00	20.00
			Calcium	51		30.00	70.00	130.00	20.00
LL8SS-082M-5398-SOM	A0C180563027D		Antimony	24		30.00	75.00	125.00	20.00

Associated Samples: All samples in Method Batch	
Client Sample ID	Lab Sample ID
LL8SS-073M-5388-SO	A0C180563014
LL8SS-074M-5389-SO	A0C180563015
LL8SS-074M-6117-FD	A0C180563017
LL8SS-075M-5390-SO	A0C180563019
LL8SS-076M-5392-SO	A0C180563020
LL8SS-077M-5393-SO	A0C180563021
LL8SS-078M-5394-SO	A0C180563022
LL8SS-079M-5395-SO	A0C180563023
LL8SS-080M-5396-SO	A0C180563024
LL8SS-081M-5397-SO	A0C180563026
LL8SS-082M-5398-SO	A0C180563027
LL8SS-083M-5399-SO	A0C180563028
LL8SS-084M-5400-SO	A0C180563029
LL8SS-086M-5401-SO	A0C180563030
LL8SS-086M-6119-FD	A0C180563031
LL8SS-087M-5402-SO	A0C180563032
LL8SS-088M-5403-SO	A0C180563033
LL8SS-089M-5404-SO	A0C180563035

* 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 : 0099274	Analysis Method : 8270C	Analysis Date : 04/12/2010
Preparation Batch : 0099274	Preparation Type : 3540C	Preparation Date : 04/09/2010
Lab Reporting Batch : A0C180563	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
LL11SB-068-5586-SOMS	A0C180563010S	SO	2,4,5-Trichlorophenol	45		0.00	50.00	110.00	30.00
LL11SB-068-5586-SOMS	A0C180563010D		2,4,5-Trichlorophenol	43		0.00	50.00	110.00	30.00
			Benzoic acid		23	0.00	0.00	110.00	20.00

Associated Samples: Parent sample only	
Client Sample ID	Lab Sample ID
LL11SB-068-5586-SO	A0C180563010

* 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 : 0079013	Analysis Method : 8270C	Analysis Date : 03/25/2010
Preparation Batch : 0079013	Preparation Type : 3540C	Preparation Date : 03/20/2010
Lab Reporting Batch : A0C180563	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
A0C200000013C	SO	bis(2-Ethylhexyl) phthalate	236		10.00	45.00	125.00	31.00

Associated Samples	
Client Sample ID	Lab Sample ID
LL11SB-061-5555-SO	A0C180563001
LL11SB-061-5556-SO	A0C180563002
LL11SB-064-5569-SO	A0C180563003
LL11SB-064-5570-SO	A0C180563004
LL11SB-064-5572-SO	A0C180563006
LL11SB-064-6188-FD	A0C180563013
LL11SB-067-5581-SO	A0C180563007
LL11SB-067-5582-SO	A0C180563008
LL11SB-067-6186-FD	A0C180563011

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: A0C180563

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit				
							Criteria*	Units			
LL11SB-061-5555-SO	A0C180563001	8082	SO	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 1260	U	40	2.04819277	ug/kg			
		8330B		1,3,5-Trinitrobenzene	U	0.24	0.01144578	mg/kg			
				1,3-Dinitrobenzene	U	0.24	0.28614458	mg/kg			
				2,4,6-Trinitrotoluene (TNT)	U	0.24	0.28614458	mg/kg			
				2,4-Dinitrotoluene	U	0.24	0.28614458	mg/kg			
				2,6-Dinitrotoluene	U	0.24	0.28614458	mg/kg			
				2-Amino-4,6-dinitrotoluene	U	0.24	0.28614458	mg/kg			
				2-Nitrotoluene	U	0.24	0.28614458	mg/kg			
				3-Nitrotoluene	U	0.24	0.28614458	mg/kg			
				4-Amino-2,6-Dinitrotoluene	U	0.24	0.28614458	mg/kg			
				4-Nitrotoluene	U	0.48	0.57228916	mg/kg			
				Nitrobenzene	U	0.24	0.28614458	mg/kg			
				LL11SB-061-5556-SO	A0C180563002	7471A	Mercury	U	0.12	0.11494253	mg/kg
							8082	Aroclor 1016	U	38	1.95402299
						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					
Aroclor 1260	U	38	1.95402299			ug/kg					
8330B	1,3,5-Trinitrobenzene	U	0.26			0.01172414	mg/kg				
	1,3-Dinitrobenzene	U	0.26			0.29310345	mg/kg				
	2,4,6-Trinitrotoluene (TNT)	U	0.26			0.29310345	mg/kg				
	2,4-Dinitrotoluene	U	0.26			0.29310345	mg/kg				
	2,6-Dinitrotoluene	U	0.26			0.29310345	mg/kg				
	2-Amino-4,6-dinitrotoluene	U	0.26			0.29310345	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: A0C180563

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit	
							Criteria*	Units
LL11SB-061-5556-SO	A0C180563002	8330B	SO	2-Nitrotoluene	U	0.26	0.29310345	mg/kg
				3-Nitrotoluene	U	0.26	0.29310345	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.26	0.29310345	mg/kg
				Nitrobenzene	U	0.26	0.29310345	mg/kg
LL11SB-064-5569-SO	A0C180563003	8082	SO	Aroclor 1016	U	37	1.88888889	ug/kg
				Aroclor 1221	U	37	1.88888889	ug/kg
				Aroclor 1232	U	37	1.88888889	ug/kg
				Aroclor 1242	U	37	1.88888889	ug/kg
				Aroclor 1248	U	37	1.88888889	ug/kg
				Aroclor 1260	U	37	1.88888889	ug/kg
LL11SB-064-5570-SO	A0C180563004	8082	SO	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
				Aroclor 1260	U	38	1.95402299	ug/kg
LL11SB-064-5572-SO	A0C180563006	7471A	SO	Mercury	U	0.13	0.12658228	mg/kg
		8082		Aroclor 1016	U	42	2.15189873	ug/kg
		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	
		LL11SB-064-6188-FD		A0C180563013	8330B	SO	1,3,5-Trinitrobenzene	U
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

* 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: A0C180563

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
LL11SB-064-6188-FD	A0C180563013	8330B	SO	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
LL11SB-067-5581-SO	A0C180563007	7471A	SO	Mercury	U	0.12	0.11904762	mg/kg
LL11SB-067-5582-SO	A0C180563008	8082	SO	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
		8330B		1,3,5-Trinitrobenzene	U	0.25	0.01192771	mg/kg
				1,3-Dinitrobenzene	U	0.25	0.29819277	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.25	0.29819277	mg/kg
				2,4-Dinitrotoluene	U	0.25	0.29819277	mg/kg
				2,6-Dinitrotoluene	U	0.25	0.29819277	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.25	0.29819277	mg/kg
				2-Nitrotoluene	U	0.25	0.29819277	mg/kg
				3-Nitrotoluene	U	0.25	0.29819277	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.25	0.29819277	mg/kg
				4-Nitrotoluene	U	0.50	0.59638554	mg/kg
				Nitrobenzene	U	0.25	0.29819277	mg/kg
LL11SB-067-6186-FD	A0C180563011	8082	SO	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

* 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: A0C180563

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
LL11SB-068-5585-SO	A0C180563009	8081A	SO	Aldrin	U	25	24.6913580	ug/kg
				delta-BHC	U	25	24.6913580	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
				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
		8260B		Acetone	U	25	24.6913580	ug/kg
				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

* 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: A0C180563

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
LL11SB-068-5585-SO	A0C180563009	8270C	SO	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
				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
LL11SB-068-5586-SO	A0C180563010	8081A	SO	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

* 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: A0C180563

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit		
							Criteria*	Units	
LL11SB-068-5586-SO	A0C180563010	8081A	SO	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	
				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		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	
		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	

* 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: A0C180563

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
LL11SB-068-5586-SO	A0C180563010	8270C	SO	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
				Bis(2-chloroisopropyl) ether	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-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
LL11SB-068-6187-FD	A0C180563012	353.2 Modified SO		Nitrocellulose	U	5.9	5.88235294	mg/kg
				7471A	U	0.12	0.11764706	mg/kg
				8081A	U	5.9	5.88235294	ug/kg
				8082	U	39	2	ug/kg
				Aroclor 1016	U	39	2	ug/kg
				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
				Aroclor 1260	U	39	2	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: A0C180563

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit			
							Criteria*	Units		
LL11SB-068-6187-FD	A0C180563012	8260B	SO	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		
				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		
				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	
					1,3-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 - 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: A0C180563

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit	
							Criteria*	Units
LL11SB-068-6187-FD	A0C180563012	8270C	SO	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-octyl phthalate	U	390	388.235294	ug/kg
				Hexachlorobenzene	U	390	388.235294	ug/kg
				Hexachlorobutadiene	U	390	388.235294	ug/kg
				HEXACHLOROCYCLOPENTADIE	U	390	#Error	ug/kg
				Hexachloroethane	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 - 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: A0C180563

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
LL11SB-068-6187-FD	A0C180563012	8270C	SO	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
LL8SS-073M-5388-SO	A0C180563014	8330B	SO	1,3,5-Trinitrobenzene	U	0.25	0.01008147	mg/kg
				1,3-Dinitrobenzene	U	0.25	0.25203666	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.25	0.25203666	mg/kg
				2,4-Dinitrotoluene	U	0.25	0.25203666	mg/kg
				2,6-Dinitrotoluene	U	0.25	0.25203666	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.25	0.25203666	mg/kg
				2-Nitrotoluene	U	0.25	0.25203666	mg/kg
				3-Nitrotoluene	U	0.25	0.25203666	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.25	0.25203666	mg/kg
				4-Nitrotoluene	U	0.50	0.50407332	mg/kg
				Nitrobenzene	U	0.25	0.25203666	mg/kg
LL8SS-074M-5389-SO	A0C180563015	8081A	SO	alpha-BHC	U	13	12.8073770	ug/kg
				beta-BHC	U	18	17.9303279	ug/kg
				Endosulfan II	U	13	12.8073770	ug/kg
				gamma-BHC (Lindane)	U	13	12.8073770	ug/kg
				Heptachlor	U	18	17.9303279	ug/kg
				Heptachlor epoxide	U	13	12.8073770	ug/kg
				Methoxychlor	U	26	25.6147541	ug/kg
		8082	SO	Aroclor 1016	U	34	1.74180328	ug/kg
				Aroclor 1221	U	34	1.74180328	ug/kg
				Aroclor 1232	U	34	1.74180328	ug/kg
				Aroclor 1242	U	34	1.74180328	ug/kg
				Aroclor 1248	U	34	1.74180328	ug/kg
				Aroclor 1254	U	34	1.74180328	ug/kg
				Aroclor 1260	U	34	1.74180328	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: A0C180563

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit	
							Criteria*	Units
LL8SS-074M-5389-SO	A0C180563015	8270C	SO	1,2,4-Trichlorobenzene	U	340	338.114754	ug/kg
				1,2-Dichlorobenzene	U	340	338.114754	ug/kg
				1,3-Dichlorobenzene	U	340	338.114754	ug/kg
				1,4-Dichlorobenzene	U	340	338.114754	ug/kg
				2,4,5-Trichlorophenol	U	340	338.114754	ug/kg
				2,4,6-Trichlorophenol	U	340	338.114754	ug/kg
				2,4-Dichlorophenol	U	340	338.114754	ug/kg
				2,4-Dimethylphenol	U	340	338.114754	ug/kg
				2,4-Dinitrophenol	U	820	819.672131	ug/kg
				2,4-Dinitrotoluene	U	340	338.114754	ug/kg
				2,6-Dinitrotoluene	U	340	338.114754	ug/kg
				2-Chloronaphthalene	U	340	338.114754	ug/kg
				2-Chlorophenol	U	340	338.114754	ug/kg
				2-Methylphenol	U	340	338.114754	ug/kg
				2-Nitroaniline	U	820	819.672131	ug/kg
				2-Nitrophenol	U	340	338.114754	ug/kg
				3,3'-Dichlorobenzidine	U	340	338.114754	ug/kg
				3-methylphenol/4-methylphenol	U	340	#Error	ug/kg
				3-Nitroaniline	U	820	819.672131	ug/kg
				4,6-Dinitro-2-methylphenol	U	820	819.672131	ug/kg
				4-Bromophenyl phenyl ether	U	340	338.114754	ug/kg
				4-Chloro-3-methylphenol	U	340	338.114754	ug/kg
				4-Chloroaniline	U	340	338.114754	ug/kg
				4-Chlorophenyl phenyl ether	U	340	338.114754	ug/kg
				4-Nitroaniline	U	820	819.672131	ug/kg
				4-Nitrophenol	U	820	819.672131	ug/kg
				Benzoic acid	U	820	819.672131	ug/kg
				Benzyl alcohol	U	340	338.114754	ug/kg
				bis(2-Chloroethoxy)methane	U	340	338.114754	ug/kg
				bis(2-Chloroethyl) ether	U	340	338.114754	ug/kg
				Bis(2-chloroisopropyl) ether	U	340	338.114754	ug/kg
				Butyl benzyl phthalate	U	340	338.114754	ug/kg
				Dibenzofuran	U	340	338.114754	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: A0C180563

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit	
							Criteria*	Units
LL8SS-074M-5389-SO	A0C180563015	8270C	SO	Diethyl phthalate	U	340	338.114754	ug/kg
				Dimethyl phthalate	U	340	338.114754	ug/kg
				Di-n-octyl phthalate	U	340	338.114754	ug/kg
				Hexachlorobenzene	U	340	338.114754	ug/kg
				Hexachlorobutadiene	U	340	338.114754	ug/kg
				HEXACHLOROCYCLOPENTADIE	U	340	#Error	ug/kg
				Hexachloroethane	U	340	338.114754	ug/kg
				Isophorone	U	340	338.114754	ug/kg
				Nitrobenzene	U	340	338.114754	ug/kg
				N-Nitrosodi-n-propylamine	U	340	338.114754	ug/kg
				N-Nitrosodiphenylamine	U	340	338.114754	ug/kg
				Pentachlorophenol	U	340	338.114754	ug/kg
				Phenol	U	340	338.114754	ug/kg
				8330M	Nitroguanidine	U	0.25	0.25358607
		LL8SS-074M-5389-SO(VO A0C180563016			8260B	SO	1,1,1-Trichloroethane	U
1,1,2,2-Tetrachloroethane	U		6.7				6.66666667	ug/kg
1,1,2-Trichloroethane	U		6.7				6.66666667	ug/kg
1,1-Dichloroethane	U		6.7				6.66666667	ug/kg
1,1-Dichloroethene	U		6.7				6.66666667	ug/kg
1,2-Dibromoethane (Ethylene Dibro	U		6.7				6.66666667	ug/kg
1,2-Dichloroethane	U		6.7				6.66666667	ug/kg
1,2-Dichloroethene (total)	U		6.7				6.66666667	ug/kg
1,2-Dichloropropane	U		6.7				6.66666667	ug/kg
2-Hexanone	U		27				26.66666667	ug/kg
4-methyl-2-pentanone (MIBK)	U		27				26.66666667	ug/kg
Acetone	U		27				26.66666667	ug/kg
Benzene	U		6.7				6.66666667	ug/kg
Bromochloromethane	U		6.7				6.66666667	ug/kg
Bromodichloromethane	U		6.7				6.66666667	ug/kg
Bromoform	U		6.7				6.66666667	ug/kg
Bromomethane (Methyl bromide)	U		6.7				6.66666667	ug/kg
Carbon disulfide	U		6.7				6.66666667	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: A0C180563

Lab ID: TALCAN

Reporting Limit Criteria*								
Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Criteria*	Units
LL8SS-074M-5389-SO(VO A0C180563016		8260B	SO	Carbon tetrachloride	U	6.7	6.66666667	ug/kg
				Chlorobenzene	U	6.7	6.66666667	ug/kg
				Chlorodibromomethane	U	6.7	6.66666667	ug/kg
				Chloroethane	U	6.7	6.66666667	ug/kg
				Chloroform	U	6.7	6.66666667	ug/kg
				Chloromethane	U	6.7	6.66666667	ug/kg
				cis-1,3-Dichloropropene	U	6.7	6.66666667	ug/kg
				Ethylbenzene	U	6.7	6.66666667	ug/kg
				Styrene	U	6.7	6.66666667	ug/kg
				Tetrachloroethene	U	6.7	6.66666667	ug/kg
				Toluene	U	6.7	6.66666667	ug/kg
				trans-1,3-Dichloropropene	U	6.7	6.66666667	ug/kg
				Trichloroethene	U	6.7	6.66666667	ug/kg
				Vinyl chloride	U	6.7	6.66666667	ug/kg
LL8SS-074M-6117-FD	A0C180563017	8081A	SO	alpha-BHC	U	13	12.7811861	ug/kg
				beta-BHC	U	18	17.8936605	ug/kg
				Dieldrin	U	8.7	8.69120654	ug/kg
				Endosulfan I	U	8.7	8.69120654	ug/kg
				Endosulfan II	U	13	12.7811861	ug/kg
				Endrin	U	8.7	8.69120654	ug/kg
				gamma-BHC (Lindane)	U	13	12.7811861	ug/kg
				gamma-Chlordane	U	8.7	8.69120654	ug/kg
				Heptachlor	U	18	17.8936605	ug/kg
				Heptachlor epoxide	U	13	12.7811861	ug/kg
				Methoxychlor	U	26	25.5623722	ug/kg
		8082		Aroclor 1016	U	34	1.73824131	ug/kg
				Aroclor 1221	U	34	1.73824131	ug/kg
				Aroclor 1232	U	34	1.73824131	ug/kg
				Aroclor 1242	U	34	1.73824131	ug/kg
				Aroclor 1248	U	34	1.73824131	ug/kg
				Aroclor 1254	U	34	1.73824131	ug/kg
				Aroclor 1260	U	34	1.73824131	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: A0C180563

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit	
							Criteria*	Units
LL8SS-074M-6117-FD	A0C180563017	8270C	SO	1,2,4-Trichlorobenzene	U	340	337.423313	ug/kg
				1,2-Dichlorobenzene	U	340	337.423313	ug/kg
				1,3-Dichlorobenzene	U	340	337.423313	ug/kg
				1,4-Dichlorobenzene	U	340	337.423313	ug/kg
				2,4,5-Trichlorophenol	U	340	337.423313	ug/kg
				2,4,6-Trichlorophenol	U	340	337.423313	ug/kg
				2,4-Dichlorophenol	U	340	337.423313	ug/kg
				2,4-Dimethylphenol	U	340	337.423313	ug/kg
				2,4-Dinitrophenol	U	820	817.995910	ug/kg
				2,4-Dinitrotoluene	U	340	337.423313	ug/kg
				2,6-Dinitrotoluene	U	340	337.423313	ug/kg
				2-Chloronaphthalene	U	340	337.423313	ug/kg
				2-Chlorophenol	U	340	337.423313	ug/kg
				2-Methylphenol	U	340	337.423313	ug/kg
				2-Nitroaniline	U	820	817.995910	ug/kg
				2-Nitrophenol	U	340	337.423313	ug/kg
				3,3'-Dichlorobenzidine	U	340	337.423313	ug/kg
				3-methylphenol/4-methylphenol	U	340	#Error	ug/kg
				3-Nitroaniline	U	820	817.995910	ug/kg
				4,6-Dinitro-2-methylphenol	U	820	817.995910	ug/kg
				4-Bromophenyl phenyl ether	U	340	337.423313	ug/kg
				4-Chloro-3-methylphenol	U	340	337.423313	ug/kg
				4-Chloroaniline	U	340	337.423313	ug/kg
				4-Chlorophenyl phenyl ether	U	340	337.423313	ug/kg
				4-Nitroaniline	U	820	817.995910	ug/kg
				4-Nitrophenol	U	820	817.995910	ug/kg
				Benzoic acid	U	820	817.995910	ug/kg
				Benzyl alcohol	U	340	337.423313	ug/kg
				bis(2-Chloroethoxy)methane	U	340	337.423313	ug/kg
				bis(2-Chloroethyl) ether	U	340	337.423313	ug/kg
				Bis(2-chloroisopropyl) ether	U	340	337.423313	ug/kg
				Butyl benzyl phthalate	U	340	337.423313	ug/kg
				Dibenzofuran	U	340	337.423313	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: A0C180563

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit					
							Criteria*	Units				
LL8SS-074M-6117-FD	A0C180563017	8270C	SO	Diethyl phthalate	U	340	337.423313	ug/kg				
				Dimethyl phthalate	U	340	337.423313	ug/kg				
				Di-n-octyl phthalate	U	340	337.423313	ug/kg				
				Hexachlorobenzene	U	340	337.423313	ug/kg				
				Hexachlorobutadiene	U	340	337.423313	ug/kg				
				HEXACHLOROCYCLOPENTADIE	U	340	#Error	ug/kg				
				Hexachloroethane	U	340	337.423313	ug/kg				
				Isophorone	U	340	337.423313	ug/kg				
				Nitrobenzene	U	340	337.423313	ug/kg				
				N-Nitrosodi-n-propylamine	U	340	337.423313	ug/kg				
				N-Nitrosodiphenylamine	U	340	337.423313	ug/kg				
				Pentachlorophenol	U	340	337.423313	ug/kg				
				Phenol	U	340	337.423313	ug/kg				
				8330B	1,3,5-Trinitrobenzene	U	0.25	0.0101227	mg/kg			
					1,3-Dinitrobenzene	U	0.25	0.25306748	mg/kg			
					2,4,6-Trinitrotoluene (TNT)	U	0.25	0.25306748	mg/kg			
		2,4-Dinitrotoluene			U	0.25	0.25306748	mg/kg				
		2,6-Dinitrotoluene			U	0.25	0.25306748	mg/kg				
		2-Amino-4,6-dinitrotoluene			U	0.25	0.25306748	mg/kg				
		2-Nitrotoluene			U	0.25	0.25306748	mg/kg				
		3-Nitrotoluene			U	0.25	0.25306748	mg/kg				
		4-Amino-2,6-Dinitrotoluene			U	0.25	0.25306748	mg/kg				
		4-Nitrotoluene			U	0.50	0.50613497	mg/kg				
		Nitrobenzene			U	0.25	0.25306748	mg/kg				
		LL8SS-074M-6117-FD(VO			A0C180563018	8260B	SO	2-Hexanone	U	26	25.6410256	ug/kg
								4-methyl-2-pentanone (MIBK)	U	26	25.6410256	ug/kg
								Xylene (Total)	U	13	12.8205128	ug/kg
		LL8SS-078M-5394-SO			A0C180563022	8330B	SO	1,3,5-Trinitrobenzene	U	0.25	0.0101227	mg/kg
								1,3-Dinitrobenzene	U	0.25	0.25306748	mg/kg
				2,4,6-Trinitrotoluene (TNT)				U	0.25	0.25306748	mg/kg	
				2,4-Dinitrotoluene				U	0.25	0.25306748	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: A0C180563

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
LL8SS-078M-5394-SO	A0C180563022	8330B	SO	2,6-Dinitrotoluene	U	0.25	0.25306748	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.25	0.25306748	mg/kg
				2-Nitrotoluene	U	0.25	0.25306748	mg/kg
				3-Nitrotoluene	U	0.25	0.25306748	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.25	0.25306748	mg/kg
				4-Nitrotoluene	U	0.50	0.50613497	mg/kg
				Nitrobenzene	U	0.25	0.25306748	mg/kg
LL8SS-080M-5396-SO	A0C180563024	8081A	SO	4,4'-DDE	U	8.7	8.67346939	ug/kg
				alpha-BHC	U	13	12.7551020	ug/kg
				beta-BHC	U	18	17.8571429	ug/kg
				Dieldrin	U	8.7	8.67346939	ug/kg
				Endosulfan I	U	8.7	8.67346939	ug/kg
				Endosulfan II	U	13	12.7551020	ug/kg
				Endrin	U	8.7	8.67346939	ug/kg
				gamma-BHC (Lindane)	U	13	12.7551020	ug/kg
				gamma-Chlordane	U	8.7	8.67346939	ug/kg
				Heptachlor	U	18	17.8571429	ug/kg
				Heptachlor epoxide	U	13	12.7551020	ug/kg
				Methoxychlor	U	26	25.5102041	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
				Aroclor 1242	U	34	1.73469388	ug/kg
				Aroclor 1248	U	34	1.73469388	ug/kg
				Aroclor 1254	U	34	1.73469388	ug/kg
				Aroclor 1260	U	34	1.73469388	ug/kg
		8270C		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

* 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: A0C180563

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit	
							Criteria*	Units
LL8SS-080M-5396-SO	A0C180563024	8270C	SO	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
				bis(2-Chloroethoxy)methane	U	340	336.734694	ug/kg
				bis(2-Chloroethyl) ether	U	340	336.734694	ug/kg
				Bis(2-chloroisopropyl) ether	U	340	336.734694	ug/kg
				Butyl benzyl phthalate	U	340	336.734694	ug/kg
				Dibenzofuran	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

* 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: A0C180563

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
LL8SS-080M-5396-SO	A0C180563024	8270C	SO	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
LL8SS-083M-5399-SO	A0C180563028	8330B	SO	1,3,5-Trinitrobenzene	U	0.25	0.01011236	mg/kg
				1,3-Dinitrobenzene	U	0.25	0.25280899	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.25	0.25280899	mg/kg
				2,4-Dinitrotoluene	U	0.25	0.25280899	mg/kg
				2,6-Dinitrotoluene	U	0.25	0.25280899	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.25	0.25280899	mg/kg
				2-Nitrotoluene	U	0.25	0.25280899	mg/kg
				3-Nitrotoluene	U	0.25	0.25280899	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.25	0.25280899	mg/kg
				4-Nitrotoluene	U	0.50	0.50561798	mg/kg
				Nitrobenzene	U	0.25	0.25280899	mg/kg
LL8SS-084M-5400-SO	A0C180563029	8330B	SO	1,3,5-Trinitrobenzene	U	0.25	0.0101227	mg/kg
				1,3-Dinitrobenzene	U	0.25	0.25306748	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.25	0.25306748	mg/kg
				2,4-Dinitrotoluene	U	0.25	0.25306748	mg/kg
				2,6-Dinitrotoluene	U	0.25	0.25306748	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.25	0.25306748	mg/kg
				2-Nitrotoluene	U	0.25	0.25306748	mg/kg
				3-Nitrotoluene	U	0.25	0.25306748	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.25	0.25306748	mg/kg
				4-Nitrotoluene	U	0.50	0.50613497	mg/kg
				Nitrobenzene	U	0.25	0.25306748	mg/kg
LL8SS-087M-5402-SO	A0C180563032	8330B	SO	1,3,5-Trinitrobenzene	U	0.25	0.0101227	mg/kg
				1,3-Dinitrobenzene	U	0.25	0.25306748	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.25	0.25306748	mg/kg
				2,4-Dinitrotoluene	U	0.25	0.25306748	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: A0C180563

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
LL8SS-087M-5402-SO	A0C180563032	8330B	SO	2,6-Dinitrotoluene	U	0.25	0.25306748	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.25	0.25306748	mg/kg
				2-Nitrotoluene	U	0.25	0.25306748	mg/kg
				3-Nitrotoluene	U	0.25	0.25306748	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.25	0.25306748	mg/kg
				4-Nitrotoluene	U	0.50	0.50613497	mg/kg
				Nitrobenzene	U	0.25	0.25306748	mg/kg
LL8SS-088M-5403-SO	A0C180563033	8081A	SO	Aldrin	U	42	41.7972832	ug/kg
				beta-BHC	U	37	36.5726228	ug/kg
				delta-BHC	U	42	41.7972832	ug/kg
				Dieldrin	U	18	17.7638454	ug/kg
				Endosulfan I	U	18	17.7638454	ug/kg
				Endrin	U	18	17.7638454	ug/kg
				Endrin ketone	U	21	20.8986416	ug/kg
				gamma-Chlordane	U	18	17.7638454	ug/kg
				Heptachlor	U	37	36.5726228	ug/kg
		8270C		2,4-Dinitrophenol	U	840	835.945664	ug/kg
				2-Nitroaniline	U	840	835.945664	ug/kg
				3-Nitroaniline	U	840	835.945664	ug/kg
				4,6-Dinitro-2-methylphenol	U	840	835.945664	ug/kg
				4-Nitroaniline	U	840	835.945664	ug/kg
				4-Nitrophenol	U	840	835.945664	ug/kg
				Benzoic acid	U	840	835.945664	ug/kg
LL8SS-088M-5403-SO(VO A0C180563034		8260B	SO	Xylene (Total)	U	15	14.7058824	ug/kg
LL8SS-089M-5404-SO	A0C180563035	6020	SO	Antimony	U	0.51	0.508647	mg/kg
		8330B		1,3,5-Trinitrobenzene	U	0.25	0.01007121	mg/kg
				1,3-Dinitrobenzene	U	0.25	0.25178026	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.25	0.25178026	mg/kg
				2,4-Dinitrotoluene	U	0.25	0.25178026	mg/kg
				2,6-Dinitrotoluene	U	0.25	0.25178026	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.25	0.25178026	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: A0C180563

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit	
							Criteria*	Units
LL8SS-089M-5404-SO	A0C180563035	8330B	SO	2-Nitrotoluene	U	0.25	0.25178026	mg/kg
				3-Nitrotoluene	U	0.25	0.25178026	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.25	0.25178026	mg/kg
				4-Nitrotoluene	U	0.50	0.50356053	mg/kg
				Nitrobenzene	U	0.25	0.25178026	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

Continuing Calibration (CCV) Outlier Report (Organics)

There are no Organic Continuing Calibrations with outliers

Continuing Calibration (CCAL) Outlier Report (Inorganics)

There are no Inorganic Continuing Calibrations with outliers

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

Lab Report Batch: A0C180563

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
LL11SB-061-5555-SO	A0C180563001	6020	SO	Antimony	J	0.081	0.60	mg/kg
				Cadmium	J	0.068	0.24	mg/kg
				Silver	J	0.023	0.60	mg/kg
				Sodium	J	63.6	120	mg/kg
				Thallium	J	0.15	0.24	mg/kg
		8330B		Methyl-2,4,6-TrinitrophenylNitramine (T	J PG	0.020	0.24	mg/kg
				PETN	J PG	0.049	0.48	mg/kg
LL11SB-061-5556-SO	A0C180563002	6020		Antimony	J	0.084	0.58	mg/kg
				Cadmium	J	0.044	0.23	mg/kg
				Silver	J	0.019	0.58	mg/kg
				Sodium	J	64.2	115	mg/kg
				Thallium	J	0.14	0.23	mg/kg
LL11SB-064-5569-SO	A0C180563003			Antimony	J	0.080	0.56	mg/kg
				Cadmium	J	0.053	0.22	mg/kg
				Selenium	J	0.25	0.56	mg/kg
				Silver	J	0.0046	0.56	mg/kg
				Sodium	J	21.9	111	mg/kg
LL11SB-064-5570-SO	A0C180563004	6020		Aroclor 1254	J	20	37	ug/kg
				Antimony	J	0.083	0.57	mg/kg
				Cadmium	J	0.068	0.23	mg/kg
				Selenium	J	0.50	0.57	mg/kg
				Silver	J	0.017	0.57	mg/kg
LL11SB-064-5572-SO	A0C180563006			Sodium	J	46.5	115	mg/kg
				Thallium	J	0.11	0.23	mg/kg
				Cadmium	J	0.065	0.25	mg/kg
				Selenium	J	0.55	0.63	mg/kg
				Silver	J	0.017	0.63	mg/kg
LL11SB-064-6188-FD	A0C180563013			Sodium	J	53.0	126	mg/kg
				Thallium	J	0.10	0.25	mg/kg
				Cadmium	J	0.054	0.25	mg/kg
				Silver	J	0.018	0.62	mg/kg
				Sodium	J	61.3	124	mg/kg
LL11SB-067-5581-SO	A0C180563007			Thallium	J	0.11	0.25	mg/kg
				Antimony	J	0.099	0.60	mg/kg
				Cadmium	J	0.14	0.24	mg/kg
				Silver	J	0.024	0.60	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: A0C180563

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
LL11SB-067-5581-SO	A0C180563007	6020	SO	Sodium	J	39.4	119	mg/kg
				Thallium	J	0.14	0.24	mg/kg
LL11SB-067-5582-SO	A0C180563008	6020	8330B	PETN	J PG	0.036	0.48	mg/kg
				Antimony	J	0.081	0.60	mg/kg
LL11SB-067-5582-SO	A0C180563008	6020		Cadmium	J	0.066	0.24	mg/kg
				Silver	J	0.0076	0.60	mg/kg
LL11SB-067-5582-SO	A0C180563008	6020		Sodium	J	44.6	120	mg/kg
				Thallium	J	0.15	0.24	mg/kg
LL11SB-067-6186-FD	A0C180563011			Antimony	J	0.12	0.60	mg/kg
				Cadmium	J	0.082	0.24	mg/kg
LL11SB-067-6186-FD	A0C180563011			Silver	J	0.010	0.60	mg/kg
				Sodium	J	38.9	120	mg/kg
LL11SB-067-6186-FD	A0C180563011	7471A		Mercury	J	0.031	0.12	mg/kg
				Antimony	J	0.091	0.61	mg/kg
LL11SB-068-5585-SO	A0C180563009	6020		Cadmium	J	0.15	0.25	mg/kg
				Silver	J	0.025	0.61	mg/kg
LL11SB-068-5585-SO	A0C180563009	6020		Sodium	J	39.2	123	mg/kg
				Thallium	J	0.16	0.25	mg/kg
LL11SB-068-5585-SO	A0C180563009	7471A		Mercury	J	0.023	0.12	mg/kg
				Methylene chloride	J B	3.3	6.1	ug/kg
LL11SB-068-5586-SO	A0C180563010	6020		Antimony	J	0.11	0.61	mg/kg
				Cadmium	J	0.063	0.25	mg/kg
LL11SB-068-5586-SO	A0C180563010	6020		Silver	J	0.019	0.61	mg/kg
				Sodium	J	41.6	123	mg/kg
LL11SB-068-5586-SO	A0C180563010	6020		Thallium	J	0.16	0.25	mg/kg
				Mercury	J	0.036	0.12	mg/kg
LL11SB-068-5586-SO	A0C180563010	8260B		Methylene chloride	J B	3.9	6.1	ug/kg
				bis(2-Ethylhexyl) phthalate	J	24	410	ug/kg
LL11SB-068-5586-SO	A0C180563010	8270C		Di-n-butyl phthalate	J	19	410	ug/kg
				Antimony	J	0.076	0.59	mg/kg
LL11SB-068-6187-FD	A0C180563012	6020		Cadmium	J	0.036	0.23	mg/kg
				Selenium	J	0.50	0.59	mg/kg
LL11SB-068-6187-FD	A0C180563012	6020		Silver	J	0.0063	0.59	mg/kg
				Sodium	J	28.4	117	mg/kg
LL11SB-068-6187-FD	A0C180563012	6020		Thallium	J	0.11	0.23	mg/kg
				Methylene chloride	J B	3.4	5.9	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: A0C180563

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
LL11SB-068-6187-FD	A0C180563012	8270C	SO	Di-n-butyl phthalate	J	19	390	ug/kg
LL8SS-073M-5388-SO	A0C180563014	6020		Antimony	J	0.073	0.51	mg/kg
				Silver	J	0.022	0.51	mg/kg
				Sodium	J	98.4	102	mg/kg
				Thallium	J	0.12	0.20	mg/kg
		7471A		Mercury	J	0.025	0.10	mg/kg
		8330B		Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetr	J PG	0.015	0.25	mg/kg
LL8SS-074M-5389-SO	A0C180563015	353.2 Modified		Nitrocellulose	B	1.3	5.1	mg/kg
		6020		Antimony	J	0.069	0.51	mg/kg
				Cadmium	J	0.17	0.20	mg/kg
				Silver	J	0.048	0.51	mg/kg
				Sodium	J	26.2	102	mg/kg
				Thallium	J	0.13	0.20	mg/kg
		7471A		Mercury	J	0.054	0.10	mg/kg
		8270C		2-Methylnaphthalene	J	21	340	ug/kg
				bis(2-Ethylhexyl) phthalate	J	58	340	ug/kg
				Di-n-butyl phthalate	J B	21	340	ug/kg
LL8SS-074M-5389-SO(VO A0C180563016		8260B		2-Butanone (MEK)	J	2.0	27	ug/kg
				Methylene chloride	J B	4.0	6.7	ug/kg
LL8SS-074M-6117-FD	A0C180563017	353.2 Modified		Nitrocellulose	B	1.2	5.1	mg/kg
		6020		Antimony	J	0.068	0.51	mg/kg
				Cadmium	J	0.16	0.20	mg/kg
				Silver	J	0.048	0.51	mg/kg
				Sodium	J	27.5	102	mg/kg
				Thallium	J	0.13	0.20	mg/kg
		7471A		Mercury	J	0.049	0.10	mg/kg
		8081A		4,4'-DDE	J	3.8	8.7	ug/kg
		8270C		2-Methylnaphthalene	J	19	340	ug/kg
				bis(2-Ethylhexyl) phthalate	J	53	340	ug/kg
				Di-n-butyl phthalate	J B	18	340	ug/kg
LL8SS-074M-6117-FD(VO A0C180563018		8260B		2-Butanone (MEK)	J	5.7	26	ug/kg
				Acetone	J	18	26	ug/kg
				Methylene chloride	J B	4.0	6.4	ug/kg
LL8SS-075M-5390-SO	A0C180563019	6020		Antimony	J	0.074	0.51	mg/kg
				Cadmium	J	0.17	0.20	mg/kg
				Silver	J	0.031	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: A0C180563

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
LL8SS-075M-5390-SO	A0C180563019	6020	SO	Sodium	J	29.9	102	mg/kg
				Thallium	J	0.13	0.20	mg/kg
				7471A Mercury	J	0.026	0.10	mg/kg
LL8SS-076M-5392-SO	A0C180563020	6020		Antimony	J	0.076	0.51	mg/kg
				Silver	J	0.020	0.51	mg/kg
				Sodium	J	63.9	102	mg/kg
		7471A		Thallium	J	0.10	0.20	mg/kg
				Mercury	J	0.018	0.10	mg/kg
				8330B Methyl-2,4,6-TrinitrophenylNitramine (T	J	0.018	0.25	mg/kg
LL8SS-077M-5393-SO	A0C180563021	6020		Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetr	J PG	0.013	0.25	mg/kg
				Antimony	J	0.073	0.51	mg/kg
				Silver	J	0.034	0.51	mg/kg
		7471A		Sodium	J	25.3	102	mg/kg
				Thallium	J	0.16	0.20	mg/kg
				Mercury	J	0.045	0.10	mg/kg
LL8SS-078M-5394-SO	A0C180563022	6020		Antimony	J	0.073	0.51	mg/kg
				Cadmium	J	0.10	0.20	mg/kg
				Silver	J	0.044	0.51	mg/kg
		7471A		Sodium	J	19.7	102	mg/kg
				Thallium	J	0.14	0.20	mg/kg
				Mercury	J	0.044	0.10	mg/kg
LL8SS-079M-5395-SO	A0C180563023	6020		Antimony	J	0.069	0.51	mg/kg
				Cadmium	J	0.10	0.20	mg/kg
				Silver	J	0.037	0.51	mg/kg
		7471A		Sodium	J	23.9	102	mg/kg
				Thallium	J	0.13	0.20	mg/kg
				Mercury	J	0.041	0.10	mg/kg
LL8SS-080M-5396-SO	A0C180563024	353.2 Modified		Nitrocellulose	B	1.1	5.1	mg/kg
		6020		Antimony	J	0.067	0.51	mg/kg
				Cadmium	J	0.15	0.20	mg/kg
				Silver	J	0.041	0.51	mg/kg
		7471A		Sodium	J	22.0	102	mg/kg
				Thallium	J	0.14	0.20	mg/kg
				Mercury	J	0.045	0.10	mg/kg
		8270C		2-Methylnaphthalene	J	21	340	ug/kg
				Benzyl alcohol	J	27	340	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: A0C180563

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
LL8SS-080M-5396-SO	A0C180563024	8270C	SO	bis(2-Ethylhexyl) phthalate	J	180	340	ug/kg
				Diethyl phthalate	J	27	340	ug/kg
				Di-n-butyl phthalate	J B	32	340	ug/kg
LL8SS-080M-5396-SO(VO	A0C180563025	8260B		Methylene chloride	J B	3.8	7.0	ug/kg
LL8SS-081M-5397-SO	A0C180563026	6020		Cadmium	J	0.11	0.20	mg/kg
				Silver	J	0.043	0.51	mg/kg
				Sodium	J	21.8	102	mg/kg
				Thallium	J	0.13	0.20	mg/kg
				Mercury	J	0.035	0.10	mg/kg
LL8SS-082M-5398-SO	A0C180563027	6020		Cadmium	J	0.13	0.20	mg/kg
				Silver	J	0.036	0.51	mg/kg
				Sodium	J	24.6	102	mg/kg
				Thallium	J	0.14	0.20	mg/kg
				Mercury	J	0.064	0.10	mg/kg
LL8SS-083M-5399-SO	A0C180563028	6020		Antimony	J	0.076	0.51	mg/kg
				Silver	J	0.038	0.51	mg/kg
				Sodium	J	33.0	102	mg/kg
				Thallium	J	0.15	0.20	mg/kg
				Mercury	J	0.049	0.10	mg/kg
LL8SS-084M-5400-SO	A0C180563029	6020		Antimony	J	0.095	0.51	mg/kg
				Silver	J	0.032	0.51	mg/kg
				Sodium	J	52.8	102	mg/kg
				Thallium	J	0.13	0.20	mg/kg
				Mercury	J	0.030	0.10	mg/kg
LL8SS-086M-5401-SO	A0C180563030	6020		Antimony	J	0.078	0.51	mg/kg
				Silver	J	0.032	0.51	mg/kg
				Sodium	J	36.1	102	mg/kg
				Thallium	J	0.13	0.20	mg/kg
				Mercury	J	0.031	0.10	mg/kg
		8330B		Methyl-2,4,6-Trinitrophenylnitramine (T	J PG	0.015	0.25	mg/kg
LL8SS-086M-6119-FD	A0C180563031	6020		Antimony	J	0.067	0.51	mg/kg
				Cadmium	J	0.18	0.20	mg/kg
				Silver	J	0.033	0.51	mg/kg
				Sodium	J	30.0	102	mg/kg
				Thallium	J	0.13	0.20	mg/kg
		7471A		Mercury	J	0.014	0.10	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: A0C180563

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
LL8SS-087M-5402-SO	A0C180563032	6020	SO	Antimony	J	0.079	0.51	mg/kg
				Silver	J	0.026	0.51	mg/kg
				Sodium	J	42.9	102	mg/kg
				Thallium	J	0.12	0.20	mg/kg
				Mercury	J	0.065	0.10	mg/kg
LL8SS-088M-5403-SO	A0C180563033	353.2 Modified		Nitrocellulose	B	1.7	5.2	mg/kg
				Antimony	J	0.073	0.52	mg/kg
		6020		Cadmium	J	0.20	0.21	mg/kg
				Silver	J	0.032	0.52	mg/kg
				Sodium	J	69.2	104	mg/kg
				Thallium	J	0.14	0.21	mg/kg
				Mercury	J	0.076	0.10	mg/kg
		7471A		4,4'-DDD	J	14	21	ug/kg
				4,4'-DDT	J	8.3	21	ug/kg
		8270C		2-Methylnaphthalene	J	19	340	ug/kg
				bis(2-Ethylhexyl) phthalate	J	120	340	ug/kg
				Di-n-butyl phthalate	J B	20	340	ug/kg
		8330B		Methyl-2,4,6-Trinitrophenylnitramine (T	J	0.019	0.25	mg/kg
LL8SS-088M-5403-SO(VO	A0C180563034	8260B		2-Butanone (MEK)	J	2.4	29	ug/kg
				Methylene chloride	J B	3.9	7.3	ug/kg
LL8SS-089M-5404-SO	A0C180563035	6020		Cadmium	J	0.095	0.20	mg/kg
				Silver	J	0.026	0.51	mg/kg
				Sodium	J	101	102	mg/kg
				Thallium	J	0.16	0.20	mg/kg
		7471A		Mercury	J	0.029	0.10	mg/kg
		8330B		Methyl-2,4,6-Trinitrophenylnitramine (T	J PG	0.014	0.25	mg/kg

Method Blank Outlier Report

Lab Reporting Batch : A0C180563

Lab ID: TALCAN

Analysis Method : 8260B

Analysis Date : 03/19/2010

Preparation Type : 5030B

Preparation Date : 03/19/2010

Method Blank Lab Sample ID : A0C190000361B

Preparation Batch : 0078361

Methylene chloride	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	1.1	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
LL11SB-068-5585-SO	A0C180563009	1	3.3	J B	ug/kg
LL11SB-068-5586-SO	A0C180563010	1	3.9	J B	ug/kg
LL11SB-068-6187-FD	A0C180563012	1	3.4	J B	ug/kg
LL8SS-074M-5389-SO(VOC	A0C180563016	1	4.0	J B	ug/kg
LL8SS-074M-6117-FD(VOCS	A0C180563018	1	4.0	J B	ug/kg
LL8SS-080M-5396-SO(VOC	A0C180563025	1	3.8	J B	ug/kg
LL8SS-088M-5403-SO(VOC	A0C180563034	1	3.9	J B	ug/kg

Method Blank Outlier Report

Lab Reporting Batch : A0C180563

Lab ID: TALCAN

Analysis Method : 6020

Analysis Date : 03/30/2010

Preparation Type : 3050B

Preparation Date : 03/25/2010

Method Blank Lab Sample ID : A0C250000021B

Preparation Batch : 0084021

Nickel					
	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	0.18	1.0	mg/kg	J	

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

Method Blank Outlier Report

Lab Reporting Batch : A0C180563

Lab ID: TALCAN

Analysis Method : 8270C

Analysis Date : 04/16/2010

Preparation Type : 3540C

Preparation Date : 04/13/2010

Method Blank Lab Sample ID : A0D130000086B

Preparation Batch : 0103086

Di-n-butyl phthalate	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	17	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
LL8SS-074M-5389-SO	A0C180563015	1	21	J B	ug/kg
LL8SS-074M-6117-FD	A0C180563017	1	18	J B	ug/kg
LL8SS-080M-5396-SO	A0C180563024	1	32	J B	ug/kg
LL8SS-088M-5403-SO	A0C180563033	1	20	J B	ug/kg

Surrogate Recovery Outlier Report

Lab Report Batch: A0C180563

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	
LL11SB-061-5556-SO	A0C180563002	8082	1	SO	Decachlorobiphenyl	44	60.0	125.0	10.0	All Target
LL11SB-068-5585-SO	A0C180563009	8260B	1	SO	4-Bromofluorobenzene	78	85.0	120.0	10.0	All Target
LL11SB-068-5586-SO	A0C180563010	8260B	1	SO	4-Bromofluorobenzene	81	85.0	120.0	10.0	All Target
					Toluene-d8	84	85.0	115.0	10.0	All Target
LL8SS-074M-5389-SO(VOCS)	A0C180563016	8260B	1	SO	4-Bromofluorobenzene	73	85.0	120.0	10.0	All Target
					Toluene-d8	81	85.0	115.0	10.0	All Target
LL8SS-074M-6117-FD(VOCS)	A0C180563018	8260B	1	SO	4-Bromofluorobenzene	79	85.0	120.0	10.0	All Target
					Toluene-d8	84	85.0	115.0	10.0	All Target
LL8SS-080M-5396-SO(VOCS)	A0C180563025	8260B	1	SO	4-Bromofluorobenzene	78	85.0	120.0	10.0	All Target
					Toluene-d8	82	85.0	115.0	10.0	All Target
LL8SS-088M-5403-SO	A0C180563033	8081A	10	SO	TETRACHLORO-M-XYLENE	136	55.0	130.0	10.0	All Target
LL8SS-089M-5404-SO	A0C180563035	8270C	1	SO	2-Fluorophenol	24	35.0	105.0	10.0	Acid
					Phenol-d5	3.8	40.0	100.0	10.0	Acid

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

**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: A0C190535

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Sample Temperature (C)	Criteria	
					Lower Limit	Upper Limit
LL11SB-060-5551-SO	A0C190535001	8082	SO	1.6	2.0	
LL11SB-060-5551-SOMS	A0C190535001S	8082	SO	1.6	2.0	
LL11SB-060-5551-SOMSD	A0C190535001D	8082	SO	1.6	2.0	
LL11SB-060-5552-SO	A0C190535002	8082	SO	1.6	2.0	
LL11SB-062-5559-SO	A0C190535003	8082	SO	1.6	2.0	
LL11SB-062-5560-SO	A0C190535004	8082	SO	1.6	2.0	
LL11SB-062-6189-FD	A0C190535005	8082	SO	1.6	2.0	
LL11SB-060-5551-SOMS	A0C190535001S	8270C	SO	1.6	2.0	
LL11SB-060-5551-SOMSD	A0C190535001D	8270C	SO	1.6	2.0	
LL11SB-060-5551-SO	A0C190535001	8270C PAH	SO	1.6	2.0	
LL11SB-060-5551-SOMS	A0C190535001S	8270C PAH	SO	1.6	2.0	
LL11SB-060-5551-SOMSD	A0C190535001D	8270C PAH	SO	1.6	2.0	
LL11SB-060-5552-SO	A0C190535002	8270C PAH	SO	1.6	2.0	
LL11SB-062-5559-SO	A0C190535003	8270C PAH	SO	1.6	2.0	
LL11SB-062-5560-SO	A0C190535004	8270C PAH	SO	1.6	2.0	
LL11SB-062-6189-FD	A0C190535005	8270C PAH	SO	1.6	2.0	
LL7SB-069-5214-SO	A0C190535006	8270C PAH	SO	1.6	2.0	
LL8SS-071M-5386-SO	A0C190535009	8270C PAH	SO	1.6	2.0	
LL8SS-072M-5387-SO	A0C190535010	8270C PAH	SO	1.6	2.0	
LL8SS-085M-5782-SO	A0C190535011	8270C PAH	SO	1.6	2.0	
LL11SB-060-5551-SO	A0C190535001	8330B	SO	1.6	2.0	
LL11SB-060-5552-SO	A0C190535002	8330B	SO	1.6	2.0	
LL11SB-062-5559-SO	A0C190535003	8330B	SO	1.6	2.0	
LL11SB-062-5560-SO	A0C190535004	8330B	SO	1.6	2.0	
LL11SB-062-6189-FD	A0C190535005	8330B	SO	1.6	2.0	
LL7SB-069-5214-SO	A0C190535006	8330B	SO	1.6	2.0	
LL8SS-071M-5386-SO	A0C190535009	8330B	SO	1.6	2.0	
LL8SS-072M-5387-SO	A0C190535010	8330B	SO	1.6	2.0	
LL8SS-085M-5782-SO	A0C190535011	8330B	SO	1.6	2.0	

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

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 : 0081047	Analysis Method : 8270C	Analysis Date : 03/25/2010
Preparation Batch : 0081047	Preparation Type : 3540C	Preparation Date : 03/22/2010
Lab Reporting Batch : A0C190535	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
LL11SB-060-5551-SOMS	A0C190535001S	SO	3,3'-Dichlorobenzidine	0.0		0.00	10.00	130.00	56.00
LL11SB-060-5551-SOMS	A0C190535001D		3,3'-Dichlorobenzidine	0.0		0.00	10.00	130.00	56.00
			Benzyl alcohol		68	0.00	20.00	125.00	30.00

Associated Samples: Parent sample only	
Client Sample ID	Lab Sample ID
LL11SB-060-5551-SO	A0C190535001

* 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 :

Analysis Method :

Analysis Date :

Preparation Batch :

Preparation Type :

Preparation Date :

Lab Reporting Batch :

Lab ID:

LCS Lab Sample ID Matrix Analyte Name			Reported Values		Project Limits (Percent)			
			Percent Recovery	RPD	Rejection Point	Lower Limit	Upper Limit	RPD

Associated Samples

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: A0C190535

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
LL11SB-060-5551-SO	A0C190535001	8082	SO	Aroclor 1016	U	46	2.36111111	ug/kg
				Aroclor 1221	U	46	2.36111111	ug/kg
				Aroclor 1232	U	46	2.36111111	ug/kg
				Aroclor 1242	U	46	2.36111111	ug/kg
				Aroclor 1248	U	46	2.36111111	ug/kg
				Aroclor 1254	U	46	2.36111111	ug/kg
				Aroclor 1260	U	46	2.36111111	ug/kg
LL11SB-062-5560-SO	A0C190535004	6020 8330B	SO	Antimony	U	0.63	0.625	mg/kg
				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
LL11SB-062-6189-FD	A0C190535005	8082	SO	Aroclor 1016	U	45	2.2972973	ug/kg
				Aroclor 1221	U	45	2.2972973	ug/kg
				Aroclor 1232	U	45	2.2972973	ug/kg
				Aroclor 1242	U	45	2.2972973	ug/kg
				Aroclor 1248	U	45	2.2972973	ug/kg
				Aroclor 1254	U	45	2.2972973	ug/kg
				Aroclor 1260	U	45	2.2972973	ug/kg
LL7SB-069-5214-SO	A0C190535006	8330B	SO	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

* 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: A0C190535

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
LL7SB-069-5214-SO	A0C190535006	8330B	SO	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
				4-Nitrotoluene	U	0.50	0.60365854	mg/kg
				Nitrobenzene	U	0.25	0.30182927	mg/kg
LL8SS-071M-5386-SO	A0C190535009	8330B	SO	1,3,5-Trinitrobenzene	U	0.25	0.01009174	mg/kg
				1,3-Dinitrobenzene	U	0.25	0.25229358	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.25	0.25229358	mg/kg
				2,4-Dinitrotoluene	U	0.25	0.25229358	mg/kg
				2,6-Dinitrotoluene	U	0.25	0.25229358	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.25	0.25229358	mg/kg
				2-Nitrotoluene	U	0.25	0.25229358	mg/kg
				3-Nitrotoluene	U	0.25	0.25229358	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.25	0.25229358	mg/kg
				4-Nitrotoluene	U	0.50	0.50458716	mg/kg
				Nitrobenzene	U	0.25	0.25229358	mg/kg
LL8SS-072M-5387-SO	A0C190535010	8330B	SO	1,3,5-Trinitrobenzene	U	0.25	0.01011236	mg/kg
				1,3-Dinitrobenzene	U	0.25	0.25280899	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.25	0.25280899	mg/kg
				2,4-Dinitrotoluene	U	0.25	0.25280899	mg/kg
				2,6-Dinitrotoluene	U	0.25	0.25280899	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.25	0.25280899	mg/kg
				2-Nitrotoluene	U	0.25	0.25280899	mg/kg
				3-Nitrotoluene	U	0.25	0.25280899	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.25	0.25280899	mg/kg
				4-Nitrotoluene	U	0.50	0.50561798	mg/kg
				Nitrobenzene	U	0.25	0.25280899	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)

There are no Organic Continuing Calibrations with outliers

Continuing Calibration (CCAL) Outlier Report (Inorganics)

There are no Inorganic Continuing Calibrations with outliers

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

Lab Report Batch: A0C190535

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
LL11SB-060-5551-SO	A0C190535001	6020	SO	Antimony	J	0.099	0.69	mg/kg
				Cadmium	J	0.21	0.28	mg/kg
				Silver	J	0.040	0.69	mg/kg
				Sodium	J	44.5	139	mg/kg
				Thallium	J	0.19	0.28	mg/kg
LL11SB-060-5552-SO	A0C190535002	6020		Mercury	J	0.077	0.14	mg/kg
				Antimony	J	0.084	0.61	mg/kg
				Cadmium	J	0.074	0.24	mg/kg
				Silver	J	0.035	0.61	mg/kg
				Sodium	J	63.2	122	mg/kg
LL11SB-062-5559-SO	A0C190535003	6020		Thallium	J	0.19	0.24	mg/kg
				Antimony	J	0.10	0.66	mg/kg
				Cadmium	J	0.24	0.26	mg/kg
				Silver	J	0.036	0.66	mg/kg
				Sodium	J	34.8	132	mg/kg
LL11SB-062-5560-SO	A0C190535004	6020		Thallium	J	0.17	0.26	mg/kg
				Mercury	J	0.035	0.13	mg/kg
				Cadmium	J	0.065	0.25	mg/kg
				Silver	J	0.018	0.63	mg/kg
				Sodium	J	48.5	125	mg/kg
LL11SB-062-6189-FD	A0C190535005	6020		Thallium	J	0.18	0.25	mg/kg
				Mercury	J	0.026	0.13	mg/kg
				Antimony	J	0.12	0.68	mg/kg
				Cadmium	J	0.26	0.27	mg/kg
				Silver	J	0.033	0.68	mg/kg
LL7SB-069-5214-SO	A0C190535006	6020		Sodium	J	35.9	135	mg/kg
				Thallium	J	0.16	0.27	mg/kg
				Mercury	J	0.041	0.14	mg/kg
				Antimony	J	0.16	0.61	mg/kg
				Cadmium	J	0.13	0.24	mg/kg
LL8SS-068-5380-SO	A0C190535012	7196A		Silver	J	0.056	0.61	mg/kg
				Sodium	J	21.9	122	mg/kg
				Mercury	J	0.061	0.12	mg/kg
				Hexahydro-1,3,5-Trinitro-1,3,5-Triazine	J	0.028	0.25	mg/kg
				Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetr	J	0.021	0.25	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: A0C190535

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
LL8SS-071M-5386-SO	A0C190535009	6020	SO	Antimony	J	0.13	0.51	mg/kg
				Silver	J	0.034	0.51	mg/kg
				Thallium	J	0.15	0.20	mg/kg
				Mercury	J	0.042	0.10	mg/kg
				Methyl-2,4,6-Trinitrophenylnitramine (T	J PG	0.027	0.25	mg/kg
LL8SS-072M-5387-SO	A0C190535010	6020		Antimony	J	0.13	0.51	mg/kg
				Silver	J	0.029	0.51	mg/kg
				Thallium	J	0.14	0.20	mg/kg
				Mercury	J	0.033	0.10	mg/kg
				Methyl-2,4,6-Trinitrophenylnitramine (T	J	0.052	0.25	mg/kg
LL8SS-085M-5782-SO	A0C190535011	6020		Antimony	J	0.11	0.51	mg/kg
				Silver	J	0.031	0.51	mg/kg
				Sodium	J	49.5	102	mg/kg
				Thallium	J	0.13	0.20	mg/kg
				Mercury	J	0.017	0.10	mg/kg
		8330B		Methyl-2,4,6-Trinitrophenylnitramine (T	J PG	0.047	0.25	mg/kg

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

**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: A0C190539

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Sample Temperature (C)	Criteria	
					Lower Limit	Upper Limit
LL11SB-060-5553-SO	A0C190539001	8082	SO	1.6	2.0	
LL11SB-062-5561-SO	A0C190539002	8082	SO	1.6	2.0	
LL11SB-060-5553-SO	A0C190539001	8270C	SO	1.6	2.0	
LL11SB-062-5561-SO	A0C190539002	8270C	SO	1.6	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 : 0081033	Analysis Method : 6020	Analysis Date : 03/23/2010
Preparation Batch : 0081033	Preparation Type : 3050B	Preparation Date : 03/22/2010
Lab Reporting Batch : A0C190539	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
LL11SB-060-5553-SOMS	A0C190539001S	SO	Antimony	32		30.00	75.00	125.00	20.00
			Arsenic	147		30.00	23.00	131.00	20.00
			Magnesium	134		30.00	70.00	130.00	20.00
LL11SB-060-5553-SOMS	A0C190539001D		Antimony	35		30.00	75.00	125.00	20.00
			Arsenic	137		30.00	23.00	131.00	20.00

Associated Samples: All samples in Method Batch	
Client Sample ID	Lab Sample ID
LL11SB-060-5553-SO	A0C190539001
LL11SB-062-5561-SO	A0C190539002

* 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 : 0079013

Analysis Method : 8270C

Analysis Date : 03/25/2010

Preparation Batch : 0079013

Preparation Type : 3540C

Preparation Date : 03/20/2010

Lab Reporting Batch : A0C190539

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
A0C200000013C	SO	bis(2-Ethylhexyl) phthalate	236		10.00	45.00	125.00	31.00

Associated Samples	
Client Sample ID	Lab Sample ID
LL11SB-060-5553-SO	A0C190539001
LL11SB-062-5561-SO	A0C190539002

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: A0C190539

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
LL11SB-060-5553-SO	A0C190539001	7471A	SO	Mercury	U	0.12	0.11904762	mg/kg
LL11SB-062-5561-SO	A0C190539002	7471A	SO	Mercury	U	0.12	0.11627907	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

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

Lab Report Batch: A0C190539

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
LL11SB-060-5553-SO	A0C190539001	6020	SO	Antimony	J	0.093	0.59	mg/kg
				Cadmium	J	0.077	0.24	mg/kg
				Silver	J	0.019	0.59	mg/kg
				Sodium	J	34.3	119	mg/kg
				Thallium	J	0.12	0.24	mg/kg
LL11SB-062-5561-SO	A0C190539002			Antimony	J	0.077	0.58	mg/kg
				Cadmium	J	0.061	0.23	mg/kg
				Silver	J	0.017	0.58	mg/kg
				Sodium	J	41.7	116	mg/kg
				Thallium	J	0.12	0.23	mg/kg

QC Outlier Report: Temperature (Non-qualified Outliers)

Lab Report Batch: A0C190542

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Sample Temperature (C)	Criteria	
					Lower Limit	Upper Limit
LL11SB-060-5553-SO	A0C190542001	8330B	SO	1.6	2.0	
LL11SB-062-5561-SO	A0C190542002	8330B	SO	1.6	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: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: A0C190542

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
LL11SB-060-5553-SO	A0C190542001	8330B	SO	1,3,5-Trinitrobenzene	U	0.27	0.0127381	mg/kg
				1,3-Dinitrobenzene	U	0.27	0.31845238	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.27	0.31845238	mg/kg
				2,4-Dinitrotoluene	U	0.27	0.31845238	mg/kg
				2,6-Dinitrotoluene	U	0.27	0.31845238	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.27	0.31845238	mg/kg
				2-Nitrotoluene	U	0.27	0.31845238	mg/kg
				3-Nitrotoluene	U	0.27	0.31845238	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.27	0.31845238	mg/kg
				4-Nitrotoluene	U	0.54	0.63690476	mg/kg
				Nitrobenzene	U	0.27	0.31845238	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: Temperature (Non-qualified Outliers)

Lab Report Batch: A0C230523

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Sample Temperature (C)	Criteria	
					Lower Limit	Upper Limit
LL11SB-065-5575-SO	A0C230523001	8082	SO	0.8	2.0	
LL11SB-066-5579-SO	A0C230523002	8082	SO	0.8	2.0	
LL11SB-065-5575-SO	A0C230523001	8270C	SO	0.8	2.0	
LL11SB-066-5579-SO	A0C230523002	8270C	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	

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch :				Analysis Method :				Analysis Date :					
Preparation Batch :				Preparation Type :				Preparation Date :					
Lab Reporting Batch :				Lab ID:									
								Reported *		Project Limits (Percent)			
								Percent Recovery	RPD	Rejection Point**	Lower Limit	Upper Limit	RPD
Client Sample ID	Lab Sample ID	Matrix	Analyte Name										

* 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 :
Preparation Batch :
Lab Reporting Batch :

Analysis Method :
Preparation Type :
Lab ID:

Analysis Date :
Preparation Date :

LCS Lab Sample ID Matrix Analyte Name			Reported Values		Project Limits (Percent)			
			Percent Recovery	RPD	Rejection Point	Lower Limit	Upper Limit	RPD

Associated Samples

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: A0C230523

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
LL11SB-065-5575-SO	A0C230523001	8082	SO	Aroclor 1016	U	39	1.97674419	ug/kg
				Aroclor 1221	U	39	1.97674419	ug/kg
				Aroclor 1232	U	39	1.97674419	ug/kg
				Aroclor 1242	U	39	1.97674419	ug/kg
				Aroclor 1248	U	39	1.97674419	ug/kg
				Aroclor 1254	U	39	1.97674419	ug/kg
				Aroclor 1260	U	39	1.97674419	ug/kg
LL11SB-066-5579-SO	A0C230523002	7471A	SO	Mercury	U	0.12	0.11764706	mg/kg
		8082		Aroclor 1016	U	39	2	ug/kg
				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
				Aroclor 1260	U	39	2	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

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

Lab Report Batch: A0C230523

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
LL11SB-065-5575-SO	A0C230523001	6020	SO	Antimony	J	0.087	0.58	mg/kg
				Cadmium	J	0.051	0.23	mg/kg
				Silver	J	0.014	0.58	mg/kg
				Sodium	J	40.3	117	mg/kg
				Thallium	J	0.13	0.23	mg/kg
LL11SB-066-5579-SO	A0C230523002	6020		Mercury	J	0.025	0.12	mg/kg
				Antimony	J	0.077	0.59	mg/kg
				Cadmium	J	0.059	0.24	mg/kg
				Silver	J	0.011	0.59	mg/kg
				Sodium	J	41.6	118	mg/kg
				Thallium	J	0.13	0.24	mg/kg

QC Outlier Report: Temperature (Non-qualified Outliers)

Lab Report Batch: A0C230527

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Sample Temperature (C)	Criteria	
					Lower Limit	Upper Limit
LL11SB-065-5575-SO	A0C230527001	8330B	SO	0.8	2.0	
LL11SB-065-5575-SOMS	A0C230527001S	8330B	SO	0.8	2.0	
LL11SB-065-5575-SOMSD	A0C230527001D	8330B	SO	0.8	2.0	
LL11SB-066-5579-SO	A0C230527002	8330B	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: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: A0C230527

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
LL11SB-066-5579-SO	A0C230527002	8330B	SO	1,3,5-Trinitrobenzene	U	0.24	0.01117647	mg/kg
				1,3-Dinitrobenzene	U	0.24	0.27941176	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.24	0.27941176	mg/kg
				2,4-Dinitrotoluene	U	0.24	0.27941176	mg/kg
				2,6-Dinitrotoluene	U	0.24	0.27941176	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.24	0.27941176	mg/kg
				2-Nitrotoluene	U	0.24	0.27941176	mg/kg
				3-Nitrotoluene	U	0.24	0.27941176	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.24	0.27941176	mg/kg
				4-Nitrotoluene	U	0.48	0.55882353	mg/kg
				Nitrobenzene	U	0.24	0.27941176	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: Temperature (Non-qualified Outliers)

Lab Report Batch: A0C230534

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Sample Temperature (C)	Criteria	
					Lower Limit	Upper Limit
CBLSB-011-5261-SO	A0C230534018	353.2 Modified	SO	0.4	2.0	6.0
CBLSB-011-5261-SOMS	A0C230534018S	353.2 Modified	SO	0.4	2.0	6.0
CBLSB-011-5261-SOMSD	A0C230534018D	353.2 Modified	SO	0.4	2.0	6.0
CBLSB-011-5262-SO	A0C230534019	353.2 Modified	SO	0.4	2.0	6.0
CBLSB-011-5263-SO	A0C230534020	353.2 Modified	SO	0.4	2.0	6.0
CBLSB-011-6127-FD	A0C230534024	353.2 Modified	SO	0.4	2.0	6.0
CBLSB-011-5261-SO	A0C230534018	8081A	SO	0.4	2.0	
CBLSB-011-5261-SOMS	A0C230534018S	8081A	SO	0.4	2.0	
CBLSB-011-5261-SOMSD	A0C230534018D	8081A	SO	0.4	2.0	
CBLSB-011-5262-SO	A0C230534019	8081A	SO	0.4	2.0	
CBLSB-011-5263-SO	A0C230534020	8081A	SO	0.4	2.0	
CBLSB-011-6127-FD	A0C230534024	8081A	SO	0.4	2.0	
CBLSB-011-5261-SO	A0C230534018	8082	SO	0.4	2.0	
CBLSB-011-5261-SOMS	A0C230534018S	8082	SO	0.4	2.0	
CBLSB-011-5261-SOMSD	A0C230534018D	8082	SO	0.4	2.0	
CBLSB-011-5262-SO	A0C230534019	8082	SO	0.4	2.0	
CBLSB-011-5263-SO	A0C230534020	8082	SO	0.4	2.0	
CBLSB-011-6127-FD	A0C230534024	8082	SO	0.4	2.0	
LL11SB-063-5563-SO	A0C230534001	8082	SO	0.8	2.0	
LL11SB-063-5564-SO	A0C230534002	8082	SO	0.8	2.0	
LL11SB-063-5565-SO	A0C230534003	8082	SO	0.8	2.0	
LL11SB-065-5573-SO	A0C230534004	8082	SO	0.8	2.0	
LL11SB-065-5574-SO	A0C230534005	8082	SO	0.8	2.0	
LL11SB-066-5577-SO	A0C230534006	8082	SO	0.8	2.0	
LL11SB-066-5578-SO	A0C230534007	8082	SO	0.8	2.0	
LL11SB-069-5589-SO	A0C230534008	8082	SO	0.8	2.0	
LL11SB-069-5590-SO	A0C230534009	8082	SO	0.8	2.0	
LL11SB-069-5591-SO	A0C230534010	8082	SO	0.8	2.0	
CBLSB-011-5261-SO	A0C230534018	8260B	SO	0.4	2.0	

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: A0C230534

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Sample Temperature (C)	Criteria	
					Lower Limit	Upper Limit
CBLSB-011-5261-SOMS	A0C230534018S	8260B	SO	0.4	2.0	
CBLSB-011-5261-SOMSD	A0C230534018D	8260B	SO	0.4	2.0	
CBLSB-011-5262-SO	A0C230534019	8260B	SO	0.4	2.0	
CBLSB-011-5263-SO	A0C230534020	8260B	SO	0.4	2.0	
CBLSB-011-6127-FD	A0C230534024	8260B	SO	0.4	2.0	
CBLSB-011-5261-SO	A0C230534018	8270C	SO	0.4	2.0	
CBLSB-011-5261-SOMS	A0C230534018S	8270C	SO	0.4	2.0	
CBLSB-011-5261-SOMSD	A0C230534018D	8270C	SO	0.4	2.0	
CBLSB-011-5262-SO	A0C230534019	8270C	SO	0.4	2.0	
CBLSB-011-5262-SOMS	A0C230534019S	8270C	SO	0.4	2.0	
CBLSB-011-5262-SOMSD	A0C230534019D	8270C	SO	0.4	2.0	
CBLSB-011-5263-SO	A0C230534020	8270C	SO	0.4	2.0	
CBLSB-011-6127-FD	A0C230534024	8270C	SO	0.4	2.0	
CBLSB-011-5261-SO	A0C230534018	8270C PAH	SO	0.4	2.0	
CBLSB-011-5261-SOMS	A0C230534018S	8270C PAH	SO	0.4	2.0	
CBLSB-011-5261-SOMSD	A0C230534018D	8270C PAH	SO	0.4	2.0	
CBLSB-011-5262-SO	A0C230534019	8270C PAH	SO	0.4	2.0	
CBLSB-011-5262-SOMS	A0C230534019S	8270C PAH	SO	0.4	2.0	
CBLSB-011-5262-SOMSD	A0C230534019D	8270C PAH	SO	0.4	2.0	
CBLSB-011-5263-SO	A0C230534020	8270C PAH	SO	0.4	2.0	
CBLSB-011-6127-FD	A0C230534024	8270C PAH	SO	0.4	2.0	
LL11SB-063-5563-SO	A0C230534001	8270C PAH	SO	0.8	2.0	
LL11SB-063-5564-SO	A0C230534002	8270C PAH	SO	0.8	2.0	
LL11SB-063-5565-SO	A0C230534003	8270C PAH	SO	0.8	2.0	
LL11SB-065-5573-SO	A0C230534004	8270C PAH	SO	0.8	2.0	
LL11SB-065-5574-SO	A0C230534005	8270C PAH	SO	0.8	2.0	
LL11SB-066-5577-SO	A0C230534006	8270C PAH	SO	0.8	2.0	
LL11SB-066-5578-SO	A0C230534007	8270C PAH	SO	0.8	2.0	
LL11SB-069-5589-SO	A0C230534008	8270C PAH	SO	0.8	2.0	

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: A0C230534

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Sample Temperature (C)	Criteria	
					Lower Limit	Upper Limit
LL11SB-069-5590-SO	A0C230534009	8270C PAH	SO	0.8	2.0	
LL11SB-069-5591-SO	A0C230534010	8270C PAH	SO	0.8	2.0	
CBLSB-007-5249-SO	A0C230534011	8330B	SO	0.4	2.0	
CBLSB-007-5250-SO	A0C230534012	8330B	SO	0.4	2.0	
CBLSB-007-5251-SO	A0C230534013	8330B	SO	0.4	2.0	
CBLSB-008-5253-SO	A0C230534014	8330B	SO	0.4	2.0	
CBLSB-008-5254-SO	A0C230534015	8330B	SO	0.4	2.0	
CBLSB-008-6126-FD	A0C230534023	8330B	SO	0.4	2.0	
CBLSB-010-5257-SO	A0C230534016	8330B	SO	0.4	2.0	
CBLSB-010-5258-SO	A0C230534017	8330B	SO	0.4	2.0	
CBLSB-011-5261-SO	A0C230534018	8330B	SO	0.4	2.0	
CBLSB-011-5261-SOMS	A0C230534018S	8330B	SO	0.4	2.0	
CBLSB-011-5261-SOMSD	A0C230534018D	8330B	SO	0.4	2.0	
CBLSB-011-5262-SO	A0C230534019	8330B	SO	0.4	2.0	
CBLSB-011-5262-SOMS	A0C230534019S	8330B	SO	0.4	2.0	
CBLSB-011-5262-SOMSD	A0C230534019D	8330B	SO	0.4	2.0	
CBLSB-011-5263-SO	A0C230534020	8330B	SO	0.4	2.0	
CBLSB-011-6127-FD	A0C230534024	8330B	SO	0.4	2.0	
CBLSB-012-5265-SO	A0C230534021	8330B	SO	0.4	2.0	
CBLSB-012-5266-SO	A0C230534022	8330B	SO	0.4	2.0	
LL11SB-063-5563-SO	A0C230534001	8330B	SO	0.8	2.0	
LL11SB-063-5564-SO	A0C230534002	8330B	SO	0.8	2.0	
LL11SB-063-5565-SO	A0C230534003	8330B	SO	0.8	2.0	
LL11SB-065-5573-SO	A0C230534004	8330B	SO	0.8	2.0	
LL11SB-065-5574-SO	A0C230534005	8330B	SO	0.8	2.0	
LL11SB-066-5577-SO	A0C230534006	8330B	SO	0.8	2.0	
LL11SB-066-5578-SO	A0C230534007	8330B	SO	0.8	2.0	
LL11SB-069-5589-SO	A0C230534008	8330B	SO	0.8	2.0	
LL11SB-069-5590-SO	A0C230534009	8330B	SO	0.8	2.0	

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: A0C230534

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Sample Temperature (C)	Criteria	
					Lower Limit	Upper Limit
LL11SB-069-5591-SO	A0C230534010	8330B	SO	0.8	2.0	
CBLSB-011-5261-SO	A0C230534018	8330M	SO	0.4	2.0	
CBLSB-011-5261-SOMS	A0C230534018S	8330M	SO	0.4	2.0	
CBLSB-011-5261-SOMSD	A0C230534018D	8330M	SO	0.4	2.0	
CBLSB-011-5262-SO	A0C230534019	8330M	SO	0.4	2.0	
CBLSB-011-5263-SO	A0C230534020	8330M	SO	0.4	2.0	
CBLSB-011-6127-FD	A0C230534024	8330M	SO	0.4	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: A0C230534

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
CBLSB-011-5262-SO	A0C230534019	8270C	SO	3540C	20.0	2.0		14	40		Days	03/23/2010	04/12/2010	04/14/2010
CBLSB-011-5262-SO	A0C230534019S	8270C	SO	3540C	20.0	2.0		14	40		Days	03/23/2010	04/12/2010	04/14/2010
CBLSB-011-5262-SO	A0C230534019D	8270C	SO	3540C	20.0	2.0		14	40		Days	03/23/2010	04/12/2010	04/14/2010
CBLSB-011-6127-FD	A0C230534024	8270C	SO	3540C	20.0	2.0		14	40		Days	03/23/2010	04/12/2010	04/14/2010
LL11SB-066-5577-SO	A0C230534006	8082	SO	3540C	17.0	4.0		14	40		Days	03/22/2010	04/08/2010	04/12/2010
LL11SB-069-5589-SO	A0C230534008	8082	SO	3540C	17.0	4.0		14	40		Days	03/22/2010	04/08/2010	04/12/2010

Laboratory Control Sample / Laboratory Control Sample Duplicate Outlier Report

Method Batch :

Analysis Method :

Analysis Date :

Preparation Batch :

Preparation Type :

Preparation Date :

Lab Reporting Batch :

Lab ID:

LCS Lab Sample ID Matrix Analyte Name			Reported Values		Project Limits (Percent)			
			Percent Recovery	RPD	Rejection Point	Lower Limit	Upper Limit	RPD

Associated Samples

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

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 0083020	Analysis Method : 6020	Analysis Date : 04/01/2010
Preparation Batch : 0083020	Preparation Type : 3050B	Preparation Date : 03/24/2010
Lab Reporting Batch : A0C230534	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
CBLSB-011-5261-SOMS	A0C230534018S	SO	Antimony	29		30.00	75.00	125.00	20.00
CBLSB-011-5261-SOMS	A0C230534018D		Antimony	28		30.00	75.00	125.00	20.00
			Calcium	1360	125	30.00	70.00	130.00	20.00

Associated Samples: All samples in Method Batch	
Client Sample ID	Lab Sample ID
CBLSB-007-5249-SO	A0C230534011
CBLSB-007-5250-SO	A0C230534012
CBLSB-007-5251-SO	A0C230534013
CBLSB-008-5253-SO	A0C230534014
CBLSB-008-5254-SO	A0C230534015
CBLSB-008-6126-FD	A0C230534023
CBLSB-010-5257-SO	A0C230534016
CBLSB-010-5258-SO	A0C230534017
CBLSB-011-5261-SO	A0C230534018
CBLSB-011-5262-SO	A0C230534019
CBLSB-011-5263-SO	A0C230534020
CBLSB-011-6127-FD	A0C230534024
CBLSB-012-5265-SO	A0C230534021
CBLSB-012-5266-SO	A0C230534022
LL11SB-065-5574-SO	A0C230534005
LL11SB-066-5577-SO	A0C230534006
LL11SB-066-5578-SO	A0C230534007
LL11SB-069-5589-SO	A0C230534008
LL11SB-069-5590-SO	A0C230534009
LL11SB-069-5591-SO	A0C230534010

* 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 : 0083021	Analysis Method : 6020	Analysis Date : 03/26/2010
Preparation Batch : 0083021	Preparation Type : 3050B	Preparation Date : 03/24/2010
Lab Reporting Batch : A0C230534	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
LL11SB-063-5563-SOMS	A0C230534001S	SO	Antimony	31		30.00	75.00	125.00	20.00
			Magnesium	538		30.00	70.00	130.00	20.00
LL11SB-063-5563-SOMS	A0C230534001D		Antimony	30		30.00	75.00	125.00	20.00
			Magnesium		78	30.00	70.00	130.00	20.00

Associated Samples: All samples in Method Batch	
Client Sample ID	Lab Sample ID
LL11SB-063-5563-SO	A0C230534001
LL11SB-063-5564-SO	A0C230534002
LL11SB-063-5565-SO	A0C230534003
LL11SB-065-5573-SO	A0C230534004

* 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 : 0083029	Analysis Method : 8082	Analysis Date : 04/07/2010
Preparation Batch : 0083029	Preparation Type : 3540C	Preparation Date : 03/24/2010
Lab Reporting Batch : A0C230534	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
CBLSB-011-5261-SOMS	A0C230534018D	SO	Aroclor 1016		45	0.00	40.00	140.00	39.00
			Aroclor 1260		48	0.00	60.00	130.00	33.00

Associated Samples: Parent sample only	
Client Sample ID	Lab Sample ID
CBLSB-011-5261-SO	A0C230534018

* 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 : 0083037	Analysis Method : 8270C	Analysis Date : 04/08/2010
Preparation Batch : 0083037	Preparation Type : 3540C	Preparation Date : 03/24/2010
Lab Reporting Batch : AOC230534	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
CBLSB-011-5261-SOMS	AOC230534018S	SO	1,2,4-Trichlorobenzene	30		0.00	45.00	110.00	30.00
			1,2-Dichlorobenzene	30		0.00	45.00	95.00	25.00
			1,3-Dichlorobenzene	28		0.00	40.00	100.00	30.00
			1,4-Dichlorobenzene	31		0.00	35.00	105.00	30.00
			2,4,5-Trichlorophenol	35		0.00	50.00	110.00	30.00
			2,4,6-Trichlorophenol	25		0.00	45.00	110.00	29.00
			2,4-Dichlorophenol	38		0.00	45.00	110.00	30.00
			2,4-Dinitrotoluene	39		0.00	50.00	115.00	30.00
			2,6-Dinitrotoluene	39		0.00	50.00	110.00	39.00
			2-Chloronaphthalene	34		0.00	45.00	105.00	28.00
			2-Chlorophenol	36		0.00	45.00	105.00	54.00
			2-Methylnaphthalene	37		0.00	45.00	105.00	27.00
			2-Methylphenol	37		0.00	40.00	105.00	29.00
			2-Nitrophenol	34		0.00	40.00	110.00	30.00
			3,3'-Dichlorobenzidine	1.9		0.00	10.00	130.00	56.00
			3-methylphenol/4-methylphenol	37					
			4,6-Dinitro-2-methylphenol	27		0.00	30.00	135.00	30.00
			4-Bromophenyl phenyl ether	34		0.00	45.00	115.00	30.00
			4-Chloro-3-methylphenol	40		0.00	45.00	115.00	55.00
			4-Chlorophenyl phenyl ether	37		0.00	45.00	110.00	29.00
			4-Nitroaniline	27		0.00	35.00	115.00	30.00
			bis(2-Chloroethoxy)methane	34		0.00	45.00	110.00	30.00
			bis(2-Chloroethyl) ether	32		0.00	40.00	105.00	30.00
			bis(2-Ethylhexyl) phthalate	39		0.00	45.00	125.00	30.00
			Butyl benzyl phthalate	41		0.00	50.00	125.00	35.00
			Carbazole	33		0.00	45.00	115.00	20.00
			Dibenzofuran	38		0.00	50.00	105.00	30.00
			Diethyl phthalate	38		0.00	50.00	115.00	29.00
			Dimethyl phthalate	38		0.00	50.00	110.00	30.00
			Di-n-butyl phthalate	37		0.00	55.00	110.00	24.00
			Hexachlorobenzene	33		0.00	45.00	120.00	30.00
			Hexachlorobutadiene	29		0.00	40.00	115.00	25.00
			Hexachloroethane	23		0.00	35.00	110.00	29.00
			Isophorone	33		0.00	45.00	110.00	30.00
			Nitrobenzene	33		0.00	40.00	115.00	29.00
			N-Nitrosodi-n-propylamine	34		0.00	40.00	115.00	50.00
			N-Nitrosodiphenylamine	34		0.00	50.00	115.00	68.00
			Pentachlorophenol	7.8		0.00	25.00	120.00	87.00
			Phenol	38		0.00	40.00	100.00	30.00
CBLSB-011-5261-SOMS	AOC230534018D		1,2,4-Trichlorobenzene		55	0.00	45.00	110.00	30.00

* 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

CBLSB-011-5261-SOMS A0C230534018D	SO	1,2-Dichlorobenzene	56	0.00	45.00	95.00	25.00
		1,3-Dichlorobenzene	56	0.00	40.00	100.00	30.00
		1,4-Dichlorobenzene	58	0.00	35.00	105.00	30.00
		2,4,5-Trichlorophenol	57	0.00	50.00	110.00	30.00
		2,4,6-Trichlorophenol	72	0.00	45.00	110.00	29.00
		2,4-Dichlorophenol	55	0.00	45.00	110.00	30.00
		2,4-Dimethylphenol	52	0.00	30.00	105.00	30.00
		2,4-Dinitrophenol	41	0.00	15.00	130.00	30.00
		2,4-Dinitrotoluene	55	0.00	50.00	115.00	30.00
		2,6-Dinitrotoluene	53	0.00	50.00	110.00	39.00
		2-Chloronaphthalene	49	0.00	45.00	105.00	28.00
		2-Chlorophenol	55	0.00	45.00	105.00	54.00
		2-Methylnaphthalene	53	0.00	45.00	105.00	27.00
		2-Methylphenol	55	0.00	40.00	105.00	29.00
		2-Nitrophenol	61	0.00	40.00	110.00	30.00
		3,3'-Dichlorobenzidine	0.0	200	0.00	10.00	130.00
		3-methylphenol/4-methylphenol	62				56.00
		4,6-Dinitro-2-methylphenol	60	0.00	30.00	135.00	30.00
		4-Bromophenyl phenyl ether	55	0.00	45.00	115.00	30.00
		4-Chloroaniline	40	0.00	10.00	95.00	30.00
		4-Chlorophenyl phenyl ether	50	0.00	45.00	110.00	29.00
		4-Nitrophenol	48	0.00	15.00	140.00	30.00
		Benzoic acid	79	0.00	0.00	110.00	20.00
		Benzyl alcohol	54	0.00	20.00	125.00	30.00
		bis(2-Chloroethoxy)methane	53	0.00	45.00	110.00	30.00
		bis(2-Chloroethyl) ether	60	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	51	0.00	45.00	125.00	30.00
		Butyl benzyl phthalate	51	0.00	50.00	125.00	35.00
		Carbazole	53	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	52	0.00	50.00	110.00	30.00
		Di-n-butyl phthalate	59	0.00	55.00	110.00	24.00
		Di-n-octyl phthalate	48	0.00	40.00	130.00	30.00
		Hexachlorobenzene	58	0.00	45.00	120.00	30.00
		Hexachlorobutadiene	54	0.00	40.00	115.00	25.00
		Hexachloroethane	57	0.00	35.00	110.00	29.00
		Isophorone	59	0.00	45.00	110.00	30.00
		Nitrobenzene	59	0.00	40.00	115.00	29.00
		N-Nitrosodi-n-propylamine	59	0.00	40.00	115.00	50.00
		Pentachlorophenol	13		0.00	25.00	120.00
		Phenol	54	0.00	40.00	100.00	30.00

Associated Samples: Parent sample only

Client Sample ID	Lab Sample ID
CBLSB-011-5261-SO	A0C230534018

* 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 : 0090417	Analysis Method : 8330B	Analysis Date : 04/05/2010
Preparation Batch : 0090417	Preparation Type : 8330B	Preparation Date : 03/31/2010
Lab Reporting Batch : A0C230534	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
CBLSB-011-5262-SOMS	A0C230534019D	SO	2,4-Dinitrotoluene	0.0	200	0.00	80.00	125.00	30.00
			2-Amino-4,6-dinitrotoluene	477	129	0.00	80.00	125.00	30.00

Associated Samples: Parent sample only	
Client Sample ID	Lab Sample ID
CBLSB-011-5262-SO	A0C230534019

* 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 : 0102247	Analysis Method : 8270C	Analysis Date : 04/14/2010
Preparation Batch : 0102247	Preparation Type : 3540C	Preparation Date : 04/12/2010
Lab Reporting Batch : A0C230534	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
CBLSB-011-5262-SOMS	A0C230534019D	SO	3,3'-Dichlorobenzidine		60	0.00	10.00	130.00	56.00

Associated Samples: Parent sample only	
Client Sample ID	Lab Sample ID
CBLSB-011-5262-SO	A0C230534019

* 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: A0C230534

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
CBLSB-007-5250-SO	A0C230534012	6020	SO	Antimony	U	0.61	0.6097561	mg/kg
				1,3,5-Trinitrobenzene	U	0.26	0.01243902	mg/kg
				1,3-Dinitrobenzene	U	0.26	0.31097561	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.26	0.31097561	mg/kg
				2,4-Dinitrotoluene	U	0.26	0.31097561	mg/kg
				2,6-Dinitrotoluene	U	0.26	0.31097561	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.26	0.31097561	mg/kg
				2-Nitrotoluene	U	0.26	0.31097561	mg/kg
				3-Nitrotoluene	U	0.26	0.31097561	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.26	0.31097561	mg/kg
				Nitrobenzene	U	0.26	0.31097561	mg/kg
CBLSB-007-5251-SO	A0C230534013	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
CBLSB-008-5253-SO	A0C230534014	8330B	SO	1,3,5-Trinitrobenzene	U	0.25	0.01285714	mg/kg
				1,3-Dinitrobenzene	U	0.25	0.32142857	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.25	0.32142857	mg/kg
				2,4-Dinitrotoluene	U	0.25	0.32142857	mg/kg
				2,6-Dinitrotoluene	U	0.25	0.32142857	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.25	0.32142857	mg/kg
				2-Nitrotoluene	U	0.25	0.32142857	mg/kg
				3-Nitrotoluene	U	0.25	0.32142857	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.25	0.32142857	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: A0C230534

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
CBLSB-008-5253-SO	A0C230534014	8330B	SO	4-Nitrotoluene	U	0.50	0.64285714	mg/kg
				Nitrobenzene	U	0.25	0.32142857	mg/kg
CBLSB-008-5254-SO	A0C230534015	8330B	SO	1,3,5-Trinitrobenzene	U	0.25	0.01192771	mg/kg
				1,3-Dinitrobenzene	U	0.25	0.29819277	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.25	0.29819277	mg/kg
				2,4-Dinitrotoluene	U	0.25	0.29819277	mg/kg
				2,6-Dinitrotoluene	U	0.25	0.29819277	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.25	0.29819277	mg/kg
				2-Nitrotoluene	U	0.25	0.29819277	mg/kg
				3-Nitrotoluene	U	0.25	0.29819277	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.25	0.29819277	mg/kg
				4-Nitrotoluene	U	0.50	0.59638554	mg/kg
				Nitrobenzene	U	0.25	0.29819277	mg/kg
CBLSB-011-5261-SO	A0C230534018	8081A	SO	4,4'-DDD	U	2.1	2.09643606	ug/kg
				4,4'-DDE	U	1.8	1.78197065	ug/kg
				4,4'-DDT	U	2.1	2.09643606	ug/kg
				Aldrin	U	4.2	4.19287212	ug/kg
				beta-BHC	U	3.7	3.66876310	ug/kg
				delta-BHC	U	4.2	4.19287212	ug/kg
				Dieldrin	U	1.8	1.78197065	ug/kg
				Endosulfan I	U	1.8	1.78197065	ug/kg
				Endrin	U	1.8	1.78197065	ug/kg
				Endrin ketone	U	2.1	2.09643606	ug/kg
				gamma-Chlordane	U	1.8	1.78197065	ug/kg
				Heptachlor	U	3.7	3.66876310	ug/kg
		8082	SO	Aroclor 1016	U	35	1.78197065	ug/kg
				Aroclor 1221	U	35	1.78197065	ug/kg
				Aroclor 1232	U	35	1.78197065	ug/kg
				Aroclor 1242	U	35	1.78197065	ug/kg
				Aroclor 1248	U	35	1.78197065	ug/kg
				Aroclor 1254	U	35	1.78197065	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: A0C230534

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
CBLSB-011-5261-SO	A0C230534018	8082	SO	Aroclor 1260	U	35	1.78197065	ug/kg
				2-Butanone (MEK)	U	21	20.9643606	ug/kg
				2-Hexanone	U	21	20.9643606	ug/kg
				4-methyl-2-pentanone (MIBK)	U	21	20.9643606	ug/kg
				Acetone	U	21	20.9643606	ug/kg
	8270C			1,2,4-Trichlorobenzene	U	350	345.91195	ug/kg
				1,2-Dichlorobenzene	U	350	345.91195	ug/kg
				1,3-Dichlorobenzene	U	350	345.91195	ug/kg
				1,4-Dichlorobenzene	U	350	345.91195	ug/kg
				2,4,5-Trichlorophenol	U	350	345.91195	ug/kg
				2,4,6-Trichlorophenol	U	350	345.91195	ug/kg
				2,4-Dichlorophenol	U	350	345.91195	ug/kg
				2,4-Dimethylphenol	U	350	345.91195	ug/kg
				2,4-Dinitrophenol	U	840	838.574423	ug/kg
				2,4-Dinitrotoluene	U	350	345.91195	ug/kg
				2,6-Dinitrotoluene	U	350	345.91195	ug/kg
				2-Chloronaphthalene	U	350	345.91195	ug/kg
				2-Chlorophenol	U	350	345.91195	ug/kg
				2-Methylnaphthalene	U	350	345.91195	ug/kg
				2-Methylphenol	U	350	345.91195	ug/kg
				2-Nitroaniline	U	840	838.574423	ug/kg
				2-Nitrophenol	U	350	345.91195	ug/kg
				3,3'-Dichlorobenzidine	U	350	345.91195	ug/kg
				3-methylphenol/4-methylphenol	U	350	#Error	ug/kg
				3-Nitroaniline	U	840	838.574423	ug/kg
				4,6-Dinitro-2-methylphenol	U	840	838.574423	ug/kg
				4-Bromophenyl phenyl ether	U	350	345.91195	ug/kg
				4-Chloro-3-methylphenol	U	350	345.91195	ug/kg
				4-Chloroaniline	U	350	345.91195	ug/kg
				4-Chlorophenyl phenyl ether	U	350	345.91195	ug/kg
				4-Nitroaniline	U	840	838.574423	ug/kg
				4-Nitrophenol	U	840	838.574423	ug/kg
				Benzoic acid	U	840	838.574423	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: A0C230534

Lab ID: TALCAN

							Reporting Limit			
Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Criteria*	Units		
CBLSB-011-5261-SO	A0C230534018	8270C	SO	Benzyl alcohol	U	350	345.91195	ug/kg		
				bis(2-Chloroethoxy)methane	U	350	345.91195	ug/kg		
				bis(2-Chloroethyl) ether	U	350	345.91195	ug/kg		
				Bis(2-chloroisopropyl) ether	U	350	345.91195	ug/kg		
				Butyl benzyl phthalate	U	350	345.91195	ug/kg		
				Dibenzofuran	U	350	345.91195	ug/kg		
				Diethyl phthalate	U	350	345.91195	ug/kg		
				Dimethyl phthalate	U	350	345.91195	ug/kg		
				Di-n-octyl phthalate	U	350	345.91195	ug/kg		
				Hexachlorobenzene	U	350	345.91195	ug/kg		
				Hexachlorobutadiene	U	350	345.91195	ug/kg		
				HEXACHLOROCYCLOPENTADIE	U	350	#Error	ug/kg		
				Hexachloroethane	U	350	345.91195	ug/kg		
				Isophorone	U	350	345.91195	ug/kg		
				Nitrobenzene	U	350	345.91195	ug/kg		
				N-Nitrosodi-n-propylamine	U	350	345.91195	ug/kg		
				N-Nitrosodiphenylamine	U	350	345.91195	ug/kg		
				Pentachlorophenol	U	350	345.91195	ug/kg		
				Phenol	U	350	345.91195	ug/kg		
				8330B	1,3,5-Trinitrobenzene	U	0.25	0.01037736	mg/kg	
		1,3-Dinitrobenzene		U	0.25	0.25943396	mg/kg			
		2,4,6-Trinitrotoluene (TNT)		U	0.25	0.25943396	mg/kg			
		2,4-Dinitrotoluene		U	0.25	0.25943396	mg/kg			
		2,6-Dinitrotoluene		U	0.25	0.25943396	mg/kg			
		2-Amino-4,6-dinitrotoluene		U	0.25	0.25943396	mg/kg			
		2-Nitrotoluene		U	0.25	0.25943396	mg/kg			
		4-Amino-2,6-Dinitrotoluene		U	0.25	0.25943396	mg/kg			
		4-Nitrotoluene		U	0.50	0.51886792	mg/kg			
		Nitrobenzene		U	0.25	0.25943396	mg/kg			
		CBLSB-011-5262-SO		A0C230534019	353.2 Modified SO	Nitrocellulose	U	6.1	6.09756098	mg/kg
					8081A	4,4'-DDE	U	2.1	2.07317073	ug/kg
						Aldrin	U	4.9	4.87804878	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: A0C230534

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit	
							Criteria*	Units
CBLSB-011-5262-SO	A0C230534019	8081A	SO	delta-BHC	U	4.9	4.87804878	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
				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

* 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: A0C230534

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
CBLSB-011-5262-SO	A0C230534019	8260B	SO	Trichloroethene	U	6.1	6.09756098	ug/kg
				Vinyl chloride	U	6.1	6.09756098	ug/kg
		8270C		Carbazole	U	61	60.9756098	ug/kg
CBLSB-011-5263-SO	A0C230534020	8081A	SO	beta-BHC	U	4.4	4.375	ug/kg
				Heptachlor	U	4.4	4.375	ug/kg
CBLSB-011-6127-FD	A0C230534024	353.2 Modified	SO	Nitrocellulose	U	6.1	6.09756098	mg/kg
				4,4'-DDE	U	2.1	2.07317073	ug/kg
		8081A		Aldrin	U	4.9	4.87804878	ug/kg
				beta-BHC	U	4.3	4.26829268	ug/kg
				delta-BHC	U	4.9	4.87804878	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
				Heptachlor	U	4.3	4.26829268	ug/kg
				Methoxychlor	U	6.1	6.09756098	ug/kg
				1,1,1-Trichloroethane	U	6.1	6.09756098	ug/kg
				1,1,2,2-Tetrachloroethane	U	6.1	6.09756098	ug/kg
				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

* 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: A0C230534

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
CBLSB-011-6127-FD	A0C230534024	8260B	SO	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
				Carbazole	U	61	60.9756098	ug/kg
CBLSB-012-5265-SO	A0C230534021	8330B	SO	1,3,5-Trinitrobenzene	U	0.26	0.01391892	mg/kg
				1,3-Dinitrobenzene	U	0.26	0.34797297	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.26	0.34797297	mg/kg
				2,4-Dinitrotoluene	U	0.26	0.34797297	mg/kg
				2,6-Dinitrotoluene	U	0.26	0.34797297	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.26	0.34797297	mg/kg
				2-Nitrotoluene	U	0.26	0.34797297	mg/kg
				3-Nitrotoluene	U	0.26	0.34797297	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.26	0.34797297	mg/kg
				4-Nitrotoluene	U	0.52	0.69594595	mg/kg
				Nitrobenzene	U	0.26	0.34797297	mg/kg
CBLSB-012-5266-SO	A0C230534022	8330B	SO	1,3,5-Trinitrobenzene	U	0.24	0.01158537	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

* 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: A0C230534

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit		
							Criteria*	Units	
CBL5B-012-5266-SO	A0C230534022	8330B	SO	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	
				LL11SB-063-5563-SO	A0C230534001	8082	SO	Aroclor 1016	U
Aroclor 1221	U	49	2.5	ug/kg					
Aroclor 1232	U	49	2.5	ug/kg					
Aroclor 1242	U	49	2.5	ug/kg					
Aroclor 1248	U	49	2.5	ug/kg					
Aroclor 1254	U	49	2.5	ug/kg					
Aroclor 1260	U	49	2.5	ug/kg					
8330B				1,3,5-Trinitrobenzene	U	0.26	0.015	mg/kg	
				1,3-Dinitrobenzene	U	0.26	0.375	mg/kg	
				2,4,6-Trinitrotoluene (TNT)	U	0.26	0.375	mg/kg	
				2,4-Dinitrotoluene	U	0.26	0.375	mg/kg	
				2,6-Dinitrotoluene	U	0.26	0.375	mg/kg	
				2-Amino-4,6-dinitrotoluene	U	0.26	0.375	mg/kg	
				2-Nitrotoluene	U	0.26	0.375	mg/kg	
				3-Nitrotoluene	U	0.26	0.375	mg/kg	
				4-Amino-2,6-Dinitrotoluene	U	0.26	0.375	mg/kg	
				Nitrobenzene	U	0.26	0.375	mg/kg	
LL11SB-063-5564-SO	A0C230534002	6020	SO	Antimony	U	0.61	0.6097561	mg/kg	
LL11SB-063-5565-SO	A0C230534003	7471A	SO	Mercury	U	0.13	0.12658228	mg/kg	
				8082	Aroclor 1016	U	42	2.15189873	ug/kg
				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	

* 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: A0C230534

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
LL11SB-063-5565-SO	A0C230534003	8082	SO	Aroclor 1260	U	42	2.15189873	ug/kg
LL11SB-065-5573-SO	A0C230534004	8082	SO	Aroclor 1016	U	43	2.20779221	ug/kg
				Aroclor 1221	U	43	2.20779221	ug/kg
				Aroclor 1232	U	43	2.20779221	ug/kg
				Aroclor 1242	U	43	2.20779221	ug/kg
				Aroclor 1248	U	43	2.20779221	ug/kg
				Aroclor 1254	U	43	2.20779221	ug/kg
				Aroclor 1260	U	43	2.20779221	ug/kg
		8330B		1,3,5-Trinitrobenzene	U	0.26	0.01324675	mg/kg
				1,3-Dinitrobenzene	U	0.26	0.33116883	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.26	0.33116883	mg/kg
				2,4-Dinitrotoluene	U	0.26	0.33116883	mg/kg
				2,6-Dinitrotoluene	U	0.26	0.33116883	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.26	0.33116883	mg/kg
				2-Nitrotoluene	U	0.26	0.33116883	mg/kg
				3-Nitrotoluene	U	0.26	0.33116883	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.26	0.33116883	mg/kg
				Nitrobenzene	U	0.26	0.33116883	mg/kg
LL11SB-065-5574-SO	A0C230534005	7471A	SO	Mercury	U	0.12	0.11904762	mg/kg
		8330B		1,3,5-Trinitrobenzene	U	0.25	0.01178571	mg/kg
				1,3-Dinitrobenzene	U	0.25	0.29464286	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.25	0.29464286	mg/kg
				2,4-Dinitrotoluene	U	0.25	0.29464286	mg/kg
				2,6-Dinitrotoluene	U	0.25	0.29464286	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.25	0.29464286	mg/kg
				2-Nitrotoluene	U	0.25	0.29464286	mg/kg
				3-Nitrotoluene	U	0.25	0.29464286	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.25	0.29464286	mg/kg
				4-Nitrotoluene	U	0.50	0.58928571	mg/kg
				Nitrobenzene	U	0.25	0.29464286	mg/kg
LL11SB-066-5577-SO	A0C230534006	6020	SO	Antimony	U	0.70	0.69444444	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: A0C230534

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
LL11SB-066-5577-SO	A0C230534006	8082	SO	Aroclor 1016	U	46	2.36111111	ug/kg
				Aroclor 1016	U	46	2.36111111	ug/kg
				Aroclor 1221	U	46	2.36111111	ug/kg
				Aroclor 1221	U	46	2.36111111	ug/kg
				Aroclor 1232	U	46	2.36111111	ug/kg
				Aroclor 1232	U	46	2.36111111	ug/kg
				Aroclor 1242	U	46	2.36111111	ug/kg
				Aroclor 1242	U	46	2.36111111	ug/kg
				Aroclor 1248	U	46	2.36111111	ug/kg
				Aroclor 1248	U	46	2.36111111	ug/kg
				Aroclor 1254	U	46	2.36111111	ug/kg
				Aroclor 1254	U	46	2.36111111	ug/kg
				Aroclor 1260	U	46	2.36111111	ug/kg
				Aroclor 1260	U	46	2.36111111	ug/kg
LL11SB-069-5590-SO	A0C230534009	8082	SO	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
				Aroclor 1260	U	40	2.04819277	ug/kg
		8330B		1,3,5-Trinitrobenzene	U	0.25	0.01192771	mg/kg
				1,3-Dinitrobenzene	U	0.25	0.29819277	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.25	0.29819277	mg/kg
				2,4-Dinitrotoluene	U	0.25	0.29819277	mg/kg
				2,6-Dinitrotoluene	U	0.25	0.29819277	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.25	0.29819277	mg/kg
				2-Nitrotoluene	U	0.25	0.29819277	mg/kg
				3-Nitrotoluene	U	0.25	0.29819277	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.25	0.29819277	mg/kg
				4-Nitrotoluene	U	0.50	0.59638554	mg/kg
				Nitrobenzene	U	0.25	0.29819277	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: A0C230534

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit	
							Criteria*	Units
LL11SB-069-5591-SO	A0C230534010	8082	SO	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

* 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

Continuing Calibration (CCV) Outlier Report (Organics)

There are no Organic Continuing Calibrations with outliers

Continuing Calibration (CCAL) Outlier Report (Inorganics)

There are no Inorganic Continuing Calibrations with outliers

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

Lab Report Batch: A0C230534

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
CBLSB-007-5249-SO	A0C230534011	6020	SO	Antimony	J	0.099	0.64	mg/kg
				Cadmium	J	0.10	0.26	mg/kg
				Silver	J	0.029	0.64	mg/kg
				Sodium	J	30.3	128	mg/kg
				Thallium	J	0.17	0.26	mg/kg
		7471A		Mercury	J	0.024	0.13	mg/kg
CBLSB-007-5250-SO	A0C230534012	6020		Cadmium	J	0.070	0.24	mg/kg
				Silver	J	0.021	0.61	mg/kg
				Sodium	J	31.7	121	mg/kg
				Thallium	J	0.16	0.24	mg/kg
				Mercury	J	0.022	0.12	mg/kg
CBLSB-007-5251-SO	A0C230534013	6020		Antimony	J	0.080	0.61	mg/kg
				Cadmium	J	0.048	0.25	mg/kg
				Silver	J	0.018	0.61	mg/kg
				Sodium	J	31.5	123	mg/kg
				Thallium	J	0.15	0.25	mg/kg
		7471A		Mercury	J	0.032	0.12	mg/kg
CBLSB-008-5253-SO	A0C230534014	6020		Antimony	J	0.087	0.65	mg/kg
				Cadmium	J	0.069	0.26	mg/kg
				Silver	J	0.048	0.65	mg/kg
				Sodium	J	24.2	129	mg/kg
				Thallium	J	0.12	0.26	mg/kg
		7471A		Mercury	J	0.046	0.13	mg/kg
CBLSB-008-5254-SO	A0C230534015	6020		Antimony	J	0.082	0.60	mg/kg
				Cadmium	J	0.044	0.24	mg/kg
				Silver	J	0.021	0.60	mg/kg
				Sodium	J	27.7	121	mg/kg
				Thallium	J	0.14	0.24	mg/kg
		7471A		Mercury	J	0.049	0.12	mg/kg
CBLSB-008-6126-FD	A0C230534023	6020		Antimony	J	0.11	0.66	mg/kg
				Cadmium	J	0.052	0.26	mg/kg
				Silver	J	0.047	0.66	mg/kg
				Sodium	J	26.9	131	mg/kg
				Thallium	J	0.14	0.26	mg/kg
		7471A		Mercury	J	0.026	0.13	mg/kg
CBLSB-010-5257-SO	A0C230534016	6020		Antimony	J	0.17	0.72	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: A0C230534

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
CBLSB-010-5257-SO	A0C230534016	6020	SO	Cadmium	J	0.11	0.29	mg/kg
				Silver	J	0.066	0.72	mg/kg
				Sodium	J	28.9	143	mg/kg
				Thallium	J	0.13	0.29	mg/kg
		7471A		Mercury	J	0.067	0.14	mg/kg
		8330B		2,4-Dinitrotoluene	J	0.025	0.24	mg/kg
				2-Amino-4,6-dinitrotoluene	J	0.16	0.24	mg/kg
				4-Amino-2,6-Dinitrotoluene	J	0.13	0.24	mg/kg
CBLSB-010-5258-SO	A0C230534017	6020		Antimony	J	0.15	0.67	mg/kg
				Cadmium	J	0.079	0.27	mg/kg
				Silver	J	0.024	0.67	mg/kg
				Sodium	J	28.7	134	mg/kg
				Thallium	J	0.13	0.27	mg/kg
		7471A		Mercury	J	0.058	0.13	mg/kg
		8330B		2-Amino-4,6-dinitrotoluene	J	0.073	0.24	mg/kg
				4-Amino-2,6-Dinitrotoluene	J	0.051	0.24	mg/kg
CBLSB-011-5261-SO	A0C230534018	6020		Antimony	J	0.069	0.52	mg/kg
				Cadmium	J	0.15	0.21	mg/kg
				Silver	J	0.016	0.52	mg/kg
				Sodium	J	24.9	105	mg/kg
				Thallium	J	0.087	0.21	mg/kg
		7471A		Mercury	J	0.037	0.10	mg/kg
		8260B		Methylene chloride	J B	1.5	5.2	ug/kg
		8270C		bis(2-Ethylhexyl) phthalate	J B	23	350	ug/kg
				Carbazole	J	29	52	ug/kg
				Di-n-butyl phthalate	J B	23	350	ug/kg
CBLSB-011-5262-SO	A0C230534019	6020		3-Nitrotoluene	J	0.018	0.25	mg/kg
				Antimony	J	0.089	0.61	mg/kg
				Cadmium	J	0.086	0.24	mg/kg
				Silver	J	0.024	0.61	mg/kg
				Sodium	J	29.4	121	mg/kg
				Thallium	J	0.14	0.24	mg/kg
		7471A		Mercury	J	0.041	0.12	mg/kg
		8260B		Methylene chloride	J B	2.6	6.1	ug/kg
CBLSB-011-5263-SO	A0C230534020	6020		Antimony	J	0.14	0.62	mg/kg
				Cadmium	J	0.11	0.25	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: A0C230534

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
CBLSB-011-5263-SO	A0C230534020	6020	SO	Silver	J	0.023	0.62	mg/kg
				Sodium	J	27.5	125	mg/kg
				Thallium	J	0.16	0.25	mg/kg
				Mercury	J	0.047	0.12	mg/kg
				Methylene chloride	J B	2.1	6.2	ug/kg
				bis(2-Ethylhexyl) phthalate	J B	27	410	ug/kg
				Di-n-butyl phthalate	J B	27	410	ug/kg
CBLSB-011-6127-FD	A0C230534024	6020		Antimony	J	0.12	0.61	mg/kg
				Cadmium	J	0.069	0.24	mg/kg
				Silver	J	0.018	0.61	mg/kg
				Sodium	J	28.9	122	mg/kg
				Thallium	J	0.14	0.24	mg/kg
				Mercury	J	0.033	0.12	mg/kg
				Methylene chloride	J B	2.4	6.1	ug/kg
CBLSB-012-5265-SO	A0C230534021	6020		Antimony	J	0.11	0.68	mg/kg
				Cadmium	J	0.22	0.27	mg/kg
				Silver	J	0.026	0.68	mg/kg
				Sodium	J	25.2	136	mg/kg
				Thallium	J	0.15	0.27	mg/kg
				Mercury	J	0.052	0.14	mg/kg
CBLSB-012-5266-SO	A0C230534022	6020		Antimony	J	0.085	0.61	mg/kg
				Cadmium	J	0.058	0.24	mg/kg
				Silver	J	0.017	0.61	mg/kg
				Sodium	J	27.6	122	mg/kg
				Thallium	J	0.14	0.24	mg/kg
				Mercury	J	0.067	0.12	mg/kg
LL11SB-063-5563-SO	A0C230534001	6020		Antimony	J	0.10	0.74	mg/kg
				Cadmium	J	0.24	0.29	mg/kg
				Silver	J	0.025	0.74	mg/kg
				Sodium	J	74.3	147	mg/kg
				Thallium	J	0.13	0.29	mg/kg
				Mercury	J	0.041	0.15	mg/kg
LL11SB-063-5564-SO	A0C230534002	6020		Cadmium	J	0.088	0.24	mg/kg
				Silver	J	0.015	0.61	mg/kg
				Sodium	J	62.2	122	mg/kg
				Thallium	J	0.15	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: A0C230534

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
LL11SB-063-5565-SO	A0C230534003	6020	SO	Cadmium	J	0.049	0.25	mg/kg
				Silver	J	0.020	0.63	mg/kg
				Sodium	J	65.8	127	mg/kg
				Thallium	J	0.11	0.25	mg/kg
LL11SB-065-5573-SO	A0C230534004	6020		Antimony	J	0.087	0.65	mg/kg
				Cadmium	J	0.073	0.26	mg/kg
				Silver	J	0.017	0.65	mg/kg
				Sodium	J	30.4	129	mg/kg
				Thallium	J	0.13	0.26	mg/kg
LL11SB-065-5574-SO	A0C230534005	6020		Mercury	J	0.043	0.13	mg/kg
				Antimony	J	0.092	0.60	mg/kg
				Cadmium	J	0.13	0.24	mg/kg
				Silver	J	0.013	0.60	mg/kg
				Sodium	J	51.2	120	mg/kg
LL11SB-066-5577-SO	A0C230534006	6020		Thallium	J	0.19	0.24	mg/kg
				Cadmium	J	0.13	0.28	mg/kg
				Calcium	J	180	279	mg/kg
				Silver	J	0.050	0.70	mg/kg
				Sodium	J	30.3	139	mg/kg
LL11SB-066-5578-SO	A0C230534007	6020		Thallium	J	0.18	0.28	mg/kg
				Mercury	J	0.053	0.14	mg/kg
				Antimony	J	0.086	0.59	mg/kg
				Cadmium	J	0.054	0.24	mg/kg
				Silver	J	0.015	0.59	mg/kg
LL11SB-069-5589-SO	A0C230534008	6020		Sodium	J	39.7	119	mg/kg
				Thallium	J	0.14	0.24	mg/kg
				Mercury	J	0.045	0.12	mg/kg
				Silver	J	0.036	0.70	mg/kg
				Sodium	J	33.0	140	mg/kg
LL11SB-069-5590-SO	A0C230534009	6020		Thallium	J	0.10	0.28	mg/kg
				Mercury	J	0.054	0.14	mg/kg
				Cadmium	J	0.058	0.24	mg/kg
				Silver	J	0.024	0.60	mg/kg
				Sodium	J	47.6	120	mg/kg
LL11SB-069-5591-SO	A0C230534010	6020		Thallium	J	0.10	0.24	mg/kg
				Cadmium	J	0.060	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: A0C230534

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
LL11SB-069-5591-SO	A0C230534010	6020	SO	Silver	J	0.022	0.60	mg/kg
				Sodium	J	52.4	120	mg/kg
				Thallium	J	0.11	0.24	mg/kg
		7471A		Mercury	J	0.068	0.12	mg/kg

Method Blank Outlier Report

Lab Reporting Batch : A0C230534

Lab ID: TALCAN

Analysis Method : 6020

Analysis Date : 04/01/2010

Preparation Type : 3050B

Preparation Date : 03/24/2010

Method Blank Lab Sample ID : A0C240000020B

Preparation Batch : 0083020

Nickel					
	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	0.19	1.0	mg/kg	J	

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

Method Blank Outlier Report

Lab Reporting Batch : A0C230534

Lab ID: TALCAN

Analysis Method : 8270C

Analysis Date : 04/08/2010

Preparation Type : 3540C

Preparation Date : 03/24/2010

Method Blank Lab Sample ID : A0C240000037B

Preparation Batch : 0083037

bis(2-Ethylhexyl) phthalate	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	23	330	ug/kg	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
CBLSB-011-5261-SO	A0C230534018	1	23	J B	ug/kg
CBLSB-011-5263-SO	A0C230534020	1	27	J B	ug/kg

Di-n-butyl phthalate	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	22	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
CBLSB-011-5261-SO	A0C230534018	1	23	J B	ug/kg
CBLSB-011-5263-SO	A0C230534020	1	27	J B	ug/kg

Method Blank Outlier Report

Lab Reporting Batch : A0C230534

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
CBLSB-011-5261-SO	A0C230534018	1	1.5	J B	ug/kg
CBLSB-011-5262-SO	A0C230534019	1	2.6	J B	ug/kg
CBLSB-011-5263-SO	A0C230534020	1	2.1	J B	ug/kg
CBLSB-011-6127-FD	A0C230534024	1	2.4	J B	ug/kg

Method Blank Outlier Report

Lab Reporting Batch : A0C230534

Lab ID: TALCAN

Analysis Method : 8270C

Analysis Date : 04/14/2010

Preparation Type : 3540C

Preparation Date : 04/12/2010

Method Blank Lab Sample ID : A0D120000247B

Preparation Batch : 0102247

2-Methylnaphthalene	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	31	330	ug/kg	J	

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

Surrogate Recovery Outlier Report

Lab Report Batch: A0C230534

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	
CBLSB-011-5261-SO	A0C230534018	8260B	1	SO	4-Bromofluorobenzene	80	85.0	120.0	10.0	All Target
CBLSB-011-5261-SOMS	A0C230534018S	8082	1	SO	Decachlorobiphenyl	58	60.0	125.0	10.0	All Target
		8260B			4-Bromofluorobenzene	82	85.0	120.0	10.0	All Target
CBLSB-011-5261-SOMSD	A0C230534018D	8260B	1	SO	4-Bromofluorobenzene	84	85.0	120.0	10.0	All Target
CBLSB-011-5262-SO	A0C230534019	8260B	1	SO	4-Bromofluorobenzene	83	85.0	120.0	10.0	All Target
					Toluene-d8	82	85.0	115.0	10.0	All Target
CBLSB-011-5263-SO	A0C230534020	8260B	1	SO	4-Bromofluorobenzene	84	85.0	120.0	10.0	All Target
CBLSB-011-6127-FD	A0C230534024	8260B	1	SO	4-Bromofluorobenzene	82	85.0	120.0	10.0	All Target
					Toluene-d8	83	85.0	115.0	10.0	All Target
LL11SB-066-5577-SO	A0C230534006	8082	1	SO	Decachlorobiphenyl	42	60.0	125.0	10.0	All Target
LL11SB-069-5589-SO	A0C230534008	8082	1	SO	Decachlorobiphenyl	48	60.0	125.0	10.0	All Target
					Decachlorobiphenyl	17	60.0	125.0	10.0	All Target

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

**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: 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	

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: 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

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 : 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

Associated Samples	
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

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-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

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-062-5726-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	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
		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

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-062-5726-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	Nitroguanidine	U	0.25	0.30555556	mg/kg		
		ASYSB-062-5727-SO	A0C310489009	353.2 Modified SO	Nitrocellulose	U	6.2	6.17283951	mg/kg
				6020	Antimony	U	0.62	0.61728395	mg/kg
				8081A	Aldrin	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	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 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 - 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	U	0.24	0.0117284
		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	U	42	2.15189873	ug/kg	
			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	1,2,4-Trichlorobenzene	U	420	417.721519	ug/kg	
			1,2-Dichlorobenzene	U	420	417.721519	ug/kg	
			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	SO	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: $100 / (100 - \text{Percent Moisture})$

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	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 - 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 - 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
LNWSW-086-5279-SW	A0C310489023	8330B	AQ	PETN	U	1.1	1.06	ug/L
				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 - 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 - 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 - 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
				Thallium	J	0.12	0.24	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	0.25	mg/kg
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		Mercury	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	Units
							Limit	
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	mg/kg	
			Cadmium	J	0.17	0.25	mg/kg	
			Silver	J	0.058	0.61	mg/kg	
			Sodium	J	72.4	123	mg/kg	
			Thallium	J	0.16	0.25	mg/kg	
		7471A	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	
		Thallium	J	0.15	0.25	mg/kg		
		8260B	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	

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-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			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
LNWSD-084-5273-SD	A0C310489017	6020		bis(2-Ethylhexyl) phthalate	J	420	460	ug/kg
				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			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
LNWSW-083-5276-SW	A0C310489020	6020	AQ	1,3,5-Trinitrobenzene	J PG	0.023	0.25	mg/kg
				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

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
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

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
WSASD-040-5652-SD	A0C310489025	6020	SO	Silver	J	0.0030	0.58	mg/kg
				Sodium	J	26.0	115	mg/kg
				bis(2-Ethylhexyl) phthalate	J	34	380	ug/kg
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
				Acetone	J	2.3	10	ug/L
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
				Acetone	J	2.7	10	ug/L
		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:

			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

**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: A0D130516

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Sample Temperature (C)	Criteria	
					Lower Limit	Upper Limit
LL11SS-079-5605-SO	A0D130516011	353.2 Modified	SO	1.3	2.0	6.0
LL11SS-079-5605-SOMS	A0D130516011S	353.2 Modified	SO	1.3	2.0	6.0
LL11SS-079-5605-SOMSD	A0D130516011D	353.2 Modified	SO	1.3	2.0	6.0
LL11SS-079-5605-SO	A0D130516011	8081A	SO	1.3	2.0	
LL11SS-079-5605-SOMS	A0D130516011S	8081A	SO	1.3	2.0	
LL11SS-079-5605-SOMSD	A0D130516011D	8081A	SO	1.3	2.0	
LL11SS-070-5596-SO	A0D130516001	8082	SO	1.3	2.0	
LL11SS-071-5597-SO	A0D130516002	8082	SO	1.3	2.0	
LL11SS-074-5600-SO	A0D130516005	8082	SO	1.3	2.0	
LL11SS-076-5602-SO	A0D130516007	8082	SO	1.3	2.0	
LL11SS-076-6183-FD	A0D130516008	8082	SO	1.3	2.0	
LL11SS-077-5603-SO	A0D130516009	8082	SO	1.3	2.0	
LL11SS-078-5604-SO	A0D130516010	8082	SO	1.3	2.0	
LL11SS-079-5605-SO	A0D130516011	8082	SO	1.3	2.0	
LL11SS-079-5605-SOMS	A0D130516011S	8082	SO	1.3	2.0	
LL11SS-079-5605-SOMSD	A0D130516011D	8082	SO	1.3	2.0	
LL11SS-080-5606-SO	A0D130516012	8082	SO	1.3	2.0	
LL11SS-081-5607-SO	A0D130516013	8082	SO	1.3	2.0	
LL11SS-079-5605-SO	A0D130516011	8260B	SO	1.3	2.0	
LL11SS-079-5605-SOMS	A0D130516011S	8260B	SO	1.3	2.0	
LL11SS-079-5605-SOMSD	A0D130516011D	8260B	SO	1.3	2.0	
LL11SS-079-5605-SO	A0D130516011	8270C	SO	1.3	2.0	
LL11SS-079-5605-SOMS	A0D130516011S	8270C	SO	1.3	2.0	
LL11SS-079-5605-SOMSD	A0D130516011D	8270C	SO	1.3	2.0	
LL11SS-070-5596-SO	A0D130516001	8270C PAH	SO	1.3	2.0	
LL11SS-071-5597-SO	A0D130516002	8270C PAH	SO	1.3	2.0	
LL11SS-074-5600-SO	A0D130516005	8270C PAH	SO	1.3	2.0	
LL11SS-076-5602-SO	A0D130516007	8270C PAH	SO	1.3	2.0	
LL11SS-076-6183-FD	A0D130516008	8270C PAH	SO	1.3	2.0	

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: A0D130516

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Sample Temperature (C)	Criteria	
					Lower Limit	Upper Limit
LL11SS-077-5603-SO	A0D130516009	8270C PAH	SO	1.3	2.0	
LL11SS-078-5604-SO	A0D130516010	8270C PAH	SO	1.3	2.0	
LL11SS-079-5605-SO	A0D130516011	8270C PAH	SO	1.3	2.0	
LL11SS-079-5605-SOMS	A0D130516011S	8270C PAH	SO	1.3	2.0	
LL11SS-079-5605-SOMSD	A0D130516011D	8270C PAH	SO	1.3	2.0	
LL11SS-080-5606-SO	A0D130516012	8270C PAH	SO	1.3	2.0	
LL11SS-081-5607-SO	A0D130516013	8270C PAH	SO	1.3	2.0	
LL11SS-070-5596-SO	A0D130516001	8330B	SO	1.3	2.0	
LL11SS-071-5597-SO	A0D130516002	8330B	SO	1.3	2.0	
LL11SS-074-5600-SO	A0D130516005	8330B	SO	1.3	2.0	
LL11SS-076-5602-SO	A0D130516007	8330B	SO	1.3	2.0	
LL11SS-076-6183-FD	A0D130516008	8330B	SO	1.3	2.0	
LL11SS-077-5603-SO	A0D130516009	8330B	SO	1.3	2.0	
LL11SS-078-5604-SO	A0D130516010	8330B	SO	1.3	2.0	
LL11SS-079-5605-SO	A0D130516011	8330B	SO	1.3	2.0	
LL11SS-079-5605-SOMS	A0D130516011S	8330B	SO	1.3	2.0	
LL11SS-079-5605-SOMSD	A0D130516011D	8330B	SO	1.3	2.0	
LL11SS-080-5606-SO	A0D130516012	8330B	SO	1.3	2.0	
LL11SS-081-5607-SO	A0D130516013	8330B	SO	1.3	2.0	
LL11SS-079-5605-SO	A0D130516011	8330M	SO	1.3	2.0	
LL11SS-079-5605-SOMS	A0D130516011S	8330M	SO	1.3	2.0	
LL11SS-079-5605-SOMSD	A0D130516011D	8330M	SO	1.3	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 : 0104017	Analysis Method : 6020	Analysis Date : 04/27/2010
Preparation Batch : 0104017	Preparation Type : 3050B	Preparation Date : 04/14/2010
Lab Reporting Batch : A0D130516	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
LL11SS-079-5605-SOMS	A0D130516011S	SO	Antimony	25		30.00	75.00	125.00	20.00
			Zinc	205		30.00	10.00	199.00	20.00
LL11SS-079-5605-SOMS	A0D130516011D		Antimony	27		30.00	75.00	125.00	20.00
			Zinc	202		30.00	10.00	199.00	20.00

Associated Samples: All samples in Method Batch	
Client Sample ID	Lab Sample ID
L10SS-076-5532-SO	A0D130516014
L10SS-077-5533-SO	A0D130516015
L10SS-078-5534-SO	A0D130516016
LL11SS-070-5596-SO	A0D130516001
LL11SS-071-5597-SO	A0D130516002
LL11SS-072-5598-SO	A0D130516003
LL11SS-073-5599-SO	A0D130516004
LL11SS-074-5600-SO	A0D130516005
LL11SS-075-5601-SO	A0D130516006
LL11SS-076-5602-SO	A0D130516007
LL11SS-076-6183-FD	A0D130516008
LL11SS-077-5603-SO	A0D130516009
LL11SS-078-5604-SO	A0D130516010
LL11SS-079-5605-SO	A0D130516011
LL11SS-080-5606-SO	A0D130516012
LL11SS-081-5607-SO	A0D130516013

* 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 : 0104028	Analysis Method : 8081A	Analysis Date : 05/05/2010
Preparation Batch : 0104028	Preparation Type : 3540C	Preparation Date : 04/14/2010
Lab Reporting Batch : A0D130516	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
LL11SS-079-5605-SOMS	A0D130516011S	SO	4,4'-DDD	143		0.00	30.00	135.00	35.00
			Endosulfan II	0.0		0.00	35.00	140.00	27.00
LL11SS-079-5605-SOMS	A0D130516011D		Endosulfan II		200	0.00	35.00	140.00	27.00

Associated Samples: Parent sample only	
Client Sample ID	Lab Sample ID
LL11SS-079-5605-SO	A0D130516011

* 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 : 0113226	Analysis Method : 8270C	Analysis Date : 05/03/2010
Preparation Batch : 0113226	Preparation Type : 3540C	Preparation Date : 04/23/2010
Lab Reporting Batch : A0D130516	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
LL11SS-079-5605-SOMS	A0D130516011S	SO	1,2-Dichlorobenzene	44		0.00	45.00	95.00	25.00
			3,3'-Dichlorobenzidine	0.0		0.00	10.00	130.00	56.00
LL11SS-079-5605-SOMS	A0D130516011D		1,2-Dichlorobenzene		35	0.00	45.00	95.00	25.00
			1,3-Dichlorobenzene		35	0.00	40.00	100.00	30.00
			1,4-Dichlorobenzene		34	0.00	35.00	105.00	30.00
			3,3'-Dichlorobenzidine	0.0		0.00	10.00	130.00	56.00
			4-Chloroaniline		48	0.00	10.00	95.00	30.00
			Bis(2-chloroisopropyl) ether		32	0.00	20.00	115.00	30.00
			Hexachloroethane		34	0.00	35.00	110.00	29.00

Associated Samples: Parent sample only	
Client Sample ID	Lab Sample ID
LL11SS-079-5605-SO	A0D130516011

* 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 : 0104034	Analysis Method : 8270C	Analysis Date : 04/22/2010
Preparation Batch : 0104034	Preparation Type : 3540C	Preparation Date : 04/14/2010
Lab Reporting Batch : A0D130516	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
A0D140000034C	SO	Pentachlorophenol	18		10.00	25.00	120.00	87.00

Associated Samples	
Client Sample ID	Lab Sample ID
LL11SS-070-5596-SO	A0D130516001
LL11SS-071-5597-SO	A0D130516002
LL11SS-074-5600-SO	A0D130516005
LL11SS-076-5602-SO	A0D130516007
LL11SS-080-5606-SO	A0D130516012
LL11SS-081-5607-SO	A0D130516013

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: A0D130516

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit	
							Criteria*	Units
LL11SS-070-5596-SO	A0D130516001	8082	SO	Aroclor 1016	U	39	2	ug/kg
				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
				Aroclor 1260	U	39	2	ug/kg
		8330B		1,3,5-Trinitrobenzene	U	0.24	0.01117647	mg/kg
				1,3-Dinitrobenzene	U	0.24	0.27941176	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.24	0.27941176	mg/kg
				2,4-Dinitrotoluene	U	0.24	0.27941176	mg/kg
				2,6-Dinitrotoluene	U	0.24	0.27941176	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.24	0.27941176	mg/kg
				2-Nitrotoluene	U	0.24	0.27941176	mg/kg
				3-Nitrotoluene	U	0.24	0.27941176	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.24	0.27941176	mg/kg
				4-Nitrotoluene	U	0.48	0.55882353	mg/kg
				Nitrobenzene	U	0.24	0.27941176	mg/kg
				LL11SS-071-5597-SO	A0D130516002	8082	SO	Aroclor 1016
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
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: $100 / (100 - \text{Percent Moisture})$

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: A0D130516

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit	
							Criteria*	Units
LL11SS-071-5597-SO	A0D130516002	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
LL11SS-074-5600-SO	A0D130516005	8082	SO	Aroclor 1016	U	39	1.97674419	ug/kg
				Aroclor 1221	U	39	1.97674419	ug/kg
				Aroclor 1232	U	39	1.97674419	ug/kg
				Aroclor 1242	U	39	1.97674419	ug/kg
				Aroclor 1248	U	39	1.97674419	ug/kg
				Aroclor 1260	U	39	1.97674419	ug/kg
LL11SS-076-5602-SO	A0D130516007	8082	SO	Aroclor 1016	U	42	2.15189873	ug/kg
				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
LL11SS-077-5603-SO	A0D130516009	6020	SO	Antimony	U	0.62	0.61728395	mg/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	
LL11SS-078-5604-SO	A0D130516010	8082	SO	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

* 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: A0D130516

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit	
							Criteria*	Units
LL11SS-078-5604-SO	A0D130516010	8082	SO	Aroclor 1248	U	41	2.09876543	ug/kg
				Aroclor 1260	U	41	2.09876543	ug/kg
LL11SS-079-5605-SO	A0D130516011	8081A	SO	4,4'-DDD	U	12	11.9047619	ug/kg
				4,4'-DDT	U	12	11.9047619	ug/kg
				Aldrin	U	24	23.8095238	ug/kg
				alpha-BHC	U	15	14.8809524	ug/kg
				alpha-Chordane	U	18	17.8571429	ug/kg
				beta-BHC	U	21	20.8333333	ug/kg
				delta-BHC	U	24	23.8095238	ug/kg
				Endosulfan II	U	15	14.8809524	ug/kg
				Endosulfan sulfate	U	18	17.8571429	ug/kg
				Endrin aldehyde	U	18	17.8571429	ug/kg
				Endrin ketone	U	12	11.9047619	ug/kg
				gamma-BHC (Lindane)	U	15	14.8809524	ug/kg
				Heptachlor	U	21	20.8333333	ug/kg
				Heptachlor epoxide	U	15	14.8809524	ug/kg
				Methoxychlor	U	30	29.7619048	ug/kg
				Toxaphene	U	400	398.809524	ug/kg
		8260B		2-Butanone (MEK)	U	24	23.8095238	ug/kg
				2-Hexanone	U	24	23.8095238	ug/kg
				4-methyl-2-pentanone (MIBK)	U	24	23.8095238	ug/kg
				Acetone	U	24	23.8095238	ug/kg
				Xylene (Total)	U	12	11.9047619	ug/kg
LL11SS-080-5606-SO	A0D130516012	6020	SO	Antimony	U	0.72	0.71428571	mg/kg
		8330B		1,3,5-Trinitrobenzene	U	0.26	0.01457143	mg/kg
				1,3-Dinitrobenzene	U	0.26	0.36428571	mg/kg
				2,4,6-Trinitrotoluene (TNT)	U	0.26	0.36428571	mg/kg
				2,4-Dinitrotoluene	U	0.26	0.36428571	mg/kg
				2,6-Dinitrotoluene	U	0.26	0.36428571	mg/kg
				2-Amino-4,6-dinitrotoluene	U	0.26	0.36428571	mg/kg
				2-Nitrotoluene	U	0.26	0.36428571	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: A0D130516

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
LL11SS-080-5606-SO	A0D130516012	8330B	SO	3-Nitrotoluene	U	0.26	0.36428571	mg/kg
				4-Amino-2,6-Dinitrotoluene	U	0.26	0.36428571	mg/kg
				Nitrobenzene	U	0.26	0.36428571	mg/kg
LL11SS-081-5607-SO	A0D130516013	8082	SO	Aroclor 1016	U	56	2.88135593	ug/kg
				Aroclor 1221	U	56	2.88135593	ug/kg
				Aroclor 1232	U	56	2.88135593	ug/kg
				Aroclor 1242	U	56	2.88135593	ug/kg
				Aroclor 1248	U	56	2.88135593	ug/kg
				Aroclor 1254	U	56	2.88135593	ug/kg
				Aroclor 1260	U	56	2.88135593	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

Continuing Calibration (CCV) Outlier Report (Organics)

There are no Organic Continuing Calibrations with outliers

Continuing Calibration (CCAL) Outlier Report (Inorganics)

There are no Inorganic Continuing Calibrations with outliers

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

Lab Report Batch: A0D130516

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
L10SS-076-5532-SO	A0D130516014	7196A	SO	Chromium, hexavalent	J	0.69	0.95	mg/kg
LL11SS-070-5596-SO	A0D130516001	6020		Cadmium	J	0.17	0.24	mg/kg
				Silver	J	0.029	0.59	mg/kg
				Sodium	J	85.9	118	mg/kg
				Thallium	J	0.15	0.24	mg/kg
		7471A		Mercury	J	0.044	0.12	mg/kg
LL11SS-071-5597-SO	A0D130516002	6020		Antimony	J	0.10	0.62	mg/kg
				Cadmium	J	0.13	0.25	mg/kg
				Silver	J	0.028	0.62	mg/kg
				Sodium	J	34.5	124	mg/kg
				Thallium	J	0.16	0.25	mg/kg
		7471A		Mercury	J	0.031	0.12	mg/kg
LL11SS-072-5598-SO	A0D130516003	7196A		Chromium, hexavalent	J	0.44	0.98	mg/kg
LL11SS-074-5600-SO	A0D130516005	6020		Antimony	J	0.12	0.58	mg/kg
				Cadmium	J	0.17	0.23	mg/kg
				Silver	J	0.027	0.58	mg/kg
				Sodium	J	36.2	117	mg/kg
				Thallium	J	0.15	0.23	mg/kg
		7471A		Mercury	J	0.018	0.12	mg/kg
		8082		Aroclor 1254	J	20	39	ug/kg
LL11SS-075-5601-SO	A0D130516006	7196A		Chromium, hexavalent	J	0.71	0.95	mg/kg
LL11SS-076-5602-SO	A0D130516007	6020		Antimony	J	0.26	0.64	mg/kg
				Cadmium	J	0.071	0.25	mg/kg
				Silver	J	0.024	0.64	mg/kg
				Sodium	J	36.0	127	mg/kg
				Thallium	J	0.16	0.25	mg/kg
		7471A		Mercury	J	0.039	0.13	mg/kg
LL11SS-076-6183-FD	A0D130516008	6020		Antimony	J	0.15	0.63	mg/kg
				Cadmium	J	0.080	0.25	mg/kg
				Silver	J	0.024	0.63	mg/kg
				Sodium	J	33.2	125	mg/kg
				Thallium	J	0.16	0.25	mg/kg
		7471A		Mercury	J	0.034	0.13	mg/kg
LL11SS-077-5603-SO	A0D130516009	6020		Cadmium	J	0.057	0.25	mg/kg
				Silver	J	0.032	0.62	mg/kg
				Sodium	J	35.2	124	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: A0D130516

Lab ID: TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
LL11SS-077-5603-SO	A0D130516009	6020	SO	Thallium	J	0.21	0.25	mg/kg
LL11SS-078-5604-SO	A0D130516010			Antimony	J	0.16	0.62	mg/kg
				Silver	J	0.035	0.62	mg/kg
				Sodium	J	40.6	124	mg/kg
				Thallium	J	0.16	0.25	mg/kg
		7471A		Mercury	J	0.031	0.12	mg/kg
		8082		Aroclor 1254	J	35	41	ug/kg
LL11SS-079-5605-SO	A0D130516011	6020		Antimony	J	0.084	0.59	mg/kg
				Cadmium	J	0.092	0.24	mg/kg
				Calcium	J B	113	238	mg/kg
				Silver	J	0.021	0.59	mg/kg
				Sodium	J	22.5	119	mg/kg
				Thallium	J	0.11	0.24	mg/kg
		7471A		Mercury	J	0.020	0.12	mg/kg
LL11SS-080-5606-SO	A0D130516012	6020		Silver	J	0.053	0.72	mg/kg
				Sodium	J	38.5	143	mg/kg
				Thallium	J	0.16	0.29	mg/kg
		7471A		Mercury	J	0.037	0.14	mg/kg
LL11SS-081-5607-SO	A0D130516013	6020		Antimony	J	0.12	0.85	mg/kg
				Silver	J	0.060	0.85	mg/kg
				Sodium	J	48.2	170	mg/kg
				Thallium	J	0.21	0.34	mg/kg
		7471A		Mercury	J	0.040	0.17	mg/kg
		8330B		Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetr	J	0.013	0.25	mg/kg

Method Blank Outlier Report

Lab Reporting Batch : A0D130516

Lab ID: TALCAN

Analysis Method : 6020

Analysis Date : 04/27/2010

Preparation Type : 3050B

Preparation Date : 04/14/2010

Method Blank Lab Sample ID : A0D140000017B

Preparation Batch : 0104017

Aluminum	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	8.3	10.0	mg/kg	J	

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

Calcium	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	43.2	200	mg/kg	J	

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

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
LL11SS-079-5605-SO	A0D130516011	1	113	J B	mg/kg

Copper	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	0.13	0.50	mg/kg	J	

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

Potassium	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	3.8	100	mg/kg	J	

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

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

**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