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Appendix **E**

Data Usability Summary Reports

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Consolidated Edison Company of New York, Inc. - Krasdale

Data Usability Summary Report (DUSR)

HUNTS POINT, BRONX, NEW YORK

Volatile Organic Compounds (VOCs), Semivolatile Organic Compounds (SVOCs), Diesel Range Organics (DRO), Polychlorinated Biphenyls (PCBs), Metals, and Miscellaneous Analyses

SDG #: 200-11278

Analyses Performed By:
TestAmerica Laboratories
Burlington, Vermont

Report #: 17010R
Review Level: Tier III
Project: B0043027.0002.08000

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) # 200-11278 for samples collected in association with the Consolidated Edison Krasdale site. The review was conducted as a Tier III evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis					
					VOC	SVOC	PCB	DRO	MET	MISC
SB-11 (1-2.5)	200-11278-1	Soil	6/12/2012		X	X	X		X	X
SB-25 (3.5-5)	200-11278-2	Soil	6/12/2012		X	X	X		X	X
DUP-01-06122012	200-11278-3	Soil	6/12/2012	SB-25 (3.5-5)	X	X	X		X	X
SB-28 (3-5)	200-11278-4	Soil	6/12/2012		X	X	X		X	X
TB-06132012	200-11278-5	Water	6/13/2012		X					
SB-03 (4.5-5)	200-11326-1	Soil	6/14/2012		X	X	X		X	X
SB-06 (4-5)	200-11326-2	Soil	6/14/2012		X	X	X		X	X
SB-11 (5-6)	200-11326-3	Soil	6/14/2012		X	X	X		X	X
SB-25 (12.7-13.7)	200-11326-4	Soil	6/14/2012		X	X	X		X	X
TB-06142012	200-11326-5	Water	6/14/2012		X					
SB-04 (0-1)	200-11346-1	Soil	6/14/2012		X	X	X		X	X
SB-07 (4.5-5)	200-11346-2	Soil	6/14/2012		X	X	X		X	X
SB-29 (17-18)	200-11346-3	Soil	6/15/2012		X	X	X		X	X
SB-29 (18-19)	200-11346-4	Soil	6/15/2012		X	X	X		X	X
SB-27 (17.5-18.5)	200-11346-5	Soil	6/15/2012		X	X	X		X	X
SB-01 (10-10.8)	200-11346-6	Soil	6/15/2012		X	X	X	X	X	X
SB-01 (12-13)	200-11346-7	Soil	6/15/2012		X	X	X	X	X	X
SB-26 (10-11)	200-11346-8	Soil	6/14/2012		X	X	X		X	X
SB-26 (12-13)	200-11346-9	Soil	6/14/2012		X	X	X		X	X
TB-06152012	200-11346-10	Water	6/15/2012		X					
SB-02 (11.5-13.1)	200-11384-1	Soil	6/15/2012		X	X	X	X	X	X
SB-02 (14-15)	200-11384-2	Soil	6/15/2012		X	X	X	X	X	X
SB-12 (11-12)	200-11384-3	Soil	6/16/2012		X	X	X		X	X

Note: Soil sample results were reported on a dry weight basis except for pH, corrosivity, and ammonia, which were reported on an as-received (wet weight) basis.

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

QA - Quality Assurance

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Methods 8260B, 8270C, 8082A, and 8015B as referenced in NYSDEC-ASP. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999 and USEPA Region II SOPs associated with USEPA SW-846 Validating Volatile Organic Compounds by GC/MS SW-846 Method 8260B (SOP HW-24 Revision 2, October 2006), Validating Semivolatile Organic Compounds by GC/MS SW-846 Method 8270D (SOP HW-22 Revision 3, October 2006), and Validating PCB Compounds by GC SW-846 Method 8082A (SOP HW-45 Revision 1, October 2006).

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected as unusable. The compound may or may not be present in the sample.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260B	Soil	48 hours from collection to extraction and 14 days from collection to analysis	Cool to 4±2 °C
	Water	14 days from collection to analysis	Cool to 4±2 °C; pH < 2 with HCl

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e. laboratory method blanks, trip blanks, and equipment rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure sample storage contamination. Rinse blanks also measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All compounds associated with the QA blanks exhibited a concentration less than the MDL, with the exception of the compounds listed in the following table. Sample results associated with QA blank contamination that were greater than the BAL resulted in the removal of the laboratory qualifier (B) of data. Sample results less than the BAL associated with the following sample locations were qualified as listed in the following table.

Sample Location	Analytes	Sample Result	Qualification
SB-11 (1-2.5) SB-04 (0-1)	1,2,4-Trichlorobenzene Methylene Chloride Toluene	Detected sample results < RL and < BAL	"UB" at the RL
SB-11 (5-6)	1,2,4-Trichlorobenzene Carbon disulfide Methylene Chloride		
SB-25 (12.7-13.7) SB-29 (17-18)	Methylene Chloride Toluene		
SB-07 (4.5-5)	1,2,4-Trichlorobenzene Toluene		
SB-29 (18-19)	Methylene Chloride		
SB-01 (12-13)	Carbon disulfide Methylene Chloride		
SB-12 (11-12)	Chloroform Methylene Chloride		

Sample Location	Analytes	Sample Result	Qualification
SB-02 (14-15)	1,2,4-Trichlorobenzene Chloroform Ethylbenzene Toluene	Detected sample results < RL and < BAL	"UB" at the RL

RL Reporting limit

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration (ICV)

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) or a correlation coefficient greater than 0.99, and a RRF value greater than control limit (0.05).

4.2 Continuing Calibration (CCV)

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

Sample Locations	Initial / Continuing	Compound	Criteria
SB-11 (1-2.5) SB-11 (5-6) SB-25 (12.7-13.7) SB-04 (0-1) SB-07 (4.5-5) SB-29 (17-18) SB-29 (18-19) SB-27 (17.5-18.5) SB-01 (12-13) SB-02 (14-15) SB-12 (11-12)	Initial %RSD	Chloroethane	16.2 %
		Acetone	19.6 %
		2-Butanone	20.4 %

Sample Locations	Initial / Continuing	Compound	Criteria
SB-25 (3.5-5) DUP-01-06122012 SB-28 (3-5) TB-06132012 SB-03 (4.5-5) SB-06 (4-5) TB-06142012 SB-01 (10-10.8) SB-26 (10-11) SB-26 (12-13) TB-06152012	Continuing %D	Dichlorodifluoromethane	-21.7 % (decrease in sensitivity)
		Bromomethane	-24.0 % (decrease in sensitivity)
		4-Methyl-2-pentanone	+20.8 % (increase in sensitivity)
SB-02 (11.5-13.1)	Continuing %D	Dichlorodifluoromethane	-24.9 % (decrease in sensitivity)
		Chloromethane	-28.6 % (decrease in sensitivity)
		Bromomethane	-53.0 % (decrease in sensitivity)
		Acetone	+22.4 % (increase in sensitivity)
		2-Butanone	+20.2 % (increase in sensitivity)
SB-11 (1-2.5)	Continuing %D	2-Butanone	-23.7 % (decrease in sensitivity)
		1,2-Dibromo-3-chloropropane	-21.9 % (decrease in sensitivity)
SB-25 (12.7-13.7) SB-04 (0-1) SB-07 (4.5-5) SB-29 (17-18) SB-29 (18-19) SB-27 (17.5-18.5)	Continuing %D	2-Butanone	+75.5 % (increase in sensitivity)
		2-Hexanone	+86.6 % (increase in sensitivity)
		4-Methyl-2-pentanone	+106.8 % (increase in sensitivity)
		Acetone	+115.9 % (increase in sensitivity)
SB-11 (5-6) SB-01 (12-13)	Continuing %D	2-Butanone	-21.4 % (decrease in sensitivity)
SB-02 (14-15) SB-12 (11-12)	Continuing %D	Dichlorodifluoromethane	-30.1 % (decrease in sensitivity)
		Bromomethane	-33.5 % (decrease in sensitivity)

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Initial/Continuing	Criteria	Sample Result	Qualification
Initial and Continuing Calibration	RRF < 0.05	Non-detect	R
		Detect	J
	RRF < 0.01[1]	Non-detect	R
		Detect	J

Initial/Continuing	Criteria	Sample Result	Qualification
	RRF > 0.05 or RRF > 0.01[1]	Non-detect	No Action
		Detect	
Initial Calibration	%RSD > 15% or a correlation coefficient < 0.99	Non-detect	UJ
		Detect	J
Continuing Calibration	%D >20% and <90% (increase in sensitivity)	Non-detect	No Action
		Detect	J
	%D >20% and <90% (decrease in sensitivity)	Non-detect	UJ
		Detect	J
	%D >90%	Non-detect	R
		Detect	J

[1] RRF of 0.01 only applies to typically poor responding compounds (e.g. ketones, 1,4-dioxane, etc.)

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

Sample locations associated with surrogates exhibiting recoveries outside of the control limits are presented in the following table.

Sample Locations	Surrogate	Recovery
SB-25 (12.7-13.7) SB-07 (4.5-5)	1,2-Dichlorobenzene-d_4 1,2-Dichloroethane-d_4 Toluene-d_8	AC
	4-Bromofluorobenzene	> UL

UL Upper control limit
AC Acceptable

The criteria used to evaluate the surrogate recoveries are presented in the following table. In the case of a surrogate deviation, the sample results associated with the deviant fraction are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> UL	Non-detect	No Action
	Detect	J
< LL but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J

Control Limit	Sample Result	Qualification
Surrogates diluted below the calibration curve	Non-detect	UJ[1]
	Detect	J[1]

[1] A more concentrated analysis was not performed with surrogate compounds within the calibration range; therefore, no determination of extraction efficiency could be made.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC analysis exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

Sample locations associated with internal standards exhibiting responses outside of the control limits are presented in the following table. The laboratory reanalyzed the samples, which exhibited similar responses. The results from the initial analyses were reported.

Sample Location	Internal Standard	Response
SB-25 (12.7-13.7) SB-04 (0-1)	Fluorobenzene Chlorobenzene-d_5	AC
	1,4-Dichlorobenzene-d_4	< LL but > 25%

AC Acceptable

The criteria used to evaluate the internal standard responses are presented in the following table. In the case of an internal standard deviation, the compounds quantitated under the deviant internal standard are qualified as documented in the table below.

Control limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No action
	Detect	J
< the lower control limit (LL) but > 25%	Non-detect	UJ
	Detect	J
< 25%	Non-detect	R
	Detect	J

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The spiked compounds used in the MS/MSD analysis must exhibit recoveries within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS and MSD results must be within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSDs performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD spiking concentration by a factor of four or greater. Sample results associated with MS/MSD exceedances where the parent samples are not site-specific are not qualified.

Sample location SB-12 (11-12) was used in the MS/MSD analysis. Sample locations associated with the MS/MSD exhibiting recoveries outside of the control limits are presented in the following table.

Sample Location	Compound	MS Recovery	MSD Recovery
SB-12 (11-12)	Carbon disulfide Methyl tert-butyl ether 1,1-Dichloroethane Chloroform	< LL but > 10%	< LL but > 10%
	Bromomethane 1,1,2-Trichloro-1,2,2-trichfluoroethane trans-1,2-Dichloroethene cis-1,2-Dichloroethene 1,1,1-Trichloroethane Carbon tetrachloride Benzene Trichloroethene 1,2-Dichloropropane Bromodichloromethane cis-1,3-Dichloropropene trans-1,3-Dichloropropene Tetrachloroethene o-Xylene	AC	< LL but > 10%

AC Acceptable

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of MS/MSD deviations, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
Parent sample concentration > 4x the MS/MSD spiking solution concentration.	Detect	No Action
	Non-detect	

Sample locations associated with MS/MSDs exhibiting RPDs greater than of the control limit are presented in the following table.

Sample Location	Compounds
SB-12 (11-12)	Dichlorodifluoromethane Chloromethane 1,1,1-Trichloroethane Cyclohexane Carbon tetrachloride Methylcyclohexane

Sample Location	Compounds
SB-12 (11-12)	Tetrachloroethene m&p-Xylene Styrene

The criteria used to evaluate the RPD between the MS and MSD are presented in the following table. In the case of RPD deviations, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> UL	Non-detect	UJ
	Detect	J

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The spiked compounds used in the LCS analysis must exhibit recoveries within the laboratory-established acceptance limits.

Sample locations associated with LCS analyses exhibiting recoveries outside of the control limits are presented in the following table.

Sample Locations	Compounds	LCS Recovery
SB-25 (12.7-13.7) SB-04 (0-1) SB-07 (4.5-5) SB-29 (17-18) SB-29 (18-19) SB-27 (17.5-18.5)	2-Butanone 2-Hexanone 4-Methyl-2-pentanone Acetone	> UL

The criteria used to evaluate the LCS recoveries are presented in the following table. In the case of any LCS deviations, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J

9. Field Duplicate Sample Analysis

The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. A control limit of 50% for water matrices and 100% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate

sample concentrations are less than or equal to five times the reporting limit (RL), a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results (in µg/kg) for the field duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
SB-25 (3.5-5) / DUP-01-06122012	Benzene	530 J	760	AC
	Carbon disulfide	680 J	1200	AC
	Chloroform	2100	2100	0.0 %
	Ethylbenzene	1200	1500	22.2 %
	Toluene	390 J	370 J	AC
	Xylenes, Total	4900	4300	13.0 %

AC Acceptable
J Estimated (result is < RL)

The field duplicate sample results are acceptable.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW-846 8260B	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X	X		
B. Equipment/Field blanks					X
C. Trip blanks		X	X		
Laboratory Control Sample (LCS) Accuracy (%R)		X	X		
Laboratory Control Sample Duplicate (LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X	X		
Matrix Spike Duplicate (MSD) %R		X	X		
MS/MSD Precision RPD		X	X		
Field/Laboratory Duplicate Sample RPD		X		X	
Surrogate Spike %R		X	X		
Dilution Factor		X		X	
Moisture Content		X		X	
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X	X		
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X	X		
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X	X		
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Quantitation transcriptions/calculations		X		X	
E. Reporting limits adjusted for sample dilutions		X		X	

%R Percent recovery
RPD Relative percent difference
%RSD Relative standard deviation
%D Percent difference

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8270C	Water	7 days from collection to extraction and 40 days from extraction to analysis	Cool to 4±2 °C
	Soil	14 days from collection to extraction and 40 days from extraction to analysis	Cool to 4±2 °C

All samples were extracted and analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e. laboratory method blanks and equipment rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Target compounds were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution are acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration Verification (ICV)

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration Verification (CCV)

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

Sample Location	Initial/ Continuing	Compound	Criteria
SB-04 (0-1) SB-07 (4.5-5)	Continuing %D	Benzoic acid	-26.4 % (decrease in sensitivity)
SB-11 (5-6) SB-29 (17-18) SB-29 (18-19) SB-27 (17.5-18.5) SB-01 (12-13)	Continuing %D	Indeno[1,2,3-cd]pyrene	-26.6 % (decrease in sensitivity)

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Initial/Continuing	Criteria	Sample Result	Qualification
Initial and Continuing Calibration	RRF < 0.05	Non-detect	R
		Detect	J
	RRF < 0.01[1]	Non-detect	R
		Detect	J
	RRF > 0.05 or RRF > 0.01[1]	Non-detect	No Action
		Detect	
Initial Calibration	%RSD > 15% or a correlation coefficient < 0.99	Non-detect	UJ
		Detect	J
Continuing Calibration	%D > 20% (increase in sensitivity)	Non-detect	No Action
		Detect	J
	%D > 20% (decrease in sensitivity)	Non-detect	UJ
		Detect	J

[1] RRF of 0.01 only applies to typically poor responding compounds (e.g. ketones, 1,4-dioxane, etc.)

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. SVOC analysis requires that two of the three SVOC surrogate compounds within each fraction exhibit recoveries within the laboratory-established acceptance limits, and that all SVOC surrogate recoveries be greater than ten percent.

Sample locations associated with surrogates exhibiting recoveries outside of the control limits presented in the following table.

Sample Locations	Surrogate	Recovery
SB-28 (3-5) SB-01 (10-10.8) SB-26 (10-11)	2,4,6-Tribromophenol 2-Fluorophenol Phenol-d_5 Nitrobenzene-d_5 2-Fluorobiphenyl Terphenyl-d_{14}	D

The criteria used to evaluate the surrogate recoveries are presented in the following table. In the case of surrogate deviations, the sample results associated with the deviant fraction are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
Surrogates diluted below the calibration range	Non-detect	J[1]
	Detect	

[1] A more concentrated analysis was not performed with surrogate compounds within the calibration range; therefore, no determination of extraction efficiency could be made.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the SVOC analysis exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within the control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit recoveries within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS and MSD results must be within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. Sample results associated with MS/MSD exceedances where the parent samples are not site-specific are not qualified.

Sample locations SB-04 (0-1) and SB-12 (11-12) were used in the MS/MSD analyses. Sample locations associated with the MS/MSD exhibiting recoveries outside of the control limits are presented in the following table.

Sample Location	Compound	MS Recovery	MSD Recovery
SB-04 (0-1)	Hexachlorocyclopentadiene	< 10%	< 10%
	Fluoranthene Benzo[a]pyrene Indeno[1,2,3-cd]pyrene Dibenz(a,h)anthracene Benzo[g,h,i]perylene	> UL	> UL
	Benzo[b]fluoranthene	AC	> UL
SB-12 (11-12)	2,4-Dinitrophenol 4,6-Dinitro-2-methylphenol Benzoic acid	< 10%	< 10%

AC Acceptable

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of MS/MSD deviations, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
Parent sample concentration > 4x the MS/MSD spiking solution concentration.	Detect	No Action
	Non-detect	

Sample locations associated with MS/MSDs exhibiting RPDs greater than of the control limit are presented in the following table.

Sample Location	Compound
SB-12 (11-12)	4,6-Dinitro-2-methylphenol Pentachlorophenol

The criteria used to evaluate the RPD between the MS and MSD are presented in the following table. In the case of RPD deviations, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> UL	Non-detect	UJ
	Detect	J

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The spiked compounds used in the LCS analysis must exhibit recoveries within the laboratory-established acceptance limits.

Sample locations associated with LCS analyses exhibiting recoveries outside of the control limits are presented in the following table.

Sample Locations	Compound	LCS Recovery
SB-11 (1-2.5) SB-25 (3.5-5) DUP-01-06122012 SB-28 (3-5)DL SB-03 (4.5-5) SB-06 (4-5) SB-11 (5-6) SB-25 (12.7-13.7) SB-29 (17-18) SB-29 (18-19) SB-27 (17.5-18.5) SB-01 (10-10.8)DL SB-01 (12-13) SB-26 (10-11)DL SB-26 (12-13)	1,3-Dichlorobenzene 1,4-Dichlorobenzene	> UL

The criteria used to evaluate the LCS recoveries are presented in the following table. In the case of any LCS deviations, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J

9. Field Duplicate Sample Analysis

The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. A control limit of 50% for water matrices and 100% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the reporting limit (RL), a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results (in µg/kg) for the field duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
SB-25 (3.5-5) / DUP-01-06122012	2-Methylnaphthalene	2900	6200	72.5 %
	Acenaphthylene	530 J	690 J	AC
	Anthracene	1400	2100 J	AC
	Benzo[a]anthracene	3500	5700	47.8 %
	Benzo[a]pyrene	3000	4300	35.6 %
	Benzo[b]fluoranthene	6200	11000	55.8 %
	Benzo[g,h,i]perylene	5300	7200	30.4 %
	Benzo[k]fluoranthene	2800	5500	65.1 %
	Carbazole	220 J	3300 U	AC
	Chrysene	4700	8000	52.0 %
	Dibenz(a,h)anthracene	1500	1800	18.2 %
	Dibenzofuran	920 J	1700 J	AC
	Fluoranthene	3500	4600	27.2 %
	Fluorene	1500	2400 J	AC
	Indeno[1,2,3-cd]pyrene	5400	7600	AC
	Naphthalene	14000	27000	63.4 %
	Phenanthrene	4700	8000	52.0 %
	Pyrene	4200	7600	57.6 %

AC Acceptable
J Estimated (result is < RL)

The field duplicate sample results are acceptable.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR SVOCs

SVOCs: SW-846 8270C	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding Times		X		X	
Reporting Limits (units)		X		X	
Blanks					
A. Method Blanks		X		X	
B. Equipment/Field Blanks					X
Laboratory Control Sample (LCS) Accuracy (%R)		X	X		
Laboratory Control Sample Duplicate (LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X	X		
Matrix Spike Duplicate (MSD) %R		X	X		
MS/MSD RPD		X	X		
Field/Laboratory Duplicate Sample RPD		X		X	
Surrogate Spike %R		X	X		
Dilution Factor		X		X	
Moisture Content		X		X	
Tier III Validation					
System Performance and Column Resolution		X		X	
Initial Calibration %RSDs		X		X	
Continuing Calibration RRFs		X		X	
Continuing Calibration %Ds		X	X		
Instrument Tune and Performance Check		X		X	
Ion Abundance Criteria for Each Instrument Used		X		X	
Internal Standards		X		X	
Compound Identification and Quantitation					
A. Reconstructed Ion Chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of Sample Compounds Within the Established RT Windows		X		X	
D. Quantitation transcriptions/calculations		X		X	
E. Reporting Limits Adjusted for Sample Dilutions		X		X	

%R Percent Recovery
RPD Relative Percent Difference
%RSD Relative Standard Deviation
%D Percent Difference

DIESEL RANGE ORGANICS (DRO) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
DRO SW-846 8015B	Soil	14 days from collection to extraction and 40 days from extraction to analysis	Cool to 4±2 °C
	Water	7 days from collection to extraction and 40 days from extraction to analysis	Cool to 4±2 °C

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e. laboratory method blanks and equipment rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected analyte in an associated blank is calculated for QA blanks containing concentrations greater than the reporting limit (RL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All analytes associated with the QA blanks exhibited a concentration less than the MDL, with the exception of the compounds listed in the following table. Sample results associated with QA blank contamination that were greater than the BAL resulted in the removal of the laboratory qualifier (B) of data. Sample results less than the BAL associated with the following sample locations were qualified as listed in the following table.

Sample Location	Analyte	Sample Result	Qualification
SB-01 (12-13) SB-02 (14-15)	Diesel Range Organics [C10-C28]	Detected sample results < RL and < BAL	"UB" at the RL

RL Reporting limit

3. System Performance

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration (ICV)

A maximum RSD of 20% or a correlation coefficient of greater than 0.99 is allowed.

4.2 Continuing Calibration (CCV)

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (15%).

All calibration criteria were within the control limits.

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. The analysis requires surrogate compounds exhibit recoveries within the laboratory-established acceptance limits.

Sample locations associated with surrogates exhibiting recoveries outside of the control limits presented in the following table.

Sample Locations	Surrogate	Recovery
SB-01 (10-10.8) SB-02 (11.5-13.1)	o-Terphenyl	D

Diluted (D)

The criteria used to evaluate the surrogate recoveries are presented in the following table. In the case of a surrogate deviation, the sample results associated with the deviant fraction are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> UL	Non-detect	No Action
	Detect	J
< LL but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
D – Surrogates diluted below the calibration curve	Non-detect	J[1]
	Detect	

Note: [1] - A more concentrated analysis was not performed with surrogate compounds within the calibration range therefore no determination of extraction efficiency could be made.

6. Matrix Spike/Matrix Spike Duplicate Sample (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The spiked analytes used in the MS/MSD analysis must exhibit recoveries within the laboratory-established

acceptance limits. The relative percent difference (RPD) between the MS and MSD results must be within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSDs performed on sample locations where the analyte concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. Sample results associated with MS/MSD exceedances where the parent samples are not site-specific are not qualified.

The MS/MSD analysis was not performed on a sample location within this SDG.

7. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The spiked analytes used in the LCS analysis must exhibit recoveries within the laboratory-established acceptance limits.

All analytes associated with the LCS analysis exhibited recoveries within the control limits.

8. Field Duplicate Sample Analysis

The field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 50% for water matrices and 100% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the reporting limit (RL), a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

DRO analysis were not designated for the field duplicate samples.

9. Analyte Identification

The retention times of all quantitated peaks must fall within the calculated retention time windows.

All identified analytes met the specified criteria.

10. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR DRO

DRO: SW-846 8015B	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY (GC/FID)					
Tier II Validation					
Holding Times		X		X	
Reporting Limits (Units)		X		X	
Blanks					
A. Method Blanks		X	X		
B. Equipment Blanks					X
Laboratory Control Sample (LCS) Accuracy (%R)		X		X	
Laboratory Control Sample Duplicate (LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R					X
Matrix Spike Duplicate (MSD) %R					X
MS/MSD RPD					X
Field/Laboratory Duplicate Sample RPD					X
Surrogate Spike %R		X	X		
Dilution Factor		X		X	
Moisture Content		X		X	
Tier III Validation					
Initial Calibration %RSDs		X		X	
Continuing Calibration %Ds		X		X	
System Performance and Column Resolution		X		X	
Compound Identification and Quantitation					
A. Quantitation Reports		X		X	
B. RT of Sample Compounds Within Established RT Windows		X		X	
C. Pattern Identification		X		X	
D. Transcription/Calculation Errors Present		X		X	
E. Reporting Limits adjusted for Sample Dilutions		X		X	

%R Percent Recovery
RPD Relative Percent Difference
%RSD Relative Standard Deviation
%D Percent Difference

POLYCHLORINATED BIPHENYLS (PCBs) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8082A	Water	7 days from collection to extraction and 40 days from extraction to analysis	Cool to 4±2 °C
	Soil	14 days from collection to extraction and 40 days from extraction to analysis	Cool to 4±2 °C

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e. laboratory method blanks and equipment rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Target analytes were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. System Performance

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

All target analytes associated with the initial calibration standards must exhibit a relative standard deviation (RSD) less than the method-specified control limit of 20% or a correlation coefficient greater than 0.99. Multiple-point calibrations were performed for Aroclor 1016 and 1260 only. Single-point calibrations were performed for the remaining Aroclors.

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (15%).

All calibration criteria were within the control limits.

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. PCB analysis requires that at least one of the two PCB surrogate compounds exhibit recoveries within the laboratory-established acceptance limits.

Sample locations associated with surrogates exhibiting recoveries outside of the control limits presented in the following table.

Sample Location	Surrogate	Recovery
SB-25 (3.5-5) SB-28 (3-5)	Tetrachloro-m-xylene Decachlorobiphenyl	< LL but > 10%

LL Lower control limit

The criteria used to evaluate the surrogate recoveries are presented in the following table. In the case of a surrogate deviation, the sample results associated with the deviant fraction are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
One surrogate exhibiting recovery outside the control limits but > 10%	Non-detect	No Action
	Detect	
Surrogates diluted below the calibration curve	Non-detect	J[1]
	Detect	

[1] A more concentrated analysis was not performed with surrogate compounds within the calibration range; therefore, no determination of extraction efficiency could be made.

6. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit recoveries within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS and MSD must be within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. Sample results associated with MS/MSD exceedances where the parent samples are not site-specific are not qualified.

Sample location SB-12 (11-12) was used in the MS/MSD analysis. The MS/MSD exhibited acceptable recoveries and RPDs between the MS and MSD results.

7. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The spiked analytes used in the LCS analysis must exhibit recoveries within the laboratory-established acceptance limits.

All analytes associated with the LCS analysis exhibited recoveries within the control limits.

8. Field Duplicate Sample Analysis

Field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. A control limit of 50% for water matrices and 100% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the reporting limit (RL), a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results (in µg/kg) for the field duplicate samples are summarized in the following table.

Sample ID / Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
SB-25 (3.5-5) / DUP-01-06122012	All Aroclors	U	U	AC

AC Acceptable
U Not detected

The field duplicate sample results are acceptable.

9. Analyte Identification

The retention times of all quantitated peaks must fall within the calculated retention time windows for both the primary and confirmation columns. When dual column analysis is performed the relative percent difference (RPD) between the detected analyte results calculated on each column must be less than 40%.

All sample results exhibited acceptable RPDs between the primary and confirmation columns.

10. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR PCBs

PCBs: SW-846 8082A	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY (GC/ECD)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment/Field blanks					X
Laboratory Control Sample (LCS) Accuracy %R		X		X	
Laboratory Control Sample Duplicate (LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD RPD		X		X	
Field/Laboratory Duplicate Sample RPD		X		X	
Surrogate Spike %R		X	X		
Column (%D) (If dual column is performed-not confirmation purposes only)		X		X	
Dilution Factor		X		X	
Moisture Content		X		X	
Tier III Validation					
Initial calibration %RSDs		X		X	
Continuing calibration %Ds		X		X	
System performance and column resolution		X		X	
Compound identification and quantitation					
A. Quantitation Reports		X		X	
B. RT of sample compounds within the established RT windows		X		X	
C. Identification/Confirmation		X		X	
D. Quantitation transcriptions/calculations		X		X	
E. Reporting limits adjusted for sample dilutions		X		X	

%R Percent recovery
RPD Relative percent difference
%RSD Relative standard deviation
%D Percent difference

INORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to (United States Environmental Protection Agency) SW-846 Methods 6010C, 7471B, 9012A, 9016, 9034, 9056, and 9045C, and Standard Methods (SM) 2320B, 4500-NH3-H, and 4500-P-E. Data were reviewed in accordance with USEPA National Functional Guidelines of July 2002.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and that it was already subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

    U The analyte was analyzed for but not detected. The associated value is the analyte instrument detection limit.

    B The reported value was obtained from a reading less than the contract-required detection limit (CRDL), but greater than or equal to the instrument detection limit (IDL).

- Quantitation (Q) Qualifiers

    E The reported value is estimated due to the presence of interference.

    N Spiked sample recovery is not within the control limits.

    * Duplicate analysis is not within the control limits.

- Validation Qualifiers

    J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.

    UJ The analyte was not detected above the reported sample detection limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.

    UB Analyte considered non-detect at the listed value due to associated blank contamination.

    R The sample results are rejected as unusable. The analyte may or may not be present in the sample.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

METALS ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 6010C	Water	180 days from collection to analysis	Cool to 4±2 °C; pH < 2 with HNO_3
	Soil	180 days from collection to analysis	Cool to 4±2 °C
SW-846 7470A	Water	28 days from collection to analysis	Cool to 4±2 °C; pH < 2 with HNO_3
SW-846 7471B	Soil	28 days from collection to analysis	Cool to 4±2 °C.

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e. laboratory method blanks and equipment rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks also measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected analyte in an associated blank (common laboratory contaminant analytes are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All analytes associated with the QA blanks exhibited a concentration less than the MDL with the exception of the analytes listed in the following table. Sample results associated with QA blank contamination that were greater than the BAL resulted in the removal of the laboratory qualifier ("B") of data. Sample results less than the BAL associated with the following sample locations were qualified as listed in the following table.

Sample Locations	Analyte	Sample Result	Qualification
SB-01 (10-10.8) SB-26 (10-11)	Magnesium	Detected sample results < RL and < BAL	"UB" at the RL
SB-02 (11.5-13.1) SB-02 (14-15) SB-12 (11-12)	Sodium		

RL = reporting limit

3. Calibration

Satisfactory instrument calibration is established to provide that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument's continuing performance is satisfactory.

3.1 Initial Calibration

The initial calibration must exhibit a correlation coefficient greater than 0.995. A technical review of the data applies limits to all analytes with no exceptions.

3.2 Continuing Calibration

All target analytes associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (10%).

The correct number and type of standards were analyzed. The correlation coefficient of the initial calibration was greater than 0.995 for all non-ICP analytes and all initial calibration verification standard recoveries were within the control limits.

All initial and continuing calibration verification standard recoveries were within the control limits.

3.3 Reporting limit (RL) Check Standard

The RL check standard serves to verify the linearity of calibration of the analysis at the RL. The RL standard is not required for the analysis of aluminum (Al), barium (Ba), calcium (Ca), iron (Fe), magnesium (Mg), sodium (Na), and potassium (K). The criteria used to evaluate the RL standard analysis are presented below in the RL standards evaluation table.

All RL standard recoveries were within the control limits.

3.4 ICP Interference Check Standard (ICS)

The ICS verifies the laboratories inter-element and background correction factors.

All ICS exhibited recoveries within the control limits.

4. Matrix Spike (MS) and Laboratory Duplicate Sample Analysis

MS and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

4.1 MS Analysis

All metal analytes must exhibit recoveries within the established acceptance limits of 75% to 125%. The MS control limits do not apply for MSs performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS spiking concentration by a factor of four or greater. In instance where this is true, the data will not be qualified and the laboratory qualifier "N" will be removed. Sample results associated with MS exceedances where the parent samples are not site-specific are not qualified.

Sample locations SB-28 (3-5), SB-25 (12.7-13.7), and SB-12 (11-12) were used in the MS analyses. All analytes associated with MS recoveries were within the control limits with the exception of the following analytes present in the table below.

Sample Location	Analyte	MS Recovery
SB-28 (3-5)	Copper	37 %
	Magnesium	285 %
	Mercury	3 %

Sample Location	Analyte	MS Recovery
SB-25 (12.7-13.7)	Arsenic	73 %
	Manganese	74 %
	Nickel	74 %
	Selenium	74 %
SB-12 (11-12)	Antimony	34 %
	Arsenic	56 %
	Chromium	58 %
	Copper	36 %

The criteria used to evaluate MS recoveries are presented in the following table. In the case of MS deviations, the sample results are qualified. The qualifications are applied to all sample results associated with this analytical batch.

Control limit	Sample Result	Qualification
MS percent recovery 30% to 74%	Non-detect	UJ
	Detect	J
MS percent recovery < 30%	Non-detect	R
	Detect	J
MS percent recovery > 125%	Non-detect	No Action
	Detect	J

4.2 Laboratory Duplicate Sample Analysis

The laboratory duplicate sample relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to five times the RL. A control limit of 20% for water matrices and 35% for soil matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the RL, a control limit of one times the RL is applied for water matrices and two times the RL for soil matrices.

Sample locations SB-28 (3-5) and SB-12 (11-12) were used in the laboratory duplicate sample analyses. All analytes associated with laboratory duplicate sample RPDs were within the control limit, with the exception of the analytes presented in the following table.

Sample Location	Analyte	Laboratory RPD
SB-28 (3-5)	Aluminum	38 %
	Calcium	135 %
	Iron	43 %
	Manganese	59 %
	Mercury	79 %
SB-12 (11-12)	Lead	49 %

The criteria used to evaluate laboratory duplicate RPD are presented in the following table. In the case of a laboratory duplicate sample RPD deviation, the sample results are qualified. The qualifications are applied to all sample results associated with the analytical batch.

Sample Concentration	Control Limit	Sample Result	Qualification
Parent sample and laboratory sample concentration > 5x RL	Water: 20% Soil: 35%	Non-detect	UJ
		Detect	J
Parent sample and/or laboratory duplicate sample result • 5x the RL and difference between samples > RL	Water: 1x RL Soil: 2x RL	Non-detect	UJ
		Detect	J

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit recoveries between the control limits of 80% and 120%.

The LCS analyses exhibited recoveries within the control limits.

6. Field Duplicate Sample Analysis

The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. A control limit of 50% for water matrices and 100% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

The field duplicate sample results (in mg/kg) are summarized in the following table.

Sample ID / Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
SB-25 (3.5-5) / DUP-01-06122012	Aluminum	448	291	42.5 %
	Antimony	6.3 J	17.3	AC
	Arsenic	15.9	27.5	53.5 %
	Barium	77.2	59.2	26.4 %
	Beryllium	0.15 J	0.069 J	AC
	Calcium	800	1370	AC
	Chromium	14.3	19.2	29.3 %
	Cobalt	1.9 J	3 J	44.9 %
	Copper	24.0	40.3	50.7 %
	Iron	11500	12900	11.5 %
	Lead	14.9	17.5	16.0 %
	Magnesium	118 J	142 J	AC
	Manganese	78.3	112	35.4 %
	Nickel	5.3	8.7	48.6 %

Sample ID / Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
SB-25 (3.5-5) / DUP-01-06122012	Potassium	210 J	362 J	AC
	Selenium	2.3 J	4.3 J	AC
	Sodium	164 J	282 J	AC
	Vanadium	19.5	25.8	27.8 %
	Zinc	14.9	23.8	46.0 %
	Mercury	1.2	3.4	95.7 %

AC Acceptable
J Estimated (result is < RL)

The field duplicate sample results are acceptable.

7. Serial Dilution

The serial dilution analysis is used to assess if a significant physical or chemical interference exists due to sample matrix. Analytes exhibiting concentrations greater than 50 times the MDL in the undiluted sample are evaluated to determine if matrix interference exists. These analytes are required to have less than a 10% difference (%D) between sample results from the undiluted (parent) sample and results associated with the same sample analyzed with a five-fold dilution.

Sample locations SB-28 (3-5), SB-25 (12.7-13.7), and SB-12 (11-12) were used in the serial dilution analyses. All serial dilutions were within the control limits, with the exception of the analytes presented in the following table. The sample locations associated with the deviant %D are also presented in the following table.

Sample Location	Analyte	Serial Dilution (%D)
SB-25 (12.7-13.7)	Barium	22 %
	Chromium	21 %
	Cobalt	25 %
	Copper	16 %
	Iron	28 %
	Magnesium	24 %
	Manganese	22 %
	Nickel	22 %
	Potassium	22 %
	Vanadium	20 %
SB-12 (11-12)	Aluminum	19 %
	Barium	22 %
	Calcium	24 %
	Chromium	22 %
	Cobalt	25 %
	Copper	17 %

Sample Location	Analyte	Serial Dilution (%D)
SB-12 (11-12)	Iron	22 %
	Magnesium	23 %
	Manganese	24 %
	Nickel	26 %
	Potassium	19 %
	Vanadium	20 %
	Zinc	21 %

The criteria used to evaluate the serial dilution are presented in the following table. In the case of a serial dilution deviation, the sample results are qualified as documented in the table below. The qualifications are applied to all sample results associated with this analytical batch.

Control Limit	Sample Result	Qualification
> UL	Non-detect	UJ
	Detect	J

8. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR METALS

METALS: SW-846 6010C and 7471B	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Inductively Coupled Plasma – Atomic Emission Spectrometry (ICP) Atomic Absorption – Manual Cold Vapor (CV)					
Tier II Validation					
Holding Times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Instrument Blanks		X	X		
B. Method Blanks		X	X		
C. Equipment/Field Blanks					X
Laboratory Control Sample (LCS)		X		X	
Matrix Spike (MS) Accuracy (%R)		X	X		
Matrix Spike Duplicate (MSD) %R					X
MS/MSD Precision (RPD)					X
Field/Laboratory Duplicate Sample RPD		X		X	
ICP Serial Dilution		X	X		
Dilution Factor		X		X	
Moisture Content		X		X	
Tier III Validation					
Initial Calibration Verification		X		X	
Continuing Calibration Verification		X		X	
RL Standard		X		X	
ICP Interference Check		X		X	
Quantitation transcriptions/calculations		X		X	
Reporting limits adjusted to reflect sample dilutions		X		X	

%R – Percent recovery
RPD – Relative percent difference

GENERAL CHEMISTRY ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
Alkalinity by SM 2320B	Water Soil	14 days from collection to analysis	Cool to 4±2 °C
Ammonia-N by SM 4500-NH3-H	Water	28 days from collection to analysis	Cool to 4±2 °C; pH of < 2
	Soil	28 days from collection to analysis	Cool to 4±2 °C;
Cyanide by SW-846 9012, 9016	Water	14 days from collection to analysis	Cool to 4±2 °C; pH of > 12.
	Soil	14 days from collection to analysis	Cool to 4±2 °C
Corrosivity by SW-846 9045	Soil	7 days from collection to analysis	Cool to 4°C+2°C
pH by SW-846 9045	Soil	Immediately upon sample receipt	Cool to 4±2 °C
Total Phosphorus by SM 4500-P-E	Water	28 days from collection to analysis	Cool to 4±2 °C; pH of < 2
	Soil	28 days from collection to analysis	Cool to 4±2 °C;
Reactive Sulfide by SW-846 9034	Soil	7 days from collection to analysis	Cool to 4°C+2°C
Chloride, Fluoride, Sulfate by SW-846 9056	Soil	28 days from collection to analysis	Cool to 4±2 °C
Nitrate-N by SW-846 9056	Water	28 days from collection to analysis	Cool to 4±2 °C; pH of < 2
	Soil	28 days from collection to analysis	Cool to 4±2 °C;
Nitrite-N by SW-846 9056	Water Soil	48 hours from collection to analysis	Cool to 4±2 °C

The analyses that exceeded the holding time are presented in the following table.

Sample Locations	Analyte	Analysis Completed	HT Criteria
SB-26 (12-13) SB-02 (11.5-13.1) SB-02 (14-15) SB-12 (11-12)	Corrosivity	> 14 Days	7 Days
	pH	> 14 Days	ASAP
SB-26 (10-11) SB-26 (12-13)	Alkalinity	15 Days	14 Days
SB-01 (10-10.8) SB-01 (12-13) SB-02 (14-15)	Ammonia	32 Days	28 Days
SB-02 (14-15)	Sulfide	43 Days	7 Days

Sample Locations	Analyte	Analysis Completed	HT Criteria
SB-11 (1-2.5) SB-25 (3.5-5) DUP-01-06122012 SB-28 (3-5) SB-03 (4.5-5) SB-06 (4-5) SB-11 (5-6) SB-25 (12.7-13.7) SB-04 (0-1) SB-07 (4.5-5) SB-29 (17-18) SB-29 (18-19) SB-27 (17.5-18.5) SB-01 (12-13) SB-26 (10-11)	Corrosivity	> 14 Days	7 Days
	pH	> 14 Days	ASAP
SB-01 (10-10.8) SB-01 (12-13) SB-26 (10-11) SB-26 (12-13) SB-02 (11.5-13.1) SB-02 (14-15)	Nitrate Nitrite	48 Hours	> 96 Hours

Sample results were qualified as specified in the table below. All other holding times were met.

Criteria	Qualification	
	Detected Analytes	Non-detect Analytes
Analysis completed < 2x holding time	J	UJ
Analysis completed > 2x holding time	J	R

Note: Due to the ready conversion of nitrite into nitrate, nitrate results for samples analyzed greater than 48 hours after collection should be considered as nitrate+nitrite. All nitrate (and nitrite) results were non-detects. Therefore, no nitrate or nitrite results required qualification.

2. Blank Contamination

Quality assurance (QA) blanks (i.e. laboratory method blanks and equipment rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected analyte in an associated blank is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All analytes associated with the QA blanks exhibited a concentration less than the MDL, with the exception of the analytes listed in the following table. Sample results associated with QA blank contamination that were greater than the BAL resulted in the removal of the laboratory qualifier (B) of

data. Sample results less than the BAL associated with the following sample locations were qualified as listed in the following table.

Sample Location	Analyte	Sample Result	Qualification
SB-11 (1-2.5) SB-28 (3-5) SB-11 (5-6) SB-04 (0-1) SB-26 (12-13) SB-29 (17-18) SB-29 (18-19) SB-27 (17.5-18.5) SB-01 (12-13)	Free Cyanide	Detected sample results < RL and < BAL	"UB" at the RL
SB-07 (4.5-5)	Free Cyanide	Detected sample results > RL and < BAL	"UB" at detected sample concentration

RL = reporting limit

3. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

3.1 Initial Calibration

The initial calibration must exhibit a correlation coefficient greater than 0.995. A technical review of the data applies limits to all analytes with no exceptions.

3.2 Continuing Calibration

All target analytes associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (15%).

All analytes associated with the initial and continuing calibrations were within the specified control limits. The correct frequency and type of standards were analyzed.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) / Laboratory Duplicate Analyses

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

4.1 MS/MSD Analysis

All analytes must exhibit recoveries within the established acceptance limits of 75% to 125%. When a MSD analysis is performed, the relative percent difference (RPD) between the MS/MSD results must be within the established acceptance limits of 20% for water matrices and 35% for soil matrices.

Note: The MS/MSD control limits do not apply for MS/MSD analyses performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. Sample results associated with MS/MSD exceedances where the parent samples are not site-specific are not qualified.

All analytes associated with MS/MSD recoveries were within the control limits with the exception of the following analyte present in the table below.

Sample Location	Analyte	MS Recovery	MSD Recovery
SB-01 (10-10.8)	Fluoride	29 %	28 %

The criteria used to evaluate MS/MSD recoveries are presented in the following table. In the case of MS/MSD deviations, the sample results are qualified. The qualifications are applied to all sample results associated with this analytical batch.

Control limit	Sample Result	Qualification
MS/MSD percent recovery 30% to 74%	Non-detect	UJ
	Detect	J
MS/MSD percent recovery < 30%	Non-detect	R
	Detect	J
MS/MSD percent recovery > 125%	Non-detect	No Action
	Detect	J

4.2 Laboratory Duplicate Sample Analysis

The laboratory duplicate sample relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to five times the reporting limit (RL). A control limit of 20% for water matrices and 35% for soil matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the RL, a control limit of one times the RL is applied for water matrices and two times the RL for soil matrices.

MS/MSD analysis was performed in lieu of the laboratory duplicate analysis; the results are acceptable.

5. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS/LCSD analysis must exhibit recoveries between the control limits of 80% and 120%. The relative percent difference (RPD) between the LCS and LCSD results must be no greater than the established acceptance limit of 20%.

All analytes associated with the LCS/LCSD analyses exhibited recoveries and RPDs within the control limits.

6. Field Duplicate Sample Analysis

The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. A control limit of 50% for water matrices and 100% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the reporting limit (RL), a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results for the field duplicate samples are summarized in the following table.

Sample ID / Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
SB-25 (3.5-5) / DUP-01-06122012	Corrosivity	4.32	5.23	19.1 %
	pH	4.32	5.23	19.1 %
	Total Cyanide	1120	1290	14.1 %
	Free Cyanide	18.7	41.4	75.5 %

The field duplicate sample results are acceptable.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR GENERAL CHEMISTRY

General Chemistry: EPA 9012A, 9016, 9034, 9056, and 9045C, and SM 2320B, 4500-NH3-H, and 4500-P-E	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Miscellaneous Instrumentation					
Tier II Validation					
Holding times		X	X		
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X	X		
B. Equipment blanks					X
Laboratory Control Sample (LCS) Accuracy (%R)		X		X	
Laboratory Control Sample Duplicate (LCSD) %R		X		X	
LCS/LCSD Precision (RPD)		X		X	
Matrix Spike (MS) %R		X	X		
Matrix Spike Duplicate (MSD) %R		X	X		
MS/MSD RPD		X		X	
Field/Laboratory Duplicate Sample RPD		X		X	
Dilution Factor		X		X	
Moisture Content		X		X	
Tier III Validation					
Initial calibration %RSD or correlation coefficient		X		X	
Continuing calibration %R		X		X	
Raw Data		X		X	
Quantitation transcriptions/calculations		X		X	
Reporting limits adjusted for sample dilutions		X		X	

%RSD – relative standard deviation
%R – percent recovery
RPD – relative percent difference
%D – difference

SAMPLE COMPLIANCE REPORT

Sample Delivery Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	Compliancy[1]						Noncompliance
					VOC	SVOC	PCB	DRO	MET	MISC	
200-11278	6/12/2012	SW846	SB-11 (1-2.5)	Soil	No	Yes	Yes	---	No	No	VOC: Blank contamination; Calibration exceedance Metals: Lab duplicate RPD; MS %R Misc: pH & corrosivity hold time exceedance; cyanide blank contamination
	6/12/2012	SW846	SB-25 (3.5-5)	Soil	No	Yes	No	---	No	No	VOC: Calibration exceedance PCB: Surrogate %R Metals: Lab duplicate RPD; MS %R Misc: pH & corrosivity hold time exceedance
	6/12/2012	SW846	DUP-01-06122012	Soil	No	Yes	Yes	---	No	No	VOC: Calibration exceedance Metals: Lab duplicate RPD; MS %R Misc: pH & corrosivity hold time exceedance
	6/12/2012	SW846	SB-28 (3-5)	Soil	No	No	No	---	No	No	VOC: Calibration exceedance SVOC: Surrogate %R PCB: Surrogate %R Metals: Lab duplicate RPD; MS %R Misc: pH & corrosivity hold time exceedance; cyanide blank contamination
	6/13/2012	SW846	TB-06132012	Water	No	---	---	---	---	---	VOC: Calibration exceedance
	6/14/2012	SW846	SB-03 (4.5-5)	Soil	No	Yes	Yes	---	No	No	VOC: Calibration exceedance Metals: Serial dilution %D; MS %R Misc: pH & corrosivity hold time exceedance
	6/14/2012	SW846	SB-11 (5-6)	Soil	No	No	Yes	---	No	No	VOC: Blank contamination; Calibration exceedance SVOC: Calibration exceedance Metals: Serial dilution %D; MS %R Misc: pH & corrosivity hold time exceedance; cyanide blank contamination

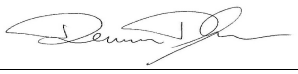
Sample Delivery Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	Compliancy[1]						Noncompliance
					VOC	SVOC	PCB	DRO	MET	MISC	
200-11278	6/14/2012	SW846	SB-06 (4-5)	Soil	No	Yes	Yes	---	No	No	VOC: Calibration exceedance Metals: Serial dilution %D; MS %R Misc: pH & corrosivity hold time exceedance
	6/14/2012	SW846	SB-25 (12.7-13.7)	Soil	No	Yes	Yes	---	No	No	VOC: Blank contamination; Calibration exceedance; Surrogate %R; Internal standard area Metals: Serial dilution %D; MS %R Misc: pH & corrosivity hold time exceedance
	6/14/2012	SW846	TB-06142012	Water	No	---	---	---	---	---	VOC: Calibration exceedance
	6/14/2012	SW846	SB-04 (0-1)	Soil	No	No	Yes	---	No	No	VOC: Blank contamination; Calibration exceedance; Internal standard area SVOC: MS/MSD %R Metals: Serial dilution %D; MS %R Misc: pH & corrosivity hold time exceedance; cyanide blank contamination
	6/14/2012	SW846	SB-07 (4.5-5)	Soil	No	Yes	Yes	---	No	No	VOC: Blank contamination; Calibration exceedance; Surrogate %R; Internal standard area Metals: Serial dilution %D; MS %R Misc: pH & corrosivity hold time exceedance; cyanide blank contamination
	6/15/2012	SW846	SB-29 (17-18)	Soil	No	Yes	Yes	---	No	No	VOC: Blank contamination; Calibration exceedance Metals: Serial dilution %D; MS %R Misc: pH & corrosivity hold time exceedance; cyanide blank contamination
	6/15/2012	SW846	SB-29 (18-19)	Soil	No	Yes	Yes	---	No	No	VOC: Blank contamination; Calibration exceedance SVOC: Calibration exceedance Metals: Serial dilution %D; MS %R Misc: pH & corrosivity hold time exceedance; cyanide blank contamination

Sample Delivery Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	Compliancy[1]						Noncompliance
					VOC	SVOC	PCB	DRO	MET	MISC	
200-11278	6/15/2012	SW846	SB-27 (17.5-18.5)	Soil	No	Yes	Yes	---	No	No	VOC: Calibration exceedance Metals: Serial dilution %D; MS %R Misc: pH & corrosivity hold time exceedance; cyanide blank contamination
	6/15/2012	SW846	SB-01 (10-10.8)	Soil	No	No	Yes	No	No	No	VOC: Calibration exceedance SVOC: Surrogate %R DRO: Surrogate %R Metals: Serial dilution %D; MS %R; Blank contamination Misc: Ammonia hold time exceedance; Fluoride MS/MSD %R
	6/15/2012	SW846	SB-01 (12-13)	Soil	No	No	Yes	No	No	No	VOC: Blank contamination; Calibration exceedance SVOC: Calibration exceedance DRO: Blank contamination Metals: Serial dilution %D; MS %R Misc: Ammonia, pH, & corrosivity hold time exceedance; Fluoride MS/MSD %R; cyanide blank contamination
	6/14/2012	SW846	SB-26 (10-11)	Soil	No	No	Yes	---	No	No	VOC: Calibration exceedance SVOC: Surrogate %R Metals: Blank contamination; Serial dilution %D; MS %R; Misc: Alkalinity, pH, & corrosivity hold time exceedance; Fluoride MS/MSD %R
	6/14/2012	SW846	SB-26 (12-13)	Soil	No	Yes	Yes	---	No	No	VOC: Calibration exceedance Metals: Serial dilution %D; MS %R; Misc: Alkalinity, pH, & corrosivity hold time exceedance; Fluoride MS/MSD %R; cyanide blank contamination
	6/15/2012	SW846	TB-06152012	Water	No	---	---	---	---	---	VOC: Calibration exceedance

Sample Delivery Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	Compliancy[1]						Noncompliance
					VOC	SVOC	PCB	DRO	MET	MISC	
200-11278	6/15/2012	SW846	SB-02 (11.5-13.1)	Soil	No	Yes	Yes	No	No	No	VOC: Calibration exceedance Metals: Serial dilution %D; MS %R; Lab duplicate RPD; Blank contamination DRO: Surrogate %R Misc: pH & corrosivity hold time exceedance
	6/15/2012	SW846	SB-02 (14-15)	Soil	No	Yes	Yes	No	No	No	VOC: Blank contamination; Calibration exceedance Metals: Serial dilution %D; MS %R; Lab duplicate RPD; Blank contamination DRO: Blank contamination Misc: Ammonia, Sulfide, pH, & corrosivity hold time exceedance
	6/16/2012	SW846	SB-12 (11-12)	Soil	No	No	Yes		No	No	VOC: Blank contamination; Calibration exceedance; MS/MSD %R SVOC: MS/MSD %R Metals: Serial dilution %D; MS %R; Lab duplicate RPD; Blank contamination Misc: pH & corrosivity hold time exceedance

1 Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant or which have added qualifiers are listed as "no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable

Validation Performed By: Dennis Dyke

Signature: 

Date: August 31, 2012

Peer Review: Dennis Capria

Date: September 11, 2012

CHAIN OF CUSTODY /
CORRECTED SAMPLE ANALYSIS DATA SHEETS

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice) Meredith Hayes	Samplers Name (Printed) Joshua Oliver	Site/Project Identification BOH3027.0002.05000
Company ARCADIS	P. O. #	State (Location of site): NJ: ☐ NY: ☒ Other:
Address 655 3rd Ave 12th Floor	Analysis Turnaround Time: Standard ☒	Regulatory Program:
City New York State NY	Rush Chrages Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	
Phone 212-682-9217(ext.39) Fax 212-682-9275		

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

Sample Identification	Date	Time	Matrix	No. of Cont.	TCL VOC's	TCL SVOC's	Cyanide (Total/Free)	pH	TAL Metals	PCBs	LAB USE ONLY Sample Numbers
SB-11 (1-2.5)	6/12/12	0900	So	4	X	X	X	X	X	X	
SB-25 (3.5-5)	6/12/12	1130	So	4	X	X	X	X	X	X	
DUP-01-06122012	6/12/12	—	So	4	X	X	X	X	X	X	
SB-28 (3-5)	6/12/12	1045	So	4	X	X	X	X	X	X	
TB-06132012	6/13/12	—	W	2	X						

LAB USE ONLY: Project No: | Job No:

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH — Soil: — — — — — —
6 = Other _____, 7 = Other _____ — Water:

Special Instructions: ☆ TAL Metals includes Mercury (All samples on COC are SDG1) Water Metals Filtered (Yes/No)? N/A

Relinquished by	Company	Date / Time	Received by	Company
1)	ARCADIS	6/13/12 1400	1)	TA NYC
Relinquished by 2)	Company TA NYC	Date / Time 6/13/12 1700	Received by 2)	Company
Relinquished by 3)	Company	Date / Time	Received by 3) 6-14-12 10:30	Company TABUR
Relinquished by 4)	Company	Date / Time	Received by 4)	Company

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). TAL - 0016 (0408)

Massachusetts (M-NJ312), North Carolina (No. 578)

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Madison, James W	Carrier Tracking No(s):	COC No: 200-8622.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jim.madison@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.				Job #: 200-11278-1
Address: 777 New Durham Road,	Due Date Requested: 6/27/2012			
City: Edison	TAT Requested (days):			
State, Zip: NJ, 08817	PO #:			
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	WO #:			
Email:	Project #: 20003974			
Project Name: Krasdale, Hunts Point Bronx, NY	SSOW#:			
Site:				

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9045C	9012A_Calc/ (MOD) Copy Analytes	9016/9016_ExtPrep	8270C/3541 (MOD) Target Compound List for BNAs	9012A/9013	SM4500_NH3_H/SM4500NH3_B	4500_P_E/SM4500_P_B	2320B/DI_LEACH (MOD) Local Method	9034/9030B	Total Number of containers	Special Instructions/Note:
			Preservation Code:														
SB-04 (0-1) (200-11346-1)	6/14/12	14:45 Eastern		Solid			X	X	X	X	X					1	
SB-07 (4.5-5) (200-11346-2)	6/14/12	17:00 Eastern		Solid			X	X	X	X	X					1	
SB-29 (17-18) (200-11346-3)	6/15/12	09:50 Eastern		Solid			X	X	X	X	X					1	
SB-29 (18-19) (200-11346-4)	6/15/12	10:00 Eastern		Solid			X	X	X	X	X					1	
SB-27 (17.5-18.5) (200-11346-5)	6/15/12	11:30 Eastern		Solid			X	X	X	X	X					1	
SB-01 (10-10.8) (200-11346-6)	6/15/12	14:00 Eastern		Solid			X	X	X	X	X	X	X	X	X	1	
SB-01 (12-13) (200-11346-7)	6/15/12	14:05 Eastern		Solid			X	X	X	X	X	X	X	X	X	1	
SB-26 (10-11) (200-11346-8)	6/14/12	15:30 Eastern		Solid			X	X	X	X	X	X	X	X	X	1	
SB-26 (12-13) (200-11346-9)	6/14/12	15:45 Eastern		Solid			X	X	X	X	X	X	X	X	X	1	

Page 4430 of 4454

Possible Hazard Identification

Unconfirmed

Deliverable Requested: I, II, III, IV, Other (specify)

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Eric Gagne	6/18/12 1000	TAL			
2					6/19/2012	
3						

Custody Seals Intact: △ Yes △ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 3.3 °C

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Madison, James W	Carrier Tracking No(s):	COC No: 200-8621.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jim.madison@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.				Job #: 200-11278-1

Address: 777 New Durham Road, ,	Due Date Requested: 6/27/2012
City: Edison	TAT Requested (days):
State, Zip: NJ, 08817	
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:
Email:	WO #:
Project Name: Krasdale, Hunts Point Bronx, NY	Project #: 20003974
Site:	SSOW#:

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9012A_Calc/ (MOD) Copy Analytes	9045C	9016/9016_ExtPrep	8270C/3541 (MOD) Target Compound List for BNAs	9012A/9013	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
SB-03 (4.5-5) (200-11326-1)	6/14/12	11:30 Eastern		Solid			X	X	X	X	X	1	
SB-06 (4-5) (200-11326-2)	6/14/12	10:10 Eastern		Solid			X	X	X	X	X	1	
SB-11 (5-6) (200-11326-3)	6/14/12	09:10 Eastern		Solid			X	X	X	X	X	1	
SB-25 (12.7-13.7) (200-11326-4)	6/14/12	11:50 Eastern		Solid			X	X	X	X	X	1	

Page 4431 of 4454

Possible Hazard Identification

Unconfirmed

Deliverable Requested: I, II, III, IV, Other (specify)

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Eric Gagne	6/18/12 1600	TA BUR			
2					6/19/2012 10:00	
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.2°

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Madison, James W	Carrier Tracking No(s):	COC No: 200-8620.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jim.madison@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Analysis Requested		Job #: 200-11278-1
Address: 777 New Durham Road, ,	Due Date Requested: 6/27/2012			Preservation Codes:
City: Edison	TAT Requested (days):			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
State, Zip: NJ, 08817				
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:			Other:
Email:	WO #:			
Project Name: Krasdale, Hunts Point Bronx, NY	Project #: 20003974			
Site:	SSOW#:			

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9012A_Calc/ (MOD) Copy Analytes	9045C	9012A/9013	8270C/3541 (MOD) Target Compound List for BNAs	9016/9016_ExtPrep	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
SB-11 (1-2.5) (200-11278-1)	6/12/12	09:00 Eastern		Solid			X	X	X	X	X	1	
SB-25 (3.5-5) (200-11278-2)	6/12/12	11:30 Eastern		Solid			X	X	X	X	X	1	
DUP-01-06122012 (200-11278-3)	6/12/12	Eastern		Solid			X	X	X	X	X	1	
SB-28 (3-5) (200-11278-4)	6/12/12	10:45 Eastern		Solid			X	X	X	X	X	1	

Page 4432 of 4454

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Eric Gagne	6/18/12 1600	TA BUR	Fed Ex		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				6/19/2012 10:00	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.3 ° 4.0

TestAmerica Connecticut
128 Long Hill Cross Road
Shelton, CT 06484
Phone (203) 929-8140 Fax (203) 929-8142

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Contact: Meredith Hayes	**Field Sampler:** J. Oliver / M. Bell	**TAT Required (business days):**	**Lab PM/Contact:** Jim Madison
Company: ARCADIS	**Mobile/Field Number:** 631-403-0169		**Lab Job Number (Lab Use Only):**
Address: 655 Third Ave	**E-Mail:**	**Deliverable Type (Report/EDD):**	**Passed Rad Screen (Lab Use Only):** [ ] Yes [ ] No
City, State, Zip: New York, NY	**PO #:**	**Sample Disposal:** [ ] Return to Client [ ] Disposal by Lab [ ] Archive for __ Months (A fee may be assessed if samples are retained for longer than 1 month)	**Cooler Temperatures (Lab Use Only):**
Phone: 212-682-9271	**WO #:**		
Email: meredith.hayes@arcadis-us.com	**Project #:** B0043027.0002.00002	**State Regulatory QC Criteria Requirements:**	
Project Name/Site Location (State): Kingston, NY	**SSOW#:**		

COC Number: 21076
Page ___ **of** ___
Carrier Tracking Notes:

Samples Submitted for analysis will be subject to TestAmerica Terms and Conditions

Analysis (Attach list if more space is needed)

No. of Containers/Preservatives

Page #	Field Sample Identification (Containers for each sample may be combined on one line)	Collection Date	Collection Time (24-Hour Clock)	Matrix Aq=Aqueous, S=Solid, W=Waste/Oil, O=Other	MS/ MSD (Yes or No)	Unpreserved	H2SO4	HNO3	HCL	NaOH	ZnAc/NaOH	Other	TCL VOCs	TCL SVOCs	Cyanide (total) 4500	pH	TAL Metals	PCBs				Comments
Page 4433 of 4454	SB-03 (4.5-5)	6/14/12	1130	Soil	N	4							X	X	X	X	X	X				
	SB-06 (4-5)	6/14/12	1010	Soil	N	4							X	X	X	X	X	X				
	SB-11 (5-6)	6/14/12	910	Soil	N	4							X	X	X	X	X	X				
	SB-25 (12.7-13.7)	6/14/12	1150	Soil	N	4							X	X	X	X	X	X				
	TB-06142012	6/14/12	—	Aq	N	2							X									

Relinquished by: Matthew Bell	Date/Time: 6/14/12 - 14:30	Company: ARCADIS	Received by: [signature]	Date/Time: 6/14/12 16:30	Company: TAN Y C
Relinquished by: [signature]	Date/Time: 6/14/12 18:16	Company:	Received by: A. Kan	Date/Time: 6-15-12 10:15	Company: TABUR
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Comments: * SDG-1 → All samples on COC are SDG-1 / TAL Metals Includes Mercury

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

Field Sampling / Shipping Instructions and Laboratory Sample Receipt Policy included on Reverse Side of COC

TAL-0015 (0609)

TestAmerica Connecticut
128 Long Hill Cross Road
Shelton, CT 06484
Phone (203) 929-8140 Fax (203) 929-8142

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Contact: Meredith Hayes	**Field Sampler:** J. Oliver / M. Bell	**TAT Required (business days):**	**Lab PM/Contact:** Jim Madison
Company: ARCADIS	**Mobile/Field Number:**		**Lab Job Number (Lab Use Only):**
Address: 655 Third Ave	**E-Mail:**	**Deliverable Type (Report/EDD):**	**Passed Rad Screen (Lab Use Only):** [ ] Yes [ ] No
City, State, Zip: NY, NY 10017	**PO #:**	**Sample Disposal:** [ ] Return to Client [ ] Disposal by Lab [ ] Archive for ___ Months (A fee may be assessed if samples are retained for longer than 1 month)	**Cooler Temperatures (Lab Use Only):**
Phone: 212-682-9271	**WO #:**		
Email: mhayes@arcadis-us.com	**Project #:** B00130270002.08000	**State Regulatory QC Criteria Requirements:**	
Project Name/Site Location (State): Con Ed - Brooklyn	**SSOW#:**		

COC Number: 21073
Page 1 **of** 1
Carrier Tracking
Notes:

Samples submitted for analysis will be subject to TestAmerica Terms and Conditions

No. of Containers/Preservatives

Analysis (Attach list if more space is needed)

Page# TB	Field Sample Identification (Containers for each sample may be combined on one line)	Collection Date	Collection Time (24-Hour Clock)	Matrix Aq=Aqueous, S=Solid, W=Waste/Oil, O=Other	MS/ MSD (Yes or No)	Unpreserved	H2SO4	HNO3	HCL	NaOH	ZnAc/NaOH	Other	VOCs	SVOCs	Metals	PCBs	TPH	Cyanide (Total/Amenable)	pH	Inorganics	Anions
Page 4434 of 4454	SB-04 (0-1)	6/14/12	1495	So:1		4							X	X	X	X		X	X		
	SB-07 (4.5-5)	6/14/12	1700			4							X	X	X	X		X	X		
	SB-29 (17-18)	6/15/12	950			4							X	X	X	X		X	X		
	SB-29 (18-19)	6/15/12	1000			4							X	X	X	X		X	X		
	SB-27 (17.5-18.5)	6/15/12	1130			4							X	X	X	X		X	X		
	SB-01 (10-10.8)	6/15/12	1400			5							X	X	X	X	X	X	X	X	X
	SB-01 (12-13)	6/15/12	1405			5							X	X	X	X	X	X	X	X	X
	SB-26 (10-11)	6/14/12	1530			5							X	X	X	X		X	X	X	X
	SB-26 (12-13)	6/14/12	1515	↓		5							X	X	X	X		X	X	X	X
	TB-06152012	6/15/12	—	Aq		2							X								

Comments
Metals include Hg
Inorganics include ammonia, sulfide, Phosphate, Carbonate/Bi
Anions include Nitrate, nitrite, sulfate Chloride and fluoride

Relinquished by:	Date/Time: 6/15/12 1500	Company ARCADIS	Received by:		Date/Time: 6-15-12 1500	Company
Relinquished by:	Date/Time: 6/15/12 16:15	Company TA NVC	Received by:		Date/Time: 6-16-12 10:00	Company TABUR
Relinquished by:	Date/Time:	Company	Received by:		Date/Time:	Company

Comments:

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

Field Sampling / Shipping Instructions and Laboratory Sample Receipt Policy included on Reverse Side of COC

TAL-0015 (0609)

Chain of Custody Record

TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Madison, James W	Carrier Tracking No(s):	COC No: 200-8619.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jim.madison@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.				Job #: 200-11278-1
Address: 5102 LaRoche Avenue,	Due Date Requested: 6/27/2012			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: Krasdale, Hunts Point Bronx, NY	Project #: 20003974			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9056_28D/DI_LEACH (MOD) Custom Sublist	9056_48HR/DI_LEACH (MOD) Custom Sublist	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
SB-01 (10-10.8) (200-11346-6)	6/15/12	14:00 Eastern		Solid			X	X	1	
SB-01 (12-13) (200-11346-7)	6/15/12	14:05 Eastern		Solid			X	X	1	
SB-26 (10-11) (200-11346-8)	6/14/12	15:30 Eastern		Solid			X	X	1	
SB-26 (12-13) (200-11346-9)	6/14/12	15:45 Eastern		Solid			X	X	1	

Possible Hazard Identification

Unconfirmed

Deliverable Requested: I, II, III, IV, Other (specify)

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by: Eric Cuque	6/18/12 1600	TA BUK		06-19-12	0930
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice) Meredith Hayes	Samplers Name (Printed) M. Bell / S. Manning	Site/Project Identification Con Ed - Kraisdale
Company ARCADIS	P. O. # B00480027.0002.08000	State (Location of site): NJ: ☐ NY: ☒ Other:
Address 655 Third Ave	Analysis Turnaround Time: Standard ☒	Regulatory Program:
City New York State NY	Rush Chrages Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	
Phone 212-682-9271 Fax —		

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

Sample Identification	Date	Time	Matrix	No. of Cont.	VOCs	SVOCs	Metals	Cyanide (total, free, amenable)	pH	PCBs	TPH	Inorganics	Anions			LAB USE ONLY Sample Numbers
SB-02 (11.5-13.1)	6/15/12	1600	Soil	5	X	X	X	X	X	X	X	X	X			1
SB-02 (14-15)	6/15/12	1610	Soil	5	X	X	X	X	X	X	X	X	X			2
SB-12 (11-12)	6/16/12	925	Soil	12	X	X	X	X	X	X						MS/MSD 3

LAB USE ONLY Project No: Job No: 41430

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH 6 = Other _____, 7 = Other _____ Soil: Water:

Special Instructions All samples on SDG-1. Metals includes Hg Water Metals Filtered (Yes/No)? _____

Relinquished by	Company	Date / Time	Received by	Company
1)	Arcadis	6/16/12 1705	1) K Hall 6/16/12	1725
Relinquished by 2) K Hall	Company	Date / Time 6/19/12 1920	Received by 2) 6/20/12 1010	Company TASUN
Relinquished by 3)	Company	Date / Time	Received by 3)	Company
Relinquished by 4)	Company	Date / Time	Received by 4)	Company

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). TAL - 0016 (0408)

Massachusetts (M-NJ312), North Carolina (No. 578)

7.4 C. # 52 office.
31.5 No Ice

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-11 (1-2.5)**

Lab Sample ID: 200-11278-1
Client Matrix: Solid

% Moisture: 10.1

Date Sampled: 06/12/2012 0900
Date Received: 06/14/2012 1030

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40464	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40354	Lab File ID:	ngaj06.d
Dilution:	1.0			Initial Weight/Volume:	5.16 g
Analysis Date:	06/15/2012 1527			Final Weight/Volume:	5 mL
Prep Date:	06/14/2012 1519				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		5.4	U J	0.25	5.4
Chloromethane		5.4	U	0.28	5.4
Vinyl chloride		5.4	U	0.32	5.4
Bromomethane		5.4	U	0.80	5.4
Chloroethane		5.4	U J	0.41	5.4
Trichlorofluoromethane		5.4	U	0.36	5.4
1,1-Dichloroethene		5.4	U	0.40	5.4
1,1,2-Trichloro-1,2,2-trichfluoroethane		5.4	U	0.36	5.4
Acetone		28	J	1.1	5.4
Carbon disulfide		0.88	J	0.33	5.4
Methyl acetate		5.4	U	0.68	5.4
Methylene Chloride		5.4 ~~1.1~~	~~J~~ UB	0.59	5.4
trans-1,2-Dichloroethene		5.4	U	0.40	5.4
Methyl t-butyl ether		5.4	U	0.32	5.4
1,2-Dichloroethene, Total		5.4	U	0.83	5.4
1,1-Dichloroethane		5.4	U	0.44	5.4
cis-1,2-Dichloroethene		5.4	U	0.45	5.4
2-Butanone		5.8	J	1.6	5.4
Chloroform		5.4	U	0.34	5.4
1,1,1-Trichloroethane		5.4	U	0.75	5.4
Cyclohexane		5.4	U	0.92	5.4
Carbon tetrachloride		5.4	U	0.82	5.4
Benzene		5.4	U	0.77	5.4
1,2-Dichloroethane		5.4	U	0.67	5.4
Trichloroethene		5.4	U	0.52	5.4
Methylcyclohexane		5.4	U	0.18	5.4
1,2-Dichloropropane		5.4	U	0.31	5.4
Bromodichloromethane		5.4	U	0.23	5.4
cis-1,3-Dichloropropene		5.4	U	0.38	5.4
4-Methyl-2-pentanone		5.4	U	0.65	5.4
Toluene		5.4 ~~0.46~~	~~JB~~ UB	0.11	5.4
trans-1,3-Dichloropropene		5.4	U	0.14	5.4
1,1,2-Trichloroethane		5.4	U	0.37	5.4
Tetrachloroethene		5.4	U	0.12	5.4
2-Hexanone		5.4	U	0.53	5.4
Dibromochloromethane		5.4	U	0.12	5.4
1,2-Dibromoethane		5.4	U	0.16	5.4
Chlorobenzene		5.4	U	0.082	5.4
Ethylbenzene		1.2	J	0.060	5.4
Xylenes, Total		4.2	J	0.79	5.4
Styrene		5.4	U	0.11	5.4
Bromoform		5.4	U	0.22	5.4
Isopropylbenzene		0.10	J	0.083	5.4
1,1,2,2-Tetrachloroethane		5.4	U	0.28	5.4
1,3-Dichlorobenzene		5.4	U	0.16	5.4
1,4-Dichlorobenzene		5.4	U	0.25	5.4

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-11 (1-2.5)**

Lab Sample ID: 200-11278-1
Client Matrix: Solid

% Moisture: 10.1

Date Sampled: 06/12/2012 0900
Date Received: 06/14/2012 1030

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40464	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40354	Lab File ID:	ngaj06.d
Dilution:	1.0			Initial Weight/Volume:	5.16 g
Analysis Date:	06/15/2012 1527			Final Weight/Volume:	5 mL
Prep Date:	06/14/2012 1519				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		5.4	U	0.24	5.4
1,2-Dibromo-3-Chloropropane		5.4	U J	0.98	5.4
1,2,4-Trichlorobenzene		5.4 ~~0.26~~	~~JB~~ UB	0.22	5.4

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	77		65 - 155
Toluene-d8	91		80 - 115
Bromofluorobenzene	95		80 - 115
1,2-Dichlorobenzene-d4	89		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-25 (3.5-5)**

Lab Sample ID: 200-11278-2
Client Matrix: Solid

% Moisture: 31.0

Date Sampled: 06/12/2012 1130
Date Received: 06/14/2012 1030

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40972	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40358	Lab File ID:	lhbab11.d
Dilution:	4.4			Initial Weight/Volume:	5.41 g
Analysis Date:	06/25/2012 1731			Final Weight/Volume:	10 mL
Prep Date:	06/14/2012 1528				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		690	U J	140	690
Chloromethane		690	U	180	690
Vinyl chloride		690	U	140	690
Bromomethane		690	U J	170	690
Chloroethane		690	U	100	690
Trichlorofluoromethane		690	U	90	690
1,1-Dichloroethene		690	U	150	690
1,1,2-Trichloro-1,2,2-trichfluoroethane		690	U	120	690
Acetone		3400	U	610	3400
Carbon disulfide		680	J	110	690
Methyl acetate		690	U	140	690
Methylene Chloride		690	U	190	690
trans-1,2-Dichloroethene		690	U	140	690
Methyl t-butyl ether		690	U	120	690
1,2-Dichloroethene, Total		690	U	120	690
1,1-Dichloroethane		690	U	140	690
cis-1,2-Dichloroethene		690	U	120	690
2-Butanone		3400	U	590	3400
Chloroform		2100		130	690
1,1,1-Trichloroethane		690	U	140	690
Cyclohexane		690	U	140	690
Carbon tetrachloride		690	U	100	690
Benzene		530	J	140	690
1,2-Dichloroethane		690	U	120	690
Trichloroethene		690	U	120	690
Methylcyclohexane		690	U	120	690
1,2-Dichloropropane		690	U	130	690
Bromodichloromethane		690	U	130	690
cis-1,3-Dichloropropene		690	U	120	690
4-Methyl-2-pentanone		3400	U	740	3400
Toluene		390	J	140	690
trans-1,3-Dichloropropene		690	U	120	690
1,1,2-Trichloroethane		690	U	130	690
Tetrachloroethene		690	U	140	690
2-Hexanone		3400	U	530	3400
Dibromochloromethane		690	U	110	690
1,2-Dibromoethane		690	U	130	690
Chlorobenzene		690	U	140	690
Ethylbenzene		1200		140	690
Xylenes, Total		4900		140	690
Styrene		690	U	120	690
Bromoform		690	U	120	690
Isopropylbenzene		690	U	130	690
1,1,2,2-Tetrachloroethane		690	U	120	690
1,3-Dichlorobenzene		690	U	130	690
1,4-Dichlorobenzene		690	U	130	690

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-25 (3.5-5)**

Lab Sample ID: 200-11278-2
Client Matrix: Solid

% Moisture: 31.0

Date Sampled: 06/12/2012 1130
Date Received: 06/14/2012 1030

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40972	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40358	Lab File ID:	lhbab11.d
Dilution:	4.4			Initial Weight/Volume:	5.41 g
Analysis Date:	06/25/2012 1731			Final Weight/Volume:	10 mL
Prep Date:	06/14/2012 1528				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		690	U	140	690
1,2-Dibromo-3-Chloropropane		690	U	120	690
1,2,4-Trichlorobenzene		690	U	140	690

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	90		65 - 155
Toluene-d8	102		80 - 115
Bromofluorobenzene	100		80 - 115
1,2-Dichlorobenzene-d4	101		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: DUP-01-06122012

Lab Sample ID: 200-11278-3
Client Matrix: Solid

% Moisture: 50.7

Date Sampled: 06/12/2012 0000
Date Received: 06/14/2012 1030

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40972	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40358	Lab File ID:	lhbab12.d
Dilution:	2.9			Initial Weight/Volume:	5.81 g
Analysis Date:	06/25/2012 1803			Final Weight/Volume:	10 mL
Prep Date:	06/14/2012 1528				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		650	U J	140	650
Chloromethane		650	U	170	650
Vinyl chloride		650	U	130	650
Bromomethane		650	U J	160	650
Chloroethane		650	U	98	650
Trichlorofluoromethane		650	U	85	650
1,1-Dichloroethene		650	U	140	650
1,1,2-Trichloro-1,2,2-trichfluoroethane		650	U	120	650
Acetone		3300	U	580	3300
Carbon disulfide		1200		100	650
Methyl acetate		650	U	140	650
Methylene Chloride		650	U	180	650
trans-1,2-Dichloroethene		650	U	130	650
Methyl t-butyl ether		650	U	120	650
1,2-Dichloroethene, Total		650	U	120	650
1,1-Dichloroethane		650	U	130	650
cis-1,2-Dichloroethene		650	U	120	650
2-Butanone		3300	U	560	3300
Chloroform		2100		120	650
1,1,1-Trichloroethane		650	U	130	650
Cyclohexane		650	U	130	650
Carbon tetrachloride		650	U	98	650
Benzene		760		140	650
1,2-Dichloroethane		650	U	110	650
Trichloroethene		650	U	110	650
Methylcyclohexane		650	U	120	650
1,2-Dichloropropane		650	U	120	650
Bromodichloromethane		650	U	120	650
cis-1,3-Dichloropropene		650	U	120	650
4-Methyl-2-pentanone		3300	U	710	3300
Toluene		370	J	130	650
trans-1,3-Dichloropropene		650	U	110	650
1,1,2-Trichloroethane		650	U	120	650
Tetrachloroethene		650	U	130	650
2-Hexanone		3300	U	500	3300
Dibromochloromethane		650	U	100	650
1,2-Dibromoethane		650	U	120	650
Chlorobenzene		650	U	130	650
Ethylbenzene		1500		130	650
Xylenes, Total		4300		140	650
Styrene		650	U	110	650
Bromoform		650	U	110	650
Isopropylbenzene		650	U	120	650
1,1,2,2-Tetrachloroethane		650	U	120	650
1,3-Dichlorobenzene		650	U	120	650
1,4-Dichlorobenzene		650	U	120	650

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: DUP-01-06122012

Lab Sample ID: 200-11278-3
Client Matrix: Solid

% Moisture: 50.7

Date Sampled: 06/12/2012 0000
Date Received: 06/14/2012 1030

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40972	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40358	Lab File ID:	lhbab12.d
Dilution:	2.9			Initial Weight/Volume:	5.81 g
Analysis Date:	06/25/2012 1803			Final Weight/Volume:	10 mL
Prep Date:	06/14/2012 1528				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		650	U	130	650
1,2-Dibromo-3-Chloropropane		650	U	110	650
1,2,4-Trichlorobenzene		650	U	130	650

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	88		65 - 155
Toluene-d8	101		80 - 115
Bromofluorobenzene	100		80 - 115
1,2-Dichlorobenzene-d4	100		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-28 (3-5)**

Lab Sample ID: 200-11278-4
Client Matrix: Solid

% Moisture: 30.9

Date Sampled: 06/12/2012 1045
Date Received: 06/14/2012 1030

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40972	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40358	Lab File ID:	lhbab13.d
Dilution:	1.0			Initial Weight/Volume:	5.58 g
Analysis Date:	06/25/2012 1835			Final Weight/Volume:	10 mL
Prep Date:	06/14/2012 1528				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		150	U J	32	150
Chloromethane		150	U	40	150
Vinyl chloride		150	U	30	150
Bromomethane		150	U J	38	150
Chloroethane		150	U	23	150
Trichlorofluoromethane		150	U	20	150
1,1-Dichloroethene		150	U	33	150
1,1,2-Trichloro-1,2,2-trichfluoroethane		150	U	27	150
Acetone		760	U	140	760
Carbon disulfide		2600		24	150
Methyl acetate		150	U	32	150
Methylene Chloride		150	U	41	150
trans-1,2-Dichloroethene		150	U	30	150
Methyl t-butyl ether		150	U	27	150
1,2-Dichloroethene, Total		150	U	27	150
1,1-Dichloroethane		150	U	30	150
cis-1,2-Dichloroethene		150	U	27	150
2-Butanone		760	U	130	760
Chloroform		540		29	150
1,1,1-Trichloroethane		150	U	30	150
Cyclohexane		150	U	30	150
Carbon tetrachloride		150	U	23	150
Benzene		1300		32	150
1,2-Dichloroethane		150	U	26	150
Trichloroethene		150	U	26	150
Methylcyclohexane		92	J	27	150
1,2-Dichloropropane		150	U	29	150
Bromodichloromethane		150	U	29	150
cis-1,3-Dichloropropene		150	U	27	150
4-Methyl-2-pentanone		760	U	160	760
Toluene		430		30	150
trans-1,3-Dichloropropene		150	U	26	150
1,1,2-Trichloroethane		150	U	29	150
Tetrachloroethene		150	U	30	150
2-Hexanone		760	U	120	760
Dibromochloromethane		150	U	24	150
1,2-Dibromoethane		150	U	29	150
Chlorobenzene		150	U	30	150
Ethylbenzene		360		30	150
Xylenes, Total		2100		32	150
Styrene		150	U	26	150
Bromoform		150	U	26	150
Isopropylbenzene		37	J	29	150
1,1,2,2-Tetrachloroethane		150	U	27	150
1,3-Dichlorobenzene		150	U	29	150
1,4-Dichlorobenzene		150	U	29	150

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-28 (3-5)**

Lab Sample ID: 200-11278-4
Client Matrix: Solid % Moisture: 30.9

Date Sampled: 06/12/2012 1045
Date Received: 06/14/2012 1030

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40972	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40358	Lab File ID:	lhbab13.d
Dilution:	1.0			Initial Weight/Volume:	5.58 g
Analysis Date:	06/25/2012 1835			Final Weight/Volume:	10 mL
Prep Date:	06/14/2012 1528				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		150	U	30	150
1,2-Dibromo-3-Chloropropane		150	U	26	150
1,2,4-Trichlorobenzene		150	U	30	150

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	88		65 - 155
Toluene-d8	101		80 - 115
Bromofluorobenzene	100		80 - 115
1,2-Dichlorobenzene-d4	101		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **TB-06132012**

Lab Sample ID: 200-11278-5
Client Matrix: Water

Date Sampled: 06/13/2012 0000
Date Received: 06/14/2012 1030

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40972	Instrument ID:	L.i
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lhbab19.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/25/2012 2147			Final Weight/Volume:	5 mL
Prep Date:	06/25/2012 2147				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	1.0	UJ	0.090	1.0
Chloromethane	1.0	U	0.12	1.0
Vinyl chloride	1.0	U	0.090	1.0
Bromomethane	1.0	UJ	0.43	1.0
Chloroethane	1.0	U	0.12	1.0
Trichlorofluoromethane	1.0	U	0.092	1.0
1,1-Dichloroethene	1.0	U	0.18	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.18	1.0
Acetone	5.0	U	0.92	5.0
Carbon disulfide	1.0	U	0.15	1.0
Methyl acetate	1.0	U	0.23	1.0
Methylene Chloride	0.22	J	0.21	1.0
trans-1,2-Dichloroethene	1.0	U	0.17	1.0
Methyl t-butyl ether	1.0	U	0.17	1.0
1,2-Dichloroethene, Total	1.0	U	0.32	1.0
1,1-Dichloroethane	1.0	U	0.16	1.0
cis-1,2-Dichloroethene	1.0	U	0.16	1.0
2-Butanone	5.0	U	1.1	5.0
Chloroform	1.0	U	0.16	1.0
1,1,1-Trichloroethane	1.0	U	0.16	1.0
Cyclohexane	1.0	U	0.23	1.0
Carbon tetrachloride	1.0	U	0.17	1.0
Benzene	1.0	U	0.17	1.0
1,2-Dichloroethane	1.0	U	0.15	1.0
Trichloroethene	1.0	U	0.14	1.0
Methylcyclohexane	1.0	U	0.25	1.0
1,2-Dichloropropane	1.0	U	0.17	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.16	1.0
4-Methyl-2-pentanone	5.0	U	0.90	5.0
Toluene	1.0	U	0.17	1.0
trans-1,3-Dichloropropene	1.0	U	0.18	1.0
1,1,2-Trichloroethane	1.0	U	0.18	1.0
Tetrachloroethene	1.0	U	0.18	1.0
2-Hexanone	5.0	U	1.1	5.0
Dibromochloromethane	1.0	U	0.17	1.0
1,2-Dibromoethane	1.0	U	0.18	1.0
Chlorobenzene	1.0	U	0.19	1.0
Ethylbenzene	1.0	U	0.18	1.0
Xylenes, Total	1.0	U	0.17	1.0
Styrene	1.0	U	0.17	1.0
Bromoform	1.0	U	0.17	1.0
Isopropylbenzene	1.0	U	0.17	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.17	1.0
1,3-Dichlorobenzene	1.0	U	0.18	1.0
1,4-Dichlorobenzene	1.0	U	0.15	1.0

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: TB-06132012

Lab Sample ID: 200-11278-5
Client Matrix: Water

Date Sampled: 06/13/2012 0000
Date Received: 06/14/2012 1030

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40972	Instrument ID:	L.i
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lhbab19.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/25/2012 2147			Final Weight/Volume:	5 mL
Prep Date:	06/25/2012 2147				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,2-Dichlorobenzene	1.0	U	0.15	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	0.22	1.0
1,2,4-Trichlorobenzene	1.0	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	88		80 - 115
Toluene-d8	102		80 - 115
Bromofluorobenzene	101		85 - 120
1,2-Dichlorobenzene-d4	100		80 - 115

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-03 (4.5-5)**

Lab Sample ID: 200-11326-1
Client Matrix: Solid % Moisture: 39.4

Date Sampled: 06/14/2012 1130
Date Received: 06/15/2012 1015

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40972	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40532	Lab File ID:	lhbab14.d
Dilution:	2.9			Initial Weight/Volume:	5.7 g
Analysis Date:	06/25/2012 1907			Final Weight/Volume:	10 mL
Prep Date:	06/19/2012 0832				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		510	U J	110	510
Chloromethane		510	U	130	510
Vinyl chloride		510	U	100	510
Bromomethane		510	U J	130	510
Chloroethane		510	U	77	510
Trichlorofluoromethane		510	U	67	510
1,1-Dichloroethene		510	U	110	510
1,1,2-Trichloro-1,2,2-trichfluoroethane		510	U	93	510
Acetone		2600	U	460	2600
Carbon disulfide		44000		82	510
Methyl acetate		510	U	110	510
Methylene Chloride		510	U	140	510
trans-1,2-Dichloroethene		510	U	100	510
Methyl t-butyl ether		510	U	93	510
1,2-Dichloroethene, Total		510	U	93	510
1,1-Dichloroethane		510	U	100	510
cis-1,2-Dichloroethene		510	U	93	510
2-Butanone		2600	U	440	2600
Chloroform		1600		98	510
1,1,1-Trichloroethane		510	U	100	510
Cyclohexane		510	U	100	510
Carbon tetrachloride		510	U	77	510
Benzene		280	J	110	510
1,2-Dichloroethane		510	U	87	510
Trichloroethene		510	U	87	510
Methylcyclohexane		510	U	93	510
1,2-Dichloropropane		510	U	98	510
Bromodichloromethane		510	U	98	510
cis-1,3-Dichloropropene		510	U	93	510
4-Methyl-2-pentanone		2600	U	560	2600
Toluene		120	J	100	510
trans-1,3-Dichloropropene		510	U	87	510
1,1,2-Trichloroethane		510	U	98	510
Tetrachloroethene		510	U	100	510
2-Hexanone		2600	U	400	2600
Dibromochloromethane		510	U	82	510
1,2-Dibromoethane		510	U	98	510
Chlorobenzene		510	U	100	510
Ethylbenzene		510	U	100	510
Xylenes, Total		170	J	110	510
Styrene		510	U	87	510
Bromoform		510	U	87	510
Isopropylbenzene		510	U	98	510
1,1,2,2-Tetrachloroethane		510	U	93	510
1,3-Dichlorobenzene		510	U	98	510
1,4-Dichlorobenzene		510	U	98	510

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-03 (4.5-5)**

Lab Sample ID: 200-11326-1
Client Matrix: Solid % Moisture: 39.4

Date Sampled: 06/14/2012 1130
Date Received: 06/15/2012 1015

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40972	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40532	Lab File ID:	lhbab14.d
Dilution:	2.9			Initial Weight/Volume:	5.7 g
Analysis Date:	06/25/2012 1907			Final Weight/Volume:	10 mL
Prep Date:	06/19/2012 0832				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		510	U	100	510
1,2-Dibromo-3-Chloropropane		510	U	87	510
1,2,4-Trichlorobenzene		510	U	100	510

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	89		65 - 155
Toluene-d8	103		80 - 115
Bromofluorobenzene	95		80 - 115
1,2-Dichlorobenzene-d4	97		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-06 (4-5)**

Lab Sample ID: 200-11326-2
Client Matrix: Solid

% Moisture: 50.2

Date Sampled: 06/14/2012 1010
Date Received: 06/15/2012 1015

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40972	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40532	Lab File ID:	lhbab15.d
Dilution:	7.3			Initial Weight/Volume:	5.49 g
Analysis Date:	06/25/2012 1939			Final Weight/Volume:	10 mL
Prep Date:	06/19/2012 0832				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		1700	UJ	360	1700
Chloromethane		1700	U	440	1700
Vinyl chloride		1700	U	340	1700
Bromomethane		1700	UJ	430	1700
Chloroethane		1700	U	260	1700
Trichlorofluoromethane		1700	U	220	1700
1,1-Dichloroethene		1700	U	370	1700
1,1,2-Trichloro-1,2,2-trichfluoroethane		1700	U	310	1700
Acetone		8500	U	1500	8500
Carbon disulfide		130000		270	1700
Methyl acetate		1700	U	360	1700
Methylene Chloride		1700	U	460	1700
trans-1,2-Dichloroethene		1700	U	340	1700
Methyl t-butyl ether		1700	U	310	1700
1,2-Dichloroethene, Total		1700	U	310	1700
1,1-Dichloroethane		1700	U	340	1700
cis-1,2-Dichloroethene		1700	U	310	1700
2-Butanone		8500	U	1500	8500
Chloroform		5500		320	1700
1,1,1-Trichloroethane		1700	U	340	1700
Cyclohexane		1700	U	340	1700
Carbon tetrachloride		1700	U	260	1700
Benzene		560	J	360	1700
1,2-Dichloroethane		1700	U	290	1700
Trichloroethene		1700	U	290	1700
Methylcyclohexane		1700	U	310	1700
1,2-Dichloropropane		1700	U	320	1700
Bromodichloromethane		1700	U	320	1700
cis-1,3-Dichloropropene		1700	U	310	1700
4-Methyl-2-pentanone		8500	U	1800	8500
Toluene		530	J	340	1700
trans-1,3-Dichloropropene		1700	U	290	1700
1,1,2-Trichloroethane		1700	U	320	1700
Tetrachloroethene		1700	U	340	1700
2-Hexanone		8500	U	1300	8500
Dibromochloromethane		1700	U	270	1700
1,2-Dibromoethane		1700	U	320	1700
Chlorobenzene		1700	U	340	1700
Ethylbenzene		1700	U	340	1700
Xylenes, Total		1500	J	360	1700
Styrene		1700	U	290	1700
Bromoform		1700	U	290	1700
Isopropylbenzene		1700	U	320	1700
1,1,2,2-Tetrachloroethane		1700	U	310	1700
1,3-Dichlorobenzene		1700	U	320	1700
1,4-Dichlorobenzene		1700	U	320	1700

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-06 (4-5)**

Lab Sample ID: 200-11326-2
Client Matrix: Solid

% Moisture: 50.2

Date Sampled: 06/14/2012 1010
Date Received: 06/15/2012 1015

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40972	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40532	Lab File ID:	lhbab15.d
Dilution:	7.3			Initial Weight/Volume:	5.49 g
Analysis Date:	06/25/2012 1939			Final Weight/Volume:	10 mL
Prep Date:	06/19/2012 0832				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		1700	U	340	1700
1,2-Dibromo-3-Chloropropane		1700	U	290	1700
1,2,4-Trichlorobenzene		1700	U	340	1700

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	87		65 - 155
Toluene-d8	100		80 - 115
Bromofluorobenzene	95		80 - 115
1,2-Dichlorobenzene-d4	97		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-11 (5-6)**

Lab Sample ID: 200-11326-3
Client Matrix: Solid

% Moisture: 11.4

Date Sampled: 06/14/2012 0910
Date Received: 06/15/2012 1015

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40924	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40538	Lab File ID:	ngam07.d
Dilution:	1.0			Initial Weight/Volume:	5.12 g
Analysis Date:	06/20/2012 1453			Final Weight/Volume:	5 mL
Prep Date:	06/19/2012 1016				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		5.5	U J	0.25	5.5
Chloromethane		5.5	U	0.29	5.5
Vinyl chloride		5.5	U	0.33	5.5
Bromomethane		5.5	U	0.82	5.5
Chloroethane		5.5	U J	0.42	5.5
Trichlorofluoromethane		5.5	U	0.36	5.5
1,1-Dichloroethene		5.5	U	0.41	5.5
1,1,2-Trichloro-1,2,2-trichfluoroethane		5.5	U	0.36	5.5
Acetone		30	J	1.1	5.5
Carbon disulfide		5.5 ~~1.0~~	~~JB~~ UB	0.34	5.5
Methyl acetate		5.5	U	0.69	5.5
Methylene Chloride		5.5 ~~0.90~~	~~J~~ UB	0.61	5.5
trans-1,2-Dichloroethene		5.5	U	0.41	5.5
Methyl t-butyl ether		5.5	U	0.33	5.5
1,2-Dichloroethene, Total		5.5	U	0.85	5.5
1,1-Dichloroethane		5.5	U	0.45	5.5
cis-1,2-Dichloroethene		5.5	U	0.46	5.5
2-Butanone		5.5	U J	1.7	5.5
Chloroform		5.5	U	0.35	5.5
1,1,1-Trichloroethane		5.5	U	0.77	5.5
Cyclohexane		5.5	U	0.94	5.5
Carbon tetrachloride		5.5	U	0.84	5.5
Benzene		5.5	U	0.78	5.5
1,2-Dichloroethane		5.5	U	0.68	5.5
Trichloroethene		5.5	U	0.53	5.5
Methylcyclohexane		5.5	U	0.19	5.5
1,2-Dichloropropane		5.5	U	0.32	5.5
Bromodichloromethane		5.5	U	0.23	5.5
cis-1,3-Dichloropropene		5.5	U	0.39	5.5
4-Methyl-2-pentanone		5.5	U	0.66	5.5
Toluene		5.5	U	0.11	5.5
trans-1,3-Dichloropropene		5.5	U	0.14	5.5
1,1,2-Trichloroethane		5.5	U	0.37	5.5
Tetrachloroethene		5.5	U	0.12	5.5
2-Hexanone		5.5	U	0.54	5.5
Dibromochloromethane		5.5	U	0.12	5.5
1,2-Dibromoethane		5.5	U	0.17	5.5
Chlorobenzene		5.5	U	0.084	5.5
Ethylbenzene		5.5	U	0.062	5.5
Xylenes, Total		5.5	U	0.80	5.5
Styrene		5.5	U	0.11	5.5
Bromoform		5.5	U	0.22	5.5
Isopropylbenzene		5.5	U	0.085	5.5
1,1,2,2-Tetrachloroethane		5.5	U	0.29	5.5
1,3-Dichlorobenzene		5.5	U	0.17	5.5
1,4-Dichlorobenzene		5.5	U	0.25	5.5

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-11 (5-6)**

Lab Sample ID: 200-11326-3
Client Matrix: Solid

% Moisture: 11.4

Date Sampled: 06/14/2012 0910
Date Received: 06/15/2012 1015

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40924	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40538	Lab File ID:	ngam07.d
Dilution:	1.0			Initial Weight/Volume:	5.12 g
Analysis Date:	06/20/2012 1453			Final Weight/Volume:	5 mL
Prep Date:	06/19/2012 1016				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		5.5	U	0.24	5.5
1,2-Dibromo-3-Chloropropane		5.5	U	1.0	5.5
1,2,4-Trichlorobenzene		5.5 ~~0.34~~	~~JB~~ UB	0.22	5.5

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	82		65 - 155
Toluene-d8	80		80 - 115
Bromofluorobenzene	84		80 - 115
1,2-Dichlorobenzene-d4	84		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-25 (12.7-13.7)**

Lab Sample ID: 200-11326-4
Client Matrix: Solid % Moisture: 34.8

Date Sampled: 06/14/2012 1150
Date Received: 06/15/2012 1015

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40858	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40538	Lab File ID:	ngal18.d
Dilution:	1.0			Initial Weight/Volume:	5.24 g
Analysis Date:	06/19/2012 1957			Final Weight/Volume:	5 mL
Prep Date:	06/19/2012 1016				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		7.3	U J	0.34	7.3
Chloromethane		7.3	U	0.38	7.3
Vinyl chloride		7.3	U	0.44	7.3
Bromomethane		7.3	U	1.1	7.3
Chloroethane		7.3	U J	0.56	7.3
Trichlorofluoromethane		7.3	U	0.48	7.3
1,1-Dichloroethene		7.3	U	0.54	7.3
1,1,2-Trichloro-1,2,2-trichfluoroethane		7.3	U	0.48	7.3
Acetone		210	J	1.5	7.3
Carbon disulfide		13	J	0.45	7.3
Methyl acetate		7.3	U	0.92	7.3
Methylene Chloride		7.3 ~~2.1~~	~~J~~ UB	0.81	7.3
trans-1,2-Dichloroethene		7.3	U	0.54	7.3
Methyl t-butyl ether		7.3	U	0.44	7.3
1,2-Dichloroethene, Total		7.3	U	1.1	7.3
1,1-Dichloroethane		7.3	U	0.60	7.3
cis-1,2-Dichloroethene		7.3	U	0.61	7.3
2-Butanone		48	J	2.2	7.3
Chloroform		7.3	U	0.47	7.3
1,1,1-Trichloroethane		7.3	U	1.0	7.3
Cyclohexane		1.5	J	1.2	7.3
Carbon tetrachloride		7.3	U	1.1	7.3
Benzene		5.1	J	1.0	7.3
1,2-Dichloroethane		7.3	U	0.91	7.3
Trichloroethene		7.3	U	0.70	7.3
Methylcyclohexane		1.9	J	0.25	7.3
1,2-Dichloropropane		7.3	U	0.42	7.3
Bromodichloromethane		7.3	U	0.31	7.3
cis-1,3-Dichloropropene		7.3	U	0.51	7.3
4-Methyl-2-pentanone		~~7.3~~	~~U~~ R	~~0.88~~	~~7.3~~
Toluene		7.3 ~~2.6~~	~~JB~~ UB	0.15	7.3
trans-1,3-Dichloropropene		7.3	U	0.19	7.3
1,1,2-Trichloroethane		7.3	U	0.50	7.3
Tetrachloroethene		7.3	U	0.16	7.3
2-Hexanone		7.3	U*	0.72	7.3
Dibromochloromethane		7.3	U	0.16	7.3
1,2-Dibromoethane		7.3	U	0.22	7.3
Chlorobenzene		7.3	U	0.11	7.3
Ethylbenzene		9.9	J	0.082	7.3
Xylenes, Total		23	J	1.1	7.3
Styrene		7.3	U	0.15	7.3
Bromoform		7.3	U	0.29	7.3
Isopropylbenzene		6.3	J	0.11	7.3
1,1,2,2-Tetrachloroethane		7.3	U J	0.38	7.3
1,3-Dichlorobenzene		7.3	U J	0.22	7.3
1,4-Dichlorobenzene		7.3	U J	0.34	7.3

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-25 (12.7-13.7)**

Lab Sample ID: 200-11326-4
Client Matrix: Solid % Moisture: 34.8

Date Sampled: 06/14/2012 1150
Date Received: 06/15/2012 1015

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40858	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40538	Lab File ID:	ngal18.d
Dilution:	1.0			Initial Weight/Volume:	5.24 g
Analysis Date:	06/19/2012 1957			Final Weight/Volume:	5 mL
Prep Date:	06/19/2012 1016				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		7.3	U J	0.32	7.3
1,2-Dibromo-3-Chloropropane		7.3	U J	1.3	7.3
1,2,4-Trichlorobenzene		7.3	U J	0.29	7.3

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	75		65 - 155
Toluene-d8	102		80 - 115
Bromofluorobenzene	134	X	80 - 115
1,2-Dichlorobenzene-d4	99		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-25 (12.7-13.7)**

Lab Sample ID: 200-11326-4
Client Matrix: Solid

% Moisture: 34.8

Date Sampled: 06/14/2012 1150
Date Received: 06/15/2012 1015

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40924	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40538	Lab File ID:	ngam08.d
Dilution:	1.0			Initial Weight/Volume:	5.13 g
Analysis Date:	06/20/2012 1523	Run Type:	RE	Final Weight/Volume:	5 mL
Prep Date:	06/19/2012 1016				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		7.5	U	0.34	7.5
Chloromethane		7.5	U	0.39	7.5
Vinyl chloride		7.5	U	0.45	7.5
Bromomethane		7.5	U	1.1	7.5
Chloroethane		7.5	U	0.57	7.5
Trichlorofluoromethane		7.5	U	0.49	7.5
1,1-Dichloroethene		7.5	U	0.55	7.5
1,1,2-Trichloro-1,2,2-trichfluoroethane		7.5	U	0.49	7.5
Acetone		460		1.5	7.5
Carbon disulfide		8.1	B	0.46	7.5
Methyl acetate		7.5	U	0.94	7.5
Methylene Chloride		2.7	J	0.82	7.5
trans-1,2-Dichloroethene		7.5	U	0.55	7.5
Methyl t-butyl ether		7.5	U	0.45	7.5
1,2-Dichloroethene, Total		7.5	U	1.2	7.5
1,1-Dichloroethane		7.5	U	0.61	7.5
cis-1,2-Dichloroethene		7.5	U	0.63	7.5
2-Butanone		140		2.2	7.5
Chloroform		7.5	U	0.48	7.5
1,1,1-Trichloroethane		7.5	U	1.0	7.5
Cyclohexane		2.3	J	1.3	7.5
Carbon tetrachloride		7.5	U	1.1	7.5
Benzene		8.4		1.1	7.5
1,2-Dichloroethane		7.5	U	0.93	7.5
Trichloroethene		7.5	U	0.72	7.5
Methylcyclohexane		2.8	J	0.25	7.5
1,2-Dichloropropane		7.5	U	0.43	7.5
Bromodichloromethane		7.5	U	0.31	7.5
cis-1,3-Dichloropropene		7.5	U	0.52	7.5
4-Methyl-2-pentanone		7.5	U	0.90	7.5
Toluene		4.1	J B	0.15	7.5
trans-1,3-Dichloropropene		7.5	U	0.19	7.5
1,1,2-Trichloroethane		7.5	U	0.51	7.5
Tetrachloroethene		7.5	U	0.16	7.5
2-Hexanone		7.5	U	0.73	7.5
Dibromochloromethane		7.5	U	0.16	7.5
1,2-Dibromoethane		7.5	U	0.22	7.5
Chlorobenzene		7.5	U	0.11	7.5
Ethylbenzene		15		0.084	7.5
Xylenes, Total		34		1.1	7.5
Styrene		0.75	J	0.15	7.5
Bromoform		7.5	U	0.30	7.5
Isopropylbenzene		11		0.12	7.5
1,1,2,2-Tetrachloroethane		7.5	U	0.39	7.5
1,3-Dichlorobenzene		7.5	U	0.22	7.5
1,4-Dichlorobenzene		7.5	U	0.34	7.5

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-25 (12.7-13.7)**

Lab Sample ID: 200-11326-4
Client Matrix: Solid

% Moisture: 34.8

Date Sampled: 06/14/2012 1150
Date Received: 06/15/2012 1015

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40924	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40538	Lab File ID:	ngam08.d
Dilution:	1.0			Initial Weight/Volume:	5.13 g
Analysis Date:	06/20/2012 1523	Run Type:	RE	Final Weight/Volume:	5 mL
Prep Date:	06/19/2012 1016				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		7.5	U	0.33	7.5
1,2-Dibromo-3-Chloropropane		7.5	U	1.4	7.5
1,2,4-Trichlorobenzene		7.5	U	0.30	7.5

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	78		65 - 155
Toluene-d8	58	X	80 - 115
Bromofluorobenzene	55	X	80 - 115
1,2-Dichlorobenzene-d4	40	X	45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **TB-06142012**

Lab Sample ID: 200-11326-5
Client Matrix: Water

Date Sampled: 06/14/2012 0000
Date Received: 06/15/2012 1015

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40972	Instrument ID:	L.i
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lhbab20.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/25/2012 2220			Final Weight/Volume:	5 mL
Prep Date:	06/25/2012 2220				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	1.0	UJ	0.090	1.0
Chloromethane	1.0	U	0.12	1.0
Vinyl chloride	1.0	U	0.090	1.0
Bromomethane	1.0	UJ	0.43	1.0
Chloroethane	1.0	U	0.12	1.0
Trichlorofluoromethane	1.0	U	0.092	1.0
1,1-Dichloroethene	1.0	U	0.18	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.18	1.0
Acetone	5.0	U	0.92	5.0
Carbon disulfide	1.0	U	0.15	1.0
Methyl acetate	1.0	U	0.23	1.0
Methylene Chloride	0.22	J	0.21	1.0
trans-1,2-Dichloroethene	1.0	U	0.17	1.0
Methyl t-butyl ether	1.0	U	0.17	1.0
1,2-Dichloroethene, Total	1.0	U	0.32	1.0
1,1-Dichloroethane	1.0	U	0.16	1.0
cis-1,2-Dichloroethene	1.0	U	0.16	1.0
2-Butanone	5.0	U	1.1	5.0
Chloroform	1.0	U	0.16	1.0
1,1,1-Trichloroethane	1.0	U	0.16	1.0
Cyclohexane	1.0	U	0.23	1.0
Carbon tetrachloride	1.0	U	0.17	1.0
Benzene	1.0	U	0.17	1.0
1,2-Dichloroethane	1.0	U	0.15	1.0
Trichloroethene	1.0	U	0.14	1.0
Methylcyclohexane	1.0	U	0.25	1.0
1,2-Dichloropropane	1.0	U	0.17	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.16	1.0
4-Methyl-2-pentanone	5.0	U	0.90	5.0
Toluene	1.0	U	0.17	1.0
trans-1,3-Dichloropropene	1.0	U	0.18	1.0
1,1,2-Trichloroethane	1.0	U	0.18	1.0
Tetrachloroethene	1.0	U	0.18	1.0
2-Hexanone	5.0	U	1.1	5.0
Dibromochloromethane	1.0	U	0.17	1.0
1,2-Dibromoethane	1.0	U	0.18	1.0
Chlorobenzene	1.0	U	0.19	1.0
Ethylbenzene	1.0	U	0.18	1.0
Xylenes, Total	1.0	U	0.17	1.0
Styrene	1.0	U	0.17	1.0
Bromoform	1.0	U	0.17	1.0
Isopropylbenzene	1.0	U	0.17	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.17	1.0
1,3-Dichlorobenzene	1.0	U	0.18	1.0
1,4-Dichlorobenzene	1.0	U	0.15	1.0

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **TB-06142012**

Lab Sample ID: 200-11326-5
Client Matrix: Water

Date Sampled: 06/14/2012 0000
Date Received: 06/15/2012 1015

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40972	Instrument ID:	L.i
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lhbab20.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/25/2012 2220			Final Weight/Volume:	5 mL
Prep Date:	06/25/2012 2220				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,2-Dichlorobenzene	1.0	U	0.15	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	0.22	1.0
1,2,4-Trichlorobenzene	1.0	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	88		80 - 115
Toluene-d8	102		80 - 115
Bromofluorobenzene	101		85 - 120
1,2-Dichlorobenzene-d4	102		80 - 115

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-04 (0-1)**

Lab Sample ID: 200-11346-1
Client Matrix: Solid

% Moisture: 23.3

Date Sampled: 06/14/2012 1445
Date Received: 06/16/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40858	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40494	Lab File ID:	ngal06.d
Dilution:	1.0			Initial Weight/Volume:	5.25 g
Analysis Date:	06/19/2012 1351			Final Weight/Volume:	5 mL
Prep Date:	06/18/2012 1352				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		6.2	U J	0.29	6.2
Chloromethane		6.2	U	0.32	6.2
Vinyl chloride		6.2	U	0.37	6.2
Bromomethane		6.2	U	0.92	6.2
Chloroethane		6.2	U J	0.47	6.2
Trichlorofluoromethane		6.2	U	0.41	6.2
1,1-Dichloroethene		6.2	U	0.46	6.2
1,1,2-Trichloro-1,2,2-trichfluoroethane		6.2	U	0.41	6.2
Acetone		31	J	1.2	6.2
Carbon disulfide		2.1	J	0.38	6.2
Methyl acetate		6.2	U	0.78	6.2
Methylene Chloride		6.2 ~~2.2~~	~~J~~ UB	0.68	6.2
trans-1,2-Dichloroethene		6.2	U	0.46	6.2
Methyl t-butyl ether		6.2	U	0.37	6.2
1,2-Dichloroethene, Total		6.2	U	0.96	6.2
1,1-Dichloroethane		6.2	U	0.51	6.2
cis-1,2-Dichloroethene		6.2	U	0.52	6.2
2-Butanone		9.0	J	1.9	6.2
Chloroform		6.2	U	0.40	6.2
1,1,1-Trichloroethane		6.2	U	0.87	6.2
Cyclohexane		6.2	U	1.1	6.2
Carbon tetrachloride		6.2	U	0.94	6.2
Benzene		6.2	U	0.88	6.2
1,2-Dichloroethane		6.2	U	0.77	6.2
Trichloroethene		6.2	U	0.60	6.2
Methylcyclohexane		6.2	U	0.21	6.2
1,2-Dichloropropane		6.2	U	0.36	6.2
Bromodichloromethane		6.2	U	0.26	6.2
cis-1,3-Dichloropropene		6.2	U	0.43	6.2
4-Methyl-2-pentanone		~~6.2~~	~~U~~ R	~~0.74~~	~~6.2~~
Toluene		6.2 ~~0.31~~	~~JB~~ UB	0.12	6.2
trans-1,3-Dichloropropene		6.2	U	0.16	6.2
1,1,2-Trichloroethane		6.2	U	0.42	6.2
Tetrachloroethene		6.2	U	0.14	6.2
2-Hexanone		6.2	U	0.61	6.2
Dibromochloromethane		6.2	U	0.14	6.2
1,2-Dibromoethane		6.2	U	0.19	6.2
Chlorobenzene		6.2	U	0.094	6.2
Ethylbenzene		6.2	U	0.069	6.2
Xylenes, Total		6.2	U	0.91	6.2
Styrene		6.2	U	0.12	6.2
Bromoform		6.2	U	0.25	6.2
Isopropylbenzene		6.2	U J	0.096	6.2
1,1,2,2-Tetrachloroethane		6.2	U J	0.32	6.2
1,3-Dichlorobenzene		6.2	U J	0.19	6.2
1,4-Dichlorobenzene		6.2	U J	0.29	6.2

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-04 (0-1)**

Lab Sample ID: 200-11346-1
Client Matrix: Solid % Moisture: 23.3

Date Sampled: 06/14/2012 1445
Date Received: 06/16/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40858	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40494	Lab File ID:	ngal06.d
Dilution:	1.0			Initial Weight/Volume:	5.25 g
Analysis Date:	06/19/2012 1351			Final Weight/Volume:	5 mL
Prep Date:	06/18/2012 1352				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		6.2	U J	0.27	6.2
1,2-Dibromo-3-Chloropropane		6.2	U J	1.1	6.2
1,2,4-Trichlorobenzene		6.2 ~~0.68~~	~~J B~~ UB	0.25	6.2

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	84		65 - 155
Toluene-d8	95		80 - 115
Bromofluorobenzene	110		80 - 115
1,2-Dichlorobenzene-d4	79		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-04 (0-1)**

Lab Sample ID: 200-11346-1
Client Matrix: Solid % Moisture: 23.3

Date Sampled: 06/14/2012 1445
Date Received: 06/16/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40924	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40494	Lab File ID:	ngam09.d
Dilution:	1.0			Initial Weight/Volume:	5.66 g
Analysis Date:	06/20/2012 1554	Run Type:	RE	Final Weight/Volume:	5 mL
Prep Date:	06/18/2012 1352				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		5.8	U	0.26	5.8
Chloromethane		5.8	U	0.30	5.8
Vinyl chloride		5.8	U	0.35	5.8
Bromomethane		5.8	U	0.85	5.8
Chloroethane		5.8	U	0.44	5.8
Trichlorofluoromethane		5.8	U	0.38	5.8
1,1-Dichloroethene		5.8	U	0.43	5.8
1,1,2-Trichloro-1,2,2-trichfluoroethane		5.8	U	0.38	5.8
Acetone		50		1.2	5.8
Carbon disulfide		4.3	J B	0.36	5.8
Methyl acetate		5.8	U	0.73	5.8
Methylene Chloride		1.2	J	0.63	5.8
trans-1,2-Dichloroethene		5.8	U	0.43	5.8
Methyl t-butyl ether		5.8	U	0.35	5.8
1,2-Dichloroethene, Total		5.8	U	0.89	5.8
1,1-Dichloroethane		5.8	U	0.47	5.8
cis-1,2-Dichloroethene		5.8	U	0.48	5.8
2-Butanone		16		1.7	5.8
Chloroform		5.8	U	0.37	5.8
1,1,1-Trichloroethane		5.8	U	0.81	5.8
Cyclohexane		5.8	U	0.98	5.8
Carbon tetrachloride		5.8	U	0.87	5.8
Benzene		5.8	U	0.82	5.8
1,2-Dichloroethane		5.8	U	0.71	5.8
Trichloroethene		5.8	U	0.55	5.8
Methylcyclohexane		5.8	U	0.20	5.8
1,2-Dichloropropane		5.8	U	0.33	5.8
Bromodichloromethane		5.8	U	0.24	5.8
cis-1,3-Dichloropropene		5.8	U	0.40	5.8
4-Methyl-2-pentanone		5.8	U	0.69	5.8
Toluene		0.26	J B	0.12	5.8
trans-1,3-Dichloropropene		5.8	U	0.15	5.8
1,1,2-Trichloroethane		5.8	U	0.39	5.8
Tetrachloroethene		5.8	U	0.13	5.8
2-Hexanone		5.8	U	0.56	5.8
Dibromochloromethane		5.8	U	0.13	5.8
1,2-Dibromoethane		5.8	U	0.17	5.8
Chlorobenzene		5.8	U	0.087	5.8
Ethylbenzene		0.37	J	0.064	5.8
Xylenes, Total		5.8	U	0.84	5.8
Styrene		5.8	U	0.12	5.8
Bromoform		5.8	U	0.23	5.8
Isopropylbenzene		5.8	U	0.089	5.8
1,1,2,2-Tetrachloroethane		5.8	U	0.30	5.8
1,3-Dichlorobenzene		5.8	U	0.17	5.8
1,4-Dichlorobenzene		5.8	U	0.26	5.8

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-04 (0-1)**

Lab Sample ID: 200-11346-1
Client Matrix: Solid

% Moisture: 23.3

Date Sampled: 06/14/2012 1445
Date Received: 06/16/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40924	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40494	Lab File ID:	ngam09.d
Dilution:	1.0			Initial Weight/Volume:	5.66 g
Analysis Date:	06/20/2012 1554	Run Type:	RE	Final Weight/Volume:	5 mL
Prep Date:	06/18/2012 1352				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		5.8	U	0.25	5.8
1,2-Dibromo-3-Chloropropane		5.8	U	1.0	5.8
1,2,4-Trichlorobenzene		0.50	J B	0.23	5.8

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	113		65 - 155
Toluene-d8	118	X	80 - 115
Bromofluorobenzene	152	X	80 - 115
1,2-Dichlorobenzene-d4	98		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-07 (4.5-5)**

Lab Sample ID: 200-11346-2
Client Matrix: Solid

% Moisture: 13.2

Date Sampled: 06/14/2012 1700
Date Received: 06/16/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40858	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40494	Lab File ID:	ngal07.d
Dilution:	1.0			Initial Weight/Volume:	6.19 g
Analysis Date:	06/19/2012 1422			Final Weight/Volume:	5 mL
Prep Date:	06/18/2012 1352				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		4.7	U J	0.21	4.7
Chloromethane		4.7	U	0.24	4.7
Vinyl chloride		4.7	U	0.28	4.7
Bromomethane		4.7	U	0.69	4.7
Chloroethane		4.7	U J	0.35	4.7
Trichlorofluoromethane		4.7	U	0.31	4.7
1,1-Dichloroethene		4.7	U	0.34	4.7
1,1,2-Trichloro-1,2,2-trichfluoroethane		4.7	U	0.31	4.7
Acetone		29	J	0.93	4.7
Carbon disulfide		3.1	J	0.29	4.7
Methyl acetate		4.7	U	0.59	4.7
Methylene Chloride		4.7	U	0.51	4.7
trans-1,2-Dichloroethene		4.7	U	0.34	4.7
Methyl t-butyl ether		4.7	U	0.28	4.7
1,2-Dichloroethene, Total		4.7	U	0.72	4.7
1,1-Dichloroethane		4.7	U	0.38	4.7
cis-1,2-Dichloroethene		4.7	U	0.39	4.7
2-Butanone		7.6	J	1.4	4.7
Chloroform		4.7	U	0.30	4.7
1,1,1-Trichloroethane		4.7	U	0.65	4.7
Cyclohexane		4.7	U	0.79	4.7
Carbon tetrachloride		4.7	U	0.71	4.7
Benzene		4.7	U	0.66	4.7
1,2-Dichloroethane		4.7	U	0.58	4.7
Trichloroethene		4.7	U	0.45	4.7
Methylcyclohexane		4.7	U	0.16	4.7
1,2-Dichloropropane		4.7	U	0.27	4.7
Bromodichloromethane		4.7	U	0.20	4.7
cis-1,3-Dichloropropene		4.7	U	0.33	4.7
4-Methyl-2-pentanone		~~4.7~~	~~U~~ R	~~0.56~~	~~4.7~~
Toluene		4.7 ~~0.21~~	~~B~~ UB	0.093	4.7
trans-1,3-Dichloropropene		4.7	U	0.12	4.7
1,1,2-Trichloroethane		4.7	U	0.32	4.7
Tetrachloroethene		4.7	U	0.10	4.7
2-Hexanone		4.7	U	0.46	4.7
Dibromochloromethane		4.7	U	0.10	4.7
1,2-Dibromoethane		4.7	U	0.14	4.7
Chlorobenzene		4.7	U	0.071	4.7
Ethylbenzene		0.11	J	0.052	4.7
Xylenes, Total		4.7	U	0.68	4.7
Styrene		4.7	U	0.093	4.7
Bromoform		4.7	U	0.19	4.7
Isopropylbenzene		0.087	J	0.072	4.7
1,1,2,2-Tetrachloroethane		4.7	U	0.24	4.7
1,3-Dichlorobenzene		4.7	U	0.14	4.7
1,4-Dichlorobenzene		4.7	U	0.21	4.7

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-07 (4.5-5)**

Lab Sample ID: 200-11346-2
Client Matrix: Solid

% Moisture: 13.2

Date Sampled: 06/14/2012 1700
Date Received: 06/16/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40858	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40494	Lab File ID:	ngal07.d
Dilution:	1.0			Initial Weight/Volume:	6.19 g
Analysis Date:	06/19/2012 1422			Final Weight/Volume:	5 mL
Prep Date:	06/18/2012 1352				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		4.7	U	0.20	4.7
1,2-Dibromo-3-Chloropropane		4.7	U	0.85	4.7
1,2,4-Trichlorobenzene		4.7 ~~0.23~~	~~JB~~ UB	0.19	4.7

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	86		65 - 155
Toluene-d8	97		80 - 115
Bromofluorobenzene	117	X	80 - 115
1,2-Dichlorobenzene-d4	99		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-07 (4.5-5)**

Lab Sample ID: 200-11346-2
Client Matrix: Solid

% Moisture: 13.2

Date Sampled: 06/14/2012 1700
Date Received: 06/16/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40924	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40494	Lab File ID:	ngam10.d
Dilution:	1.0			Initial Weight/Volume:	5.54 g
Analysis Date:	06/20/2012 1625	Run Type:	RE	Final Weight/Volume:	5 mL
Prep Date:	06/18/2012 1352				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		5.2	U	0.24	5.2
Chloromethane		5.2	U	0.27	5.2
Vinyl chloride		5.2	U	0.31	5.2
Bromomethane		5.2	U	0.77	5.2
Chloroethane		5.2	U	0.40	5.2
Trichlorofluoromethane		5.2	U	0.34	5.2
1,1-Dichloroethene		5.2	U	0.38	5.2
1,1,2-Trichloro-1,2,2-trichfluoroethane		5.2	U	0.34	5.2
Acetone		44		1.0	5.2
Carbon disulfide		4.9	J B	0.32	5.2
Methyl acetate		5.2	U	0.66	5.2
Methylene Chloride		0.98	J	0.57	5.2
trans-1,2-Dichloroethene		5.2	U	0.38	5.2
Methyl t-butyl ether		5.2	U	0.31	5.2
1,2-Dichloroethene, Total		5.2	U	0.80	5.2
1,1-Dichloroethane		5.2	U	0.43	5.2
cis-1,2-Dichloroethene		5.2	U	0.44	5.2
2-Butanone		11		1.6	5.2
Chloroform		5.2	U	0.33	5.2
1,1,1-Trichloroethane		5.2	U	0.73	5.2
Cyclohexane		5.2	U	0.88	5.2
Carbon tetrachloride		5.2	U	0.79	5.2
Benzene		5.2	U	0.74	5.2
1,2-Dichloroethane		5.2	U	0.64	5.2
Trichloroethene		5.2	U	0.50	5.2
Methylcyclohexane		5.2	U	0.18	5.2
1,2-Dichloropropane		5.2	U	0.30	5.2
Bromodichloromethane		5.2	U	0.22	5.2
cis-1,3-Dichloropropene		5.2	U	0.36	5.2
4-Methyl-2-pentanone		5.2	U	0.62	5.2
Toluene		0.46	J B	0.10	5.2
trans-1,3-Dichloropropene		5.2	U	0.14	5.2
1,1,2-Trichloroethane		5.2	U	0.35	5.2
Tetrachloroethene		5.2	U	0.11	5.2
2-Hexanone		5.2	U	0.51	5.2
Dibromochloromethane		5.2	U	0.11	5.2
1,2-Dibromoethane		5.2	U	0.16	5.2
Chlorobenzene		5.2	U	0.079	5.2
Ethylbenzene		5.2	U	0.058	5.2
Xylenes, Total		5.2	U	0.76	5.2
Styrene		5.2	U	0.10	5.2
Bromoform		5.2	U	0.21	5.2
Isopropylbenzene		5.2	U	0.080	5.2
1,1,2,2-Tetrachloroethane		5.2	U	0.27	5.2
1,3-Dichlorobenzene		5.2	U	0.16	5.2
1,4-Dichlorobenzene		5.2	U	0.24	5.2

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-07 (4.5-5)**

Lab Sample ID: 200-11346-2
Client Matrix: Solid

% Moisture: 13.2

Date Sampled: 06/14/2012 1700
Date Received: 06/16/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40924	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40494	Lab File ID:	ngam10.d
Dilution:	1.0			Initial Weight/Volume:	5.54 g
Analysis Date:	06/20/2012 1625	Run Type:	RE	Final Weight/Volume:	5 mL
Prep Date:	06/18/2012 1352				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		5.2	U	0.23	5.2
1,2-Dibromo-3-Chloropropane		5.2	U	0.95	5.2
1,2,4-Trichlorobenzene		5.2	U	0.21	5.2

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	96		65 - 155
Toluene-d8	98		80 - 115
Bromofluorobenzene	120	X	80 - 115
1,2-Dichlorobenzene-d4	102		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-29 (17-18)**

Lab Sample ID: 200-11346-3
Client Matrix: Solid

% Moisture: 13.7

Date Sampled: 06/15/2012 0950
Date Received: 06/16/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40858	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40494	Lab File ID:	ngal08.d
Dilution:	1.0			Initial Weight/Volume:	5.94 g
Analysis Date:	06/19/2012 1452			Final Weight/Volume:	5 mL
Prep Date:	06/18/2012 1352				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		4.9	U J	0.22	4.9
Chloromethane		4.9	U	0.25	4.9
Vinyl chloride		4.9	U	0.29	4.9
Bromomethane		4.9	U	0.72	4.9
Chloroethane		4.9	U J	0.37	4.9
Trichlorofluoromethane		4.9	U	0.32	4.9
1,1-Dichloroethene		4.9	U	0.36	4.9
1,1,2-Trichloro-1,2,2-trichfluoroethane		4.9	U	0.32	4.9
Acetone		44	~~J~~	0.98	4.9
Carbon disulfide		0.31	J	0.30	4.9
Methyl acetate		4.9	U	0.61	4.9
Methylene Chloride		4.9 ~~0.74~~	~~J~~ UB	0.54	4.9
trans-1,2-Dichloroethene		4.9	U	0.36	4.9
Methyl t-butyl ether		4.9	U	0.29	4.9
1,2-Dichloroethene, Total		4.9	U	0.75	4.9
1,1-Dichloroethane		4.9	U	0.40	4.9
cis-1,2-Dichloroethene		4.9	U	0.41	4.9
2-Butanone		8.0	~~J~~	1.5	4.9
Chloroform		4.9	U	0.31	4.9
1,1,1-Trichloroethane		4.9	U	0.68	4.9
Cyclohexane		4.9	U	0.83	4.9
Carbon tetrachloride		4.9	U	0.74	4.9
Benzene		4.9	U	0.69	4.9
1,2-Dichloroethane		4.9	U	0.61	4.9
Trichloroethene		4.9	U	0.47	4.9
Methylcyclohexane		4.9	U	0.17	4.9
1,2-Dichloropropane		4.9	U	0.28	4.9
Bromodichloromethane		4.9	U	0.20	4.9
cis-1,3-Dichloropropene		4.9	U	0.34	4.9
4-Methyl-2-pentanone		~~4.9~~	~~U~~ R	~~0.59~~	~~4.9~~
Toluene		4.9 ~~0.10~~	~~JB~~ UB	0.098	4.9
trans-1,3-Dichloropropene		4.9	U	0.13	4.9
1,1,2-Trichloroethane		4.9	U	0.33	4.9
Tetrachloroethene		4.9	U	0.11	4.9
2-Hexanone		4.9	U	0.48	4.9
Dibromochloromethane		4.9	U	0.11	4.9
1,2-Dibromoethane		4.9	U	0.15	4.9
Chlorobenzene		4.9	U	0.074	4.9
Ethylbenzene		4.9	U	0.055	4.9
Xylenes, Total		4.9	U	0.71	4.9
Styrene		4.9	U	0.098	4.9
Bromoform		4.9	U	0.20	4.9
Isopropylbenzene		4.9	U	0.075	4.9
1,1,2,2-Tetrachloroethane		4.9	U	0.25	4.9
1,3-Dichlorobenzene		4.9	U	0.15	4.9
1,4-Dichlorobenzene		4.9	U	0.22	4.9

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-29 (17-18)**

Lab Sample ID: 200-11346-3
Client Matrix: Solid

% Moisture: 13.7

Date Sampled: 06/15/2012 0950
Date Received: 06/16/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40858	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40494	Lab File ID:	ngal08.d
Dilution:	1.0			Initial Weight/Volume:	5.94 g
Analysis Date:	06/19/2012 1452			Final Weight/Volume:	5 mL
Prep Date:	06/18/2012 1352				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		4.9	U	0.21	4.9
1,2-Dibromo-3-Chloropropane		4.9	U	0.89	4.9
1,2,4-Trichlorobenzene		4.9	U	0.20	4.9

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	79		65 - 155
Toluene-d8	93		80 - 115
Bromofluorobenzene	101		80 - 115
1,2-Dichlorobenzene-d4	92		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-29 (18-19)**

Lab Sample ID: 200-11346-4
Client Matrix: Solid

% Moisture: 15.2

Date Sampled: 06/15/2012 1000
Date Received: 06/16/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40858	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40494	Lab File ID:	ngal09.d
Dilution:	1.0			Initial Weight/Volume:	5.86 g
Analysis Date:	06/19/2012 1523			Final Weight/Volume:	5 mL
Prep Date:	06/18/2012 1352				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		5.0	U J	0.23	5.0
Chloromethane		5.0	U	0.26	5.0
Vinyl chloride		5.0	U	0.30	5.0
Bromomethane		5.0	U	0.74	5.0
Chloroethane		5.0	U J	0.38	5.0
Trichlorofluoromethane		5.0	U	0.33	5.0
1,1-Dichloroethene		5.0	U	0.37	5.0
1,1,2-Trichloro-1,2,2-trichfluoroethane		5.0	U	0.33	5.0
Acetone		62	J	1.0	5.0
Carbon disulfide		5.0	U	0.31	5.0
Methyl acetate		5.0	U	0.63	5.0
Methylene Chloride		5.0 ~~0.71~~	~~J~~ UB	0.55	5.0
trans-1,2-Dichloroethene		5.0	U	0.37	5.0
Methyl t-butyl ether		5.0	U	0.30	5.0
1,2-Dichloroethene, Total		5.0	U	0.77	5.0
1,1-Dichloroethane		5.0	U	0.41	5.0
cis-1,2-Dichloroethene		5.0	U	0.42	5.0
2-Butanone		7.8	J	1.5	5.0
Chloroform		5.0	U	0.32	5.0
1,1,1-Trichloroethane		5.0	U	0.70	5.0
Cyclohexane		5.0	U	0.85	5.0
Carbon tetrachloride		5.0	U	0.76	5.0
Benzene		5.0	U	0.71	5.0
1,2-Dichloroethane		5.0	U	0.62	5.0
Trichloroethene		5.0	U	0.48	5.0
Methylcyclohexane		5.0	U	0.17	5.0
1,2-Dichloropropane		5.0	U	0.29	5.0
Bromodichloromethane		5.0	U	0.21	5.0
cis-1,3-Dichloropropene		5.0	U	0.35	5.0
4-Methyl-2-pentanone		~~5.0~~	~~U~~ R	~~0.60~~	~~5.0~~
Toluene		5.0	U	0.10	5.0
trans-1,3-Dichloropropene		5.0	U	0.13	5.0
1,1,2-Trichloroethane		5.0	U	0.34	5.0
Tetrachloroethene		5.0	U	0.11	5.0
2-Hexanone		5.0	U J	0.49	5.0
Dibromochloromethane		5.0	U	0.11	5.0
1,2-Dibromoethane		5.0	U	0.15	5.0
Chlorobenzene		5.0	U	0.076	5.0
Ethylbenzene		5.0	U	0.056	5.0
Xylenes, Total		5.0	U	0.73	5.0
Styrene		5.0	U	0.10	5.0
Bromoform		5.0	U	0.20	5.0
Isopropylbenzene		5.0	U	0.077	5.0
1,1,2,2-Tetrachloroethane		5.0	U	0.26	5.0
1,3-Dichlorobenzene		5.0	U	0.15	5.0
1,4-Dichlorobenzene		5.0	U	0.23	5.0

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-29 (18-19)**

Lab Sample ID: 200-11346-4
Client Matrix: Solid

% Moisture: 15.2

Date Sampled: 06/15/2012 1000
Date Received: 06/16/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40858	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40494	Lab File ID:	ngal09.d
Dilution:	1.0			Initial Weight/Volume:	5.86 g
Analysis Date:	06/19/2012 1523			Final Weight/Volume:	5 mL
Prep Date:	06/18/2012 1352				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		5.0	U	0.22	5.0
1,2-Dibromo-3-Chloropropane		5.0	U	0.92	5.0
1,2,4-Trichlorobenzene		5.0	U	0.20	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	83		65 - 155
Toluene-d8	94		80 - 115
Bromofluorobenzene	106		80 - 115
1,2-Dichlorobenzene-d4	96		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-27 (17.5-18.5)**

Lab Sample ID: 200-11346-5
Client Matrix: Solid % Moisture: 17.1

Date Sampled: 06/15/2012 1130
Date Received: 06/16/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40858	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40494	Lab File ID:	ngal10.d
Dilution:	1.0			Initial Weight/Volume:	7.61 g
Analysis Date:	06/19/2012 1554			Final Weight/Volume:	5 mL
Prep Date:	06/18/2012 1352				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		4.0	U J	0.18	4.0
Chloromethane		4.0	U	0.21	4.0
Vinyl chloride		4.0	U	0.24	4.0
Bromomethane		4.0	U	0.59	4.0
Chloroethane		4.0	U J	0.30	4.0
Trichlorofluoromethane		4.0	U	0.26	4.0
1,1-Dichloroethene		4.0	U	0.29	4.0
1,1,2-Trichloro-1,2,2-trichfluoroethane		4.0	U	0.26	4.0
Acetone		65	J	0.79	4.0
Carbon disulfide		4.0	U	0.25	4.0
Methyl acetate		4.0	U	0.50	4.0
Methylene Chloride		4.0	U	0.44	4.0
trans-1,2-Dichloroethene		4.0	U	0.29	4.0
Methyl t-butyl ether		4.0	U	0.24	4.0
1,2-Dichloroethene, Total		4.0	U	0.61	4.0
1,1-Dichloroethane		4.0	U	0.32	4.0
cis-1,2-Dichloroethene		4.0	U	0.33	4.0
2-Butanone		9.1	J	1.2	4.0
Chloroform		4.0	U	0.25	4.0
1,1,1-Trichloroethane		4.0	U	0.55	4.0
Cyclohexane		4.0	U	0.67	4.0
Carbon tetrachloride		4.0	U	0.60	4.0
Benzene		4.0	U	0.56	4.0
1,2-Dichloroethane		4.0	U	0.49	4.0
Trichloroethene		4.0	U	0.38	4.0
Methylcyclohexane		4.0	U	0.13	4.0
1,2-Dichloropropane		4.0	U	0.23	4.0
Bromodichloromethane		4.0	U	0.17	4.0
cis-1,3-Dichloropropene		4.0	U	0.28	4.0
4-Methyl-2-pentanone		~~4.0~~	~~U~~ R	~~0.48~~	~~4.0~~
Toluene		4.0	U	0.079	4.0
trans-1,3-Dichloropropene		4.0	U	0.10	4.0
1,1,2-Trichloroethane		4.0	U	0.27	4.0
Tetrachloroethene		4.0	U	0.087	4.0
2-Hexanone		4.0	U J	0.39	4.0
Dibromochloromethane		4.0	U	0.087	4.0
1,2-Dibromoethane		4.0	U	0.12	4.0
Chlorobenzene		4.0	U	0.060	4.0
Ethylbenzene		4.0	U	0.044	4.0
Xylenes, Total		4.0	U	0.58	4.0
Styrene		4.0	U	0.079	4.0
Bromoform		4.0	U	0.16	4.0
Isopropylbenzene		4.0	U	0.061	4.0
1,1,2,2-Tetrachloroethane		4.0	U	0.21	4.0
1,3-Dichlorobenzene		4.0	U	0.12	4.0
1,4-Dichlorobenzene		4.0	U	0.18	4.0

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-27 (17.5-18.5)**

Lab Sample ID: 200-11346-5
Client Matrix: Solid

% Moisture: 17.1

Date Sampled: 06/15/2012 1130
Date Received: 06/16/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40858	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40494	Lab File ID:	ngal10.d
Dilution:	1.0			Initial Weight/Volume:	7.61 g
Analysis Date:	06/19/2012 1554			Final Weight/Volume:	5 mL
Prep Date:	06/18/2012 1352				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		4.0	U	0.17	4.0
1,2-Dibromo-3-Chloropropane		4.0	U	0.72	4.0
1,2,4-Trichlorobenzene		4.0	U	0.16	4.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	84		65 - 155
Toluene-d8	93		80 - 115
Bromofluorobenzene	105		80 - 115
1,2-Dichlorobenzene-d4	96		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-01 (10-10.8)**

Lab Sample ID: 200-11346-6
Client Matrix: Solid

% Moisture: 41.2

Date Sampled: 06/15/2012 1400
Date Received: 06/16/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40972	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40487	Lab File ID:	lhbab08.d
Dilution:	11			Initial Weight/Volume:	4.92 g
Analysis Date:	06/25/2012 1555			Final Weight/Volume:	10 mL
Prep Date:	06/18/2012 1253				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		2300	U J	480	2300
Chloromethane		2300	U	590	2300
Vinyl chloride		2300	U	460	2300
Bromomethane		2300	U J	570	2300
Chloroethane		2300	U	340	2300
Trichlorofluoromethane		2300	U	300	2300
1,1-Dichloroethene		2300	U	500	2300
1,1,2-Trichloro-1,2,2-trichfluoroethane		2300	U	410	2300
Acetone		11000	U	2000	11000
Carbon disulfide		36000		370	2300
Methyl acetate		2300	U	480	2300
Methylene Chloride		2300	U	620	2300
trans-1,2-Dichloroethene		2300	U	460	2300
Methyl t-butyl ether		2300	U	410	2300
1,2-Dichloroethene, Total		2300	U	410	2300
1,1-Dichloroethane		2300	U	460	2300
cis-1,2-Dichloroethene		2300	U	410	2300
2-Butanone		11000	U	2000	11000
Chloroform		2300	U	430	2300
1,1,1-Trichloroethane		2300	U	460	2300
Cyclohexane		2300	U	460	2300
Carbon tetrachloride		2300	U	340	2300
Benzene		2300	U	480	2300
1,2-Dichloroethane		2300	U	390	2300
Trichloroethene		2300	U	390	2300
Methylcyclohexane		2300	U	410	2300
1,2-Dichloropropane		2300	U	430	2300
Bromodichloromethane		2300	U	430	2300
cis-1,3-Dichloropropene		2300	U	410	2300
4-Methyl-2-pentanone		11000	U	2500	11000
Toluene		2300	U	460	2300
trans-1,3-Dichloropropene		2300	U	390	2300
1,1,2-Trichloroethane		2300	U	430	2300
Tetrachloroethene		2300	U	460	2300
2-Hexanone		11000	U	1800	11000
Dibromochloromethane		2300	U	370	2300
1,2-Dibromoethane		2300	U	430	2300
Chlorobenzene		2300	U	460	2300
Ethylbenzene		1500	J	460	2300
Xylenes, Total		1800	J	480	2300
Styrene		2300	U	390	2300
Bromoform		2300	U	390	2300
Isopropylbenzene		2300	U	430	2300
1,1,2,2-Tetrachloroethane		2300	U	410	2300
1,3-Dichlorobenzene		2300	U	430	2300
1,4-Dichlorobenzene		2300	U	430	2300

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-01 (10-10.8)**

Lab Sample ID: 200-11346-6
Client Matrix: Solid

% Moisture: 41.2

Date Sampled: 06/15/2012 1400
Date Received: 06/16/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40972	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40487	Lab File ID:	lhbab08.d
Dilution:	11			Initial Weight/Volume:	4.92 g
Analysis Date:	06/25/2012 1555			Final Weight/Volume:	10 mL
Prep Date:	06/18/2012 1253				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		2300	U	460	2300
1,2-Dibromo-3-Chloropropane		2300	U	390	2300
1,2,4-Trichlorobenzene		2300	U	460	2300

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	103		65 - 155
Toluene-d8	98		80 - 115
Bromofluorobenzene	99		80 - 115
1,2-Dichlorobenzene-d4	99		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-01 (12-13)**

Lab Sample ID: 200-11346-7
Client Matrix: Solid

% Moisture: 11.1

Date Sampled: 06/15/2012 1405
Date Received: 06/16/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40924	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40494	Lab File ID:	ngam11.d
Dilution:	1.0			Initial Weight/Volume:	5.61 g
Analysis Date:	06/20/2012 1655			Final Weight/Volume:	5 mL
Prep Date:	06/18/2012 1352				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		5.0	U J	0.23	5.0
Chloromethane		5.0	U	0.26	5.0
Vinyl chloride		5.0	U	0.30	5.0
Bromomethane		5.0	U	0.74	5.0
Chloroethane		5.0	U J	0.38	5.0
Trichlorofluoromethane		5.0	U	0.33	5.0
1,1-Dichloroethene		5.0	U	0.37	5.0
1,1,2-Trichloro-1,2,2-trichfluoroethane		5.0	U	0.33	5.0
Acetone		41	J	1.0	5.0
Carbon disulfide		5.0 ~~1.2~~	~~B~~ UB	0.31	5.0
Methyl acetate		5.0	U	0.63	5.0
Methylene Chloride		5.0 ~~0.94~~	~~J~~ UB	0.55	5.0
trans-1,2-Dichloroethene		5.0	U	0.37	5.0
Methyl t-butyl ether		5.0	U	0.30	5.0
1,2-Dichloroethene, Total		5.0	U	0.77	5.0
1,1-Dichloroethane		5.0	U	0.41	5.0
cis-1,2-Dichloroethene		5.0	U	0.42	5.0
2-Butanone		5.0	U J	1.5	5.0
Chloroform		5.0	U	0.32	5.0
1,1,1-Trichloroethane		5.0	U	0.70	5.0
Cyclohexane		5.0	U	0.85	5.0
Carbon tetrachloride		5.0	U	0.76	5.0
Benzene		5.0	U	0.71	5.0
1,2-Dichloroethane		5.0	U	0.62	5.0
Trichloroethene		5.0	U	0.48	5.0
Methylcyclohexane		5.0	U	0.17	5.0
1,2-Dichloropropane		5.0	U	0.29	5.0
Bromodichloromethane		5.0	U	0.21	5.0
cis-1,3-Dichloropropene		5.0	U	0.35	5.0
4-Methyl-2-pentanone		5.0	U	0.60	5.0
Toluene		5.0	U	0.10	5.0
trans-1,3-Dichloropropene		5.0	U	0.13	5.0
1,1,2-Trichloroethane		5.0	U	0.34	5.0
Tetrachloroethene		5.0	U	0.11	5.0
2-Hexanone		5.0	U	0.49	5.0
Dibromochloromethane		5.0	U	0.11	5.0
1,2-Dibromoethane		5.0	U	0.15	5.0
Chlorobenzene		5.0	U	0.076	5.0
Ethylbenzene		5.0	U	0.056	5.0
Xylenes, Total		5.0	U	0.73	5.0
Styrene		5.0	U	0.10	5.0
Bromoform		5.0	U	0.20	5.0
Isopropylbenzene		5.0	U	0.077	5.0
1,1,2,2-Tetrachloroethane		5.0	U	0.26	5.0
1,3-Dichlorobenzene		5.0	U	0.15	5.0
1,4-Dichlorobenzene		5.0	U	0.23	5.0

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-01 (12-13)**

Lab Sample ID: 200-11346-7
Client Matrix: Solid % Moisture: 11.1

Date Sampled: 06/15/2012 1405
Date Received: 06/16/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40924	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40494	Lab File ID:	ngam11.d
Dilution:	1.0			Initial Weight/Volume:	5.61 g
Analysis Date:	06/20/2012 1655			Final Weight/Volume:	5 mL
Prep Date:	06/18/2012 1352				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		5.0	U	0.22	5.0
1,2-Dibromo-3-Chloropropane		5.0	U	0.91	5.0
1,2,4-Trichlorobenzene		5.0	U	0.20	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	78		65 - 155
Toluene-d8	81		80 - 115
Bromofluorobenzene	86		80 - 115
1,2-Dichlorobenzene-d4	85		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-26 (10-11)**

Lab Sample ID: 200-11346-8
Client Matrix: Solid

% Moisture: 34.9

Date Sampled: 06/14/2012 1530
Date Received: 06/16/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40972	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40487	Lab File ID:	lhbab09.d
Dilution:	8.8			Initial Weight/Volume:	4.85 g
Analysis Date:	06/25/2012 1627			Final Weight/Volume:	10 mL
Prep Date:	06/18/2012 1253				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		1600	U J	340	1600
Chloromethane		1600	U	420	1600
Vinyl chloride		1600	U	330	1600
Bromomethane		1600	U J	410	1600
Chloroethane		1600	U	240	1600
Trichlorofluoromethane		1600	U	210	1600
1,1-Dichloroethene		1600	U	360	1600
1,1,2-Trichloro-1,2,2-trichfluoroethane		1600	U	290	1600
Acetone		8100	U	1500	8100
Carbon disulfide		8200		260	1600
Methyl acetate		1600	U	340	1600
Methylene Chloride		1600	U	440	1600
trans-1,2-Dichloroethene		1600	U	330	1600
Methyl t-butyl ether		1600	U	290	1600
1,2-Dichloroethene, Total		1600	U	290	1600
1,1-Dichloroethane		1600	U	330	1600
cis-1,2-Dichloroethene		1600	U	290	1600
2-Butanone		8100	U	1400	8100
Chloroform		1600	U	310	1600
1,1,1-Trichloroethane		1600	U	330	1600
Cyclohexane		1600	U	330	1600
Carbon tetrachloride		1600	U	240	1600
Benzene		1400	J	340	1600
1,2-Dichloroethane		1600	U	280	1600
Trichloroethene		1600	U	280	1600
Methylcyclohexane		1600	U	290	1600
1,2-Dichloropropane		1600	U	310	1600
Bromodichloromethane		1600	U	310	1600
cis-1,3-Dichloropropene		1600	U	290	1600
4-Methyl-2-pentanone		8100	U	1800	8100
Toluene		1600	U	330	1600
trans-1,3-Dichloropropene		1600	U	280	1600
1,1,2-Trichloroethane		1600	U	310	1600
Tetrachloroethene		1600	U	330	1600
2-Hexanone		8100	U	1300	8100
Dibromochloromethane		1600	U	260	1600
1,2-Dibromoethane		1600	U	310	1600
Chlorobenzene		1600	U	330	1600
Ethylbenzene		960	J	330	1600
Xylenes, Total		2400		340	1600
Styrene		1600	U	280	1600
Bromoform		1600	U	280	1600
Isopropylbenzene		1600	U	310	1600
1;1,2,2-Tetrachloroethane		1600	U	290	1600
1,3-Dichlorobenzene		1600	U	310	1600
1,4-Dichlorobenzene		1600	U	310	1600

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-26 (10-11)**

Lab Sample ID: 200-11346-8
Client Matrix: Solid

% Moisture: 34.9

Date Sampled: 06/14/2012 1530
Date Received: 06/16/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40972	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40487	Lab File ID:	lhbab09.d
Dilution:	8.8			Initial Weight/Volume:	4.85 g
Analysis Date:	06/25/2012 1627			Final Weight/Volume:	10 mL
Prep Date:	06/18/2012 1253				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		1600	U	330	1600
1,2-Dibromo-3-Chloropropane		1600	U	280	1600
1,2,4-Trichlorobenzene		1600	U	330	1600

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	104		65 - 155
Toluene-d8	100		80 - 115
Bromofluorobenzene	102		80 - 115
1,2-Dichlorobenzene-d4	100		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-26 (12-13)**

Lab Sample ID: 200-11346-9
Client Matrix: Solid % Moisture: 40.2

Date Sampled: 06/14/2012 1545
Date Received: 06/16/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40972	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40487	Lab File ID:	lhbab10.d
Dilution:	1.0			Initial Weight/Volume:	5.11 g
Analysis Date:	06/25/2012 1659			Final Weight/Volume:	10 mL
Prep Date:	06/18/2012 1253				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		200	UJ	41	200
Chloromethane		200	U	51	200
Vinyl chloride		200	U	39	200
Bromomethane		200	UJ	49	200
Chloroethane		200	U	30	200
Trichlorofluoromethane		200	U	26	200
1,1-Dichloroethene		200	U	43	200
1,1,2-Trichloro-1,2,2-trichfluoroethane		200	U	35	200
Acetone		1300		180	990
Carbon disulfide		230		32	200
Methyl acetate		600		41	200
Methylene Chloride		200	U	53	200
trans-1,2-Dichloroethene		200	U	39	200
Methyl t-butyl ether		200	U	35	200
1,2-Dichloroethene, Total		200	U	35	200
1,1-Dichloroethane		200	U	39	200
cis-1,2-Dichloroethene		200	U	35	200
2-Butanone		990	U	170	990
Chloroform		590		37	200
1,1,1-Trichloroethane		200	U	39	200
Cyclohexane		200	U	39	200
Carbon tetrachloride		200	U	30	200
Benzene		4200		41	200
1,2-Dichloroethane		200	U	34	200
Trichloroethene		200	U	34	200
Methylcyclohexane		200	U	35	200
1,2-Dichloropropane		200	U	37	200
Bromodichloromethane		200	U	37	200
cis-1,3-Dichloropropene		200	U	35	200
4-Methyl-2-pentanone		990	U	210	990
Toluene		220		39	200
trans-1,3-Dichloropropene		200	U	34	200
1,1,2-Trichloroethane		200	U	37	200
Tetrachloroethene		200	U	39	200
2-Hexanone		990	U	150	990
Dibromochloromethane		200	U	32	200
1,2-Dibromoethane		200	U	37	200
Chlorobenzene		200	U	39	200
Ethylbenzene		70	J	39	200
Xylenes, Total		56	J	41	200
Styrene		200	U	34	200
Bromoform		200	U	34	200
Isopropylbenzene		200	U	37	200
1,1,2,2-Tetrachloroethane		200	U	35	200
1,3-Dichlorobenzene		200	U	37	200
1,4-Dichlorobenzene		200	U	37	200

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-26 (12-13)**

Lab Sample ID: 200-11346-9
Client Matrix: Solid

% Moisture: 40.2

Date Sampled: 06/14/2012 1545
Date Received: 06/16/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40972	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40487	Lab File ID:	lhbab10.d
Dilution:	1.0			Initial Weight/Volume:	5.11 g
Analysis Date:	06/25/2012 1659			Final Weight/Volume:	10 mL
Prep Date:	06/18/2012 1253				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		200	U	39	200
1,2-Dibromo-3-Chloropropane		200	U	34	200
1,2,4-Trichlorobenzene		200	U	39	200

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	101		65 - 155
Toluene-d8	102		80 - 115
Bromofluorobenzene	102		80 - 115
1,2-Dichlorobenzene-d4	102		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **TB-06152012**

Lab Sample ID: 200-11346-10
Client Matrix: Water

Date Sampled: 06/15/2012 0000
Date Received: 06/16/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40972	Instrument ID:	L.i
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lhbab21.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/25/2012 2252			Final Weight/Volume:	5 mL
Prep Date:	06/25/2012 2252				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	1.0	U J	0.090	1.0
Chloromethane	1.0	U	0.12	1.0
Vinyl chloride	1.0	U	0.090	1.0
Bromomethane	1.0	U J	0.43	1.0
Chloroethane	1.0	U	0.12	1.0
Trichlorofluoromethane	1.0	U	0.092	1.0
1,1-Dichloroethene	1.0	U	0.18	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.18	1.0
Acetone	5.0	U	0.92	5.0
Carbon disulfide	1.0	U	0.15	1.0
Methyl acetate	1.0	U	0.23	1.0
Methylene Chloride	1.0	U	0.21	1.0
trans-1,2-Dichloroethene	1.0	U	0.17	1.0
Methyl t-butyl ether	1.0	U	0.17	1.0
1,2-Dichloroethene, Total	1.0	U	0.32	1.0
1,1-Dichloroethane	1.0	U	0.16	1.0
cis-1,2-Dichloroethene	1.0	U	0.16	1.0
2-Butanone	5.0	U	1.1	5.0
Chloroform	1.0	U	0.16	1.0
1,1,1-Trichloroethane	1.0	U	0.16	1.0
Cyclohexane	1.0	U	0.23	1.0
Carbon tetrachloride	1.0	U	0.17	1.0
Benzene	1.0	U	0.17	1.0
1,2-Dichloroethane	1.0	U	0.15	1.0
Trichloroethene	1.0	U	0.14	1.0
Methylcyclohexane	1.0	U	0.25	1.0
1,2-Dichloropropane	1.0	U	0.17	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.16	1.0
4-Methyl-2-pentanone	5.0	U	0.90	5.0
Toluene	1.0	U	0.17	1.0
trans-1,3-Dichloropropene	1.0	U	0.18	1.0
1,1,2-Trichloroethane	1.0	U	0.18	1.0
Tetrachloroethene	1.0	U	0.18	1.0
2-Hexanone	5.0	U	1.1	5.0
Dibromochloromethane	1.0	U	0.17	1.0
1,2-Dibromoethane	1.0	U	0.18	1.0
Chlorobenzene	1.0	U	0.19	1.0
Ethylbenzene	1.0	U	0.18	1.0
Xylenes, Total	1.0	U	0.17	1.0
Styrene	1.0	U	0.17	1.0
Bromoform	1.0	U	0.17	1.0
Isopropylbenzene	1.0	U	0.17	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.17	1.0
1,3-Dichlorobenzene	1.0	U	0.18	1.0
1,4-Dichlorobenzene	1.0	U	0.15	1.0

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **TB-06152012**

Lab Sample ID: 200-11346-10
Client Matrix: Water

Date Sampled: 06/15/2012 0000
Date Received: 06/16/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40972	Instrument ID:	L.i
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lhbab21.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/25/2012 2252			Final Weight/Volume:	5 mL
Prep Date:	06/25/2012 2252				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,2-Dichlorobenzene	1.0	U	0.15	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	0.22	1.0
1,2,4-Trichlorobenzene	1.0	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	91		80 - 115
Toluene-d8	103		80 - 115
Bromofluorobenzene	103		85 - 120
1,2-Dichlorobenzene-d4	104		80 - 115

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-02 (11.5-13.1)**

Lab Sample ID: 200-11384-1
Client Matrix: Solid % Moisture: 46.4

Date Sampled: 06/15/2012 1600
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41091	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40685	Lab File ID:	lhbae16.d
Dilution:	8.8			Initial Weight/Volume:	6.12 g
Analysis Date:	06/27/2012 1730			Final Weight/Volume:	10 mL
Prep Date:	06/21/2012 1020				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		1700	U J	360	1700
Chloromethane		1700	U J	450	1700
Vinyl chloride		1700	U	340	1700
Bromomethane		1700	U J	430	1700
Chloroethane		1700	U	260	1700
Trichlorofluoromethane		1700	U	220	1700
1,1-Dichloroethene		1700	U	380	1700
1,1,2-Trichloro-1,2,2-trichfluoroethane		1700	U	310	1700
Acetone		3900	J	1500	8600
Carbon disulfide		28000		280	1700
Methyl acetate		1700	U	360	1700
Methylene Chloride		1700	U	470	1700
trans-1,2-Dichloroethene		1700	U	340	1700
Methyl t-butyl ether		1700	U	310	1700
1,2-Dichloroethene, Total		1700	U	310	1700
1,1-Dichloroethane		1700	U	340	1700
cis-1,2-Dichloroethene		1700	U	310	1700
2-Butanone		8600	U	1500	8600
Chloroform		1700	U	330	1700
1,1,1-Trichloroethane		1700	U	340	1700
Cyclohexane		1700	U	340	1700
Carbon tetrachloride		1700	U	260	1700
Benzene		1700	U	360	1700
1,2-Dichloroethane		1700	U	290	1700
Trichloroethene		1700	U	290	1700
Methylcyclohexane		1700	U	310	1700
1,2-Dichloropropane		1700	U	330	1700
Bromodichloromethane		1700	U	330	1700
cis-1,3-Dichloropropene		1700	U	310	1700
4-Methyl-2-pentanone		8600	U	1900	8600
Toluene		470	J	340	1700
trans-1,3-Dichloropropene		1700	U	290	1700
1,1,2-Trichloroethane		1700	U	330	1700
Tetrachloroethene		1700	U	340	1700
2-Hexanone		8600	U	1300	8600
Dibromochloromethane		1700	U	280	1700
1,2-Dibromoethane		1700	U	330	1700
Chlorobenzene		1700	U	340	1700
Ethylbenzene		700	J	340	1700
Xylenes, Total		4500		360	1700
Styrene		1700	U	290	1700
Bromoform		1700	U	290	1700
Isopropylbenzene		1700	U	330	1700
1,1,2,2-Tetrachloroethane		1700	U	310	1700
1,3-Dichlorobenzene		1700	U	330	1700
1,4-Dichlorobenzene		1700	U	330	1700

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-02 (11.5-13.1)**

Lab Sample ID: 200-11384-1
Client Matrix: Solid

% Moisture: 46.4

Date Sampled: 06/15/2012 1600
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41091	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40685	Lab File ID:	lhbae16.d
Dilution:	8.8			Initial Weight/Volume:	6.12 g
Analysis Date:	06/27/2012 1730			Final Weight/Volume:	10 mL
Prep Date:	06/21/2012 1020				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		1700	U	340	1700
1,2-Dibromo-3-Chloropropane		1700	U	290	1700
1,2,4-Trichlorobenzene		1700	U	340	1700

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	88		65 - 155
Toluene-d8	101		80 - 115
Bromofluorobenzene	101		80 - 115
1,2-Dichlorobenzene-d4	102		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-02 (14-15)**

Lab Sample ID: 200-11384-2
Client Matrix: Solid

% Moisture: 19.5

Date Sampled: 06/15/2012 1615
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41070	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40686	Lab File ID:	ngan06.d
Dilution:	1.0			Initial Weight/Volume:	5.14 g
Analysis Date:	06/26/2012 1415			Final Weight/Volume:	5 mL
Prep Date:	06/21/2012 1027				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		6.0	U J	0.28	6.0
Chloromethane		6.0	U	0.31	6.0
Vinyl chloride		6.0	U	0.36	6.0
Bromomethane		6.0	U J	0.89	6.0
Chloroethane		6.0	U J	0.46	6.0
Trichlorofluoromethane		6.0	U	0.40	6.0
1,1-Dichloroethene		6.0	U	0.45	6.0
1,1,2-Trichloro-1,2,2-trichfluoroethane		6.0	U	0.40	6.0
Acetone		240	J	1.2	6.0
Carbon disulfide		67		0.37	6.0
Methyl acetate		6.0	U	0.76	6.0
Methylene Chloride		8.7		0.66	6.0
trans-1,2-Dichloroethene		6.0	U	0.45	6.0
Methyl t-butyl ether		6.0	U	0.36	6.0
1,2-Dichloroethene, Total		6.0	U	0.93	6.0
1,1-Dichloroethane		6.0	U	0.50	6.0
cis-1,2-Dichloroethene		6.0	U	0.51	6.0
2-Butanone		21	J	1.8	6.0
Chloroform		6.0 ~~1.2~~	~~J B~~ UB	0.39	6.0
1,1,1-Trichloroethane		6.0	U	0.85	6.0
Cyclohexane		6.0	U	1.0	6.0
Carbon tetrachloride		6.0	U	0.92	6.0
Benzene		2.8	J	0.86	6.0
1,2-Dichloroethane		6.0	U	0.75	6.0
Trichloroethene		6.0	U	0.58	6.0
Methylcyclohexane		6.0	U	0.21	6.0
1,2-Dichloropropane		6.0	U	0.35	6.0
Bromodichloromethane		6.0	U	0.25	6.0
cis-1,3-Dichloropropene		6.0	U	0.42	6.0
4-Methyl-2-pentanone		1.3	J	0.72	6.0
Toluene		6.0 ~~1.6~~	~~J B~~ UB	0.12	6.0
trans-1,3-Dichloropropene		6.0	U	0.16	6.0
1,1,2-Trichloroethane		6.0	U	0.41	6.0
Tetrachloroethene		6.0	U	0.13	6.0
2-Hexanone		6.0	U	0.59	6.0
Dibromochloromethane		6.0	U	0.13	6.0
1,2-Dibromoethane		6.0	U	0.18	6.0
Chlorobenzene		6.0	U	0.092	6.0
Ethylbenzene		6.0 ~~0.72~~	~~J B~~ UB	0.068	6.0
Xylenes, Total		6.0		0.88	6.0
Styrene		6.0	U	0.12	6.0
Bromoform		6.0	U	0.24	6.0
Isopropylbenzene		6.0	U	0.093	6.0
1,1,2,2-Tetrachloroethane		6.0	U	0.31	6.0
1,3-Dichlorobenzene		6.0	U	0.18	6.0
1,4-Dichlorobenzene		6.0	U	0.28	6.0

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-02 (14-15)**

Lab Sample ID: 200-11384-2
Client Matrix: Solid % Moisture: 19.5

Date Sampled: 06/15/2012 1615
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41070	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40686	Lab File ID:	ngan06.d
Dilution:	1.0			Initial Weight/Volume:	5.14 g
Analysis Date:	06/26/2012 1415			Final Weight/Volume:	5 mL
Prep Date:	06/21/2012 1027				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		6.0	U	0.27	6.0
1,2-Dibromo-3-Chloropropane		6.0	U	1.1	6.0
1,2,4-Trichlorobenzene		6.0 ~~0.39~~	~~JB~~ UB	0.24	6.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	79		65 - 155
Toluene-d8	83		80 - 115
Bromofluorobenzene	93		80 - 115
1,2-Dichlorobenzene-d4	87		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-12 (11-12)**

Lab Sample ID: 200-11384-3
Client Matrix: Solid

% Moisture: 10.2

Date Sampled: 06/16/2012 0925
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41070	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40686	Lab File ID:	ngan07.d
Dilution:	1.0			Initial Weight/Volume:	5.22 g
Analysis Date:	06/26/2012 1446			Final Weight/Volume:	5 mL
Prep Date:	06/21/2012 1027				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		5.3	U	0.25	5.3
Chloromethane		5.3	U	0.28	5.3
Vinyl chloride		5.3	U	0.32	5.3
Bromomethane		5.3	U	0.79	5.3
Chloroethane		5.3	U	0.41	5.3
Trichlorofluoromethane		5.3	U	0.35	5.3
1,1-Dichloroethene		5.3	U	0.39	5.3
1,1,2-Trichloro-1,2,2-trichfluoroethane		5.3	U	0.35	5.3
Acetone		13		1.1	5.3
Carbon disulfide		3.0	J	0.33	5.3
Methyl acetate		5.3	U	0.67	5.3
Methylene Chloride		~~2.1~~ 53	~~J~~ UB	0.59	5.3
trans-1,2-Dichloroethene		5.3	U	0.39	5.3
Methyl t-butyl ether		5.3	U	0.32	5.3
1,2-Dichloroethene, Total		5.3	U	0.82	5.3
1,1-Dichloroethane		5.3	U	0.44	5.3
cis-1,2-Dichloroethene		5.3	U	0.45	5.3
2-Butanone		5.3	U	1.6	5.3
Chloroform		~~0.77~~ 53	~~JB~~ UB	0.34	5.3
1,1,1-Trichloroethane		5.3	U	0.75	5.3
Cyclohexane		5.3	U	0.91	5.3
Carbon tetrachloride		5.3	U	0.81	5.3
Benzene		5.3	U	0.76	5.3
1,2-Dichloroethane		5.3	U	0.66	5.3
Trichloroethene		5.3	U	0.51	5.3
Methylcyclohexane		5.3	U	0.18	5.3
1,2-Dichloropropane		5.3	U	0.31	5.3
Bromodichloromethane		5.3	U	0.22	5.3
cis-1,3-Dichloropropene		5.3	U	0.37	5.3
4-Methyl-2-pentanone		5.3	U	0.64	5.3
Toluene		5.3	U	0.11	5.3
trans-1,3-Dichloropropene		5.3	U	0.14	5.3
1,1,2-Trichloroethane		5.3	U	0.36	5.3
Tetrachloroethene		5.3	U	0.12	5.3
2-Hexanone		5.3	U	0.52	5.3
Dibromochloromethane		5.3	U	0.12	5.3
1,2-Dibromoethane		5.3	U	0.16	5.3
Chlorobenzene		5.3	U	0.081	5.3
Ethylbenzene		5.3	U	0.060	5.3
Xylenes, Total		5.3	U	0.78	5.3
Styrene		5.3	U	0.11	5.3
Bromoform		5.3	U	0.21	5.3
Isopropylbenzene		5.3	U	0.082	5.3
1,1,2,2-Tetrachloroethane		5.3	U	0.28	5.3
1,3-Dichlorobenzene		5.3	U	0.16	5.3
1,4-Dichlorobenzene		5.3	U	0.25	5.3

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-12 (11-12)**

Lab Sample ID: 200-11384-3
Client Matrix: Solid

% Moisture: 10.2

Date Sampled: 06/16/2012 0925
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41070	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40686	Lab File ID:	ngan07.d
Dilution:	1.0			Initial Weight/Volume:	5.22 g
Analysis Date:	06/26/2012 1446			Final Weight/Volume:	5 mL
Prep Date:	06/21/2012 1027				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		5.3	U	0.23	5.3
1,2-Dibromo-3-Chloropropane		5.3	U	0.97	5.3
1,2,4-Trichlorobenzene		5.3	U	0.21	5.3

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	85		65 - 155
Toluene-d8	94		80 - 115
Bromofluorobenzene	99		80 - 115
1,2-Dichlorobenzene-d4	97		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-02 (11.5-13.1)**

Lab Sample ID: 200-11384-1
Client Matrix: Solid % Moisture: 46.4

Date Sampled: 06/15/2012 1600
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41091	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40685	Lab File ID:	lhbae16.d
Dilution:	8.8			Initial Weight/Volume:	6.12 g
Analysis Date:	06/27/2012 1730			Final Weight/Volume:	10 mL
Prep Date:	06/21/2012 1020				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		1700	U J	360	1700
Chloromethane		1700	U J	450	1700
Vinyl chloride		1700	U	340	1700
Bromomethane		1700	U J	430	1700
Chloroethane		1700	U	260	1700
Trichlorofluoromethane		1700	U	220	1700
1,1-Dichloroethene		1700	U	380	1700
1,1,2-Trichloro-1,2,2-trichfluoroethane		1700	U	310	1700
Acetone		3900	J	1500	8600
Carbon disulfide		28000		280	1700
Methyl acetate		1700	U	360	1700
Methylene Chloride		1700	U	470	1700
trans-1,2-Dichloroethene		1700	U	340	1700
Methyl t-butyl ether		1700	U	310	1700
1,2-Dichloroethene, Total		1700	U	310	1700
1,1-Dichloroethane		1700	U	340	1700
cis-1,2-Dichloroethene		1700	U	310	1700
2-Butanone		8600	U	1500	8600
Chloroform		1700	U	330	1700
1,1,1-Trichloroethane		1700	U	340	1700
Cyclohexane		1700	U	340	1700
Carbon tetrachloride		1700	U	260	1700
Benzene		1700	U	360	1700
1,2-Dichloroethane		1700	U	290	1700
Trichloroethene		1700	U	290	1700
Methylcyclohexane		1700	U	310	1700
1,2-Dichloropropane		1700	U	330	1700
Bromodichloromethane		1700	U	330	1700
cis-1,3-Dichloropropene		1700	U	310	1700
4-Methyl-2-pentanone		8600	U	1900	8600
Toluene		470	J	340	1700
trans-1,3-Dichloropropene		1700	U	290	1700
1,1,2-Trichloroethane		1700	U	330	1700
Tetrachloroethene		1700	U	340	1700
2-Hexanone		8600	U	1300	8600
Dibromochloromethane		1700	U	280	1700
1,2-Dibromoethane		1700	U	330	1700
Chlorobenzene		1700	U	340	1700
Ethylbenzene		700	J	340	1700
Xylenes, Total		4500		360	1700
Styrene		1700	U	290	1700
Bromoform		1700	U	290	1700
Isopropylbenzene		1700	U	330	1700
1,1,2,2-Tetrachloroethane		1700	U	310	1700
1,3-Dichlorobenzene		1700	U	330	1700
1,4-Dichlorobenzene		1700	U	330	1700

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-02 (11.5-13.1)**

Lab Sample ID: 200-11384-1
Client Matrix: Solid

% Moisture: 46.4

Date Sampled: 06/15/2012 1600
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41091	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40685	Lab File ID:	lhbae16.d
Dilution:	8.8			Initial Weight/Volume:	6.12 g
Analysis Date:	06/27/2012 1730			Final Weight/Volume:	10 mL
Prep Date:	06/21/2012 1020				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		1700	U	340	1700
1,2-Dibromo-3-Chloropropane		1700	U	290	1700
1,2,4-Trichlorobenzene		1700	U	340	1700

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	88		65 - 155
Toluene-d8	101		80 - 115
Bromofluorobenzene	101		80 - 115
1,2-Dichlorobenzene-d4	102		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-02 (14-15)**

Lab Sample ID: 200-11384-2
Client Matrix: Solid % Moisture: 19.5

Date Sampled: 06/15/2012 1615
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41070	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40686	Lab File ID:	ngan06.d
Dilution:	1.0			Initial Weight/Volume:	5.14 g
Analysis Date:	06/26/2012 1415			Final Weight/Volume:	5 mL
Prep Date:	06/21/2012 1027				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		6.0	U J	0.28	6.0
Chloromethane		6.0	U	0.31	6.0
Vinyl chloride		6.0	U	0.36	6.0
Bromomethane		6.0	U J	0.89	6.0
Chloroethane		6.0	U J	0.46	6.0
Trichlorofluoromethane		6.0	U	0.40	6.0
1,1-Dichloroethene		6.0	U	0.45	6.0
1,1,2-Trichloro-1,2,2-trichfluoroethane		6.0	U	0.40	6.0
Acetone		240	J	1.2	6.0
Carbon disulfide		67		0.37	6.0
Methyl acetate		6.0	U	0.76	6.0
Methylene Chloride		8.7		0.66	6.0
trans-1,2-Dichloroethene		6.0	U	0.45	6.0
Methyl t-butyl ether		6.0	U	0.36	6.0
1,2-Dichloroethene, Total		6.0	U	0.93	6.0
1,1-Dichloroethane		6.0	U	0.50	6.0
cis-1,2-Dichloroethene		6.0	U	0.51	6.0
2-Butanone		21	J	1.8	6.0
Chloroform		6.0 ~~1.2~~	~~JB~~ UB	0.39	6.0
1,1,1-Trichloroethane		6.0	U	0.85	6.0
Cyclohexane		6.0	U	1.0	6.0
Carbon tetrachloride		6.0	U	0.92	6.0
Benzene		2.8	J	0.86	6.0
1,2-Dichloroethane		6.0	U	0.75	6.0
Trichloroethene		6.0	U	0.58	6.0
Methylcyclohexane		6.0	U	0.21	6.0
1,2-Dichloropropane		6.0	U	0.35	6.0
Bromodichloromethane		6.0	U	0.25	6.0
cis-1,3-Dichloropropene		6.0	U	0.42	6.0
4-Methyl-2-pentanone		1.3	J	0.72	6.0
Toluene		6.0 ~~1.6~~	~~JB~~ UB	0.12	6.0
trans-1,3-Dichloropropene		6.0	U	0.16	6.0
1,1,2-Trichloroethane		6.0	U	0.41	6.0
Tetrachloroethene		6.0	U	0.13	6.0
2-Hexanone		6.0	U	0.59	6.0
Dibromochloromethane		6.0	U	0.13	6.0
1,2-Dibromoethane		6.0	U	0.18	6.0
Chlorobenzene		6.0	U	0.092	6.0
Ethylbenzene		6.0 ~~0.72~~	~~JB~~ UB	0.068	6.0
Xylenes, Total		6.0		0.88	6.0
Styrene		6.0	U	0.12	6.0
Bromoform		6.0	U	0.24	6.0
Isopropylbenzene		6.0	U	0.093	6.0
1,1,2,2-Tetrachloroethane		6.0	U	0.31	6.0
1,3-Dichlorobenzene		6.0	U	0.18	6.0
1,4-Dichlorobenzene		6.0	U	0.28	6.0

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-02 (14-15)**

Lab Sample ID: 200-11384-2
Client Matrix: Solid

% Moisture: 19.5

Date Sampled: 06/15/2012 1615
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41070	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40686	Lab File ID:	ngan06.d
Dilution:	1.0			Initial Weight/Volume:	5.14 g
Analysis Date:	06/26/2012 1415			Final Weight/Volume:	5 mL
Prep Date:	06/21/2012 1027				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		6.0	U	0.27	6.0
1,2-Dibromo-3-Chloropropane		6.0	U	1.1	6.0
1,2,4-Trichlorobenzene		6.0 ~~0.39~~	~~JB~~ UB	0.24	6.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	79		65 - 155
Toluene-d8	83		80 - 115
Bromofluorobenzene	93		80 - 115
1,2-Dichlorobenzene-d4	87		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-12 (11-12)**

Lab Sample ID: 200-11384-3
Client Matrix: Solid

% Moisture: 10.2

Date Sampled: 06/16/2012 0925
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41070	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40686	Lab File ID:	ngan07.d
Dilution:	1.0			Initial Weight/Volume:	5.22 g
Analysis Date:	06/26/2012 1446			Final Weight/Volume:	5 mL
Prep Date:	06/21/2012 1027				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		5.3	U	0.25	5.3
Chloromethane		5.3	U	0.28	5.3
Vinyl chloride		5.3	U	0.32	5.3
Bromomethane		5.3	U	0.79	5.3
Chloroethane		5.3	U	0.41	5.3
Trichlorofluoromethane		5.3	U	0.35	5.3
1,1-Dichloroethene		5.3	U	0.39	5.3
1,1,2-Trichloro-1,2,2-trichfluoroethane		5.3	U	0.35	5.3
Acetone		13	J	1.1	5.3
Carbon disulfide		3.0	J	0.33	5.3
Methyl acetate		5.3	U	0.67	5.3
Methylene Chloride		53 ~~2.1~~	~~J~~ UB	0.59	5.3
trans-1,2-Dichloroethene		5.3	U	0.39	5.3
Methyl t-butyl ether		5.3	U	0.32	5.3
1,2-Dichloroethene, Total		5.3	U	0.82	5.3
1,1-Dichloroethane		5.3	U	0.44	5.3
cis-1,2-Dichloroethene		5.3	U	0.45	5.3
2-Butanone		5.3	U	1.6	5.3
Chloroform		53 ~~0.77~~	~~JB~~ UB	0.34	5.3
1,1,1-Trichloroethane		5.3	U	0.75	5.3
Cyclohexane		5.3	U	0.91	5.3
Carbon tetrachloride		5.3	U	0.81	5.3
Benzene		5.3	U	0.76	5.3
1,2-Dichloroethane		5.3	U	0.66	5.3
Trichloroethene		5.3	U	0.51	5.3
Methylcyclohexane		5.3	U	0.18	5.3
1,2-Dichloropropane		5.3	U	0.31	5.3
Bromodichloromethane		5.3	U	0.22	5.3
cis-1,3-Dichloropropene		5.3	U	0.37	5.3
4-Methyl-2-pentanone		5.3	U	0.64	5.3
Toluene		5.3	U	0.11	5.3
trans-1,3-Dichloropropene		5.3	U	0.14	5.3
1,1,2-Trichloroethane		5.3	U	0.36	5.3
Tetrachloroethene		5.3	U	0.12	5.3
2-Hexanone		5.3	U	0.52	5.3
Dibromochloromethane		5.3	U	0.12	5.3
1,2-Dibromoethane		5.3	U	0.16	5.3
Chlorobenzene		5.3	U	0.081	5.3
Ethylbenzene		5.3	U	0.060	5.3
Xylenes, Total		5.3	U	0.78	5.3
Styrene		5.3	U	0.11	5.3
Bromoform		5.3	U	0.21	5.3
Isopropylbenzene		5.3	U	0.082	5.3
1,1,2,2-Tetrachloroethane		5.3	U	0.28	5.3
1,3-Dichlorobenzene		5.3	U	0.16	5.3
1,4-Dichlorobenzene		5.3	U	0.25	5.3

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-12 (11-12)**

Lab Sample ID: 200-11384-3
Client Matrix: Solid

% Moisture: 10.2

Date Sampled: 06/16/2012 0925
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41070	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40686	Lab File ID:	ngan07.d
Dilution:	1.0			Initial Weight/Volume:	5.22 g
Analysis Date:	06/26/2012 1446			Final Weight/Volume:	5 mL
Prep Date:	06/21/2012 1027				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		5.3	U	0.23	5.3
1,2-Dibromo-3-Chloropropane		5.3	U	0.97	5.3
1,2,4-Trichlorobenzene		5.3	U	0.21	5.3

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	85		65 - 155
Toluene-d8	94		80 - 115
Bromofluorobenzene	99		80 - 115
1,2-Dichlorobenzene-d4	97		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-11 (1-2.5)**

Lab Sample ID: 200-11278-1
Client Matrix: Solid % Moisture: 10.1

Date Sampled: 06/12/2012 0900
Date Received: 06/14/2012 1030

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118204	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-117106	Lab File ID:	z19292.d
Dilution:	5.0			Initial Weight/Volume:	15.03 g
Analysis Date:	07/01/2012 1841			Final Weight/Volume:	1 mL
Prep Date:	06/22/2012 0849			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		1800	U	250	1800
2-Chlorophenol		1800	U	240	1800
2-Methylphenol		1800	U	310	1800
2-Nitrophenol		1800	U	200	1800
3 & 4 Methylphenol		1800	U	310	1800
2,4-Dimethylphenol		1800	U	450	1800
2,4-Dichlorophenol		1800	U	270	1800
4-Chloro-3-methylphenol		1800	U	280	1800
2,4,6-Trichlorophenol		1800	U	210	1800
2,4,5-Trichlorophenol		1800	U	240	1800
2,4-Dinitrophenol		5500	U	1000	5500
4-Nitrophenol		5500	U	1200	5500
4,6-Dinitro-2-methylphenol		5500	U	500	5500
Pentachlorophenol		5500	U	550	5500
Bis(2-chloroethyl)ether		180	U	25	180
1,3-Dichlorobenzene		1800	U	170	1800
Benzoic acid		1800	U	1800	1800
1,4-Dichlorobenzene		1800	U	210	1800
1,2-Dichlorobenzene		1800	U	210	1800
N-Nitrosodi-n-propylamine		180	U	31	180
Hexachloroethane		180	U	20	180
Nitrobenzene		180	U	26	180
Isophorone		1800	U	220	1800
Bis(2-chloroethoxy)methane		1800	U	240	1800
1,2,4-Trichlorobenzene		180	U	21	180
Naphthalene		580	J	210	1800
4-Chloroaniline		1800	U	490	1800
Hexachlorobutadiene		370	U	45	370
2-Methylnaphthalene		270	J	240	1800
Hexachlorocyclopentadiene		1800	U	220	1800
2-Chloronaphthalene		1800	U	200	1800
2-Nitroaniline		3700	U	770	3700
Dimethyl phthalate		1800	U	220	1800
Acenaphthylene		980	J	220	1800
2,6-Dinitrotoluene		370	U	55	370
3-Nitroaniline		3700	U	650	3700
Acenaphthene		580	J	270	1800
Dibenzofuran		2200		220	1800
2,4-Dinitrotoluene		370	U	60	370
Diethyl phthalate		1800	U	220	1800
4-Chlorophenyl phenyl ether		1800	U	220	1800
Fluorene		4000		230	1800
4-Nitroaniline		3700	U	570	3700
N-Nitrosodiphenylamine		1800	U	180	1800
4-Bromophenyl phenyl ether		1800	U	180	1800
Hexachlorobenzene		180	U	25	180

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-11 (1-2.5)**

Lab Sample ID: 200-11278-1
Client Matrix: Solid % Moisture: 10.1

Date Sampled: 06/12/2012 0900
Date Received: 06/14/2012 1030

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118204	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-117106	Lab File ID:	z19292.d
Dilution:	5.0			Initial Weight/Volume:	15.03 g
Analysis Date:	07/01/2012 1841			Final Weight/Volume:	1 mL
Prep Date:	06/22/2012 0849			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		16000		230	1800
Anthracene		5700		220	1800
Carbazole		980	J	220	1800
Di-n-butyl phthalate		1800	U	230	1800
Fluoranthene		12000		240	1800
Pyrene		14000		150	1800
Butyl benzyl phthalate		1800	U	170	1800
3,3'-Dichlorobenzidine		3700	U	640	3700
Benzo[a]anthracene		6200		13	180
Chrysene		6600		210	1800
Bis(2-ethylhexyl) phthalate		1800	U	610	1800
Di-n-octyl phthalate		1800	U	120	1800
Benzo[b]fluoranthene		5400		12	180
Benzo[k]fluoranthene		2000		14	180
Benzo[a]pyrene		5600		13	180
Indeno[1,2,3-cd]pyrene		4000		34	180
Dibenz(a,h)anthracene		730		23	180
Benzo[g,h,i]perylene		4300		140	1800
2,2'-oxybis[1-chloropropane]		1800	U	200	1800

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	73		38 - 105
Phenol-d5	77		41 - 118
Terphenyl-d14	94		16 - 151
2,4,6-Tribromophenol	35		10 - 120
2-Fluorophenol	75		37 - 125
2-Fluorobiphenyl	85		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-25 (3.5-5)**

Lab Sample ID: 200-11278-2
Client Matrix: Solid

% Moisture: 31.0

Date Sampled: 06/12/2012 1130
Date Received: 06/14/2012 1030

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118204	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-117106	Lab File ID:	z19298.d
Dilution:	2.0			Initial Weight/Volume:	15.00 g
Analysis Date:	07/01/2012 2101			Final Weight/Volume:	1 mL
Prep Date:	06/22/2012 0849			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		960	U	130	960
2-Chlorophenol		960	U	130	960
2-Methylphenol		960	U	160	960
2-Nitrophenol		960	U	110	960
3 & 4 Methylphenol		960	U	160	960
2,4-Dimethylphenol		960	U	240	960
2,4-Dichlorophenol		960	U	140	960
4-Chloro-3-methylphenol		960	U	140	960
2,4,6-Trichlorophenol		960	U	110	960
2,4,5-Trichlorophenol		960	U	120	960
2,4-Dinitrophenol		2900	U	550	2900
4-Nitrophenol		2900	U	620	2900
4,6-Dinitro-2-methylphenol		2900	U	260	2900
Pentachlorophenol		2900	U	290	2900
Bis(2-chloroethyl)ether		96	U	13	96
1,3-Dichlorobenzene		960	U	87	960
Benzoic acid		960	U	960	960
1,4-Dichlorobenzene		960	U	110	960
1,2-Dichlorobenzene		960	U	110	960
N-Nitrosodi-n-propylamine		96	U	16	96
Hexachloroethane		96	U	11	96
Nitrobenzene		96	U	14	96
Isophorone		960	U	120	960
Bis(2-chloroethoxy)methane		960	U	120	960
1,2,4-Trichlorobenzene		96	U	11	96
Naphthalene		14000		110	960
4-Chloroaniline		960	U	250	960
Hexachlorobutadiene		190	U	23	190
2-Methylnaphthalene		2900		120	960
Hexachlorocyclopentadiene		960	U	110	960
2-Chloronaphthalene		960	U	110	960
2-Nitroaniline		1900	U	400	1900
Dimethyl phthalate		960	U	110	960
Acenaphthylene		530	J	110	960
2,6-Dinitrotoluene		190	U	29	190
3-Nitroaniline		1900	U	340	1900
Acenaphthene		960	U	140	960
Dibenzofuran		920	J	110	960
2,4-Dinitrotoluene		190	U	32	190
Diethyl phthalate		960	U	110	960
4-Chlorophenyl phenyl ether		960	U	110	960
Fluorene		1500		120	960
4-Nitroaniline		1900	U	300	1900
N-Nitrosodiphenylamine		960	U	95	960
4-Bromophenyl phenyl ether		960	U	95	960
Hexachlorobenzene		96	U	13	96

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-25 (3.5-5)**

Lab Sample ID: 200-11278-2
Client Matrix: Solid

% Moisture: 31.0

Date Sampled: 06/12/2012 1130
Date Received: 06/14/2012 1030

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118204	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-117106	Lab File ID:	z19298.d
Dilution:	2.0			Initial Weight/Volume:	15.00 g
Analysis Date:	07/01/2012 2101			Final Weight/Volume:	1 mL
Prep Date:	06/22/2012 0849			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		4700		120	960
Anthracene		1400		120	960
Carbazole		220	J	110	960
Di-n-butyl phthalate		960	U	120	960
Fluoranthene		3500		130	960
Pyrene		4200		80	960
Butyl benzyl phthalate		960	U	88	960
3,3'-Dichlorobenzidine		1900	U	340	1900
Benzo[a]anthracene		3500		6.7	96
Chrysene		4700		110	960
Bis(2-ethylhexyl) phthalate		960	U	320	960
Di-n-octyl phthalate		960	U	61	960
Benzo[b]fluoranthene		6200		6.1	96
Benzo[k]fluoranthene		2800		7.3	96
Benzo[a]pyrene		3000		6.8	96
Indeno[1,2,3-cd]pyrene		5400		18	96
Dibenz(a,h)anthracene		1500		12	96
Benzo[g,h,i]perylene		5300		71	960
2,2'-oxybis[1-chloropropane]		960	U	110	960

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	72		38 - 105
Phenol-d5	67		41 - 118
Terphenyl-d14	68		16 - 151
2,4,6-Tribromophenol	52		10 - 120
2-Fluorophenol	69		37 - 125
2-Fluorobiphenyl	81		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **DUP-01-06122012**

Lab Sample ID: 200-11278-3
Client Matrix: Solid

% Moisture: 50.7

Date Sampled: 06/12/2012 0000
Date Received: 06/14/2012 1030

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118432	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-117106	Lab File ID:	z19355.d
Dilution:	5.0			Initial Weight/Volume:	15.02 g
Analysis Date:	07/02/2012 2205			Final Weight/Volume:	1 mL
Prep Date:	06/22/2012 0849			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		3300	U	450	3300
2-Chlorophenol		3300	U	440	3300
2-Methylphenol		3300	U	570	3300
2-Nitrophenol		3300	U	370	3300
3 & 4 Methylphenol		3300	U	570	3300
2,4-Dimethylphenol		3300	U	830	3300
2,4-Dichlorophenol		3300	U	490	3300
4-Chloro-3-methylphenol		3300	U	500	3300
2,4,6-Trichlorophenol		3300	U	390	3300
2,4,5-Trichlorophenol		3300	U	430	3300
2,4-Dinitrophenol		10000	U	1900	10000
4-Nitrophenol		10000	U	2200	10000
4,6-Dinitro-2-methylphenol		10000	U	910	10000
Pentachlorophenol		10000	U	1000	10000
Bis(2-chloroethyl)ether		330	U	46	330
1,3-Dichlorobenzene		3300	U	300	3300
Benzoic acid		3300	U	3300	3300
1,4-Dichlorobenzene		3300	U	380	3300
1,2-Dichlorobenzene		3300	U	390	3300
N-Nitrosodi-n-propylamine		330	U	56	330
Hexachloroethane		330	U	37	330
Nitrobenzene		330	U	48	330
Isophorone		3300	U	410	3300
Bis(2-chloroethoxy)methane		3300	U	430	3300
1,2,4-Trichlorobenzene		330	U	38	330
Naphthalene		27000		390	3300
4-Chloroaniline		3300	U	890	3300
Hexachlorobutadiene		680	U	82	680
2-Methylnaphthalene		6200		430	3300
Hexachlorocyclopentadiene		3300	U	390	3300
2-Chloronaphthalene		3300	U	370	3300
2-Nitroaniline		6800	U	1400	6800
Dimethyl phthalate		3300	U	400	3300
Acenaphthylene		690	J	400	3300
2,6-Dinitrotoluene		680	U	100	680
3-Nitroaniline		6800	U	1200	6800
Acenaphthene		3300	U	490	3300
Dibenzofuran		1700	J	390	3300
2,4-Dinitrotoluene		680	U	110	680
Diethyl phthalate		3300	U	400	3300
4-Chlorophenyl phenyl ether		3300	U	390	3300
Fluorene		2400	J	430	3300
4-Nitroaniline		6800	U	1000	6800
N-Nitrosodiphenylamine		3300	U	330	3300
4-Bromophenyl phenyl ether		3300	U	330	3300
Hexachlorobenzene		330	U	46	330

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: DUP-01-06122012

Lab Sample ID: 200-11278-3
Client Matrix: Solid

% Moisture: 50.7

Date Sampled: 06/12/2012 0000
Date Received: 06/14/2012 1030

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118432	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-117106	Lab File ID:	z19355.d
Dilution:	5.0			Initial Weight/Volume:	15.02 g
Analysis Date:	07/02/2012 2205			Final Weight/Volume:	1 mL
Prep Date:	06/22/2012 0849			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		8000		430	3300
Anthracene		2100	J	410	3300
Carbazole		3300	U	400	3300
Di-n-butyl phthalate		3300	U	410	3300
Fluoranthene		4600		450	3300
Pyrene		7600		280	3300
Butyl benzyl phthalate		3300	U	310	3300
3,3'-Dichlorobenzidine		6800	U	1200	6800
Benzo[a]anthracene		5700		23	330
Chrysene		8000		390	3300
Bis(2-ethylhexyl) phthalate		3300	U	1100	3300
Di-n-octyl phthalate		3300	U	210	3300
Benzo[b]fluoranthene		11000		21	330
Benzo[k]fluoranthene		5500		25	330
Benzo[a]pyrene		4300		24	330
Indeno[1,2,3-cd]pyrene		7600		62	330
Dibenz(a,h)anthracene		1800		42	330
Benzo[g,h,i]perylene		7200		250	3300
2,2'-oxybis[1-chloropropane]		3300	U	370	3300

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	58		38 - 105
Phenol-d5	54		41 - 118
Terphenyl-d14	64		16 - 151
2,4,6-Tribromophenol	33		10 - 120
2-Fluorophenol	54		37 - 125
2-Fluorobiphenyl	67		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-28 (3-5)**

Lab Sample ID: 200-11278-4
Client Matrix: Solid

% Moisture: 30.9

Date Sampled: 06/12/2012 1045
Date Received: 06/14/2012 1030

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118432	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-117106	Lab File ID:	z19356.d
Dilution:	25			Initial Weight/Volume:	15.01 g
Analysis Date:	07/02/2012 2229	Run Type:	DL	Final Weight/Volume:	1 mL
Prep Date:	06/22/2012 0849			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		12000	U J	1600	12000
2-Chlorophenol		12000	U	1600	12000
2-Methylphenol		12000	U	2000	12000
2-Nitrophenol		12000	U	1300	12000
3 & 4 Methylphenol		12000	U	2000	12000
2,4-Dimethylphenol		12000	U	2900	12000
2,4-Dichlorophenol		12000	U	1700	12000
4-Chloro-3-methylphenol		12000	U	1800	12000
2,4,6-Trichlorophenol		12000	U	1400	12000
2,4,5-Trichlorophenol		12000	U	1500	12000
2,4-Dinitrophenol		36000	U	6800	36000
4-Nitrophenol		36000	U	7700	36000
4,6-Dinitro-2-methylphenol		36000	U	3300	36000
Pentachlorophenol		36000	U	3600	36000
Bis(2-chloroethyl)ether		1200	U	160	1200
1,3-Dichlorobenzene		12000	U J	1100	12000
Benzoic acid		12000	U	12000	12000
1,4-Dichlorobenzene		12000	U J	1300	12000
1,2-Dichlorobenzene		12000	U	1400	12000
N-Nitrosodi-n-propylamine		1200	U	200	1200
Hexachloroethane		1200	U	130	1200
Nitrobenzene		1200	U	170	1200
Isophorone		12000	U	1400	12000
Bis(2-chloroethoxy)methane		12000	U	1500	12000
1,2,4-Trichlorobenzene		1200	U	140	1200
Naphthalene		49000	D J	1400	12000
4-Chloroaniline		12000	U J	3200	12000
Hexachlorobutadiene		2400	U J	290	2400
2-Methylnaphthalene		34000	D J	1500	12000
Hexachlorocyclopentadiene		12000	U J	1400	12000
2-Chloronaphthalene		12000	U	1300	12000
2-Nitroaniline		24000	U	5000	24000
Dimethyl phthalate		12000	U	1400	12000
Acenaphthylene		32000	D J	1400	12000
2,6-Dinitrotoluene		2400	U J	360	2400
3-Nitroaniline		24000	U J	4200	24000
Acenaphthene		5600	J D	1700	12000
Dibenzofuran		12000	U J	1400	12000
2,4-Dinitrotoluene		2400	U	390	2400
Diethyl phthalate		12000	U	1400	12000
4-Chlorophenyl phenyl ether		12000	U	1400	12000
Fluorene		39000	D J	1500	12000
4-Nitroaniline		24000	U J	3700	24000
N-Nitrosodiphenylamine		12000	U	1200	12000
4-Bromophenyl phenyl ether		12000	U	1200	12000
Hexachlorobenzene		1200	U	160	1200

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-28 (3-5)**

Lab Sample ID: 200-11278-4
Client Matrix: Solid

% Moisture: 30.9

Date Sampled: 06/12/2012 1045
Date Received: 06/14/2012 1030

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118432	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-117106	Lab File ID:	z19356.d
Dilution:	25			Initial Weight/Volume:	15.01 g
Analysis Date:	07/02/2012 2229	Run Type:	DL	Final Weight/Volume:	1 mL
Prep Date:	06/22/2012 0849			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		170000	D	1500	12000
Anthracene		46000	D	1500	12000
Carbazole		3500	J D	1400	12000
Di-n-butyl phthalate		12000	U	1500	12000
Fluoranthene		53000	D	1600	12000
Pyrene		120000	D	1000	12000
Butyl benzyl phthalate		12000	U	1100	12000
3,3'-Dichlorobenzidine		24000	U	4200	24000
Benzo[a]anthracene		43000	D	83	1200
Chrysene		52000	D	1400	12000
Bis(2-ethylhexyl) phthalate		12000	U	4000	12000
Di-n-octyl phthalate		12000	U	760	12000
Benzo[b]fluoranthene		26000	D	76	1200
Benzo[k]fluoranthene		7800	D	91	1200
Benzo[a]pyrene		34000	D	85	1200
Indeno[1,2,3-cd]pyrene		19000	D	220	1200
Dibenz(a,h)anthracene		5300	D	150	1200
Benzo[g,h,i]perylene		28000	D	890	12000
2,2'-oxybis[1-chloropropane]		12000	U	1300	12000

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	0	D	38 - 105
Phenol-d5	0	D	41 - 118
Terphenyl-d14	0	D	16 - 151
2,4,6-Tribromophenol	0	D	10 - 120
2-Fluorophenol	0	D	37 - 125
2-Fluorobiphenyl	0	D	40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-03 (4.5-5)**

Lab Sample ID: 200-11326-1
Client Matrix: Solid % Moisture: 39.4

Date Sampled: 06/14/2012 1130
Date Received: 06/15/2012 1015

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118177	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-117106	Lab File ID:	z19224.d
Dilution:	1.0			Initial Weight/Volume:	15.03 g
Analysis Date:	06/29/2012 2344			Final Weight/Volume:	1 mL
Prep Date:	06/22/2012 0849			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		540	U	73	540
2-Chlorophenol		540	U	72	540
2-Methylphenol		540	U	93	540
2-Nitrophenol		540	U	61	540
3 & 4 Methylphenol		130	J	93	540
2,4-Dimethylphenol		540	U	130	540
2,4-Dichlorophenol		540	U	80	540
4-Chloro-3-methylphenol		540	U	82	540
2,4,6-Trichlorophenol		540	U	64	540
2,4,5-Trichlorophenol		540	U	70	540
2,4-Dinitrophenol		1600	U	310	1600
4-Nitrophenol		1600	U	350	1600
4,6-Dinitro-2-methylphenol		1600	U	150	1600
Pentachlorophenol		1600	U	160	1600
Bis(2-chloroethyl)ether		54	U	7.4	54
1,3-Dichlorobenzene		540	U	49	540
Benzoic acid		540	U	540	540
1,4-Dichlorobenzene		540	U	61	540
1,2-Dichlorobenzene		540	U	63	540
N-Nitrosodi-n-propylamine		54	U	9.1	54
Hexachloroethane		54	U	6.1	54
Nitrobenzene		54	U	7.7	54
Isophorone		540	U	66	540
Bis(2-chloroethoxy)methane		540	U	70	540
1,2,4-Trichlorobenzene		54	U	6.2	54
Naphthalene		6000		63	540
4-Chloroaniline		540	U	140	540
Hexachlorobutadiene		110	U	13	110
2-Methylnaphthalene		1400		70	540
Hexachlorocyclopentadiene		540	U	64	540
2-Chloronaphthalene		540	U	61	540
2-Nitroaniline		1100	U	230	1100
Dimethyl phthalate		540	U	65	540
Acenaphthylene		930		64	540
2,6-Dinitrotoluene		110	U	16	110
3-Nitroaniline		1100	U	190	1100
Acenaphthene		330	J	79	540
Dibenzofuran		4700		64	540
2,4-Dinitrotoluene		110	U	18	110
Diethyl phthalate		540	U	65	540
4-Chlorophenyl phenyl ether		540	U	64	540
Fluorene		3200		70	540
4-Nitroaniline		1100	U	170	1100
N-Nitrosodiphenylamine		540	U	54	540
4-Bromophenyl phenyl ether		540	U	54	540
Hexachlorobenzene		54	U	7.4	54

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-03 (4.5-5)**

Lab Sample ID: 200-11326-1
Client Matrix: Solid % Moisture: 39.4

Date Sampled: 06/14/2012 1130
Date Received: 06/15/2012 1015

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118177	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-117106	Lab File ID:	z19224.d
Dilution:	1.0			Initial Weight/Volume:	15.03 g
Analysis Date:	06/29/2012 2344			Final Weight/Volume:	1 mL
Prep Date:	06/22/2012 0849			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		9500		69	540
Anthracene		430	J	66	540
Carbazole		540	U	64	540
Di-n-butyl phthalate		540	U	67	540
Fluoranthene		2700		73	540
Pyrene		2200		46	540
Butyl benzyl phthalate		540	U	50	540
3,3'-Dichlorobenzidine		1100	U	190	1100
Benzo[a]anthracene		2000		3.8	54
Chrysene		2000		64	540
Bis(2-ethylhexyl) phthalate		540	U	180	540
Di-n-octyl phthalate		540	U	35	540
Benzo[b]fluoranthene		2100		3.4	54
Benzo[k]fluoranthene		760		4.1	54
Benzo[a]pyrene		1500		3.9	54
Indeno[1,2,3-cd]pyrene		1400		10	54
Dibenz(a,h)anthracene		350		6.9	54
Benzo[g,h,i]perylene		1400		40	540
2,2'-oxybis[1-chloropropane]		540	U	60	540

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	53		38 - 105
Phenol-d5	52		41 - 118
Terphenyl-d14	54		16 - 151
2,4,6-Tribromophenol	44		10 - 120
2-Fluorophenol	50		37 - 125
2-Fluorobiphenyl	58		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-06 (4-5)**

Lab Sample ID: 200-11326-2
Client Matrix: Solid

% Moisture: 50.2

Date Sampled: 06/14/2012 1010
Date Received: 06/15/2012 1015

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118204	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-117106	Lab File ID:	z19293.d
Dilution:	5.0			Initial Weight/Volume:	15.02 g
Analysis Date:	07/01/2012 1904			Final Weight/Volume:	1 mL
Prep Date:	06/22/2012 0849			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		3300	U	450	3300
2-Chlorophenol		3300	U	440	3300
2-Methylphenol		3300	U	570	3300
2-Nitrophenol		3300	U	370	3300
3 & 4 Methylphenol		3300	U	570	3300
2,4-Dimethylphenol		3300	U	820	3300
2,4-Dichlorophenol		3300	U	490	3300
4-Chloro-3-methylphenol		3300	U	500	3300
2,4,6-Trichlorophenol		3300	U	390	3300
2,4,5-Trichlorophenol		3300	U	430	3300
2,4-Dinitrophenol		10000	U	1900	10000
4-Nitrophenol		10000	U	2100	10000
4,6-Dinitro-2-methylphenol		10000	U	900	10000
Pentachlorophenol		10000	U	990	10000
Bis(2-chloroethyl)ether		330	U	45	330
1,3-Dichlorobenzene		3300	U	300	3300
Benzoic acid		3300	U	3300	3300
1,4-Dichlorobenzene		3300	U	370	3300
1,2-Dichlorobenzene		3300	U	390	3300
N-Nitrosodi-n-propylamine		330	U	55	330
Hexachloroethane		330	U	37	330
Nitrobenzene		330	U	47	330
Isophorone		3300	U	400	3300
Bis(2-chloroethoxy)methane		3300	U	430	3300
1,2,4-Trichlorobenzene		330	U	38	330
Naphthalene		45000		380	3300
4-Chloroaniline		3300	U	880	3300
Hexachlorobutadiene		670	U	81	670
2-Methylnaphthalene		6200		430	3300
Hexachlorocyclopentadiene		3300	U	390	3300
2-Chloronaphthalene		3300	U	370	3300
2-Nitroaniline		6700	U	1400	6700
Dimethyl phthalate		3300	U	390	3300
Acenaphthylene		1000	J	390	3300
2,6-Dinitrotoluene		670	U	100	670
3-Nitroaniline		6700	U	1200	6700
Acenaphthene		3300	U	480	3300
Dibenzofuran		3400		390	3300
2,4-Dinitrotoluene		670	U	110	670
Diethyl phthalate		3300	U	400	3300
4-Chlorophenyl phenyl ether		3300	U	390	3300
Fluorene		2800	J	420	3300
4-Nitroaniline		6700	U	1000	6700
N-Nitrosodiphenylamine		3300	U	330	3300
4-Bromophenyl phenyl ether		3300	U	330	3300
Hexachlorobenzene		330	U	45	330

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-06 (4-5)**

Lab Sample ID: 200-11326-2
Client Matrix: Solid % Moisture: 50.2

Date Sampled: 06/14/2012 1010
Date Received: 06/15/2012 1015

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118204	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-117106	Lab File ID:	z19293.d
Dilution:	5.0			Initial Weight/Volume:	15.02 g
Analysis Date:	07/01/2012 1904			Final Weight/Volume:	1 mL
Prep Date:	06/22/2012 0849			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		24000		420	3300
Anthracene		3000	J	400	3300
Carbazole		500	J	390	3300
Di-n-butyl phthalate		3300	U	410	3300
Fluoranthene		12000		440	3300
Pyrene		12000		280	3300
Butyl benzyl phthalate		3300	U	300	3300
3,3'-Dichlorobenzidine		6700	U	1200	6700
Benzo[a]anthracene		6800		23	330
Chrysene		7100		390	3300
Bis(2-ethylhexyl) phthalate		3300	U	1100	3300
Di-n-octyl phthalate		3300	U	210	3300
Benzo[b]fluoranthene		5900		21	330
Benzo[k]fluoranthene		2400		25	330
Benzo[a]pyrene		4700		23	330
Indeno[1,2,3-cd]pyrene		4500		62	330
Dibenz(a,h)anthracene		930		42	330
Benzo[g,h,i]perylene		4800		250	3300
2,2'-oxybis[1-chloropropane]		3300	U	370	3300

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	41		38 - 105
Phenol-d5	42		41 - 118
Terphenyl-d14	52		16 - 151
2,4,6-Tribromophenol	33		10 - 120
2-Fluorophenol	39		37 - 125
2-Fluorobiphenyl	49		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-11 (5-6)**

Lab Sample ID: 200-11326-3
Client Matrix: Solid % Moisture: 11.4

Date Sampled: 06/14/2012 0910
Date Received: 06/15/2012 1015

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-117976	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-117106	Lab File ID:	z19067.d
Dilution:	1.0			Initial Weight/Volume:	15.04 g
Analysis Date:	06/26/2012 1200			Final Weight/Volume:	1 mL
Prep Date:	06/22/2012 0849			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		370	U	50	370
2-Chlorophenol		370	U	49	370
2-Methylphenol		370	U	63	370
2-Nitrophenol		370	U	42	370
3 & 4 Methylphenol		370	U	63	370
2,4-Dimethylphenol		370	U	92	370
2,4-Dichlorophenol		370	U	54	370
4-Chloro-3-methylphenol		370	U	56	370
2,4,6-Trichlorophenol		370	U	44	370
2,4,5-Trichlorophenol		370	U	48	370
2,4-Dinitrophenol		1100	U	210	1100
4-Nitrophenol		1100	U	240	1100
4,6-Dinitro-2-methylphenol		1100	U	100	1100
Pentachlorophenol		1100	U	110	1100
Bis(2-chloroethyl)ether		37	U	5.1	37
1,3-Dichlorobenzene		370	U	34	370
Benzoic acid		370	U	370	370
1,4-Dichlorobenzene		370	U	42	370
1,2-Dichlorobenzene		370	U	43	370
N-Nitrosodi-n-propylamine		37	U	6.2	37
Hexachloroethane		37	U	4.1	37
Nitrobenzene		37	U	5.3	37
Isophorone		370	U	45	370
Bis(2-chloroethoxy)methane		370	U	48	370
1,2,4-Trichlorobenzene		37	U	4.2	37
Naphthalene		370	U	43	370
4-Chloroaniline		370	U	99	370
Hexachlorobutadiene		75	U	9.1	75
2-Methylnaphthalene		370	U	48	370
Hexachlorocyclopentadiene		370	U	44	370
2-Chloronaphthalene		370	U	42	370
2-Nitroaniline		750	U	160	750
Dimethyl phthalate		370	U	44	370
Acenaphthylene		370	U	44	370
2,6-Dinitrotoluene		75	U	11	75
3-Nitroaniline		750	U	130	750
Acenaphthene		370	U	54	370
Dibenzofuran		370	U	44	370
2,4-Dinitrotoluene		75	U	12	75
Diethyl phthalate		370	U	44	370
4-Chlorophenyl phenyl ether		370	U	44	370
Fluorene		370	U	48	370
4-Nitroaniline		750	U	120	750
N-Nitrosodiphenylamine		370	U	37	370
4-Bromophenyl phenyl ether		370	U	37	370
Hexachlorobenzene		37	U	5.1	37

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-11 (5-6)**

Lab Sample ID: 200-11326-3
Client Matrix: Solid

% Moisture: 11.4

Date Sampled: 06/14/2012 0910
Date Received: 06/15/2012 1015

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-117976	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-117106	Lab File ID:	z19067.d
Dilution:	1.0			Initial Weight/Volume:	15.04 g
Analysis Date:	06/26/2012 1200			Final Weight/Volume:	1 mL
Prep Date:	06/22/2012 0849			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		47	J	47	370
Anthracene		370	U	45	370
Carbazole		370	U	44	370
Di-n-butyl phthalate		370	U	46	370
Fluoranthene		370	U	50	370
Pyrene		49	J	31	370
Butyl benzyl phthalate		370	U	34	370
3,3'-Dichlorobenzidine		750	U	130	750
Benzo[a]anthracene		27	J	2.6	37
Chrysene		370	U	43	370
Bis(2-ethylhexyl) phthalate		140	J	120	370
Di-n-octyl phthalate		370	U	24	370
Benzo[b]fluoranthene		14	J	2.4	37
Benzo[k]fluoranthene		37	U	2.8	37
Benzo[a]pyrene		13	J	2.6	37
Indeno[1,2,3-cd]pyrene		37	UJ	6.9	37
Dibenz(a,h)anthracene		37	U	4.7	37
Benzo[g,h,i]perylene		370	U	28	370
2,2'-oxybis[1-chloropropane]		370	U	41	370

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	83		38 - 105
Phenol-d5	88		41 - 118
Terphenyl-d14	94		16 - 151
2,4,6-Tribromophenol	58		10 - 120
2-Fluorophenol	79		37 - 125
2-Fluorobiphenyl	81		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-25 (12.7-13.7)**

Lab Sample ID: 200-11326-4
Client Matrix: Solid % Moisture: 34.8

Date Sampled: 06/14/2012 1150
Date Received: 06/15/2012 1015

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118432	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-117106	Lab File ID:	z19357.d
Dilution:	1.0			Initial Weight/Volume:	15.02 g
Analysis Date:	07/02/2012 2252			Final Weight/Volume:	1 mL
Prep Date:	06/22/2012 0849			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		520		68	510
2-Chlorophenol		510	U	67	510
2-Methylphenol		410	J	86	510
2-Nitrophenol		510	U	57	510
3 & 4 Methylphenol		570		86	510
2,4-Dimethylphenol		510	U	130	510
2,4-Dichlorophenol		510	U	74	510
4-Chloro-3-methylphenol		510	U	76	510
2,4,6-Trichlorophenol		510	U	59	510
2,4,5-Trichlorophenol		510	U	65	510
2,4-Dinitrophenol		1500	U	290	1500
4-Nitrophenol		1500	U	330	1500
4,6-Dinitro-2-methylphenol		1500	U	140	1500
Pentachlorophenol		1500	U	150	1500
Bis(2-chloroethyl)ether		51	U	6.9	51
1,3-Dichlorobenzene		510	U	46	510
Benzoic acid		510	U	510	510
1,4-Dichlorobenzene		510	U	57	510
1,2-Dichlorobenzene		510	U	59	510
N-Nitrosodi-n-propylamine		51	U	8.5	51
Hexachloroethane		51	U	5.6	51
Nitrobenzene		51	U	7.2	51
Isophorone		510	U	61	510
Bis(2-chloroethoxy)methane		510	U	65	510
1,2,4-Trichlorobenzene		51	U	5.7	51
Naphthalene		5100		59	510
4-Chloroaniline		510	U	130	510
Hexachlorobutadiene		100	U	12	100
2-Methylnaphthalene		390	J	65	510
Hexachlorocyclopentadiene		510	U	60	510
2-Chloronaphthalene		510	U	57	510
2-Nitroaniline		1000	U	210	1000
Dimethyl phthalate		510	U	60	510
Acenaphthylene		410	J	60	510
2,6-Dinitrotoluene		100	U	15	100
3-Nitroaniline		1000	U	180	1000
Acenaphthene		520		74	510
Dibenzofuran		370	J	59	510
2,4-Dinitrotoluene		100	U	17	100
Diethyl phthalate		510	U	60	510
4-Chlorophenyl phenyl ether		510	U	59	510
Fluorene		520		65	510
4-Nitroaniline		1000	U	160	1000
N-Nitrosodiphenylamine		510	U	50	510
4-Bromophenyl phenyl ether		510	U	50	510
Hexachlorobenzene		51	U	6.9	51

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-25 (12.7-13.7)**

Lab Sample ID: 200-11326-4
Client Matrix: Solid % Moisture: 34.8

Date Sampled: 06/14/2012 1150
Date Received: 06/15/2012 1015

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118432	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-117106	Lab File ID:	z19357.d
Dilution:	1.0			Initial Weight/Volume:	15.02 g
Analysis Date:	07/02/2012 2252			Final Weight/Volume:	1 mL
Prep Date:	06/22/2012 0849			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		3600		65	510
Anthracene		1500		62	510
Carbazole		160	J	60	510
Di-n-butyl phthalate		510	U	63	510
Fluoranthene		5200		68	510
Pyrene		5600		42	510
Butyl benzyl phthalate		510	U	46	510
3,3'-Dichlorobenzidine		1000	U	180	1000
Benzo[a]anthracene		3400		3.5	51
Chrysene		3900		59	510
Bis(2-ethylhexyl) phthalate		510	U	170	510
Di-n-octyl phthalate		510	U	32	510
Benzo[b]fluoranthene		2900		3.2	51
Benzo[k]fluoranthene		970		3.8	51
Benzo[a]pyrene		3200		3.6	51
Indeno[1,2,3-cd]pyrene		2200		9.4	51
Dibenz(a,h)anthracene		450		6.4	51
Benzo[g,h,i]perylene		2500		38	510
2,2'-oxybis[1-chloropropane]		510	U	56	510

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	73		38 - 105
Phenol-d5	67		41 - 118
Terphenyl-d14	68		16 - 151
2,4,6-Tribromophenol	39		10 - 120
2-Fluorophenol	65		37 - 125
2-Fluorobiphenyl	84		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-04 (0-1)**

Lab Sample ID: 200-11346-1
Client Matrix: Solid

% Moisture: 23.3

Date Sampled: 06/14/2012 1445
Date Received: 06/16/2012 1000

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118330	Instrument ID:	BNAMS10
Prep Method:	3541	Prep Batch:	460-117695	Lab File ID:	p31537.d
Dilution:	1.0			Initial Weight/Volume:	15.00 g
Analysis Date:	07/02/2012 0630			Final Weight/Volume:	1 mL
Prep Date:	06/27/2012 1531			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		430	U	58	430
2-Chlorophenol		430	U	57	430
2-Methylphenol		430	U	73	430
2-Nitrophenol		430	U	48	430
3 & 4 Methylphenol		430	U	73	430
2,4-Dimethylphenol		430	U	110	430
2,4-Dichlorophenol		430	U	63	430
4-Chloro-3-methylphenol		430	U	65	430
2,4,6-Trichlorophenol		430	U	50	430
2,4,5-Trichlorophenol		430	U	56	430
2,4-Dinitrophenol		1300	U	240	1300
4-Nitrophenol		1300	U	280	1300
4,6-Dinitro-2-methylphenol		1300	U	120	1300
Pentachlorophenol		1300	U	130	1300
Bis(2-chloroethyl)ether		43	U	5.9	43
1,3-Dichlorobenzene		430	U	39	430
Benzoic acid		430	UJ	430	430
1,4-Dichlorobenzene		430	U	49	430
1,2-Dichlorobenzene		430	U	50	430
N-Nitrosodi-n-propylamine		43	U	7.2	43
Hexachloroethane		43	U	4.8	43
Nitrobenzene		43	U	6.1	43
Isophorone		430	U	52	430
Bis(2-chloroethoxy)methane		430	U	56	430
1,2,4-Trichlorobenzene		43	U	4.9	43
Naphthalene		450		50	430
4-Chloroaniline		430	U	110	430
Hexachlorobutadiene		87	U	11	87
2-Methylnaphthalene		220	J	55	430
Hexachlorocyclopentadiene		~~430~~	~~U~~ R	~~51~~	~~430~~
2-Chloronaphthalene		430	U	48	430
2-Nitroaniline		870	U	180	870
Dimethyl phthalate		430	U	51	430
Acenaphthylene		320	J	51	430
2,6-Dinitrotoluene		87	U	13	87
3-Nitroaniline		870	U	150	870
Acenaphthene		400	J	63	430
Dibenzofuran		400	J	51	430
2,4-Dinitrotoluene		87	U	14	87
Diethyl phthalate		430	U	51	430
4-Chlorophenyl phenyl ether		430	U	51	430
Fluorene		570		55	430
4-Nitroaniline		870	U	130	870
N-Nitrosodiphenylamine		430	U	42	430
4-Bromophenyl phenyl ether		430	U	43	430
Hexachlorobenzene		43	U	5.9	43

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-04 (0-1)**

Lab Sample ID: 200-11346-1
Client Matrix: Solid

% Moisture: 23.3

Date Sampled: 06/14/2012 1445
Date Received: 06/16/2012 1000

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118330	Instrument ID:	BNAMS10
Prep Method:	3541	Prep Batch:	460-117695	Lab File ID:	p31537.d
Dilution:	1.0			Initial Weight/Volume:	15.00 g
Analysis Date:	07/02/2012 0630			Final Weight/Volume:	1 mL
Prep Date:	06/27/2012 1531			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		2900		55	430
Anthracene		1000		52	430
Carbazole		390	J	51	430
Di-n-butyl phthalate		430	U	53	430
Fluoranthene		3400		57	430
Pyrene		3200		36	430
Butyl benzyl phthalate		430	U	39	430
3,3'-Dichlorobenzidine		870	U	150	870
Benzo[a]anthracene		2000		3.0	43
Chrysene		2200		50	430
Bis(2-ethylhexyl) phthalate		430	U	140	430
Di-n-octyl phthalate		430	U	27	430
Benzo[b]fluoranthene		2200		2.7	43
Benzo[k]fluoranthene		940		3.3	43
Benzo[a]pyrene		1800		3.0	43
Indeno[1,2,3-cd]pyrene		1800		8.0	43
Dibenz(a,h)anthracene		510		5.4	43
Benzo[g,h,i]perylene		1800		32	430
2,2'-oxybis[1-chloropropane]		430	U	48	430

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	67		38 - 105
Phenol-d5	67		41 - 118
Terphenyl-d14	77		16 - 151
2,4,6-Tribromophenol	64		10 - 120
2-Fluorophenol	65		37 - 125
2-Fluorobiphenyl	81		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-07 (4.5-5)**

Lab Sample ID: 200-11346-2
Client Matrix: Solid

% Moisture: 13.2

Date Sampled: 06/14/2012 1700
Date Received: 06/16/2012 1000

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118330	Instrument ID:	BNAMS10
Prep Method:	3541	Prep Batch:	460-117695	Lab File ID:	p31536.d
Dilution:	1.0			Initial Weight/Volume:	15.05 g
Analysis Date:	07/02/2012 0607			Final Weight/Volume:	1 mL
Prep Date:	06/27/2012 1531			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		380	U	51	380
2-Chlorophenol		380	U	50	380
2-Methylphenol		380	U	65	380
2-Nitrophenol		380	U	42	380
3 & 4 Methylphenol		380	U	65	380
2,4-Dimethylphenol		380	U	94	380
2,4-Dichlorophenol		380	U	56	380
4-Chloro-3-methylphenol		380	U	57	380
2,4,6-Trichlorophenol		380	U	44	380
2,4,5-Trichlorophenol		380	U	49	380
2,4-Dinitrophenol		1100	U	220	1100
4-Nitrophenol		1100	U	240	1100
4,6-Dinitro-2-methylphenol		1100	U	100	1100
Pentachlorophenol		1100	U	110	1100
Bis(2-chloroethyl)ether		38	U	5.2	38
1,3-Dichlorobenzene		380	U	34	380
Benzoic acid		380	U J	380	380
1,4-Dichlorobenzene		380	U	43	380
1,2-Dichlorobenzene		380	U	44	380
N-Nitrosodi-n-propylamine		38	U	6.3	38
Hexachloroethane		38	U	4.2	38
Nitrobenzene		38	U	5.4	38
Isophorone		380	U	46	380
Bis(2-chloroethoxy)methane		380	U	49	380
1,2,4-Trichlorobenzene		38	U	4.3	38
Naphthalene		57	J	44	380
4-Chloroaniline		380	U	100	380
Hexachlorobutadiene		77	U	9.3	77
2-Methylnaphthalene		380	U	49	380
Hexachlorocyclopentadiene		380	U	45	380
2-Chloronaphthalene		380	U	42	380
2-Nitroaniline		770	U	160	770
Dimethyl phthalate		380	U	45	380
Acenaphthylene		380	U	45	380
2,6-Dinitrotoluene		77	U	11	77
3-Nitroaniline		770	U	130	770
Acenaphthene		380	U	55	380
Dibenzofuran		380	U	45	380
2,4-Dinitrotoluene		77	U	13	77
Diethyl phthalate		380	U	45	380
4-Chlorophenyl phenyl ether		380	U	45	380
Fluorene		85	J	49	380
4-Nitroaniline		770	U	120	770
N-Nitrosodiphenylamine		380	U	37	380
4-Bromophenyl phenyl ether		380	U	38	380
Hexachlorobenzene		38	U	5.2	38

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-07 (4.5-5)**

Lab Sample ID: 200-11346-2
Client Matrix: Solid % Moisture: 13.2

Date Sampled: 06/14/2012 1700
Date Received: 06/16/2012 1000

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118330	Instrument ID:	BNAMS10
Prep Method:	3541	Prep Batch:	460-117695	Lab File ID:	p31536.d
Dilution:	1.0			Initial Weight/Volume:	15.05 g
Analysis Date:	07/02/2012 0607			Final Weight/Volume:	1 mL
Prep Date:	06/27/2012 1531			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		270	J	48	380
Anthracene		120	J	46	380
Carbazole		380	U	45	380
Di-n-butyl phthalate		380	U	47	380
Fluoranthene		600		51	380
Pyrene		670		32	380
Butyl benzyl phthalate		380	U	35	380
3,3'-Dichlorobenzidine		770	U	130	770
Benzo[a]anthracene		370		2.7	38
Chrysene		410		44	380
Bis(2-ethylhexyl) phthalate		380	U	130	380
Di-n-octyl phthalate		380	U	24	380
Benzo[b]fluoranthene		400		2.4	38
Benzo[k]fluoranthene		160		2.9	38
Benzo[a]pyrene		370		2.7	38
Indeno[1,2,3-cd]pyrene		290		7.1	38
Dibenz(a,h)anthracene		78		4.8	38
Benzo[g,h,i]perylene		360	J	28	380
2,2'-oxybis[1-chloropropane]		380	U	42	380

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	62		38 - 105
Phenol-d5	63		41 - 118
Terphenyl-d14	85		16 - 151
2,4,6-Tribromophenol	63		10 - 120
2-Fluorophenol	61		37 - 125
2-Fluorobiphenyl	77		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-29 (17-18)**

Lab Sample ID: 200-11346-3
Client Matrix: Solid

% Moisture: 13.7

Date Sampled: 06/15/2012 0950
Date Received: 06/16/2012 1000

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-117976	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-117106	Lab File ID:	z19068.d
Dilution:	1.0			Initial Weight/Volume:	15.03 g
Analysis Date:	06/26/2012 1223			Final Weight/Volume:	1 mL
Prep Date:	06/22/2012 0849			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		380	U	51	380
2-Chlorophenol		380	U	50	380
2-Methylphenol		380	U	65	380
2-Nitrophenol		380	U	43	380
3 & 4 Methylphenol		380	U	65	380
2,4-Dimethylphenol		380	U	94	380
2,4-Dichlorophenol		380	U	56	380
4-Chloro-3-methylphenol		380	U	58	380
2,4,6-Trichlorophenol		380	U	45	380
2,4,5-Trichlorophenol		380	U	49	380
2,4-Dinitrophenol		1200	U	220	1200
4-Nitrophenol		1200	U	250	1200
4,6-Dinitro-2-methylphenol		1200	U	100	1200
Pentachlorophenol		1200	U	110	1200
Bis(2-chloroethyl)ether		38	U	5.2	38
1,3-Dichlorobenzene		380	U	35	380
Benzoic acid		380	U	380	380
1,4-Dichlorobenzene		380	U	43	380
1,2-Dichlorobenzene		380	U	44	380
N-Nitrosodi-n-propylamine		38	U	6.4	38
Hexachloroethane		38	U	4.3	38
Nitrobenzene		38	U	5.4	38
Isophorone		380	U	46	380
Bis(2-chloroethoxy)methane		380	U	49	380
1,2,4-Trichlorobenzene		38	U	4.3	38
Naphthalene		380	U	44	380
4-Chloroaniline		380	U	100	380
Hexachlorobutadiene		78	U	9.3	78
2-Methylnaphthalene		380	U	49	380
Hexachlorocyclopentadiene		380	U	45	380
2-Chloronaphthalene		380	U	43	380
2-Nitroaniline		780	U	160	780
Dimethyl phthalate		380	U	45	380
Acenaphthylene		380	U	45	380
2,6-Dinitrotoluene		78	U	12	78
3-Nitroaniline		780	U	140	780
Acenaphthene		380	U	56	380
Dibenzofuran		380	U	45	380
2,4-Dinitrotoluene		78	U	13	78
Diethyl phthalate		380	U	46	380
4-Chlorophenyl phenyl ether		380	U	45	380
Fluorene		380	U	49	380
4-Nitroaniline		780	U	120	780
N-Nitrosodiphenylamine		380	U	38	380
4-Bromophenyl phenyl ether		380	U	38	380
Hexachlorobenzene		38	U	5.2	38

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-29 (17-18)**

Lab Sample ID: 200-11346-3
Client Matrix: Solid % Moisture: 13.7

Date Sampled: 06/15/2012 0950
Date Received: 06/16/2012 1000

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-117976	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-117106	Lab File ID:	z19068.d
Dilution:	1.0			Initial Weight/Volume:	15.03 g
Analysis Date:	06/26/2012 1223			Final Weight/Volume:	1 mL
Prep Date:	06/22/2012 0849			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		380	U	49	380
Anthracene		380	U	47	380
Carbazole		380	U	45	380
Di-n-butyl phthalate		380	U	47	380
Fluoranthene		380	U	51	380
Pyrene		380	U	32	380
Butyl benzyl phthalate		380	U	35	380
3,3'-Dichlorobenzidine		780	U	130	780
Benzo[a]anthracene		38	U	2.7	38
Chrysene		380	U	45	380
Bis(2-ethylhexyl) phthalate		140	J	130	380
Di-n-octyl phthalate		380	U	24	380
Benzo[b]fluoranthene		38	U	2.4	38
Benzo[k]fluoranthene		38	U	2.9	38
Benzo[a]pyrene		38	U	2.7	38
Indeno[1,2,3-cd]pyrene		38	UJ	7.1	38
Dibenz(a,h)anthracene		38	U	4.8	38
Benzo[g,h,i]perylene		380	U	28	380
2,2'-oxybis[1-chloropropane]		380	U	42	380

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	72		38 - 105
Phenol-d5	77		41 - 118
Terphenyl-d14	85		16 - 151
2,4,6-Tribromophenol	59		10 - 120
2-Fluorophenol	72		37 - 125
2-Fluorobiphenyl	72		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-29 (18-19)**

Lab Sample ID: 200-11346-4
Client Matrix: Solid

% Moisture: 15.2

Date Sampled: 06/15/2012 1000
Date Received: 06/16/2012 1000

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-117976	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-117106	Lab File ID:	z19069.d
Dilution:	1.0			Initial Weight/Volume:	15.01 g
Analysis Date:	06/26/2012 1246			Final Weight/Volume:	1 mL
Prep Date:	06/22/2012 0849			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		390	U	52	390
2-Chlorophenol		390	U	51	390
2-Methylphenol		390	U	66	390
2-Nitrophenol		390	U	43	390
3 & 4 Methylphenol		390	U	66	390
2,4-Dimethylphenol		390	U	96	390
2,4-Dichlorophenol		390	U	57	390
4-Chloro-3-methylphenol		390	U	59	390
2,4,6-Trichlorophenol		390	U	46	390
2,4,5-Trichlorophenol		390	U	50	390
2,4-Dinitrophenol		1200	U	220	1200
4-Nitrophenol		1200	U	250	1200
4,6-Dinitro-2-methylphenol		1200	U	110	1200
Pentachlorophenol		1200	U	120	1200
Bis(2-chloroethyl)ether		39	U	5.3	39
1,3-Dichlorobenzene		390	U	35	390
Benzoic acid		390	U	390	390
1,4-Dichlorobenzene		390	U	44	390
1,2-Dichlorobenzene		390	U	45	390
N-Nitrosodi-n-propylamine		39	U	6.5	39
Hexachloroethane		39	U	4.3	39
Nitrobenzene		39	U	5.5	39
Isophorone		390	U	47	390
Bis(2-chloroethoxy)methane		390	U	50	390
1,2,4-Trichlorobenzene		39	U	4.4	39
Naphthalene		390	U	45	390
4-Chloroaniline		390	U	100	390
Hexachlorobutadiene		79	U	9.5	79
2-Methylnaphthalene		390	U	50	390
Hexachlorocyclopentadiene		390	U	46	390
2-Chloronaphthalene		390	U	43	390
2-Nitroaniline		790	U	160	790
Dimethyl phthalate		390	U	46	390
Acenaphthylene		390	U	46	390
2,6-Dinitrotoluene		79	U	12	79
3-Nitroaniline		790	U	140	790
Acenaphthene		390	U	57	390
Dibenzofuran		390	U	46	390
2,4-Dinitrotoluene		79	U	13	79
Diethyl phthalate		390	U	46	390
4-Chlorophenyl phenyl ether		390	U	46	390
Fluorene		390	U	50	390
4-Nitroaniline		790	U	120	790
N-Nitrosodiphenylamine		390	U	38	390
4-Bromophenyl phenyl ether		390	U	39	390
Hexachlorobenzene		39	U	5.3	39

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-29 (18-19)**

Lab Sample ID: 200-11346-4
Client Matrix: Solid % Moisture: 15.2

Date Sampled: 06/15/2012 1000
Date Received: 06/16/2012 1000

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-117976	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-117106	Lab File ID:	z19069.d
Dilution:	1.0			Initial Weight/Volume:	15.01 g
Analysis Date:	06/26/2012 1246			Final Weight/Volume:	1 mL
Prep Date:	06/22/2012 0849			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		390	U	50	390
Anthracene		390	U	47	390
Carbazole		390	U	46	390
Di-n-butyl phthalate		390	U	48	390
Fluoranthene		58	J	52	390
Pyrene		52	J	33	390
Butyl benzyl phthalate		390	U	36	390
3,3'-Dichlorobenzidine		790	U	140	790
Benzo[a]anthracene		27	J	2.7	39
Chrysene		390	U	45	390
Bis(2-ethylhexyl) phthalate		390	U	130	390
Di-n-octyl phthalate		390	U	25	390
Benzo[b]fluoranthene		29	J	2.5	39
Benzo[k]fluoranthene		13	J	3.0	39
Benzo[a]pyrene		14	J	2.8	39
Indeno[1,2,3-cd]pyrene		39	U J	7.2	39
Dibenz(a,h)anthracene		39	U	4.9	39
Benzo[g,h,i]perylene		390	U	29	390
2,2'-oxybis[1-chloropropane]		390	U	43	390

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	73		38 - 105
Phenol-d5	76		41 - 118
Terphenyl-d14	85		16 - 151
2,4,6-Tribromophenol	63		10 - 120
2-Fluorophenol	71		37 - 125
2-Fluorobiphenyl	73		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-27 (17.5-18.5)**

Lab Sample ID: 200-11346-5
Client Matrix: Solid

% Moisture: 17.1

Date Sampled: 06/15/2012 1130
Date Received: 06/16/2012 1000

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-117976	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-117106	Lab File ID:	z19070.d
Dilution:	1.0			Initial Weight/Volume:	15.04 g
Analysis Date:	06/26/2012 1310			Final Weight/Volume:	1 mL
Prep Date:	06/22/2012 0849			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		400	U	53	400
2-Chlorophenol		400	U	52	400
2-Methylphenol		400	U	68	400
2-Nitrophenol		400	U	44	400
3 & 4 Methylphenol		400	U	68	400
2,4-Dimethylphenol		400	U	98	400
2,4-Dichlorophenol		400	U	58	400
4-Chloro-3-methylphenol		400	U	60	400
2,4,6-Trichlorophenol		400	U	47	400
2,4,5-Trichlorophenol		400	U	51	400
2,4-Dinitrophenol		1200	U	230	1200
4-Nitrophenol		1200	U	260	1200
4,6-Dinitro-2-methylphenol		1200	U	110	1200
Pentachlorophenol		1200	U	120	1200
Bis(2-chloroethyl)ether		40	U	5.4	40
1,3-Dichlorobenzene		400	U f	36	400
Benzoic acid		400	U	400	400
1,4-Dichlorobenzene		400	U f	45	400
1,2-Dichlorobenzene		400	U	46	400
N-Nitrosodi-n-propylamine		40	U	6.6	40
Hexachloroethane		40	U	4.4	40
Nitrobenzene		40	U	5.7	40
Isophorone		400	U	48	400
Bis(2-chloroethoxy)methane		400	U	51	400
1,2,4-Trichlorobenzene		40	U	4.5	40
Naphthalene		400	U	46	400
4-Chloroaniline		400	U	110	400
Hexachlorobutadiene		81	U	9.7	81
2-Methylnaphthalene		400	U	51	400
Hexachlorocyclopentadiene		400	U	47	400
2-Chloronaphthalene		400	U	44	400
2-Nitroaniline		810	U	170	810
Dimethyl phthalate		400	U	47	400
Acenaphthylene		400	U	47	400
2,6-Dinitrotoluene		81	U	12	81
3-Nitroaniline		810	U	140	810
Acenaphthene		400	U	58	400
Dibenzofuran		400	U	47	400
2,4-Dinitrotoluene		81	U	13	81
Diethyl phthalate		400	U	47	400
4-Chlorophenyl phenyl ether		400	U	47	400
Fluorene		400	U	51	400
4-Nitroaniline		810	U	120	810
N-Nitrosodiphenylamine		400	U	39	400
4-Bromophenyl phenyl ether		400	U	39	400
Hexachlorobenzene		40	U	5.4	40

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-27 (17.5-18.5)**

Lab Sample ID: 200-11346-5
Client Matrix: Solid

% Moisture: 17.1

Date Sampled: 06/15/2012 1130
Date Received: 06/16/2012 1000

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-117976	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-117106	Lab File ID:	z19070.d
Dilution:	1.0			Initial Weight/Volume:	15.04 g
Analysis Date:	06/26/2012 1310			Final Weight/Volume:	1 mL
Prep Date:	06/22/2012 0849			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		400	U	51	400
Anthracene		400	U	48	400
Carbazole		400	U	47	400
Di-n-butyl phthalate		400	U	49	400
Fluoranthene		400	U	53	400
Pyrene		400	U	33	400
Butyl benzyl phthalate		400	U	36	400
3,3'-Dichlorobenzidine		810	U	140	810
Benzo[a]anthracene		15	J	2.8	40
Chrysene		400	U	46	400
Bis(2-ethylhexyl) phthalate		400	U	130	400
Di-n-octyl phthalate		400	U	25	400
Benzo[b]fluoranthene		11	J	2.5	40
Benzo[k]fluoranthene		40	U	3.0	40
Benzo[a]pyrene		40	U	2.8	40
Indeno[1,2,3-cd]pyrene		40	U J	7.4	40
Dibenz(a,h)anthracene		40	U	5.0	40
Benzo[g,h,i]perylene		400	U	29	400
2,2'-oxybis[1-chloropropane]		400	U	44	400

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	85		38 - 105
Phenol-d5	91		41 - 118
Terphenyl-d14	105		16 - 151
2,4,6-Tribromophenol	64		10 - 120
2-Fluorophenol	81		37 - 125
2-Fluorobiphenyl	85		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-01 (10-10.8)**

Lab Sample ID: 200-11346-6
Client Matrix: Solid % Moisture: 41.2

Date Sampled: 06/15/2012 1400
Date Received: 06/16/2012 1000

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118204	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-117106	Lab File ID:	z19294.d
Dilution:	10			Initial Weight/Volume:	15.02 g
Analysis Date:	07/01/2012 1928	Run Type:	DL	Final Weight/Volume:	1 mL
Prep Date:	06/22/2012 0849			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		5600	U J	750	5600
2-Chlorophenol		5600	U	740	5600
2-Methylphenol		5600	U	960	5600
2-Nitrophenol		5600	U	630	5600
3 & 4 Methylphenol		5600	U	960	5600
2,4-Dimethylphenol		5600	U	1400	5600
2,4-Dichlorophenol		5600	U	820	5600
4-Chloro-3-methylphenol		5600	U	850	5600
2,4,6-Trichlorophenol		5600	U	660	5600
2,4,5-Trichlorophenol		5600	U	720	5600
2,4-Dinitrophenol		17000	U	3200	17000
4-Nitrophenol		17000	U	3600	17000
4,6-Dinitro-2-methylphenol		17000	U	1500	17000
Pentachlorophenol		17000	U	1700	17000
Bis(2-chloroethyl)ether		560	U	77	560
1,3-Dichlorobenzene		5600	U	510	5600
Benzoic acid		5600	U	5600	5600
1,4-Dichlorobenzene		5600	U	630	5600
1,2-Dichlorobenzene		5600	U	650	5600
N-Nitrosodi-n-propylamine		560	U	94	560
Hexachloroethane		560	U	62	560
Nitrobenzene		560	U	80	560
Isophorone		5600	U	680	5600
Bis(2-chloroethoxy)methane		5600	U	720	5600
1,2,4-Trichlorobenzene		560	U	64	560
Naphthalene		68000	D J	650	5600
4-Chloroaniline		5600	U J	1500	5600
Hexachlorobutadiene		1100	U J	140	1100
2-Methylnaphthalene		4400	J D	720	5600
Hexachlorocyclopentadiene		5600	U J	660	5600
2-Chloronaphthalene		5600	U	630	5600
2-Nitroaniline		11000	U	2300	11000
Dimethyl phthalate		5600	U	670	5600
Acenaphthylene		800	J D	660	5600
2,6-Dinitrotoluene		1100	U J	170	1100
3-Nitroaniline		11000	U	2000	11000
Acenaphthene		5600	U	820	5600
Dibenzofuran		7500	D J	660	5600
2,4-Dinitrotoluene		1100	U J	190	1100
Diethyl phthalate		5600	U	670	5600
4-Chlorophenyl phenyl ether		5600	U	660	5600
Fluorene		11000	D J	720	5600
4-Nitroaniline		11000	U J	1700	11000
N-Nitrosodiphenylamine		5600	U	550	5600
4-Bromophenyl phenyl ether		5600	U	560	5600
Hexachlorobenzene		560	U	77	560

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-01 (10-10.8)**

Lab Sample ID: 200-11346-6
Client Matrix: Solid

% Moisture: 41.2

Date Sampled: 06/15/2012 1400
Date Received: 06/16/2012 1000

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118204	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-117106	Lab File ID:	z19294.d
Dilution:	10			Initial Weight/Volume:	15.02 g
Analysis Date:	07/01/2012 1928	Run Type:	DL	Final Weight/Volume:	1 mL
Prep Date:	06/22/2012 0849			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		24000	D J	710	5600
Anthracene		4400	J D	680	5600
Carbazole		890	J D	660	5600
Di-n-butyl phthalate		5600	U J	690	5600
Fluoranthene		9200	D J	750	5600
Pyrene		11000	D J	470	5600
Butyl benzyl phthalate		5600	U J	510	5600
3,3'-Dichlorobenzidine		11000	U J	2000	11000
Benzo[a]anthracene		7700	D J	39	560
Chrysene		9200	D J	660	5600
Bis(2-ethylhexyl) phthalate		5600	U J	1900	5600
Di-n-octyl phthalate		5600	U J	360	5600
Benzo[b]fluoranthene		6200	D J	35	560
Benzo[k]fluoranthene		2500	D	43	560
Benzo[a]pyrene		6500	D	40	560
Indeno[1,2,3-cd]pyrene		4700	D	100	560
Dibenz(a,h)anthracene		1200	D	71	560
Benzo[g,h,i]perylene		6000	D	420	5600
2,2'-oxybis[1-chloropropane]		5600	U J	620	5600

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	0	D	38 - 105
Phenol-d5	0	D	41 - 118
Terphenyl-d14	0	D	16 - 151
2,4,6-Tribromophenol	0	D	10 - 120
2-Fluorophenol	0	D	37 - 125
2-Fluorobiphenyl	0	D	40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-01 (12-13)**

Lab Sample ID: 200-11346-7
Client Matrix: Solid

% Moisture: 11.1

Date Sampled: 06/15/2012 1405
Date Received: 06/16/2012 1000

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-117976	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-117106	Lab File ID:	z19071.d
Dilution:	1.0			Initial Weight/Volume:	15.02 g
Analysis Date:	06/26/2012 1333			Final Weight/Volume:	1 mL
Prep Date:	06/22/2012 0849			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		370	U	50	370
2-Chlorophenol		370	U	49	370
2-Methylphenol		370	U	63	370
2-Nitrophenol		370	U	41	370
3 & 4 Methylphenol		370	U	63	370
2,4-Dimethylphenol		370	U	92	370
2,4-Dichlorophenol		370	U	54	370
4-Chloro-3-methylphenol		370	U	56	370
2,4,6-Trichlorophenol		370	U	43	370
2,4,5-Trichlorophenol		370	U	48	370
2,4-Dinitrophenol		1100	U	210	1100
4-Nitrophenol		1100	U	240	1100
4,6-Dinitro-2-methylphenol		1100	U	100	1100
Pentachlorophenol		1100	U	110	1100
Bis(2-chloroethyl)ether		37	U	5.1	37
1,3-Dichlorobenzene		370	U	34	370
Benzoic acid		370	U	370	370
1,4-Dichlorobenzene		370	U	42	370
1,2-Dichlorobenzene		370	U	43	370
N-Nitrosodi-n-propylamine		37	U	6.2	37
Hexachloroethane		37	U	4.1	37
Nitrobenzene		37	U	5.3	37
Isophorone		370	U	45	370
Bis(2-chloroethoxy)methane		370	U	48	370
1,2,4-Trichlorobenzene		37	U	4.2	37
Naphthalene		370	U	43	370
4-Chloroaniline		370	U	98	370
Hexachlorobutadiene		75	U	9.1	75
2-Methylnaphthalene		370	U	48	370
Hexachlorocyclopentadiene		370	U	44	370
2-Chloronaphthalene		370	U	41	370
2-Nitroaniline		750	U	160	750
Dimethyl phthalate		370	U	44	370
Acenaphthylene		370	U	44	370
2,6-Dinitrotoluene		75	U	11	75
3-Nitroaniline		750	U	130	750
Acenaphthene		370	U	54	370
Dibenzofuran		370	U	44	370
2,4-Dinitrotoluene		75	U	12	75
Diethyl phthalate		370	U	44	370
4-Chlorophenyl phenyl ether		370	U	44	370
Fluorene		370	U	48	370
4-Nitroaniline		750	U	120	750
N-Nitrosodiphenylamine		370	U	37	370
4-Bromophenyl phenyl ether		370	U	37	370
Hexachlorobenzene		37	U	5.1	37

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-01 (12-13)**

Lab Sample ID: 200-11346-7
Client Matrix: Solid

% Moisture: 11.1

Date Sampled: 06/15/2012 1405
Date Received: 06/16/2012 1000

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-117976	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-117106	Lab File ID:	z19071.d
Dilution:	1.0			Initial Weight/Volume:	15.02 g
Analysis Date:	06/26/2012 1333			Final Weight/Volume:	1 mL
Prep Date:	06/22/2012 0849			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		370	U	47	370
Anthracene		370	U	45	370
Carbazole		370	U	44	370
Di-n-butyl phthalate		370	U	46	370
Fluoranthene		370	U	50	370
Pyrene		370	U	31	370
Butyl benzyl phthalate		370	U	34	370
3,3'-Dichlorobenzidine		750	U	130	750
Benzo[a]anthracene		37	U	2.6	37
Chrysene		370	U	43	370
Bis(2-ethylhexyl) phthalate		370	U	120	370
Di-n-octyl phthalate		370	U	24	370
Benzo[b]fluoranthene		37	U	2.3	37
Benzo[k]fluoranthene		37	U	2.8	37
Benzo[a]pyrene		37	U	2.6	37
Indeno[1,2,3-cd]pyrene		37	U J	6.9	37
Dibenz(a,h)anthracene		37	U	4.7	37
Benzo[g,h,i]perylene		370	U	28	370
2,2'-oxybis[1-chloropropane]		370	U	41	370

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	80		38 - 105
Phenol-d5	86		41 - 118
Terphenyl-d14	95		16 - 151
2,4,6-Tribromophenol	61		10 - 120
2-Fluorophenol	79		37 - 125
2-Fluorobiphenyl	80		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-26 (10-11)**

Lab Sample ID: 200-11346-8
Client Matrix: Solid

% Moisture: 34.9

Date Sampled: 06/14/2012 1530
Date Received: 06/16/2012 1000

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118204	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-117106	Lab File ID:	z19295.d
Dilution:	10			Initial Weight/Volume:	15.01 g
Analysis Date:	07/01/2012 1951	Run Type:	DL	Final Weight/Volume:	1 mL
Prep Date:	06/22/2012 0849			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		5100	U J	680	5100
2-Chlorophenol		5100	U	670	5100
2-Methylphenol		5100	U	870	5100
2-Nitrophenol		5100	U	570	5100
3 & 4 Methylphenol		5100	U	870	5100
2,4-Dimethylphenol		5100	U	1300	5100
2,4-Dichlorophenol		5100	U	740	5100
4-Chloro-3-methylphenol		5100	U	770	5100
2,4,6-Trichlorophenol		5100	U	590	5100
2,4,5-Trichlorophenol		5100	U	660	5100
2,4-Dinitrophenol		15000	U	2900	15000
4-Nitrophenol		15000	U	3300	15000
4,6-Dinitro-2-methylphenol		15000	U	1400	15000
Pentachlorophenol		15000	U	1500	15000
Bis(2-chloroethyl)ether		510	U	69	510
1,3-Dichlorobenzene		5100	U	460	5100
Benzoic acid		5100	U	5100	5100
1,4-Dichlorobenzene		5100	U	570	5100
1,2-Dichlorobenzene		5100	U	590	5100
N-Nitrosodi-n-propylamine		510	U	85	510
Hexachloroethane		510	U	56	510
Nitrobenzene		510	U	72	510
Isophorone		5100	U	620	5100
Bis(2-chloroethoxy)methane		5100	U	660	5100
1,2,4-Trichlorobenzene		510	U	58	510
Naphthalene		83000	D J	590	5100
4-Chloroaniline		5100	U J	1300	5100
Hexachlorobutadiene		1000	U J	120	1000
2-Methylnaphthalene		11000	D J	650	5100
Hexachlorocyclopentadiene		5100	U J	600	5100
2-Chloronaphthalene		5100	U	570	5100
2-Nitroaniline		10000	U	2100	10000
Dimethyl phthalate		5100	U	600	5100
Acenaphthylene		2900	J D	600	5100
2,6-Dinitrotoluene		1000	U J	150	1000
3-Nitroaniline		10000	U J	1800	10000
Acenaphthene		1200	J D	740	5100
Dibenzofuran		16000	D J	600	5100
2,4-Dinitrotoluene		1000	U J	170	1000
Diethyl phthalate		5100	U	600	5100
4-Chlorophenyl phenyl ether		5100	U	600	5100
Fluorene		27000	D J	650	5100
4-Nitroaniline		10000	U J	1600	10000
N-Nitrosodiphenylamine		5100	U	500	5100
4-Bromophenyl phenyl ether		5100	U	500	5100
Hexachlorobenzene		510	U	69	510

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-26 (10-11)**

Lab Sample ID: 200-11346-8
Client Matrix: Solid

% Moisture: 34.9

Date Sampled: 06/14/2012 1530
Date Received: 06/16/2012 1000

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118204	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-117106	Lab File ID:	z19295.d
Dilution:	10			Initial Weight/Volume:	15.01 g
Analysis Date:	07/01/2012 1951	Run Type:	DL	Final Weight/Volume:	1 mL
Prep Date:	06/22/2012 0849			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		57000	D J	650	5100
Anthracene		26000	D J	620	5100
Carbazole		3200	J D	600	5100
Di-n-butyl phthalate		5100	U J	630	5100
Fluoranthene		25000	D J	680	5100
Pyrene		21000	D J	430	5100
Butyl benzyl phthalate		5100	U J	470	5100
3,3'-Dichlorobenzidine		10000	U J	1800	10000
Benzo[a]anthracene		14000	D J	35	510
Chrysene		14000	D J	590	5100
Bis(2-ethylhexyl) phthalate		2100	J D	1700	5100
Di-n-octyl phthalate		5100	U J	320	5100
Benzo[b]fluoranthene		12000	D J	32	510
Benzo[k]fluoranthene		5100	D	39	510
Benzo[a]pyrene		11000	D	36	510
Indeno[1,2,3-cd]pyrene		8500	D	94	510
Dibenz(a,h)anthracene		2000	D	64	510
Benzo[g,h,i]perylene		8300	D	380	5100
2,2'-oxybis[1-chloropropane]		5100	U J	560	5100

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	0	D	38 - 105
Phenol-d5	0	D	41 - 118
Terphenyl-d14	0	D	16 - 151
2,4,6-Tribromophenol	0	D	10 - 120
2-Fluorophenol	0	D	37 - 125
2-Fluorobiphenyl	0	D	40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-26 (12-13)**

Lab Sample ID: 200-11346-9
Client Matrix: Solid

% Moisture: 40.2

Date Sampled: 06/14/2012 1545
Date Received: 06/16/2012 1000

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118177	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-117106	Lab File ID:	z19234.d
Dilution:	1.0			Initial Weight/Volume:	15.03 g
Analysis Date:	06/30/2012 0336			Final Weight/Volume:	1 mL
Prep Date:	06/22/2012 0849			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		550	U	74	550
2-Chlorophenol		550	U	73	550
2-Methylphenol		420	J	94	550
2-Nitrophenol		550	U	62	550
3 & 4 Methylphenol		940		94	550
2,4-Dimethylphenol		430	J	140	550
2,4-Dichlorophenol		550	U	81	550
4-Chloro-3-methylphenol		550	U	83	550
2,4,6-Trichlorophenol		550	U	65	550
2,4,5-Trichlorophenol		550	U	71	550
2,4-Dinitrophenol		1700	U	310	1700
4-Nitrophenol		1700	U	360	1700
4,6-Dinitro-2-methylphenol		1700	U	150	1700
Pentachlorophenol		1700	U	160	1700
Bis(2-chloroethyl)ether		55	U	7.5	55
1,3-Dichlorobenzene		550	U	50	550
Benzoic acid		550	U	550	550
1,4-Dichlorobenzene		550	U	62	550
1,2-Dichlorobenzene		550	U	64	550
N-Nitrosodi-n-propylamine		55	U	9.2	55
Hexachloroethane		55	U	6.1	55
Nitrobenzene		55	U	7.8	55
Isophorone		550	U	67	550
Bis(2-chloroethoxy)methane		550	U	71	550
1,2,4-Trichlorobenzene		55	U	6.3	55
Naphthalene		3500		64	550
4-Chloroaniline		550	U	150	550
Hexachlorobutadiene		110	U	13	110
2-Methylnaphthalene		420	J	71	550
Hexachlorocyclopentadiene		550	U	65	550
2-Chloronaphthalene		550	U	62	550
2-Nitroaniline		1100	U	230	1100
Dimethyl phthalate		550	U	65	550
Acenaphthylene		490	J	65	550
2,6-Dinitrotoluene		110	U	17	110
3-Nitroaniline		1100	U	200	1100
Acenaphthene		410	J	80	550
Dibenzofuran		180	J	65	550
2,4-Dinitrotoluene		110	U	18	110
Diethyl phthalate		550	U	66	550
4-Chlorophenyl phenyl ether		550	U	65	550
Fluorene		610		71	550
4-Nitroaniline		1100	U	170	1100
N-Nitrosodiphenylamine		550	U	54	550
4-Bromophenyl phenyl ether		550	U	55	550
Hexachlorobenzene		55	U	7.5	55

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-26 (12-13)**

Lab Sample ID: 200-11346-9
Client Matrix: Solid % Moisture: 40.2

Date Sampled: 06/14/2012 1545
Date Received: 06/16/2012 1000

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118177	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-117106	Lab File ID:	z19234.d
Dilution:	1.0			Initial Weight/Volume:	15.03 g
Analysis Date:	06/30/2012 0336			Final Weight/Volume:	1 mL
Prep Date:	06/22/2012 0849			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		4400		70	550
Anthracene		2800		67	550
Carbazole		120	J	65	550
Di-n-butyl phthalate		550	U	68	550
Fluoranthene		7300		74	550
Pyrene		8400		46	550
Butyl benzyl phthalate		550	U	51	550
3,3'-Dichlorobenzidine		1100	U	190	1100
Benzo[a]anthracene		6900		3.9	55
Chrysene		6900		64	550
Bis(2-ethylhexyl) phthalate		550	U	180	550
Di-n-octyl phthalate		550	U	35	550
Benzo[b]fluoranthene		4200		3.5	55
Benzo[k]fluoranthene		1200		4.2	55
Benzo[a]pyrene		5400		3.9	55
Indeno[1,2,3-cd]pyrene		3200		10	55
Dibenz(a,h)anthracene		780		7.0	55
Benzo[g,h,i]perylene		3500		41	550
2,2'-oxybis[1-chloropropane]		550	U	61	550

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	63		38 - 105
Phenol-d5	64		41 - 118
Terphenyl-d14	67		16 - 151
2,4,6-Tribromophenol	61		10 - 120
2-Fluorophenol	60		37 - 125
2-Fluorobiphenyl	71		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-02 (11.5-13.1)**

Lab Sample ID: 200-11384-1
Client Matrix: Solid % Moisture: 46.4

Date Sampled: 06/15/2012 1600
Date Received: 06/20/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-116936	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-117694	Lab File ID:	zz18919.d
Dilution:	1.0			Initial Weight/Volume:	15.05 g
Analysis Date:	06/21/2012 0208			Final Weight/Volume:	1 mL
Prep Date:	06/19/2012 1530			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		610	U	83	610
2-Chlorophenol		610	U	81	610
2-Methylphenol		610	U	100	610
2-Nitrophenol		610	U	69	610
3 & 4 Methylphenol		610	U	100	610
2,4-Dimethylphenol		610	U	150	610
2,4-Dichlorophenol		610	U	90	610
4-Chloro-3-methylphenol		610	U	93	610
2,4,6-Trichlorophenol		610	U	72	610
2,4,5-Trichlorophenol		610	U	79	610
2,4-Dinitrophenol		1900	U	350	1900
4-Nitrophenol		1900	U	400	1900
4,6-Dinitro-2-methylphenol		1900	U	170	1900
Pentachlorophenol		1900	U	180	1900
Bis(2-chloroethyl)ether		61	U	8.4	61
1,3-Dichlorobenzene		610	U	56	610
Benzoic acid		610	U	610	610
1,4-Dichlorobenzene		610	U	69	610
1,2-Dichlorobenzene		610	U	71	610
N-Nitrosodi-n-propylamine		61	U	10	61
Hexachloroethane		61	U	6.8	61
Nitrobenzene		61	U	8.7	61
Isophorone		610	U	75	610
Bis(2-chloroethoxy)methane		610	U	79	610
1,2,4-Trichlorobenzene		61	U	7.0	61
Naphthalene		9700		71	610
4-Chloroaniline		610	U	160	610
Hexachlorobutadiene		120	U	15	120
2-Methylnaphthalene		1500		79	610
Hexachlorocyclopentadiene		610	U	72	610
2-Chloronaphthalene		610	U	69	610
2-Nitroaniline		1200	U	260	1200
Dimethyl phthalate		610	U	73	610
Acenaphthylene		250	J	73	610
2,6-Dinitrotoluene		120	U	19	120
3-Nitroaniline		1200	U	220	1200
Acenaphthene		170	J	90	610
Dibenzofuran		1800		72	610
2,4-Dinitrotoluene		120	U	20	120
Diethyl phthalate		610	U	73	610
4-Chlorophenyl phenyl ether		610	U	72	610
Fluorene		2000		79	610
4-Nitroaniline		1200	U	190	1200
N-Nitrosodiphenylamine		610	U	61	610
4-Bromophenyl phenyl ether		610	U	61	610
Hexachlorobenzene		61	U	8.4	61

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-02 (11.5-13.1)**

Lab Sample ID: 200-11384-1
Client Matrix: Solid

% Moisture: 46.4

Date Sampled: 06/15/2012 1600
Date Received: 06/20/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-116936	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-117694	Lab File ID:	zz18919.d
Dilution:	1.0			Initial Weight/Volume:	15.05 g
Analysis Date:	06/21/2012 0208			Final Weight/Volume:	1 mL
Prep Date:	06/19/2012 1530			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		5400		78	610
Anthracene		1400		75	610
Carbazole		350	J	73	610
Di-n-butyl phthalate		610	U	76	610
Fluoranthene		3900		82	610
Pyrene		4900		52	610
Butyl benzyl phthalate		610	U	56	610
3,3'-Dichlorobenzidine		1200	U	220	1200
Benzo[a]anthracene		3700		4.3	61
Chrysene		3900		72	610
Bis(2-ethylhexyl) phthalate		610	U	200	610
Di-n-octyl phthalate		610	U	39	610
Benzo[b]fluoranthene		2100		3.9	61
Benzo[k]fluoranthene		930		4.7	61
Benzo[a]pyrene		2700		4.4	61
Indeno[1,2,3-cd]pyrene		2000		11	61
Dibenz(a,h)anthracene		540		7.8	61
Benzo[g,h,i]perylene		2400		46	610
2,2'-oxybis[1-chloropropane]		610	U	68	610

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	54		38 - 105
Phenol-d5	57		41 - 118
Terphenyl-d14	69		16 - 151
2,4,6-Tribromophenol	70		10 - 120
2-Fluorophenol	50		37 - 125
2-Fluorobiphenyl	74		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-02 (14-15)**

Lab Sample ID: 200-11384-2
Client Matrix: Solid

% Moisture: 19.5

Date Sampled: 06/15/2012 1615
Date Received: 06/20/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-116936	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-117694	Lab File ID:	zz18904.d
Dilution:	1.0			Initial Weight/Volume:	15.02 g
Analysis Date:	06/20/2012 2016			Final Weight/Volume:	1 mL
Prep Date:	06/19/2012 1530			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		410	U	55	410
2-Chlorophenol		410	U	54	410
2-Methylphenol		410	U	70	410
2-Nitrophenol		410	U	46	410
3 & 4 Methylphenol		410	U	70	410
2,4-Dimethylphenol		410	U	100	410
2,4-Dichlorophenol		410	U	60	410
4-Chloro-3-methylphenol		410	U	62	410
2,4,6-Trichlorophenol		410	U	48	410
2,4,5-Trichlorophenol		410	U	53	410
2,4-Dinitrophenol		1200	U	230	1200
4-Nitrophenol		1200	U	260	1200
4,6-Dinitro-2-methylphenol		1200	U	110	1200
Pentachlorophenol		1200	U	120	1200
Bis(2-chloroethyl)ether		41	U	5.6	41
1,3-Dichlorobenzene		410	U	37	410
Benzoic acid		410	U	410	410
1,4-Dichlorobenzene		410	U	46	410
1,2-Dichlorobenzene		410	U	48	410
N-Nitrosodi-n-propylamine		41	U	6.8	41
Hexachloroethane		41	U	4.6	41
Nitrobenzene		41	U	5.8	41
Isophorone		410	U	50	410
Bis(2-chloroethoxy)methane		410	U	53	410
1,2,4-Trichlorobenzene		41	U	4.7	41
Naphthalene		370	J	48	410
4-Chloroaniline		410	U	110	410
Hexachlorobutadiene		83	U	10	83
2-Methylnaphthalene		61	J	53	410
Hexachlorocyclopentadiene		410	U	48	410
2-Chloronaphthalene		410	U	46	410
2-Nitroaniline		830	U	170	830
Dimethyl phthalate		410	U	49	410
Acenaphthylene		410	U	48	410
2,6-Dinitrotoluene		83	U	12	83
3-Nitroaniline		830	U	150	830
Acenaphthene		410	U	60	410
Dibenzofuran		410	U	48	410
2,4-Dinitrotoluene		83	U	14	83
Diethyl phthalate		410	U	49	410
4-Chlorophenyl phenyl ether		410	U	48	410
Fluorene		410	U	52	410
4-Nitroaniline		830	U	130	830
N-Nitrosodiphenylamine		410	U	40	410
4-Bromophenyl phenyl ether		410	U	41	410
Hexachlorobenzene		41	U	5.6	41

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-02 (14-15)**

Lab Sample ID: 200-11384-2
Client Matrix: Solid % Moisture: 19.5

Date Sampled: 06/15/2012 1615
Date Received: 06/20/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-116936	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-117694	Lab File ID:	zz18904.d
Dilution:	1.0			Initial Weight/Volume:	15.02 g
Analysis Date:	06/20/2012 2016			Final Weight/Volume:	1 mL
Prep Date:	06/19/2012 1530			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		55	J	52	410
Anthracene		410	U	50	410
Carbazole		410	U	48	410
Di-n-butyl phthalate		410	U	51	410
Fluoranthene		410	U	55	410
Pyrene		410	U	34	410
Butyl benzyl phthalate		410	U	38	410
3,3'-Dichlorobenzidine		830	U	140	830
Benzo[a]anthracene		41	U	2.9	41
Chrysene		410	U	48	410
Bis(2-ethylhexyl) phthalate		410	U	140	410
Di-n-octyl phthalate		410	U	26	410
Benzo[b]fluoranthene		41	U	2.6	41
Benzo[k]fluoranthene		41	U	3.1	41
Benzo[a]pyrene		9.2	J	2.9	41
Indeno[1,2,3-cd]pyrene		11	J	7.6	41
Dibenz(a,h)anthracene		41	U	5.2	41
Benzo[g,h,i]perylene		410	U	30	410
2,2'-oxybis[1-chloropropane]		410	U	45	410

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	72		38 - 105
Phenol-d5	70		41 - 118
Terphenyl-d14	66		16 - 151
2,4,6-Tribromophenol	72		10 - 120
2-Fluorophenol	71		37 - 125
2-Fluorobiphenyl	72		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-12 (11-12)**

Lab Sample ID: 200-11384-3
Client Matrix: Solid

% Moisture: 10.2

Date Sampled: 06/16/2012 0925
Date Received: 06/20/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-116936	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-117694	Lab File ID:	zz18905.d
Dilution:	1.0			Initial Weight/Volume:	14.97 g
Analysis Date:	06/20/2012 2039			Final Weight/Volume:	1 mL
Prep Date:	06/19/2012 1530			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		370	U	50	370
2-Chlorophenol		370	U	49	370
2-Methylphenol		370	U	63	370
2-Nitrophenol		370	U	41	370
3 & 4 Methylphenol		370	U	63	370
2,4-Dimethylphenol		370	U	91	370
2,4-Dichlorophenol		370	U	54	370
4-Chloro-3-methylphenol		~~370~~	~~U~~ R	~~56~~	~~370~~
2,4,6-Trichlorophenol		370	U	43	370
2,4,5-Trichlorophenol		370	U	48	370
2,4-Dinitrophenol		~~1100~~	~~U~~ R	~~210~~	~~1100~~
4-Nitrophenol		1100	U	240	1100
4,6-Dinitro-2-methylphenol		1100	U	100	1100
Pentachlorophenol		1100	U J	110	1100
Bis(2-chloroethyl)ether		37	U	5.0	37
1,3-Dichlorobenzene		370	U	33	370
Benzoic acid		~~370~~	~~U~~ R	~~370~~	~~370~~
1,4-Dichlorobenzene		370	U	42	370
1,2-Dichlorobenzene		370	U	43	370
N-Nitrosodi-n-propylamine		37	U	6.2	37
Hexachloroethane		37	U	4.1	37
Nitrobenzene		37	U	5.2	37
Isophorone		370	U	45	370
Bis(2-chloroethoxy)methane		370	U	48	370
1,2,4-Trichlorobenzene		37	U	4.2	37
Naphthalene		370	U	43	370
4-Chloroaniline		370	U	98	370
Hexachlorobutadiene		75	U	9.0	75
2-Methylnaphthalene		370	U	47	370
Hexachlorocyclopentadiene		370	U	43	370
2-Chloronaphthalene		370	U	41	370
2-Nitroaniline		750	U	150	750
Dimethyl phthalate		370	U	44	370
Acenaphthylene		370	U	44	370
2,6-Dinitrotoluene		75	U	11	75
3-Nitroaniline		750	U	130	750
Acenaphthene		370	U	54	370
Dibenzofuran		370	U	43	370
2,4-Dinitrotoluene		75	U	12	75
Diethyl phthalate		370	U	44	370
4-Chlorophenyl phenyl ether		370	U	43	370
Fluorene		370	U	47	370
4-Nitroaniline		750	U	110	750
N-Nitrosodiphenylamine		370	U	36	370
4-Bromophenyl phenyl ether		370	U	37	370
Hexachlorobenzene		37	U	5.0	37

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-12 (11-12)**

Lab Sample ID: 200-11384-3
Client Matrix: Solid

% Moisture: 10.2

Date Sampled: 06/16/2012 0925
Date Received: 06/20/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-116936	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-117694	Lab File ID:	zz18905.d
Dilution:	1.0			Initial Weight/Volume:	14.97 g
Analysis Date:	06/20/2012 2039			Final Weight/Volume:	1 mL
Prep Date:	06/19/2012 1530			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		370	U	47	370
Anthracene		370	U	45	370
Carbazole		370	U	44	370
Di-n-butyl phthalate		370	U	46	370
Fluoranthene		370	U	49	370
Pyrene		370	U	31	370
Butyl benzyl phthalate		370	U	34	370
3,3'-Dichlorobenzidine		750	U	130	750
Benzo[a]anthracene		37	U	2.6	37
Chrysene		370	U	43	370
Bis(2-ethylhexyl) phthalate		370	U	120	370
Di-n-octyl phthalate		370	U	24	370
Benzo[b]fluoranthene		37	U	2.3	37
Benzo[k]fluoranthene		37	U	2.8	37
Benzo[a]pyrene		37	U	2.6	37
Indeno[1,2,3-cd]pyrene		37	U	6.9	37
Dibenz(a,h)anthracene		37	U	4.7	37
Benzo[g,h,i]perylene		370	U	27	370
2,2'-oxybis[1-chloropropane]		370	U	41	370

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	62		38 - 105
Phenol-d5	65		41 - 118
Terphenyl-d14	66		16 - 151
2,4,6-Tribromophenol	60		10 - 120
2-Fluorophenol	66		37 - 125
2-Fluorobiphenyl	61		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-01 (10-10.8)**

Lab Sample ID: 200-11346-6
Client Matrix: Solid

% Moisture: 41.2

Date Sampled: 06/15/2012 1400
Date Received: 06/16/2012 1000

8015B Diesel Range Organics (DRO) (GC)

Analysis Method:	8015B	Analysis Batch:	200-41066	Instrument ID:	3012.i
Prep Method:	3550B	Prep Batch:	200-40530	Initial Weight/Volume:	29.91 g
Dilution:	20			Final Weight/Volume:	2000 uL
Analysis Date:	06/28/2012 1009			Injection Volume:	2 uL
Prep Date:	06/19/2012 0809			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Diesel Range Organics [C10-C28]		840	B J	34	230

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	0	X	40 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-01 (12-13)**

Lab Sample ID: 200-11346-7
Client Matrix: Solid

% Moisture: 11.1

Date Sampled: 06/15/2012 1405
Date Received: 06/16/2012 1000

8015B Diesel Range Organics (DRO) (GC)

Analysis Method:	8015B	Analysis Batch:	200-40936	Instrument ID:	3012.i
Prep Method:	3550B	Prep Batch:	200-40530	Initial Weight/Volume:	30.44 g
Dilution:	1.0			Final Weight/Volume:	2000 uL
Analysis Date:	06/20/2012 2114			Injection Volume:	2 uL
Prep Date:	06/19/2012 0809			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Diesel Range Organics [C10-C28]		~~4.3~~ 7.4	~~JB~~ UB	1.1	7.4

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	79		40 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-02 (11.5-13.1)**

Lab Sample ID: 200-11384-1
Client Matrix: Solid

% Moisture: 46.4

Date Sampled: 06/15/2012 1600
Date Received: 06/20/2012 1010

8015B Diesel Range Organics (DRO) (GC)

Analysis Method:	8015B	Analysis Batch:	200-41066	Instrument ID:	3012.i
Prep Method:	3550B	Prep Batch:	200-40766	Initial Weight/Volume:	30.34 g
Dilution:	10			Final Weight/Volume:	2000 uL
Analysis Date:	06/28/2012 0212			Injection Volume:	2 uL
Prep Date:	06/22/2012 1046			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Diesel Range Organics [C10-C28]		1000	~~B~~ J	18	120

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	0	X	40 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-02 (14-15)**

Lab Sample ID: 200-11384-2
Client Matrix: Solid
% Moisture: 19.5

Date Sampled: 06/15/2012 1615
Date Received: 06/20/2012 1010

8015B Diesel Range Organics (DRO) (GC)

Analysis Method:	8015B	Analysis Batch:	200-41066	Instrument ID:	3012.i
Prep Method:	3550B	Prep Batch:	200-40766	Initial Weight/Volume:	30.06 g
Dilution:	1.0			Final Weight/Volume:	2000 uL
Analysis Date:	06/28/2012 0248			Injection Volume:	2 uL
Prep Date:	06/22/2012 1046			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Diesel Range Organics [C10-C28]		~~8.5~~ 8.3	~~J B~~ UB	1.2	8.3

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	55		40 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-11 (1-2.5)**

Lab Sample ID: 200-11278-1
Client Matrix: Solid % Moisture: 10.1

Date Sampled: 06/12/2012 0900
Date Received: 06/14/2012 1030

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40613	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40366	Initial Weight/Volume:	15.52 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/18/2012 2107			Injection Volume:	1 uL
Prep Date:	06/14/2012 1739			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		18	U	6.0	18
PCB-1221		18	U	4.6	18
PCB-1232		18	U	3.5	18
PCB-1242		18	U	7.2	18
PCB-1248		18	U	2.1	18
PCB-1254		18	U	3.0	18
PCB-1260		18	U	2.6	18
PCB-1262		18	U	1.6	18
PCB-1268		18	U	1.5	18

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	44		30 - 130
DCB Decachlorobiphenyl	33	X	45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-11 (1-2.5)**

Lab Sample ID: 200-11278-1
Client Matrix: Solid
% Moisture: 10.1

Date Sampled: 06/12/2012 0900
Date Received: 06/14/2012 1030

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40613	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40366	Initial Weight/Volume:	15.52 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/18/2012 2107			Injection Volume:	1 uL
Prep Date:	06/14/2012 1739			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	46		30 - 130
DCB Decachlorobiphenyl	39	X	45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-25 (3.5-5)**

Lab Sample ID: 200-11278-2
Client Matrix: Solid % Moisture: 31.0

Date Sampled: 06/12/2012 1130
Date Received: 06/14/2012 1030

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40613	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40366	Initial Weight/Volume:	15.69 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/18/2012 2137			Injection Volume:	1 uL
Prep Date:	06/14/2012 1739			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		24	U J	7.8	24
PCB-1221		24	U	6.0	24
PCB-1232		24	U	4.6	24
PCB-1242		24	U	9.3	24
PCB-1248		24	U	2.8	24
PCB-1254		24	U	3.9	24
PCB-1260		24	U	3.3	24
PCB-1262		24	U	2.1	24
PCB-1268		24	U	1.9	24

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	28	X	30 - 130
DCB Decachlorobiphenyl	23	X	45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-25 (3.5-5)**

Lab Sample ID: 200-11278-2
Client Matrix: Solid

% Moisture: 31.0

Date Sampled: 06/12/2012 1130
Date Received: 06/14/2012 1030

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40613	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40366	Initial Weight/Volume:	15.69 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/18/2012 2137			Injection Volume:	1 uL
Prep Date:	06/14/2012 1739			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	31		30 - 130
DCB Decachlorobiphenyl	31	X	45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **DUP-01-06122012**

Lab Sample ID: 200-11278-3
Client Matrix: Solid % Moisture: 50.7

Date Sampled: 06/12/2012 0000
Date Received: 06/14/2012 1030

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40613	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40366	Initial Weight/Volume:	14.71 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/18/2012 2206			Injection Volume:	1 uL
Prep Date:	06/14/2012 1739			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		35	U	12	35
PCB-1221		35	U	8.9	35
PCB-1232		35	U	6.8	35
PCB-1242		35	U	14	35
PCB-1248		35	U	4.1	35
PCB-1254		35	U	5.8	35
PCB-1260		35	U	5.0	35
PCB-1262		35	U	3.1	35
PCB-1268		35	U	2.9	35

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	51		30 - 130
DCB Decachlorobiphenyl	40	X	45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **DUP-01-06122012**

Lab Sample ID: 200-11278-3
Client Matrix: Solid

% Moisture: 50.7

Date Sampled: 06/12/2012 0000
Date Received: 06/14/2012 1030

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40613	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40366	Initial Weight/Volume:	14.71 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/18/2012 2206			Injection Volume:	1 uL
Prep Date:	06/14/2012 1739			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	56		30 - 130
DCB Decachlorobiphenyl	52		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-28 (3-5)**

Lab Sample ID: 200-11278-4
Client Matrix: Solid

% Moisture: 30.9

Date Sampled: 06/12/2012 1045
Date Received: 06/14/2012 1030

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40613	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40366	Initial Weight/Volume:	15.94 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/18/2012 2236			Injection Volume:	1 uL
Prep Date:	06/14/2012 1739			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		23	U	7.6	23
PCB-1221		23	U	5.9	23
PCB-1232		23	U	4.5	23
PCB-1242		23	U	9.1	23
PCB-1248		23	U	2.7	23
PCB-1254		23	U	3.8	23
PCB-1260		23	U	3.3	23
PCB-1262		23	U	2.0	23
PCB-1268		23	U	1.9	23

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	21	X	30 - 130
DCB Decachlorobiphenyl	10	X	45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-28 (3-5)**

Lab Sample ID: 200-11278-4
Client Matrix: Solid

% Moisture: 30.9

Date Sampled: 06/12/2012 1045
Date Received: 06/14/2012 1030

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40613	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40366	Initial Weight/Volume:	15.94 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/18/2012 2236			Injection Volume:	1 uL
Prep Date:	06/14/2012 1739			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	22	X	30 - 130
DCB Decachlorobiphenyl	15	X	45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-03 (4.5-5)**

Lab Sample ID: 200-11326-1
Client Matrix: Solid
% Moisture: 39.4

Date Sampled: 06/14/2012 1130
Date Received: 06/15/2012 1015

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40761	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40461	Initial Weight/Volume:	15.23 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/20/2012 1839			Injection Volume:	1 uL
Prep Date:	06/18/2012 0928			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		28	U	9.1	28
PCB-1221		28	U	7.0	28
PCB-1232		28	U	5.4	28
PCB-1242		28	U	11	28
PCB-1248		28	U	3.3	28
PCB-1254		28	U	4.6	28
PCB-1260		28	U	3.9	28
PCB-1262		28	U	2.4	28
PCB-1268		28	U	2.3	28

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	48		30 - 130
DCB Decachlorobiphenyl	54		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-03 (4.5-5)**

Lab Sample ID: 200-11326-1
Client Matrix: Solid

% Moisture: 39.4

Date Sampled: 06/14/2012 1130
Date Received: 06/15/2012 1015

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40761	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40461	Initial Weight/Volume:	15.23 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/20/2012 1839			Injection Volume:	1 uL
Prep Date:	06/18/2012 0928			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	55		30 - 130
DCB Decachlorobiphenyl	55		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-06 (4-5)**

Lab Sample ID: 200-11326-2
Client Matrix: Solid % Moisture: 50.2

Date Sampled: 06/14/2012 1010
Date Received: 06/15/2012 1015

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40761	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40461	Initial Weight/Volume:	15.48 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/20/2012 1909			Injection Volume:	1 uL
Prep Date:	06/18/2012 0928			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		33	U	11	33
PCB-1221		33	U	8.4	33
PCB-1232		33	U	6.4	33
PCB-1242		33	U	13	33
PCB-1248		33	U	3.9	33
PCB-1254		98		5.4	33
PCB-1260		33	U	4.7	33
PCB-1262		33	U	2.9	33
PCB-1268		33	U	2.7	33

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	50		30 - 130
DCB Decachlorobiphenyl	50		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-06 (4-5)**

Lab Sample ID: 200-11326-2
Client Matrix: Solid

% Moisture: 50.2

Date Sampled: 06/14/2012 1010
Date Received: 06/15/2012 1015

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40761	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40461	Initial Weight/Volume:	15.48 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/20/2012 1909			Injection Volume:	1 uL
Prep Date:	06/18/2012 0928			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	51		30 - 130
DCB Decachlorobiphenyl	50		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-11 (5-6)**

Lab Sample ID: 200-11326-3
Client Matrix: Solid

% Moisture: 11.4

Date Sampled: 06/14/2012 0910
Date Received: 06/15/2012 1015

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40761	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40461	Initial Weight/Volume:	15.36 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/20/2012 1938			Injection Volume:	1 uL
Prep Date:	06/18/2012 0928			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		19	U	6.2	19
PCB-1221		19	U	4.7	19
PCB-1232		19	U	3.6	19
PCB-1242		19	U	7.4	19
PCB-1248		19	U	2.2	19
PCB-1254		19	U	3.1	19
PCB-1260		19	U	2.6	19
PCB-1262		19	U	1.7	19
PCB-1268		19	U	1.5	19

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	76		30 - 130
DCB Decachlorobiphenyl	69		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-11 (5-6)**

Lab Sample ID: 200-11326-3
Client Matrix: Solid
% Moisture: 11.4

Date Sampled: 06/14/2012 0910
Date Received: 06/15/2012 1015

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40761	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40461	Initial Weight/Volume:	15.36 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/20/2012 1938			Injection Volume:	1 uL
Prep Date:	06/18/2012 0928			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	80		30 - 130
DCB Decachlorobiphenyl	73		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-25 (12.7-13.7)**

Lab Sample ID: 200-11326-4
Client Matrix: Solid % Moisture: 34.8

Date Sampled: 06/14/2012 1150
Date Received: 06/15/2012 1015

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40761	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40461	Initial Weight/Volume:	14.95 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/20/2012 2008			Injection Volume:	1 uL
Prep Date:	06/18/2012 0928			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		26	U	8.6	26
PCB-1221		26	U	6.6	26
PCB-1232		26	U	5.1	26
PCB-1242		26	U	10	26
PCB-1248		26	U	3.1	26
PCB-1254		26	U	4.3	26
PCB-1260		26	U	3.7	26
PCB-1262		26	U	2.3	26
PCB-1268		26	U	2.2	26

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	73		30 - 130
DCB Decachlorobiphenyl	52		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-25 (12.7-13.7)**

Lab Sample ID: 200-11326-4
Client Matrix: Solid % Moisture: 34.8

Date Sampled: 06/14/2012 1150
Date Received: 06/15/2012 1015

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40761	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40461	Initial Weight/Volume:	14.95 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/20/2012 2008			Injection Volume:	1 uL
Prep Date:	06/18/2012 0928			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	78		30 - 130
DCB Decachlorobiphenyl	56		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-04 (0-1)**

Lab Sample ID: 200-11346-1
Client Matrix: Solid % Moisture: 23.3

Date Sampled: 06/14/2012 1445
Date Received: 06/16/2012 1000

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40761	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40461	Initial Weight/Volume:	15.28 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/20/2012 2037			Injection Volume:	1 uL
Prep Date:	06/18/2012 0928			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		22	U	7.2	22
PCB-1221		22	U	5.5	22
PCB-1232		22	U	4.2	22
PCB-1242		34		8.6	22
PCB-1248		22	U	2.6	22
PCB-1254		92		3.6	22
PCB-1260		53		3.1	22
PCB-1262		22	U	1.9	22
PCB-1268		22	U	1.8	22

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	70		30 - 130
DCB Decachlorobiphenyl	68		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-04 (0-1)**

Lab Sample ID: 200-11346-1
Client Matrix: Solid
% Moisture: 23.3

Date Sampled: 06/14/2012 1445
Date Received: 06/16/2012 1000

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40761	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40461	Initial Weight/Volume:	15.28 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/20/2012 2037			Injection Volume:	1 uL
Prep Date:	06/18/2012 0928			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	71		30 - 130
DCB Decachlorobiphenyl	70		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-07 (4.5-5)**

Lab Sample ID: 200-11346-2
Client Matrix: Solid % Moisture: 13.2

Date Sampled: 06/14/2012 1700
Date Received: 06/16/2012 1000

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40761	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40461	Initial Weight/Volume:	15.14 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/20/2012 2107			Injection Volume:	1 uL
Prep Date:	06/18/2012 0928			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		19	U	6.4	19
PCB-1221		19	U	4.9	19
PCB-1232		19	U	3.8	19
PCB-1242		19	U	7.6	19
PCB-1248		19	U	2.3	19
PCB-1254		19	U	3.2	19
PCB-1260		19	U	2.7	19
PCB-1262		19	U	1.7	19
PCB-1268		19	U	1.6	19

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	86		30 - 130
DCB Decachlorobiphenyl	52		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-07 (4.5-5)**

Lab Sample ID: 200-11346-2
Client Matrix: Solid

% Moisture: 13.2

Date Sampled: 06/14/2012 1700
Date Received: 06/16/2012 1000

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40761	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40461	Initial Weight/Volume:	15.14 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/20/2012 2107			Injection Volume:	1 uL
Prep Date:	06/18/2012 0928			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	89		30 - 130
DCB Decachlorobiphenyl	52		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-29 (17-18)**

Lab Sample ID: 200-11346-3
Client Matrix: Solid

% Moisture: 13.7

Date Sampled: 06/15/2012 0950
Date Received: 06/16/2012 1000

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40761	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40461	Initial Weight/Volume:	15.69 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/20/2012 2136			Injection Volume:	1 uL
Prep Date:	06/18/2012 0928			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		19	U	6.2	19
PCB-1221		19	U	4.8	19
PCB-1232		19	U	3.7	19
PCB-1242		19	U	7.4	19
PCB-1248		19	U	2.2	19
PCB-1254		19	U	3.1	19
PCB-1260		19	U	2.7	19
PCB-1262		19	U	1.7	19
PCB-1268		19	U	1.6	19

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	84		30 - 130
DCB Decachlorobiphenyl	70		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-29 (17-18)**

Lab Sample ID: 200-11346-3
Client Matrix: Solid
% Moisture: 13.7

Date Sampled: 06/15/2012 0950
Date Received: 06/16/2012 1000

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40761	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40461	Initial Weight/Volume:	15.69 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/20/2012 2136			Injection Volume:	1 uL
Prep Date:	06/18/2012 0928			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	88		30 - 130
DCB Decachlorobiphenyl	78		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-29 (18-19)**

Lab Sample ID: 200-11346-4
Client Matrix: Solid

% Moisture: 15.2

Date Sampled: 06/15/2012 1000
Date Received: 06/16/2012 1000

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40761	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40461	Initial Weight/Volume:	15.57 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/20/2012 2206			Injection Volume:	1 uL
Prep Date:	06/18/2012 0928			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		19	U	6.4	19
PCB-1221		19	U	4.9	19
PCB-1232		19	U	3.7	19
PCB-1242		19	U	7.6	19
PCB-1248		19	U	2.3	19
PCB-1254		19	U	3.2	19
PCB-1260		19	U	2.7	19
PCB-1262		19	U	1.7	19
PCB-1268		19	U	1.6	19

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	80		30 - 130
DCB Decachlorobiphenyl	76		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-29 (18-19)**

Lab Sample ID: 200-11346-4
Client Matrix: Solid
% Moisture: 15.2

Date Sampled: 06/15/2012 1000
Date Received: 06/16/2012 1000

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40761	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40461	Initial Weight/Volume:	15.57 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/20/2012 2206			Injection Volume:	1 uL
Prep Date:	06/18/2012 0928			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	85		30 - 130
DCB Decachlorobiphenyl	86		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-27 (17.5-18.5)**

Lab Sample ID: 200-11346-5
Client Matrix: Solid % Moisture: 17.1

Date Sampled: 06/15/2012 1130
Date Received: 06/16/2012 1000

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40761	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40461	Initial Weight/Volume:	15.57 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/20/2012 2306			Injection Volume:	1 uL
Prep Date:	06/18/2012 0928			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		20	U	6.5	20
PCB-1221		20	U	5.0	20
PCB-1232		20	U	3.8	20
PCB-1242		20	U	7.8	20
PCB-1248		20	U	2.3	20
PCB-1254		20	U	3.3	20
PCB-1260		20	U	2.8	20
PCB-1262		20	U	1.7	20
PCB-1268		20	U	1.6	20

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	81		30 - 130
DCB Decachlorobiphenyl	83		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-27 (17.5-18.5)**

Lab Sample ID: 200-11346-5
Client Matrix: Solid

% Moisture: 17.1

Date Sampled: 06/15/2012 1130
Date Received: 06/16/2012 1000

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40761	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40461	Initial Weight/Volume:	15.57 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/20/2012 2306			Injection Volume:	1 uL
Prep Date:	06/18/2012 0928			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	84		30 - 130
DCB Decachlorobiphenyl	90		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-01 (10-10.8)**

Lab Sample ID: 200-11346-6
Client Matrix: Solid % Moisture: 41.2

Date Sampled: 06/15/2012 1400
Date Received: 06/16/2012 1000

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40761	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40461	Initial Weight/Volume:	15.23 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/20/2012 2336			Injection Volume:	1 uL
Prep Date:	06/18/2012 0928			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		28	U	9.4	28
PCB-1221		28	U	7.2	28
PCB-1232		28	U	5.5	28
PCB-1242		28	U	11	28
PCB-1248		28	U	3.3	28
PCB-1254		28	U	4.7	28
PCB-1260		28	U	4.0	28
PCB-1262		28	U	2.5	28
PCB-1268		28	U	2.3	28

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	66		30 - 130
DCB Decachlorobiphenyl	49		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-01 (10-10.8)**

Lab Sample ID: 200-11346-6
Client Matrix: Solid % Moisture: 41.2

Date Sampled: 06/15/2012 1400
Date Received: 06/16/2012 1000

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40761	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40461	Initial Weight/Volume:	15.23 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/20/2012 2336			Injection Volume:	1 uL
Prep Date:	06/18/2012 0928			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	74		30 - 130
DCB Decachlorobiphenyl	52		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-01 (12-13)**

Lab Sample ID: 200-11346-7
Client Matrix: Solid % Moisture: 11.1

Date Sampled: 06/15/2012 1405
Date Received: 06/16/2012 1000

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40761	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40461	Initial Weight/Volume:	15.36 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/21/2012 0006			Injection Volume:	1 uL
Prep Date:	06/18/2012 0928			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		19	U	6.2	19
PCB-1221		19	U	4.7	19
PCB-1232		19	U	3.6	19
PCB-1242		19	U	7.4	19
PCB-1248		19	U	2.2	19
PCB-1254		19	U	3.1	19
PCB-1260		19	U	2.6	19
PCB-1262		19	U	1.6	19
PCB-1268		19	U	1.5	19

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	86		30 - 130
DCB Decachlorobiphenyl	85		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-01 (12-13)**

Lab Sample ID: 200-11346-7
Client Matrix: Solid

% Moisture: 11.1

Date Sampled: 06/15/2012 1405
Date Received: 06/16/2012 1000

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40761	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40461	Initial Weight/Volume:	15.36 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/21/2012 0006			Injection Volume:	1 uL
Prep Date:	06/18/2012 0928			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	87		30 - 130
DCB Decachlorobiphenyl	89		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-26 (10-11)**

Lab Sample ID: 200-11346-8
Client Matrix: Solid

% Moisture: 34.9

Date Sampled: 06/14/2012 1530
Date Received: 06/16/2012 1000

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40761	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40461	Initial Weight/Volume:	14.95 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/21/2012 0035			Injection Volume:	1 uL
Prep Date:	06/18/2012 0928			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		26	U	8.6	26
PCB-1221		26	U	6.6	26
PCB-1232		26	U	5.1	26
PCB-1242		26	U	10	26
PCB-1248		26	U	3.1	26
PCB-1254		26	U	4.3	26
PCB-1260		26	U	3.7	26
PCB-1262		26	U	2.3	26
PCB-1268		26	U	2.2	26

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	55		30 - 130
DCB Decachlorobiphenyl	59		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-26 (10-11)**

Lab Sample ID: 200-11346-8
Client Matrix: Solid

% Moisture: 34.9

Date Sampled: 06/14/2012 1530
Date Received: 06/16/2012 1000

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40761	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40461	Initial Weight/Volume:	14.95 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/21/2012 0035			Injection Volume:	1 uL
Prep Date:	06/18/2012 0928			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	63		30 - 130
DCB Decachlorobiphenyl	60		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-26 (12-13)**

Lab Sample ID: 200-11346-9
Client Matrix: Solid % Moisture: 40.2

Date Sampled: 06/14/2012 1545
Date Received: 06/16/2012 1000

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40761	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40461	Initial Weight/Volume:	15.47 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/21/2012 0105			Injection Volume:	1 uL
Prep Date:	06/18/2012 0928			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		28	U	9.1	28
PCB-1221		28	U	7.0	28
PCB-1232		28	U	5.3	28
PCB-1242		28	U	11	28
PCB-1248		28	U	3.2	28
PCB-1254		28	U	4.5	28
PCB-1260		28	U	3.9	28
PCB-1262		28	U	2.4	28
PCB-1268		28	U	2.3	28

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	81		30 - 130
DCB Decachlorobiphenyl	62		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-26 (12-13)**

Lab Sample ID: 200-11346-9
Client Matrix: Solid

% Moisture: 40.2

Date Sampled: 06/14/2012 1545
Date Received: 06/16/2012 1000

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40761	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40461	Initial Weight/Volume:	15.47 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/21/2012 0105			Injection Volume:	1 uL
Prep Date:	06/18/2012 0928			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	83		30 - 130
DCB Decachlorobiphenyl	62		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-02 (11.5-13.1)**

Lab Sample ID: 200-11384-1
Client Matrix: Solid % Moisture: 46.4

Date Sampled: 06/15/2012 1600
Date Received: 06/20/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40902	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40636	Initial Weight/Volume:	15.50 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/23/2012 0537			Injection Volume:	1 uL
Prep Date:	06/20/2012 1403			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		31	U	10	31
PCB-1221		31	U	7.8	31
PCB-1232		31	U	6.0	31
PCB-1242		31	U	12	31
PCB-1248		31	U	3.6	31
PCB-1254		31	U	5.1	31
PCB-1260		31	U	4.3	31
PCB-1262		31	U	2.7	31
PCB-1268		31	U	2.5	31

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	61		30 - 130
DCB Decachlorobiphenyl	54		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-02 (11.5-13.1)**

Lab Sample ID: 200-11384-1
Client Matrix: Solid
% Moisture: 46.4

Date Sampled: 06/15/2012 1600
Date Received: 06/20/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40902	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40636	Initial Weight/Volume:	15.50 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/23/2012 0537			Injection Volume:	1 uL
Prep Date:	06/20/2012 1403			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	66		30 - 130
DCB Decachlorobiphenyl	59		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-02 (14-15)**

Lab Sample ID: 200-11384-2
Client Matrix: Solid

% Moisture: 19.5

Date Sampled: 06/15/2012 1615
Date Received: 06/20/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40902	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40636	Initial Weight/Volume:	14.79 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/23/2012 0608			Injection Volume:	1 uL
Prep Date:	06/20/2012 1403			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		21	U	7.1	21
PCB-1221		21	U	5.4	21
PCB-1232		21	U	4.2	21
PCB-1242		21	U	8.4	21
PCB-1248		21	U	2.5	21
PCB-1254		21	U	3.5	21
PCB-1260		21	U	3.0	21
PCB-1262		21	U	1.9	21
PCB-1268		21	U	1.8	21

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	78		30 - 130
DCB Decachlorobiphenyl	82		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-02 (14-15)**

Lab Sample ID: 200-11384-2
Client Matrix: Solid

% Moisture: 19.5

Date Sampled: 06/15/2012 1615
Date Received: 06/20/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40902	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40636	Initial Weight/Volume:	14.79 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/23/2012 0608			Injection Volume:	1 uL
Prep Date:	06/20/2012 1403			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	83		30 - 130
DCB Decachlorobiphenyl	84		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-12 (11-12)**

Lab Sample ID: 200-11384-3
Client Matrix: Solid

% Moisture: 10.2

Date Sampled: 06/16/2012 0925
Date Received: 06/20/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40902	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40636	Initial Weight/Volume:	14.78 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/23/2012 0638			Injection Volume:	1 uL
Prep Date:	06/20/2012 1403			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		19	U	6.3	19
PCB-1221		19	U	4.9	19
PCB-1232		19	U	3.7	19
PCB-1242		19	U	7.6	19
PCB-1248		19	U	2.3	19
PCB-1254		19	U	3.2	19
PCB-1260		19	U	2.7	19
PCB-1262		19	U	1.7	19
PCB-1268		19	U	1.6	19

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	67		30 - 130
DCB Decachlorobiphenyl	73		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-12 (11-12)**

Lab Sample ID: 200-11384-3
Client Matrix: Solid % Moisture: 10.2

Date Sampled: 06/16/2012 0925
Date Received: 06/20/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40902	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40636	Initial Weight/Volume:	14.78 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/23/2012 0638			Injection Volume:	1 uL
Prep Date:	06/20/2012 1403			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	75		30 - 130
DCB Decachlorobiphenyl	74		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-11 (1-2.5)**

Lab Sample ID: 200-11278-1
Client Matrix: Solid % Moisture: 10.1

Date Sampled: 06/12/2012 0900
Date Received: 06/14/2012 1030

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41198	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40426	Lab File ID:	062612-05.ttx
Dilution:	1.0			Initial Weight/Volume:	1.31 g
Analysis Date:	06/26/2012 2226			Final Weight/Volume:	100 mL
Prep Date:	06/15/2012 1000				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		6650	J	14.4	17.0
Antimony		5.1	U	0.42	5.1
Arsenic		3.8		0.48	0.85
Barium		37.7		0.44	17.0
Beryllium		0.33	J	0.027	0.42
Cadmium		0.11	J	0.066	0.42
Calcium		1800	J	43.3	424
Chromium		12.9		0.093	0.85
Cobalt		5.5		0.069	4.2
Copper		14.5	J	0.19	2.1
Iron		13800	J	11.0	17.0
Lead		18.8	J	0.37	0.85
Magnesium		2110	J	11.9	424
Manganese		255	J	0.38	1.3
Nickel		15.1		0.25	3.4
Potassium		883		12.7	424
Selenium		3.0	U	0.74	3.0
Silver		0.85	U	0.11	0.85
Sodium		130	J	6.4	424
Thallium		2.1	U	0.35	2.1
Vanadium		17.1		0.11	4.2
Zinc		28.4		0.48	1.7

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-40480	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-40425	Lab File ID:	061812AA.PRN
Dilution:	1.0			Initial Weight/Volume:	0.31 g
Analysis Date:	06/18/2012 1123			Final Weight/Volume:	50 mL
Prep Date:	06/15/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.096	J	0.0024	0.036

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-25 (3.5-5)**

Lab Sample ID: 200-11278-2
Client Matrix: Solid

% Moisture: 31.0

Date Sampled: 06/12/2012 1130
Date Received: 06/14/2012 1030

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41198	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40426	Lab File ID:	062612-05.ttx
Dilution:	1.0			Initial Weight/Volume:	1.34 g
Analysis Date:	06/26/2012 2231			Final Weight/Volume:	100 mL
Prep Date:	06/15/2012 1000				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		448	J	18.4	21.6
Antimony		6.3	J	0.53	6.5
Arsenic		15.9		0.61	1.1
Barium		77.2		0.56	21.6
Beryllium		0.15	J	0.035	0.54
Cadmium		0.54	U	0.084	0.54
Calcium		800	J	55.2	541
Chromium		14.3		0.12	1.1
Cobalt		1.9	J	0.088	5.4
Copper		24.0	J	0.24	2.7
Iron		11500	J	14.1	21.6
Lead		14.9	J	0.48	1.1
Magnesium		118	J	15.1	541
Manganese		78.3	J	0.49	1.6
Nickel		5.3		0.31	4.3
Potassium		210	J	16.2	541
Selenium		2.3	J	0.94	3.8
Silver		1.1	U	0.14	1.1
Sodium		164	J	8.1	541
Thallium		2.7	U	0.44	2.7
Vanadium		19.5		0.14	5.4
Zinc		14.9		0.61	2.2

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-40480	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-40425	Lab File ID:	061812AA.PRN
Dilution:	1.0			Initial Weight/Volume:	0.35 g
Analysis Date:	06/18/2012 1126			Final Weight/Volume:	50 mL
Prep Date:	06/15/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		1.2	J	0.0027	0.041

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **DUP-01-06122012**

Lab Sample ID: 200-11278-3
Client Matrix: Solid

% Moisture: 50.7

Date Sampled: 06/12/2012 0000
Date Received: 06/14/2012 1030

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41198	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40426	Lab File ID:	062612-05.ttx
Dilution:	1.0			Initial Weight/Volume:	1.44 g
Analysis Date:	06/26/2012 2236			Final Weight/Volume:	100 mL
Prep Date:	06/15/2012 1000				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		291	J	23.9	28.1
Antimony		17.3		0.69	8.4
Arsenic		27.5		0.79	1.4
Barium		59.2		0.73	28.1
Beryllium		0.069	J	0.045	0.70
Cadmium		0.70	U	0.11	0.70
Calcium		1370	J	71.8	704
Chromium		19.2		0.15	1.4
Cobalt		3.0	J	0.11	7.0
Copper		40.3	J	0.31	3.5
Iron		12900	J	18.3	28.1
Lead		17.5	J	0.62	1.4
Magnesium		142	J	19.7	704
Manganese		112	J	0.63	2.1
Nickel		8.7		0.41	5.6
Potassium		362	J	21.1	704
Selenium		4.3	J	1.2	4.9
Silver		1.4	U	0.18	1.4
Sodium		282	J	10.6	704
Thallium		3.5	U	0.58	3.5
Vanadium		25.8		0.18	7.0
Zinc		23.8		0.79	2.8

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-40480	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-40425	Lab File ID:	061812AA.PRN
Dilution:	2.0			Initial Weight/Volume:	0.32 g
Analysis Date:	06/18/2012 1143			Final Weight/Volume:	50 mL
Prep Date:	06/15/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		3.4	J	0.0084	0.13

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-28 (3-5)**

Lab Sample ID: 200-11278-4
Client Matrix: Solid

% Moisture: 30.9

Date Sampled: 06/12/2012 1045
Date Received: 06/14/2012 1030

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41198	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40426	Lab File ID:	062612-05.ttx
Dilution:	1.0			Initial Weight/Volume:	1.49 g
Analysis Date:	06/26/2012 2241			Final Weight/Volume:	100 mL
Prep Date:	06/15/2012 1000				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		2200	J	16.5	19.4
Antimony		0.98	J	0.48	5.8
Arsenic		62.2		0.54	0.97
Barium		43.3		0.50	19.4
Beryllium		0.68		0.031	0.49
Cadmium		0.57		0.076	0.49
Calcium		2660	J	49.5	485
Chromium		17.4		0.11	0.97
Cobalt		24.5		0.079	4.9
Copper		78.6	J	0.21	2.4
Iron		6240	J	12.6	19.4
Lead		38.5	J	0.43	0.97
Magnesium		398	J	13.6	485
Manganese		24.4	J	0.44	1.5
Nickel		63.6		0.28	3.9
Potassium		267	J	14.6	485
Selenium		1.6	J	0.84	3.4
Silver		0.97	U	0.13	0.97
Sodium		328	J	7.3	485
Thallium		2.4	U	0.40	2.4
Vanadium		21.6		0.13	4.9
Zinc		63.5		0.54	1.9

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-40480	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-40425	Lab File ID:	061812AA.PRN
Dilution:	1.0			Initial Weight/Volume:	0.32 g
Analysis Date:	06/18/2012 1130			Final Weight/Volume:	50 mL
Prep Date:	06/15/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.44	J	0.0030	0.045

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: SB-03 (4.5-5)

Lab Sample ID: 200-11326-1
Client Matrix: Solid % Moisture: 39.4

Date Sampled: 06/14/2012 1130
Date Received: 06/15/2012 1015

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-40876	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40517	Lab File ID:	062312-01.tbx
Dilution:	1.0			Initial Weight/Volume:	1.37 g
Analysis Date:	06/23/2012 1537			Final Weight/Volume:	100 mL
Prep Date:	06/18/2012 1920				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		23.1		0.59	7.2
Arsenic		49.5	J	0.67	1.2
Barium		29.4	J	0.63	24.1
Beryllium		0.60	U	0.039	0.60
Cadmium		0.32	J	0.094	0.60
Calcium		872		61.4	602
Chromium		44.5	~~B~~ J	0.13	1.2
Cobalt		14.7	J	0.098	6.0
Copper		480	J	0.27	3.0
Lead		177		0.53	1.2
Magnesium		697	J	16.9	602
Manganese		386	J	0.54	1.8
Nickel		72.7	J	0.35	4.8
Potassium		855	J	18.1	602
Selenium		2.3	J	1.0	4.2
Silver		1.2	U	0.16	1.2
Sodium		59.4	J	9.0	602
Thallium		3.0	U	0.49	3.0
Vanadium		32.7	J	0.16	6.0

Analysis Method:	6010C	Analysis Batch:	200-41473	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40517	Lab File ID:	070712-01.tbx
Dilution:	1.0			Initial Weight/Volume:	1.37 g
Analysis Date:	07/06/2012 2000			Final Weight/Volume:	100 mL
Prep Date:	06/18/2012 1920				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		1080		20.5	24.1
Iron		25100	J	15.7	24.1

Analysis Method:	6010C	Analysis Batch:	200-41484	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40517	Lab File ID:	070712-04.tbx
Dilution:	10			Initial Weight/Volume:	1.37 g
Analysis Date:	07/07/2012 0925			Final Weight/Volume:	100 mL
Prep Date:	06/18/2012 1920				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Zinc		184		6.7	24.1

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-03 (4.5-5)**

Lab Sample ID: 200-11326-1
Client Matrix: Solid % Moisture: 39.4

Date Sampled: 06/14/2012 1130
Date Received: 06/15/2012 1015

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41039	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41014	Lab File ID:	062712CC.PRN
Dilution:	1.0			Initial Weight/Volume:	0.30 g
Analysis Date:	06/27/2012 1425			Final Weight/Volume:	50 mL
Prep Date:	06/26/2012 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.97		0.0036	0.054

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-06 (4-5)**

Lab Sample ID: 200-11326-2
Client Matrix: Solid % Moisture: 50.2

Date Sampled: 06/14/2012 1010
Date Received: 06/15/2012 1015

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-40876	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40517	Lab File ID:	062312-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.27 g
Analysis Date:	06/23/2012 1542			Final Weight/Volume:	100 mL
Prep Date:	06/18/2012 1920				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		23.2		0.77	9.5
Arsenic		74.0	J	0.89	1.6
Barium		29.0	J	0.82	31.6
Beryllium		0.79	U	0.051	0.79
Cadmium		0.45	J	0.12	0.79
Calcium		1080		80.6	791
Chromium		84.3	~~B~~ J	0.17	1.6
Cobalt		15.2	J	0.13	7.9
Copper		436	J	0.35	4.0
Lead		167		0.70	1.6
Magnesium		639	J	22.1	791
Manganese		341	J	0.71	2.4
Nickel		77.6	J	0.46	6.3
Potassium		762	J	23.7	791
Selenium		4.4	J	1.4	5.5
Silver		1.6	U	0.21	1.6
Sodium		256	J	11.9	791
Thallium		4.0	U	0.65	4.0
Vanadium		52.9	J	0.21	7.9

Analysis Method:	6010C	Analysis Batch:	200-41473	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40517	Lab File ID:	070712-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.27 g
Analysis Date:	07/06/2012 2005			Final Weight/Volume:	100 mL
Prep Date:	06/18/2012 1920				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		1090		26.9	31.6
Iron		56900	J	20.6	31.6

Analysis Method:	6010C	Analysis Batch:	200-41484	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40517	Lab File ID:	070712-04.ttx
Dilution:	10			Initial Weight/Volume:	1.27 g
Analysis Date:	07/07/2012 0945			Final Weight/Volume:	100 mL
Prep Date:	06/18/2012 1920				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Zinc		87.4		8.9	31.6

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-06 (4-5)**

Lab Sample ID: 200-11326-2
Client Matrix: Solid

% Moisture: 50.2

Date Sampled: 06/14/2012 1010
Date Received: 06/15/2012 1015

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41039	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41014	Lab File ID:	062712CC.PRN
Dilution:	1.0			Initial Weight/Volume:	0.32 g
Analysis Date:	06/27/2012 1427			Final Weight/Volume:	50 mL
Prep Date:	06/26/2012 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		3.0		0.0041	0.062

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-11 (5-6)**

Lab Sample ID: 200-11326-3
Client Matrix: Solid

% Moisture: 11.4

Date Sampled: 06/14/2012 0910
Date Received: 06/15/2012 1015

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-40876	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40517	Lab File ID:	062312-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.24 g
Analysis Date:	06/23/2012 1547			Final Weight/Volume:	100 mL
Prep Date:	06/18/2012 1920				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.58	J	0.45	5.5
Arsenic		0.81	J	0.51	0.91
Barium		149	J	0.47	18.2
Beryllium		0.20	J	0.029	0.46
Cadmium		0.46	U	0.071	0.46
Calcium		1370		46.4	455
Chromium		35.6	~~B~~ J	0.10	0.91
Cobalt		12.0	J	0.074	4.6
Copper		26.4	J	0.20	2.3
Lead		4.9		0.40	0.91
Magnesium		6070	J	12.7	455
Manganese		251	J	0.41	1.4
Nickel		21.9	J	0.26	3.6
Potassium		6360	J	13.7	455
Selenium		3.2	U J	0.79	3.2
Silver		0.91	U	0.12	0.91
Sodium		146	J	6.8	455
Thallium		1.1	J	0.37	2.3
Vanadium		36.5	J	0.12	4.6

Analysis Method:	6010C	Analysis Batch:	200-41473	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40517	Lab File ID:	070712-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.24 g
Analysis Date:	07/06/2012 2010			Final Weight/Volume:	100 mL
Prep Date:	06/18/2012 1920				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		13000		15.5	18.2
Iron		21000	J	11.8	18.2

Analysis Method:	6010C	Analysis Batch:	200-41484	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40517	Lab File ID:	070712-04.ttx
Dilution:	10			Initial Weight/Volume:	1.24 g
Analysis Date:	07/07/2012 0950			Final Weight/Volume:	100 mL
Prep Date:	06/18/2012 1920				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Zinc		63.5		5.1	18.2

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-11 (5-6)**

Lab Sample ID: 200-11326-3
Client Matrix: Solid % Moisture: 11.4

Date Sampled: 06/14/2012 0910
Date Received: 06/15/2012 1015

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41039	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41014	Lab File ID:	062712CC.PRN
Dilution:	1.0			Initial Weight/Volume:	0.37 g
Analysis Date:	06/27/2012 1430			Final Weight/Volume:	50 mL
Prep Date:	06/26/2012 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.030	U	0.0020	0.030

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-25 (12.7-13.7)**

Lab Sample ID: 200-11326-4
Client Matrix: Solid % Moisture: 34.8

Date Sampled: 06/14/2012 1150
Date Received: 06/15/2012 1015

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-40876	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40517	Lab File ID:	062312-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.38 g
Analysis Date:	06/23/2012 1552			Final Weight/Volume:	100 mL
Prep Date:	06/18/2012 1920				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		6.7	U	0.54	6.7
Arsenic		12.5	J	0.62	1.1
Barium		109	J	0.58	22.2
Beryllium		0.75		0.036	0.56
Cadmium		0.62		0.087	0.56
Calcium		1690		56.7	556
Chromium		49.2	~~B~~ J	0.12	1.1
Cobalt		8.1	J	0.090	5.6
Copper		69.7	J	0.24	2.8
Lead		136		0.49	1.1
Magnesium		4610	J	15.6	556
Manganese		307	J	0.50	1.7
Nickel		20.8	J	0.32	4.4
Potassium		3260	J	16.7	556
Selenium		1.0	J	0.97	3.9
Silver		0.34	J	0.14	1.1
Sodium		415	J	8.3	556
Thallium		2.8	U	0.46	2.8
Vanadium		34.5	J	0.14	5.6

Analysis Method:	6010C	Analysis Batch:	200-41473	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40517	Lab File ID:	070712-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.38 g
Analysis Date:	07/06/2012 2015			Final Weight/Volume:	100 mL
Prep Date:	06/18/2012 1920				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Iron		26000	J	14.5	22.2

Analysis Method:	6010C	Analysis Batch:	200-41484	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40517	Lab File ID:	070712-04.ttx
Dilution:	10			Initial Weight/Volume:	1.38 g
Analysis Date:	07/07/2012 0955			Final Weight/Volume:	100 mL
Prep Date:	06/18/2012 1920				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		16800		189	222
Zinc		244		6.2	22.2

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-25 (12.7-13.7)**

Lab Sample ID: 200-11326-4
Client Matrix: Solid

% Moisture: 34.8

Date Sampled: 06/14/2012 1150
Date Received: 06/15/2012 1015

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41039	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41014	Lab File ID:	062712CC.PRN
Dilution:	2.0			Initial Weight/Volume:	0.30 g
Analysis Date:	06/27/2012 1531			Final Weight/Volume:	50 mL
Prep Date:	06/26/2012 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		3.0		0.0068	0.10

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: SB-04 (0-1)

Lab Sample ID: 200-11346-1
Client Matrix: Solid

% Moisture: 23.3

Date Sampled: 06/14/2012 1445
Date Received: 06/16/2012 1000

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-40876	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40517	Lab File ID:	062312-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.32 g
Analysis Date:	06/23/2012 1439			Final Weight/Volume:	100 mL
Prep Date:	06/18/2012 1920				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		1.1	J	0.48	5.9
Arsenic		5.8	J	0.55	0.99
Barium		116	J	0.51	19.7
Beryllium		0.42	J	0.032	0.49
Cadmium		0.30	J	0.077	0.49
Calcium		11700		50.3	494
Chromium		29.3	BJ	0.11	0.99
Cobalt		8.6	J	0.080	4.9
Copper		72.3	J	0.22	2.5
Lead		140		0.43	0.99
Magnesium		5100	J	13.8	494
Manganese		200	J	0.44	1.5
Nickel		22.6	J	0.29	3.9
Potassium		3420	J	14.8	494
Selenium		1.2	J	0.86	3.5
Silver		0.99	U	0.13	0.99
Sodium		186	J	7.4	494
Thallium		2.5	U	0.40	2.5
Vanadium		44.9	J	0.13	4.9

Analysis Method:	6010C	Analysis Batch:	200-41473	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40517	Lab File ID:	070712-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.32 g
Analysis Date:	07/06/2012 1850			Final Weight/Volume:	100 mL
Prep Date:	06/18/2012 1920				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		10600		16.8	19.7
Iron		25000	J	12.8	19.7

Analysis Method:	6010C	Analysis Batch:	200-41484	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40517	Lab File ID:	070712-04.ttx
Dilution:	10			Initial Weight/Volume:	1.32 g
Analysis Date:	07/07/2012 0840			Final Weight/Volume:	100 mL
Prep Date:	06/18/2012 1920				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Zinc		177		5.5	19.7

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-04 (0-1)**

Lab Sample ID: 200-11346-1
Client Matrix: Solid

% Moisture: 23.3

Date Sampled: 06/14/2012 1445
Date Received: 06/16/2012 1000

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41039	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41014	Lab File ID:	062712CC.PRN
Dilution:	1.0			Initial Weight/Volume:	0.32 g
Analysis Date:	06/27/2012 1434			Final Weight/Volume:	50 mL
Prep Date:	06/26/2012 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.50		0.0027	0.040

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-07 (4.5-5)**

Lab Sample ID: 200-11346-2
Client Matrix: Solid

% Moisture: 13.2

Date Sampled: 06/14/2012 1700
Date Received: 06/16/2012 1000

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-40876	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40517	Lab File ID:	062312-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.33 g
Analysis Date:	06/23/2012 1444			Final Weight/Volume:	100 mL
Prep Date:	06/18/2012 1920				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		5.2	U	0.42	5.2
Arsenic		2.8	J	0.49	0.87
Barium		52.3	J	0.45	17.3
Beryllium		0.35	J	0.028	0.43
Cadmium		0.16	J	0.068	0.43
Calcium		10400		44.2	433
Chromium		29.2	~~B~~ J	0.095	0.87
Cobalt		7.3	J	0.070	4.3
Copper		53.6	J	0.19	2.2
Lead		43.8		0.38	0.87
Magnesium		5420	J	12.1	433
Manganese		212	J	0.39	1.3
Nickel		56.4	J	0.25	3.5
Potassium		1420	J	13.0	433
Selenium		3.0	U J	0.75	3.0
Silver		0.87	U	0.11	0.87
Sodium		160	J	6.5	433
Thallium		2.2	U	0.36	2.2
Vanadium		101	J	0.11	4.3

Analysis Method:	6010C	Analysis Batch:	200-41473	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40517	Lab File ID:	070712-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.33 g
Analysis Date:	07/06/2012 1855			Final Weight/Volume:	100 mL
Prep Date:	06/18/2012 1920				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8250		14.7	17.3
Iron		13700	J	11.3	17.3

Analysis Method:	6010C	Analysis Batch:	200-41484	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40517	Lab File ID:	070712-04.ttx
Dilution:	10			Initial Weight/Volume:	1.33 g
Analysis Date:	07/07/2012 0845			Final Weight/Volume:	100 mL
Prep Date:	06/18/2012 1920				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Zinc		65.1		4.9	17.3

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-07 (4.5-5)**

Lab Sample ID: 200-11346-2
Client Matrix: Solid % Moisture: 13.2

Date Sampled: 06/14/2012 1700
Date Received: 06/16/2012 1000

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41039	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41014	Lab File ID:	062712CC.PRN
Dilution:	1.0			Initial Weight/Volume:	0.34 g
Analysis Date:	06/27/2012 1437			Final Weight/Volume:	50 mL
Prep Date:	06/26/2012 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.067		0.0022	0.034

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-29 (17-18)**

Lab Sample ID: 200-11346-3
Client Matrix: Solid

% Moisture: 13.7

Date Sampled: 06/15/2012 0950
Date Received: 06/16/2012 1000

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-40876	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40517	Lab File ID:	062312-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.30 g
Analysis Date:	06/23/2012 1448			Final Weight/Volume:	100 mL
Prep Date:	06/18/2012 1920				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.48	J	0.44	5.4
Arsenic		2.2	J	0.50	0.89
Barium		111	J	0.46	17.8
Beryllium		0.39	J	0.029	0.45
Cadmium		0.45	U	0.070	0.45
Calcium		899		45.5	446
Chromium		32.5	J	0.098	0.89
Cobalt		8.2	J	0.072	4.5
Copper		23.8	J	0.20	2.2
Lead		10.9		0.39	0.89
Magnesium		4870	J	12.5	446
Manganese		263	J	0.40	1.3
Nickel		17.3	J	0.26	3.6
Potassium		3550	J	13.4	446
Selenium		3.1	UJ	0.78	3.1
Silver		0.89	U	0.12	0.89
Sodium		248	J	6.7	446
Thallium		0.60	J	0.37	2.2
Vanadium		41.8	J	0.12	4.5

Analysis Method:	6010C	Analysis Batch:	200-41473	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40517	Lab File ID:	070712-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.30 g
Analysis Date:	07/06/2012 1900			Final Weight/Volume:	100 mL
Prep Date:	06/18/2012 1920				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Iron		20600	J	11.6	17.8

Analysis Method:	6010C	Analysis Batch:	200-41484	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40517	Lab File ID:	070712-04.ttx
Dilution:	10			Initial Weight/Volume:	1.30 g
Analysis Date:	07/07/2012 0850			Final Weight/Volume:	100 mL
Prep Date:	06/18/2012 1920				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		18800		152	178
Zinc		55.5		5.0	17.8

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-29 (17-18)**

Lab Sample ID: 200-11346-3
Client Matrix: Solid % Moisture: 13.7

Date Sampled: 06/15/2012 0950
Date Received: 06/16/2012 1000

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41039	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41014	Lab File ID:	062712CC.PRN
Dilution:	1.0			Initial Weight/Volume:	0.34 g
Analysis Date:	06/27/2012 1440			Final Weight/Volume:	50 mL
Prep Date:	06/26/2012 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.034	U	0.0023	0.034

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-29 (18-19)**

Lab Sample ID: 200-11346-4
Client Matrix: Solid

% Moisture: 15.2

Date Sampled: 06/15/2012 1000
Date Received: 06/16/2012 1000

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-40876	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40517	Lab File ID:	062312-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.48 g
Analysis Date:	06/23/2012 1453			Final Weight/Volume:	100 mL
Prep Date:	06/18/2012 1920				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		4.8	U	0.39	4.8
Arsenic		1.9	J	0.45	0.80
Barium		77.4	J	0.41	15.9
Beryllium		0.37	J	0.025	0.40
Cadmium		0.40	U	0.062	0.40
Calcium		838		40.6	398
Chromium		27.2	J	0.088	0.80
Cobalt		8.1	J	0.065	4.0
Copper		27.5	J	0.18	2.0
Lead		46.9		0.35	0.80
Magnesium		3770	J	11.1	398
Manganese		199	J	0.36	1.2
Nickel		17.5	J	0.23	3.2
Potassium		2720	J	11.9	398
Selenium		2.8	UJ	0.69	2.8
Silver		0.80	U	0.10	0.80
Sodium		304	J	6.0	398
Thallium		2.0	U	0.33	2.0
Vanadium		38.0	J	0.10	4.0

Analysis Method:	6010C	Analysis Batch:	200-41484	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40517	Lab File ID:	070712-04.ttx
Dilution:	10			Initial Weight/Volume:	1.48 g
Analysis Date:	07/07/2012 0855			Final Weight/Volume:	100 mL
Prep Date:	06/18/2012 1920				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		17900		135	159
Iron		24800	J	104	159
Zinc		51.3		4.5	15.9

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41039	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41014	Lab File ID:	062712CC.PRN
Dilution:	1.0			Initial Weight/Volume:	0.35 g
Analysis Date:	06/27/2012 1447			Final Weight/Volume:	50 mL
Prep Date:	06/26/2012 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.019	J	0.0022	0.033

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-27 (17.5-18.5)**

Lab Sample ID: 200-11346-5
Client Matrix: Solid

% Moisture: 17.1

Date Sampled: 06/15/2012 1130
Date Received: 06/16/2012 1000

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-40876	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40517	Lab File ID:	062312-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.43 g
Analysis Date:	06/23/2012 1458			Final Weight/Volume:	100 mL
Prep Date:	06/18/2012 1920				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.46	J	0.41	5.1
Arsenic		1.6	J	0.47	0.84
Barium		120	J	0.44	16.9
Beryllium		0.40	J	0.027	0.42
Cadmium		0.071	J	0.066	0.42
Calcium		591		43.0	422
Chromium		30.2	~~B~~ J	0.093	0.84
Cobalt		10.1	J	0.068	4.2
Copper		31.0	J	0.19	2.1
Lead		10.9		0.37	0.84
Magnesium		5480	J	11.8	422
Manganese		239	J	0.38	1.3
Nickel		20.6	J	0.24	3.4
Potassium		5110	J	12.7	422
Selenium		3.0	U J	0.73	3.0
Silver		0.84	U	0.11	0.84
Sodium		353	J	6.3	422
Thallium		0.58	J	0.35	2.1
Vanadium		39.6	J	0.11	4.2

Analysis Method:	6010C	Analysis Batch:	200-41484	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40517	Lab File ID:	070712-04.ttx
Dilution:	10			Initial Weight/Volume:	1.43 g
Analysis Date:	07/07/2012 0900			Final Weight/Volume:	100 mL
Prep Date:	06/18/2012 1920				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		20400		143	169
Iron		28800	J	110	169
Zinc		58.3		4.7	16.9

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41039	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41014	Lab File ID:	062712CC.PRN
Dilution:	1.0			Initial Weight/Volume:	0.35 g
Analysis Date:	06/27/2012 1450			Final Weight/Volume:	50 mL
Prep Date:	06/26/2012 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.018	J	0.0023	0.034

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-01 (10-10.8)**

Lab Sample ID: 200-11346-6
Client Matrix: Solid

% Moisture: 41.2

Date Sampled: 06/15/2012 1400
Date Received: 06/16/2012 1000

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-40876	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40517	Lab File ID:	062312-01.tbx
Dilution:	1.0			Initial Weight/Volume:	1.41 g
Analysis Date:	06/23/2012 1503			Final Weight/Volume:	100 mL
Prep Date:	06/18/2012 1920				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		28.3		0.59	7.2
Arsenic		37.2	J	0.68	1.2
Barium		38.8	J	0.63	24.1
Beryllium		0.059	J	0.039	0.60
Cadmium		0.36	J	0.094	0.60
Calcium		547	J	61.5	603
Chromium		220	B J	0.13	1.2
Cobalt		29.3	J	0.098	6.0
Copper		452	J	0.27	3.0
Lead		246		0.53	1.2
Magnesium		603 ~~383~~	+ U B	16.9	603
Manganese		115	J	0.54	1.8
Nickel		351	J	0.35	4.8
Potassium		178	J	18.1	603
Selenium		2.8	J	1.0	4.2
Sodium		87.9	J	9.0	603
Thallium		3.0	U	0.49	3.0
Vanadium		40.5	J	0.16	6.0

Analysis Method:	6010C	Analysis Batch:	200-41473	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40517	Lab File ID:	070712-01.tbx
Dilution:	1.0			Initial Weight/Volume:	1.41 g
Analysis Date:	07/06/2012 1915			Final Weight/Volume:	100 mL
Prep Date:	06/18/2012 1920				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		7740		20.5	24.1
Silver		1.2	U	0.16	1.2

Analysis Method:	6010C	Analysis Batch:	200-41473	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40517	Lab File ID:	070712-01.tbx
Dilution:	10			Initial Weight/Volume:	1.41 g
Analysis Date:	07/06/2012 1920			Final Weight/Volume:	100 mL
Prep Date:	06/18/2012 1920				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Iron		136000	J	157	241

Analysis Method:	6010C	Analysis Batch:	200-41484	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40517	Lab File ID:	070712-04.tbx
Dilution:	100			Initial Weight/Volume:	1.41 g
Analysis Date:	07/07/2012 0905			Final Weight/Volume:	100 mL
Prep Date:	06/18/2012 1920				

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-01 (10-10.8)**

Lab Sample ID: 200-11346-6
Client Matrix: Solid

% Moisture: 41.2

Date Sampled: 06/15/2012 1400
Date Received: 06/16/2012 1000

6010C Metals (ICP)

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Zinc		470		67.5	241

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41039	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41014	Lab File ID:	062712CC.PRN
Dilution:	1.0			Initial Weight/Volume:	0.31 g
Analysis Date:	06/27/2012 1452			Final Weight/Volume:	50 mL
Prep Date:	06/26/2012 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		1.8		0.0036	0.054

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-01 (12-13)**

Lab Sample ID: 200-11346-7
Client Matrix: Solid

% Moisture: 11.1

Date Sampled: 06/15/2012 1405
Date Received: 06/16/2012 1000

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-40876	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40517	Lab File ID:	062312-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.26 g
Analysis Date:	06/23/2012 1508			Final Weight/Volume:	100 mL
Prep Date:	06/18/2012 1920				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.68	J	0.44	5.4
Arsenic		0.74	J	0.50	0.89
Barium		122	J	0.46	17.9
Beryllium		0.32	J	0.029	0.45
Cadmium		0.45	U	0.070	0.45
Calcium		638		45.5	446
Chromium		26.9	~~B~~ J	0.098	0.89
Cobalt		8.7	J	0.072	4.5
Copper		33.3	J	0.20	2.2
Lead		6.0		0.39	0.89
Magnesium		5150	J	12.5	446
Manganese		194	J	0.40	1.3
Nickel		19.5	J	0.26	3.6
Potassium		6330	J	13.4	446
Selenium		3.1	U J	0.78	3.1
Silver		0.89	U	0.12	0.89
Sodium		118	J	6.7	446
Thallium		0.89	J	0.37	2.2
Vanadium		36.5	J	0.12	4.5

Analysis Method:	6010C	Analysis Batch:	200-41473	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40517	Lab File ID:	070712-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.26 g
Analysis Date:	07/06/2012 1925			Final Weight/Volume:	100 mL
Prep Date:	06/18/2012 1920				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		14800		15.2	17.9
Iron		24800	J	11.6	17.9

Analysis Method:	6010C	Analysis Batch:	200-41484	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40517	Lab File ID:	070712-04.ttx
Dilution:	10			Initial Weight/Volume:	1.26 g
Analysis Date:	07/07/2012 0910			Final Weight/Volume:	100 mL
Prep Date:	06/18/2012 1920				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Zinc		54.7		5.0	17.9

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-01 (12-13)**

Lab Sample ID: 200-11346-7
Client Matrix: Solid

% Moisture: 11.1

Date Sampled: 06/15/2012 1405
Date Received: 06/16/2012 1000

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41039	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41014	Lab File ID:	062712CC.PRN
Dilution:	1.0			Initial Weight/Volume:	0.34 g
Analysis Date:	06/27/2012 1454			Final Weight/Volume:	50 mL
Prep Date:	06/26/2012 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0033	J	0.0022	0.033

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-26 (10-11)**

Lab Sample ID: 200-11346-8
Client Matrix: Solid % Moisture: 34.9

Date Sampled: 06/14/2012 1530
Date Received: 06/16/2012 1000

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-40876	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40517	Lab File ID:	062312-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.40 g
Analysis Date:	06/23/2012 1513			Final Weight/Volume:	100 mL
Prep Date:	06/18/2012 1920				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		8.9		0.54	6.6
Arsenic		30.2	J	0.61	1.1
Barium		30.5	J	0.57	21.9
Beryllium		0.53	J	0.035	0.55
Cadmium		0.55	U	0.086	0.55
Calcium		1220		56.0	549
Chromium		99.7	~~B~~ J	0.12	1.1
Cobalt		9.3	J	0.089	5.5
Copper		274	J	0.24	2.7
Lead		39.5		0.48	1.1
Magnesium		549 ~~50.8~~	J UB	15.4	549
Manganese		160	J	0.49	1.6
Nickel		41.8	J	0.32	4.4
Potassium		225	J	16.5	549
Selenium		1.7	J	0.95	3.8
Sodium		73.1	J	8.2	549
Thallium		2.7	U	0.45	2.7
Vanadium		57.4	J	0.14	5.5

Analysis Method:	6010C	Analysis Batch:	200-41473	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40517	Lab File ID:	070712-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.40 g
Analysis Date:	07/06/2012 1945			Final Weight/Volume:	100 mL
Prep Date:	06/18/2012 1920				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		381		18.7	21.9
Silver		0.24	J	0.14	1.1
Zinc		47.1		0.61	2.2

Analysis Method:	6010C	Analysis Batch:	200-41473	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40517	Lab File ID:	070712-01.ttx
Dilution:	10			Initial Weight/Volume:	1.40 g
Analysis Date:	07/06/2012 1950			Final Weight/Volume:	100 mL
Prep Date:	06/18/2012 1920				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Iron		126000	J	143	219

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-26 (10-11)**

Lab Sample ID: 200-11346-8
Client Matrix: Solid

% Moisture: 34.9

Date Sampled: 06/14/2012 1530
Date Received: 06/16/2012 1000

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41039	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41014	Lab File ID:	062712CC.PRN
Dilution:	2.0			Initial Weight/Volume:	0.30 g
Analysis Date:	06/27/2012 1533			Final Weight/Volume:	50 mL
Prep Date:	06/26/2012 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		3.1		0.0068	0.10

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-26 (12-13)**

Lab Sample ID: 200-11346-9
Client Matrix: Solid

% Moisture: 40.2

Date Sampled: 06/14/2012 1545
Date Received: 06/16/2012 1000

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-40876	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40517	Lab File ID:	062312-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.34 g
Analysis Date:	06/23/2012 1532			Final Weight/Volume:	100 mL
Prep Date:	06/18/2012 1920				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.65	J	0.61	7.5
Arsenic		18.3		0.70	1.2
Barium		99.7		0.65	24.9
Beryllium		0.73		0.040	0.62
Cadmium		0.79		0.097	0.62
Calcium		2270		63.6	624
Chromium		59.5		0.14	1.2
Cobalt		10.5		0.10	6.2
Copper		82.7		0.27	3.1
Lead		175		0.55	1.2
Magnesium		6700		17.5	624
Manganese		792		0.56	1.9
Nickel		26.3		0.36	5.0
Potassium		3580		18.7	624
Selenium		1.1	J	1.1	4.4
Silver		0.54	J	0.16	1.2
Sodium		928		9.4	624
Thallium		0.72	J	0.51	3.1
Vanadium		40.7		0.16	6.2

Analysis Method:	6010C	Analysis Batch:	200-41484	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40517	Lab File ID:	070712-04.ttx
Dilution:	10			Initial Weight/Volume:	1.34 g
Analysis Date:	07/07/2012 0920			Final Weight/Volume:	100 mL
Prep Date:	06/18/2012 1920				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		20300		212	249
Iron		49500		162	249
Zinc		248		7.0	24.9

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41039	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41014	Lab File ID:	062712CC.PRN
Dilution:	1.0			Initial Weight/Volume:	0.31 g
Analysis Date:	06/27/2012 1459			Final Weight/Volume:	50 mL
Prep Date:	06/26/2012 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		1.1		0.0036	0.053

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-02 (11.5-13.1)**

Lab Sample ID: 200-11384-1
Client Matrix: Solid

% Moisture: 46.4

Date Sampled: 06/15/2012 1600
Date Received: 06/20/2012 1010

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41205	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40836	Lab File ID:	070112-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.26 g
Analysis Date:	07/01/2012 0229			Final Weight/Volume:	100 mL
Prep Date:	06/23/2012 0838				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		1530	J	25.2	29.6
Antimony		30.3	J	0.73	8.9
Arsenic		49.1	J	0.83	1.5
Barium		33.7	J	0.77	29.6
Beryllium		0.055	J	0.047	0.74
Cadmium		1.7		0.12	0.74
Calcium		4120	J	75.5	740
Chromium		122	J	0.16	1.5
Cobalt		48.5	J	0.12	7.4
Copper		1520	J	0.33	3.7
Iron		131000	J	19.3	29.6
Lead		240	J	0.65	1.5
Magnesium		2430	J	20.7	740
Manganese		80.9	J	0.67	2.2
Nickel		631	J	0.43	5.9
Potassium		573	J	22.2	740
Selenium		1.8	J	1.3	5.2
Silver		1.5	U	0.19	1.5
Sodium		740 ~~83.6~~	~~J B~~ U B	11.1	740
Thallium		1.6	J	0.61	3.7
Vanadium		66.7	J	0.19	7.4
Zinc		770	J	0.83	3.0

7471B Mercury In Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41039	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41014	Lab File ID:	062712CC.PRN
Dilution:	1.0			Initial Weight/Volume:	0.29 g
Analysis Date:	06/27/2012 1502			Final Weight/Volume:	50 mL
Prep Date:	06/26/2012 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.60		0.0042	0.064

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-02 (14-15)**

Lab Sample ID: 200-11384-2
Client Matrix: Solid % Moisture: 19.5

Date Sampled: 06/15/2012 1615
Date Received: 06/20/2012 1010

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41205	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40836	Lab File ID:	070112-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.41 g
Analysis Date:	07/01/2012 0234			Final Weight/Volume:	100 mL
Prep Date:	06/23/2012 0838				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		21600	J	15.0	17.6
Antimony		5.3	UJ	0.43	5.3
Arsenic		12.6	J	0.49	0.88
Barium		32.4	J	0.46	17.6
Beryllium		0.63		0.028	0.44
Cadmium		0.069	J	0.069	0.44
Calcium		342	J	44.9	440
Chromium		39.5	J	0.097	0.88
Cobalt		9.2	J	0.071	4.4
Copper		19.3	J	0.19	2.2
Iron		18200	J	11.5	17.6
Lead		10.8	J	0.39	0.88
Magnesium		3950	J	12.3	440
Manganese		104	J	0.40	1.3
Nickel		17.9	J	0.26	3.5
Potassium		1580	J	13.2	440
Selenium		0.97	J	0.77	3.1
Silver		0.88	U	0.11	0.88
Sodium		440 ~~79.9~~	~~J B~~ UB	6.6	440
Thallium		0.56	J	0.36	2.2
Vanadium		47.9	J	0.11	4.4
Zinc		41.4	J	0.49	1.8

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41039	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41014	Lab File ID:	062712CC.PRN
Dilution:	1.0			Initial Weight/Volume:	0.32 g
Analysis Date:	06/27/2012 1504			Final Weight/Volume:	50 mL
Prep Date:	06/26/2012 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.023	J	0.0026	0.038

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

Client Sample ID: **SB-12 (11-12)**

Lab Sample ID: 200-11384-3
Client Matrix: Solid

% Moisture: 10.2

Date Sampled: 06/16/2012 0925
Date Received: 06/20/2012 1010

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41205	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40836	Lab File ID:	070112-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.33 g
Analysis Date:	07/01/2012 0254			Final Weight/Volume:	100 mL
Prep Date:	06/23/2012 0838				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		11800	J	14.2	16.7
Antimony		5.0	U J	0.41	5.0
Arsenic		1.9	J	0.47	0.84
Barium		90.5	J	0.44	16.7
Beryllium		0.38	J	0.027	0.42
Cadmium		0.11	J	0.065	0.42
Calcium		12400	J	42.7	419
Chromium		29.2	J	0.092	0.84
Cobalt		8.8	J	0.068	4.2
Copper		28.9	J	0.18	2.1
Iron		20300	J	10.9	16.7
Lead		10	J	0.37	0.84
Magnesium		10700	J	11.7	419
Manganese		449	J	0.38	1.3
Nickel		19.0	J	0.24	3.3
Potassium		3760	J	12.6	419
Selenium		2.9	U	0.73	2.9
Silver		0.84	U	0.11	0.84
Sodium		419 ~~179~~	~~J B~~ UB	6.3	419
Thallium		0.56	J	0.34	2.1
Vanadium		34.5	J	0.11	4.2
Zinc		39.8	J	0.47	1.7

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41039	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41014	Lab File ID:	062712CC.PRN
Dilution:	1.0			Initial Weight/Volume:	0.30 g
Analysis Date:	06/27/2012 1506			Final Weight/Volume:	50 mL
Prep Date:	06/26/2012 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.018	J	0.0025	0.037

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

General Chemistry

Client Sample ID: **SB-11 (1-2.5)**

Lab Sample ID: 200-11278-1
Client Matrix: Solid

Date Sampled: 06/12/2012 0900
Date Received: 06/14/2012 1030

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	7.60	HF J	SU			1.0	9045C
	Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1115					DryWt Corrected: N
Corrosivity	7.60	HF J	SU			1.0	9045C
	Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1115					DryWt Corrected: N
Percent Solids	89.9		%	0.25	0.25	1.0	Moisture
	Analysis Batch: 200-40356	Analysis Date: 06/14/2012 1520					DryWt Corrected: N

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

General Chemistry

Client Sample ID: **SB-25 (3.5-5)**

Lab Sample ID: 200-11278-2
Client Matrix: Solid

Date Sampled: 06/12/2012 1130
Date Received: 06/14/2012 1030

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	4.32	HF J	SU			1.0	9045C
	Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1116					DryWt Corrected: N
Corrosivity	4.32	HF J	SU			1.0	9045C
	Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1116					DryWt Corrected: N
Percent Solids	69.0		%	0.25	0.25	1.0	Moisture
	Analysis Batch: 200-40356	Analysis Date: 06/14/2012 1520					DryWt Corrected: N

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

General Chemistry

Client Sample ID: **DUP-01-06122012**

Lab Sample ID: 200-11278-3
Client Matrix: Solid

Date Sampled: 06/12/2012 0000
Date Received: 06/14/2012 1030

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	5.23	HF J	SU			1.0	9045C
	Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1118					DryWt Corrected: N
Corrosivity	5.23	HF J	SU			1.0	9045C
	Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1118					DryWt Corrected: N
Percent Solids	49.3		%	0.25	0.25	1.0	Moisture
	Analysis Batch: 200-40356	Analysis Date: 06/14/2012 1520					DryWt Corrected: N

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

General Chemistry

Client Sample ID: **SB-28 (3-5)**

Lab Sample ID: 200-11278-4
Client Matrix: Solid

Date Sampled: 06/12/2012 1045
Date Received: 06/14/2012 1030

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	7.57	HF J	SU			1.0	9045C
	Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1119					DryWt Corrected: N
Corrosivity	7.57	HF J	SU			1.0	9045C
	Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1119					DryWt Corrected: N
Percent Solids	69.1		%	0.25	0.25	1.0	Moisture
	Analysis Batch: 200-40356	Analysis Date: 06/14/2012 1520					DryWt Corrected: N

General Chemistry

Client Sample ID: **SB-03 (4.5-5)**

Lab Sample ID: 200-11326-1
Client Matrix: Solid

Date Sampled: 06/14/2012 1130
Date Received: 06/15/2012 1015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	4.22	HF J	SU			1.0	9045C
	Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1120					DryWt Corrected: N
Corrosivity	4.22	HF J	SU			1.0	9045C
	Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1120					DryWt Corrected: N
Percent Solids	60.6		%	0.25	0.25	1.0	Moisture
	Analysis Batch: 200-40518	Analysis Date: 06/18/2012 2059					DryWt Corrected: N

General Chemistry

Client Sample ID: **SB-06 (4-5)**

Lab Sample ID: 200-11326-2
Client Matrix: Solid

Date Sampled: 06/14/2012 1010
Date Received: 06/15/2012 1015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	5.10	HF J	SU			1.0	9045C
	Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1121					DryWt Corrected: N
Corrosivity	5.10	HF J	SU			1.0	9045C
	Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1121					DryWt Corrected: N
Percent Solids	49.8		%	0.25	0.25	1.0	Moisture
	Analysis Batch: 200-40518	Analysis Date: 06/18/2012 2059					DryWt Corrected: N

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

General Chemistry

Client Sample ID: **SB-11 (5-6)**

Lab Sample ID: 200-11326-3
Client Matrix: Solid

Date Sampled: 06/14/2012 0910
Date Received: 06/15/2012 1015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	7.45	HF J	SU			1.0	9045C
	Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1122					DryWt Corrected: N
Corrosivity	7.45	HF J	SU			1.0	9045C
	Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1122					DryWt Corrected: N
Percent Solids	88.6		%	0.25	0.25	1.0	Moisture
	Analysis Batch: 200-40518	Analysis Date: 06/18/2012 2059					DryWt Corrected: N

General Chemistry

Client Sample ID: **SB-25 (12.7-13.7)**

Lab Sample ID: 200-11326-4
Client Matrix: Solid

Date Sampled: 06/14/2012 1150
Date Received: 06/15/2012 1015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	5.19	HF J	SU			1.0	9045C
	Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1123					DryWt Corrected: N
Corrosivity	5.19	HF J	SU			1.0	9045C
	Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1123					DryWt Corrected: N
Percent Solids	65.2		%	0.25	0.25	1.0	Moisture
	Analysis Batch: 200-40518	Analysis Date: 06/18/2012 2059					DryWt Corrected: N

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

General Chemistry

Client Sample ID: **SB-04 (0-1)**

Lab Sample ID: 200-11346-1
Client Matrix: Solid

Date Sampled: 06/14/2012 1445
Date Received: 06/16/2012 1000

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	4.40	HF J	SU			1.0	9045C
	Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1124					DryWt Corrected: N
Corrosivity	4.40	HF J	SU			1.0	9045C
	Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1124					DryWt Corrected: N
Percent Solids	76.7		%	0.25	0.25	1.0	Moisture
	Analysis Batch: 200-40518	Analysis Date: 06/18/2012 2059					DryWt Corrected: N

General Chemistry

Client Sample ID: **SB-07 (4.5-5)**

Lab Sample ID: 200-11346-2
Client Matrix: Solid

Date Sampled: 06/14/2012 1700
Date Received: 06/16/2012 1000

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	6.86	HF J	SU			1.0	9045C
	Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1125					DryWt Corrected: N
Corrosivity	6.86	HF J	SU			1.0	9045C
	Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1125					DryWt Corrected: N
Percent Solids	86.8		%	0.25	0.25	1.0	Moisture
	Analysis Batch: 200-40518	Analysis Date: 06/18/2012 2059					DryWt Corrected: N

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

General Chemistry

Client Sample ID: **SB-29 (17-18)**

Lab Sample ID: 200-11346-3
Client Matrix: Solid

Date Sampled: 06/15/2012 0950
Date Received: 06/16/2012 1000

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	6.91	HF J	SU			1.0	9045C
	Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1126					DryWt Corrected: N
Corrosivity	6.91	HF J	SU			1.0	9045C
	Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1126					DryWt Corrected: N
Percent Solids	86.3		%	0.25	0.25	1.0	Moisture
	Analysis Batch: 200-40518	Analysis Date: 06/18/2012 2059					DryWt Corrected: N

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

General Chemistry

Client Sample ID: **SB-29 (18-19)**

Lab Sample ID: 200-11346-4
Client Matrix: Solid

Date Sampled: 06/15/2012 1000
Date Received: 06/16/2012 1000

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	7.16	HF J	SU			1.0	9045C
	Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1127					DryWt Corrected: N
Corrosivity	7.16	HF J	SU			1.0	9045C
	Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1127					DryWt Corrected: N
Percent Solids	84.8		%	0.25	0.25	1.0	Moisture
	Analysis Batch: 200-40518	Analysis Date: 06/18/2012 2059					DryWt Corrected: N

General Chemistry

Client Sample ID: **SB-27 (17.5-18.5)**

Lab Sample ID: 200-11346-5
Client Matrix: Solid

Date Sampled: 06/15/2012 1130
Date Received: 06/16/2012 1000

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	7.50	HF J	SU			1.0	9045C
	Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1129					DryWt Corrected: N
Corrosivity	7.50	HF J	SU			1.0	9045C
	Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1129					DryWt Corrected: N
Percent Solids	82.9		%	0.25	0.25	1.0	Moisture
	Analysis Batch: 200-40518	Analysis Date: 06/18/2012 2059					DryWt Corrected: N

General Chemistry

Client Sample ID: **SB-01 (10-10.8)**

Lab Sample ID: 200-11346-6
Client Matrix: Solid

Date Sampled: 06/15/2012 1400
Date Received: 06/16/2012 1000

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia (as N)-ASTM Leach	5.7	J	mg/L	0.026	0.20	2.0	4500 NH3 H
Analysis Batch: 460-120125	Analysis Date: 07/17/2012 1201						DryWt Corrected: N
Prep Batch: 460-120071	Prep Date: 07/17/2012 0630						
Sulfide	3750		mg/Kg	54.8	148	10	9034
Analysis Batch: 460-117804	Analysis Date: 06/21/2012 1800						DryWt Corrected: Y
Prep Batch: 460-117799	Prep Date: 06/21/2012 1300						
Chloride-Soluble	39.7	J	mg/Kg	33.9	170	5.0	9056
Analysis Batch: 680-241232	Analysis Date: 06/21/2012 2335						DryWt Corrected: Y
Nitrate as N-Soluble	8.5	U	mg/Kg	2.5	8.5	5.0	9056
Analysis Batch: 680-241430	Analysis Date: 06/22/2012 1908						DryWt Corrected: Y
Nitrite as N-Soluble	8.5	U	mg/Kg	2.5	8.5	5.0	9056
Analysis Batch: 680-241430	Analysis Date: 06/22/2012 1908						DryWt Corrected: Y
Sulfate-Soluble	2450		mg/Kg	33.9	170	5.0	9056
Analysis Batch: 680-241232	Analysis Date: 06/21/2012 2335						DryWt Corrected: Y
Fluoride-Soluble	~~33.9~~	~~U~~ R	mg/Kg	~~6.8~~	~~33.9~~	5.0	9056
Analysis Batch: 680-241232	Analysis Date: 06/21/2012 2335						DryWt Corrected: Y
Percent Solids	58.8		%	0.25	0.25	1.0	Moisture
Analysis Batch: 200-40518	Analysis Date: 06/18/2012 2059						DryWt Corrected: N
Bicarbonate Alkalinity as CaCO3-Soluble	34.0	U	mg/Kg	34.0	34.0	1.0	SM 2320B
Analysis Batch: 460-118089	Analysis Date: 06/29/2012 1723						DryWt Corrected: Y
Carbonate Alkalinity as CaCO3-Soluble	34.0	U	mg/Kg	34.0	34.0	1.0	SM 2320B
Analysis Batch: 460-118089	Analysis Date: 06/29/2012 1723						DryWt Corrected: Y
Alkalinity-Soluble	34.0	U	mg/Kg	34.0	34.0	1.0	SM 2320B
Analysis Batch: 460-118089	Analysis Date: 06/29/2012 1723						DryWt Corrected: Y
Phosphorus as PO4	2150		mg/Kg	20.3	51.0	20	SM 4500 P E
Analysis Batch: 460-119560	Analysis Date: 07/11/2012 1530						DryWt Corrected: Y
Prep Batch: 460-119552	Prep Date: 07/11/2012 1138						
Phosphorus as P	702		mg/Kg	20.3	51.0	20	SM 4500 P E
Analysis Batch: 460-119560	Analysis Date: 07/11/2012 1530						DryWt Corrected: Y
Prep Batch: 460-119552	Prep Date: 07/11/2012 1138						

General Chemistry

Client Sample ID: **SB-01 (12-13)**

Lab Sample ID: 200-11346-7
Client Matrix: Solid

Date Sampled: 06/15/2012 1405
Date Received: 06/16/2012 1000

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia (as N)-ASTM Leach	2.1	J	mg/L	0.013	0.10	1.0	4500 NH3 H
Analysis Batch: 460-120125	Analysis Date: 07/17/2012 1148						DryWt Corrected: N
Prep Batch: 460-120071	Prep Date: 07/17/2012 0630						
Sulfide	9.8	U	mg/Kg	3.6	9.8	1.0	9034
Analysis Batch: 460-117804	Analysis Date: 06/21/2012 1800						DryWt Corrected: Y
Prep Batch: 460-117799	Prep Date: 06/21/2012 1300						
pH	4.14	HF J	SU			1.0	9045C
Analysis Batch: 460-119669	Analysis Date: 07/12/2012 1601						DryWt Corrected: N
Corrosivity	4.14	HF J	SU			1.0	9045C
Analysis Batch: 460-119669	Analysis Date: 07/12/2012 1601						DryWt Corrected: N
Chloride-Soluble	111	U	mg/Kg	22.1	111	5.0	9056
Analysis Batch: 680-241232	Analysis Date: 06/22/2012 0012						DryWt Corrected: Y
Nitrate as N-Soluble	5.5	U	mg/Kg	1.7	5.5	5.0	9056
Analysis Batch: 680-241430	Analysis Date: 06/22/2012 1924						DryWt Corrected: Y
Nitrite as N-Soluble	5.5	U	mg/Kg	1.7	5.5	5.0	9056
Analysis Batch: 680-241430	Analysis Date: 06/22/2012 1924						DryWt Corrected: Y
Sulfate-Soluble	1030		mg/Kg	22.1	111	5.0	9056
Analysis Batch: 680-241232	Analysis Date: 06/22/2012 0012						DryWt Corrected: Y
Fluoride-Soluble	~~22.1~~	~~UR~~	mg/Kg	~~4.4~~	~~22.1~~	5.0	9056
Analysis Batch: 680-241232	Analysis Date: 06/22/2012 0012						DryWt Corrected: Y
Percent Solids	88.9		%	0.25	0.25	1.0	Moisture
Analysis Batch: 200-40518	Analysis Date: 06/18/2012 2059						DryWt Corrected: N
Bicarbonate Alkalinity as CaCO3-Soluble	22.5	U	mg/Kg	22.5	22.5	1.0	SM 2320B
Analysis Batch: 460-118089	Analysis Date: 06/29/2012 1705						DryWt Corrected: Y
Carbonate Alkalinity as CaCO3-Soluble	22.5	U	mg/Kg	22.5	22.5	1.0	SM 2320B
Analysis Batch: 460-118089	Analysis Date: 06/29/2012 1705						DryWt Corrected: Y
Alkalinity-Soluble	22.5	U	mg/Kg	22.5	22.5	1.0	SM 2320B
Analysis Batch: 460-118089	Analysis Date: 06/29/2012 1705						DryWt Corrected: Y
Phosphorus as PO4	1680		mg/Kg	13.5	33.8	20	SM 4500 P E
Analysis Batch: 460-119560	Analysis Date: 07/11/2012 1530						DryWt Corrected: Y
Prep Batch: 460-119552	Prep Date: 07/11/2012 1138						
Phosphorus as P	549		mg/Kg	13.5	33.8	20	SM 4500 P E
Analysis Batch: 460-119560	Analysis Date: 07/11/2012 1530						DryWt Corrected: Y
Prep Batch: 460-119552	Prep Date: 07/11/2012 1138						

General Chemistry

Client Sample ID: **SB-26 (10-11)**

Lab Sample ID: 200-11346-8
Client Matrix: Solid

% Moisture: 34.9

Date Sampled: 06/14/2012 1530
Date Received: 06/16/2012 1000

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Sulfide	13.4	U	mg/Kg	5.0	13.4	1.0	9034
Analysis Batch: 460-117804	Analysis Date: 06/21/2012 1800						DryWt Corrected: Y
Prep Batch: 460-117799	Prep Date: 06/21/2012 1300						
pH	3.88	HF J	SU			1.0	9045C
Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1130						DryWt Corrected: N
Corrosivity	3.88	HF J	SU			1.0	9045C
Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1130						DryWt Corrected: N
Chloride-Soluble	72.2	J	mg/Kg	30.7	153	5.0	9056
Analysis Batch: 680-241232	Analysis Date: 06/22/2012 0024						DryWt Corrected: Y
Nitrate as N-Soluble	7.7	U	mg/Kg	2.3	7.7	5.0	9056
Analysis Batch: 680-241430	Analysis Date: 06/22/2012 1939						DryWt Corrected: Y
Nitrite as N-Soluble	7.7	U	mg/Kg	2.3	7.7	5.0	9056
Analysis Batch: 680-241430	Analysis Date: 06/22/2012 1939						DryWt Corrected: Y
Sulfate-Soluble	47400		mg/Kg	307	1530	50	9056
Analysis Batch: 680-241855	Analysis Date: 06/28/2012 0010						DryWt Corrected: Y
Fluoride-Soluble	~~30.7~~	~~U~~ R	mg/Kg	~~6.1~~	~~30.7~~	5.0	9056
Analysis Batch: 680-241232	Analysis Date: 06/22/2012 0024						DryWt Corrected: Y
Percent Solids	65.1		%	0.25	0.25	1.0	Moisture
Analysis Batch: 200-40518	Analysis Date: 06/18/2012 2059						DryWt Corrected: N
Bicarbonate Alkalinity as CaCO3-Soluble	30.7	U H J	mg/Kg	30.7	30.7	1.0	SM 2320B
Analysis Batch: 460-118089	Analysis Date: 06/29/2012 1708						DryWt Corrected: Y
Carbonate Alkalinity as CaCO3-Soluble	30.7	U H J	mg/Kg	30.7	30.7	1.0	SM 2320B
Analysis Batch: 460-118089	Analysis Date: 06/29/2012 1708						DryWt Corrected: Y
Alkalinity-Soluble	30.7	U H J	mg/Kg	30.7	30.7	1.0	SM 2320B
Analysis Batch: 460-118089	Analysis Date: 06/29/2012 1708						DryWt Corrected: Y
Phosphorus as PO4	910		mg/Kg	18.4	46.1	20	SM 4500 P E
Analysis Batch: 460-118566	Analysis Date: 07/03/2012 1700						DryWt Corrected: Y
Prep Batch: 460-118565	Prep Date: 07/03/2012 1100						
Phosphorus as P	297		mg/Kg	18.4	46.1	20	SM 4500 P E
Analysis Batch: 460-118566	Analysis Date: 07/03/2012 1700						DryWt Corrected: Y
Prep Batch: 460-118565	Prep Date: 07/03/2012 1100						

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

General Chemistry

Client Sample ID: SB-26 (12-13)

Lab Sample ID: 200-11346-9
Client Matrix: Solid

% Moisture: 40.2

Date Sampled: 06/14/2012 1545
Date Received: 06/16/2012 1000

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Sulfide	44.5		mg/Kg	5.4	14.5	1.0	9034
Analysis Batch: 460-117804	Analysis Date: 06/21/2012 1800						DryWt Corrected: Y
Prep Batch: 460-117799	Prep Date: 06/21/2012 1300						
pH	4.73	HF J	SU			1.0	9045C
Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1131						DryWt Corrected: N
Corrosivity	4.73	HF J	SU			1.0	9045C
Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1131						DryWt Corrected: N
Chloride-Soluble	338		mg/Kg	33.4	167	5.0	9056
Analysis Batch: 680-241232	Analysis Date: 06/22/2012 0037						DryWt Corrected: Y
Nitrate as N-Soluble	8.3	U	mg/Kg	2.5	8.3	5.0	9056
Analysis Batch: 680-241430	Analysis Date: 06/22/2012 1955						DryWt Corrected: Y
Nitrite as N-Soluble	8.3	U	mg/Kg	2.5	8.3	5.0	9056
Analysis Batch: 680-241430	Analysis Date: 06/22/2012 1955						DryWt Corrected: Y
Sulfate-Soluble	4790		mg/Kg	33.4	167	5.0	9056
Analysis Batch: 680-241232	Analysis Date: 06/22/2012 0037						DryWt Corrected: Y
Fluoride-Soluble	~~33.4~~	~~U~~ R	mg/Kg	~~6.7~~	~~33.4~~	5.0	9056
Analysis Batch: 680-241232	Analysis Date: 06/22/2012 0037						DryWt Corrected: Y
Percent Solids	59.8		%	0.25	0.25	1.0	Moisture
Analysis Batch: 200-40518	Analysis Date: 06/18/2012 2059						DryWt Corrected: N
Bicarbonate Alkalinity as CaCO3-Soluble	33.4	U H J	mg/Kg	33.4	33.4	1.0	SM 2320B
Analysis Batch: 460-118089	Analysis Date: 06/29/2012 1713						DryWt Corrected: Y
Carbonate Alkalinity as CaCO3-Soluble	33.4	U H J	mg/Kg	33.4	33.4	1.0	SM 2320B
Analysis Batch: 460-118089	Analysis Date: 06/29/2012 1713						DryWt Corrected: Y
Alkalinity-Soluble	33.4	U H J	mg/Kg	33.4	33.4	1.0	SM 2320B
Analysis Batch: 460-118089	Analysis Date: 06/29/2012 1713						DryWt Corrected: Y
Phosphorus as PO4	2060		mg/Kg	25.0	62.7	25	SM 4500 P E
Analysis Batch: 460-118566	Analysis Date: 07/03/2012 1700						DryWt Corrected: Y
Prep Batch: 460-118565	Prep Date: 07/03/2012 1100						
Phosphorus as P	671		mg/Kg	25.0	62.7	25	SM 4500 P E
Analysis Batch: 460-118566	Analysis Date: 07/03/2012 1700						DryWt Corrected: Y
Prep Batch: 460-118565	Prep Date: 07/03/2012 1100						

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

General Chemistry

Client Sample ID: **SB-02 (11.5-13.1)**

Lab Sample ID: 200-11384-1
Client Matrix: Solid

Date Sampled: 06/15/2012 1600
Date Received: 06/20/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	5.17	HF J	SU			1.0	9045C
Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1607						DryWt Corrected: N
Corrosivity	5.17	HF J	SU			1.0	9045C
Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1607						DryWt Corrected: N
Chloride-Soluble	187	U	mg/Kg	37.3	187	5.0	9056
Analysis Batch: 680-242043	Analysis Date: 06/30/2012 0419						DryWt Corrected: Y
Nitrate as N-Soluble	9.3	U	mg/Kg	2.8	9.3	5.0	9056
Analysis Batch: 680-241960	Analysis Date: 06/28/2012 2207						DryWt Corrected: Y
Nitrite as N-Soluble	9.3	U	mg/Kg	2.8	9.3	5.0	9056
Analysis Batch: 680-241960	Analysis Date: 06/28/2012 2207						DryWt Corrected: Y
Sulfate-Soluble	8700		mg/Kg	37.3	187	5.0	9056
Analysis Batch: 680-242043	Analysis Date: 06/30/2012 0419						DryWt Corrected: Y
Fluoride-Soluble	37.3	U	mg/Kg	7.5	37.3	5.0	9056
Analysis Batch: 680-242043	Analysis Date: 06/30/2012 0419						DryWt Corrected: Y
Percent Solids	53.6		%	0.25	0.25	1.0	Moisture
Analysis Batch: 200-40632	Analysis Date: 06/20/2012 1333						DryWt Corrected: N
Bicarbonate Alkalinity as CaCO3-Soluble	37.3	U	mg/Kg	37.3	37.3	1.0	SM 2320B
Analysis Batch: 460-118089	Analysis Date: 06/29/2012 1657						DryWt Corrected: Y
Carbonate Alkalinity as CaCO3-Soluble	37.3	U	mg/Kg	37.3	37.3	1.0	SM 2320B
Analysis Batch: 460-118089	Analysis Date: 06/29/2012 1657						DryWt Corrected: Y
Alkalinity-Soluble	37.3	U	mg/Kg	37.3	37.3	1.0	SM 2320B
Analysis Batch: 460-118089	Analysis Date: 06/29/2012 1657						DryWt Corrected: Y

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

General Chemistry

Client Sample ID: SB-02 (14-15)

Lab Sample ID: 200-11384-2
Client Matrix: Solid

Date Sampled: 06/15/2012 1615
Date Received: 06/20/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia (as N)-ASTM Leach	3.8	J	mg/L	0.013	0.10	1.0	4500 NH3 H
Analysis Batch: 460-120125	Analysis Date: 07/17/2012 1149						DryWt Corrected: N
Prep Batch: 460-120071	Prep Date: 07/17/2012 0630						
Sulfide	~~10.8~~	~~UHR~~	mg/Kg	~~4.0~~	~~10.8~~	1.0	9034
Analysis Batch: 460-121720	Analysis Date: 07/28/2012 1800						DryWt Corrected: Y
Prep Batch: 460-121719	Prep Date: 07/28/2012 1115						
pH	3.88	HF J	SU			1.0	9045C
Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1608						DryWt Corrected: N
Corrosivity	3.88	HF J	SU			1.0	9045C
Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1608						DryWt Corrected: N
Chloride-Soluble	122	U	mg/Kg	24.4	122	5.0	9056
Analysis Batch: 680-242043	Analysis Date: 06/30/2012 0432						DryWt Corrected: Y
Nitrate as N-Soluble	6.1	U	mg/Kg	1.8	6.1	5.0	9056
Analysis Batch: 680-241960	Analysis Date: 06/28/2012 2223						DryWt Corrected: Y
Nitrite as N-Soluble	6.1	U	mg/Kg	1.8	6.1	5.0	9056
Analysis Batch: 680-241960	Analysis Date: 06/28/2012 2223						DryWt Corrected: Y
Sulfate-Soluble	2980		mg/Kg	24.4	122	5.0	9056
Analysis Batch: 680-242043	Analysis Date: 06/30/2012 0432						DryWt Corrected: Y
Fluoride-Soluble	24.4	U	mg/Kg	4.9	24.4	5.0	9056
Analysis Batch: 680-242043	Analysis Date: 06/30/2012 0432						DryWt Corrected: Y
Percent Solids	80.5		%	0.25	0.25	1.0	Moisture
Analysis Batch: 200-40632	Analysis Date: 06/20/2012 1333						DryWt Corrected: N
Bicarbonate Alkalinity as CaCO3-Soluble	24.8	U	mg/Kg	24.8	24.8	1.0	SM 2320B
Analysis Batch: 460-118089	Analysis Date: 06/29/2012 1701						DryWt Corrected: Y
Carbonate Alkalinity as CaCO3-Soluble	24.8	U	mg/Kg	24.8	24.8	1.0	SM 2320B
Analysis Batch: 460-118089	Analysis Date: 06/29/2012 1701						DryWt Corrected: Y
Alkalinity-Soluble	24.8	U	mg/Kg	24.8	24.8	1.0	SM 2320B
Analysis Batch: 460-118089	Analysis Date: 06/29/2012 1701						DryWt Corrected: Y
Phosphorus as PO4	1140		mg/Kg	14.9	37.3	20	SM 4500 P E
Analysis Batch: 460-119560	Analysis Date: 07/11/2012 1530						DryWt Corrected: Y
Prep Batch: 460-119552	Prep Date: 07/11/2012 1138						
Phosphorus as P	373		mg/Kg	14.9	37.3	20	SM 4500 P E
Analysis Batch: 460-119560	Analysis Date: 07/11/2012 1530						DryWt Corrected: Y
Prep Batch: 460-119552	Prep Date: 07/11/2012 1138						

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1
Sdg Number: 11278

General Chemistry

Client Sample ID: SB-12 (11-12)

Lab Sample ID: 200-11384-3
Client Matrix: Solid

Date Sampled: 06/16/2012 0925
Date Received: 06/20/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	7.38	HF J	SU			1.0	9045C
	Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1611					DryWt Corrected: N
Corrosivity	7.38	HF J	SU			1.0	9045C
	Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1611					DryWt Corrected: N
Percent Solids	89.8		%	0.25	0.25	1.0	Moisture
	Analysis Batch: 200-40632	Analysis Date: 06/20/2012 1333					DryWt Corrected: N

Client: ARCADIS U.S. Inc

Job Number: 200-11278-2
Sdg Number: 11278-2

General Chemistry

Client Sample ID: **SB-11 (1-2.5)**

Lab Sample ID: 200-11278-1
Client Matrix: Solid

% Moisture: 10.1

Date Sampled: 06/12/2012 0900
Date Received: 06/14/2012 1030

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	2.3		mg/Kg	0.060	0.56	1.0	9012A
	Analysis Batch: 460-117617	Analysis Date: 06/26/2012 1942					DryWt Corrected: Y
	Prep Batch: 460-117513	Prep Date: 06/26/2012 1030					
Cyanide, Free	0.46 ~~0.18~~	UB ~~JB~~	mg/Kg	0.12	0.46	1.0	9016
	Analysis Batch: 460-117483	Analysis Date: 06/21/2012 1200					DryWt Corrected: Y
	Prep Batch: 460-117480	Prep Date: 06/21/2012 0600					

Client: ARCADIS U.S. Inc

Job Number: 200-11278-2
Sdg Number: 11278-2

General Chemistry

Client Sample ID: **SB-25 (3.5-5)**

Lab Sample ID: 200-11278-2
Client Matrix: Solid
% Moisture: 31.0

Date Sampled: 06/12/2012 1130
Date Received: 06/14/2012 1030

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	1120		mg/Kg	3.9	36.2	50	9012A
	Analysis Batch: 460-117617		Analysis Date: 06/26/2012 2010				DryWt Corrected: Y
	Prep Batch: 460-117513		Prep Date: 06/26/2012 1030				
Cyanide, Free	18.7	B	mg/Kg	0.16	0.62	1.0	9016
	Analysis Batch: 460-117483		Analysis Date: 06/21/2012 1200				DryWt Corrected: Y
	Prep Batch: 460-117480		Prep Date: 06/21/2012 0600				

Client: ARCADIS U.S. Inc

Job Number: 200-11278-2
Sdg Number: 11278-2

General Chemistry

Client Sample ID: **DUP-01-06122012**

Lab Sample ID: 200-11278-3
Client Matrix: Solid

% Moisture: 50.7

Date Sampled: 06/12/2012 0000
Date Received: 06/14/2012 1030

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	1290		mg/Kg	5.5	50.7	50	9012A
Analysis Batch: 460-117617	Analysis Date: 06/26/2012 2012						DryWt Corrected: Y
Prep Batch: 460-117513	Prep Date: 06/26/2012 1030						
Cyanide, Free	41.4	B	mg/Kg	0.22	0.87	1.0	9016
Analysis Batch: 460-117483	Analysis Date: 06/21/2012 1200						DryWt Corrected: Y
Prep Batch: 460-117480	Prep Date: 06/21/2012 0600						

Client: ARCADIS U.S. Inc

Job Number: 200-11278-2
Sdg Number: 11278-2

General Chemistry

Client Sample ID: **SB-28 (3-5)**

Lab Sample ID: 200-11278-4
Client Matrix: Solid

% Moisture: 30.9

Date Sampled: 06/12/2012 1045
Date Received: 06/14/2012 1030

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	2.6		mg/Kg	0.078	0.72	1.0	9012A
	Analysis Batch: 460-117617	Analysis Date: 06/26/2012 1943					DryWt Corrected: Y
	Prep Batch: 460-117513	Prep Date: 06/26/2012 1030					
Cyanide, Free	0.61 ~~0.45~~	UB ~~JB~~	mg/Kg	0.15	0.61	1.0	9016
	Analysis Batch: 460-117483	Analysis Date: 06/21/2012 1200					DryWt Corrected: Y
	Prep Batch: 460-117480	Prep Date: 06/21/2012 0600					

Client: ARCADIS U.S. Inc

Job Number: 200-11278-2
Sdg Number: 11278-2

General Chemistry

Client Sample ID: **SB-03 (4.5-5)**

Lab Sample ID: 200-11326-1
Client Matrix: Solid

% Moisture: 39.4

Date Sampled: 06/14/2012 1130
Date Received: 06/15/2012 1015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	542		mg/Kg	1.8	16.5	20	9012A
	Analysis Batch: 460-117697	Analysis Date: 06/27/2012 1506					DryWt Corrected: Y
	Prep Batch: 460-117649	Prep Date: 06/27/2012 1030					
Cyanide, Free	61.9	B	mg/Kg	0.34	1.4	2.0	9016
	Analysis Batch: 460-117483	Analysis Date: 06/21/2012 1200					DryWt Corrected: Y
	Prep Batch: 460-117480	Prep Date: 06/21/2012 0600					

Client: ARCADIS U.S. Inc

Job Number: 200-11278-2
Sdg Number: 11278-2

General Chemistry

Client Sample ID: **SB-06 (4-5)**

Lab Sample ID: 200-11326-2
Client Matrix: Solid

% Moisture: 50.2

Date Sampled: 06/14/2012 1010
Date Received: 06/15/2012 1015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	605		mg/Kg	2.2	20.1	20	9012A
Analysis Batch: 460-117697	Analysis Date: 06/27/2012 1511						DryWt Corrected: Y
Prep Batch: 460-117649	Prep Date: 06/27/2012 1030						
Cyanide, Free	122	B	mg/Kg	0.43	1.7	2.0	9016
Analysis Batch: 460-117483	Analysis Date: 06/21/2012 1200						DryWt Corrected: Y
Prep Batch: 460-117480	Prep Date: 06/21/2012 0600						

Client: ARCADIS U.S. Inc

Job Number: 200-11278-2
Sdg Number: 11278-2

General Chemistry

Client Sample ID: **SB-11 (5-6)**

Lab Sample ID: 200-11326-3
Client Matrix: Solid

% Moisture: 11.4

Date Sampled: 06/14/2012 0910
Date Received: 06/15/2012 1015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	1.2		mg/Kg	0.061	0.56	1.0	9012A
Analysis Batch: 460-117697	Analysis Date: 06/27/2012 1512						DryWt Corrected: Y
Prep Batch: 460-117649	Prep Date: 06/27/2012 1030						
Cyanide, Free	0.48 ~~0.19~~	UB ~~LB~~	mg/Kg	0.12	0.48	1.0	9016
Analysis Batch: 460-117483	Analysis Date: 06/21/2012 1200						DryWt Corrected: Y
Prep Batch: 460-117480	Prep Date: 06/21/2012 0600						

Client: ARCADIS U.S. Inc

Job Number: 200-11278-2
Sdg Number: 11278-2

General Chemistry

Client Sample ID: **SB-25 (12.7-13.7)**

Lab Sample ID: 200-11326-4
Client Matrix: Solid
% Moisture: 34.8

Date Sampled: 06/14/2012 1150
Date Received: 06/15/2012 1015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.76	J	mg/Kg	0.083	0.77	1.0	9012A
Analysis Batch: 460-117697	Analysis Date: 06/27/2012 1447						DryWt Corrected: Y
Prep Batch: 460-117649	Prep Date: 06/27/2012 1030						
Cyanide, Free	0.46	J	mg/Kg	0.16	0.64	1.0	9016
Analysis Batch: 460-118248	Analysis Date: 06/28/2012 1200						DryWt Corrected: Y
Prep Batch: 460-118240	Prep Date: 06/28/2012 0600						

General Chemistry

Client Sample ID: **SB-04 (0-1)**

Lab Sample ID: 200-11346-1
Client Matrix: Solid
% Moisture: 23.3

Date Sampled: 06/14/2012 1445
Date Received: 06/16/2012 1000

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	43.5		mg/Kg	0.35	3.3	5.0	9012A
Analysis Batch: 460-117889	Analysis Date: 06/28/2012 1545						DryWt Corrected: Y
Prep Batch: 460-117794	Prep Date: 06/28/2012 0630						
Cyanide, Free	0.54 ~~0.21~~	UB ~~JB~~	mg/Kg	0.14	0.54	1.0	9016
Analysis Batch: 460-117483	Analysis Date: 06/21/2012 1200						DryWt Corrected: Y
Prep Batch: 460-117480	Prep Date: 06/21/2012 0600						

General Chemistry

Client Sample ID: **SB-07 (4.5-5)**

Lab Sample ID: 200-11346-2
Client Matrix: Solid

% Moisture: 13.2

Date Sampled: 06/14/2012 1700
Date Received: 06/16/2012 1000

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	1.5		mg/Kg	0.062	0.58	1.0	9012A
Analysis Batch: 460-117889	Analysis Date: 06/28/2012 1533						DryWt Corrected: Y
Prep Batch: 460-117794	Prep Date: 06/28/2012 0630						
Cyanide, Free	0.76	UB	mg/Kg	0.12	~~0.49~~ 0.76	1.0	9016
Analysis Batch: 460-117483	Analysis Date: 06/21/2012 1200						DryWt Corrected: Y
Prep Batch: 460-117480	Prep Date: 06/21/2012 0600						

Client: ARCADIS U.S. Inc

Job Number: 200-11278-2
Sdg Number: 11278-2

General Chemistry

Client Sample ID: **SB-29 (17-18)**

Lab Sample ID: 200-11346-3
Client Matrix: Solid

% Moisture: 13.7

Date Sampled: 06/15/2012 0950
Date Received: 06/16/2012 1000

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.58	U	mg/Kg	0.063	0.58	1.0	9012A
Analysis Batch: 460-118029	Analysis Date: 06/29/2012 1108						DryWt Corrected: Y
Prep Batch: 460-117980	Prep Date: 06/29/2012 0630						
Cyanide, Free	0.48 ~~0.19~~	UB ~~JB~~	mg/Kg	0.12	0.48	1.0	9016
Analysis Batch: 460-117483	Analysis Date: 06/21/2012 1200						DryWt Corrected: Y
Prep Batch: 460-117480	Prep Date: 06/21/2012 0600						

Client: ARCADIS U.S. Inc

Job Number: 200-11278-2
Sdg Number: 11278-2

General Chemistry

Client Sample ID: **SB-29 (18-19)**

Lab Sample ID: 200-11346-4
Client Matrix: Solid

% Moisture: 15.2

Date Sampled: 06/15/2012 1000
Date Received: 06/16/2012 1000

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.59	U	mg/Kg	0.064	0.59	1.0	9012A
Analysis Batch: 460-118029	Analysis Date: 06/29/2012 1109						DryWt Corrected: Y
Prep Batch: 460-117980	Prep Date: 06/29/2012 0630						
Cyanide, Free	0.50 ~~0.31~~	UB ~~J B~~	mg/Kg	0.13	0.50	1.0	9016
Analysis Batch: 460-117483	Analysis Date: 06/21/2012 1200						DryWt Corrected: Y
Prep Batch: 460-117480	Prep Date: 06/21/2012 0600						

Client: ARCADIS U.S. Inc

Job Number: 200-11278-2
Sdg Number: 11278-2

General Chemistry

Client Sample ID: **SB-27 (17.5-18.5)**

Lab Sample ID: 200-11346-5
Client Matrix: Solid

% Moisture: 17.1

Date Sampled: 06/15/2012 1130
Date Received: 06/16/2012 1000

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.60	U	mg/Kg	0.065	0.60	1.0	9012A
Analysis Batch: 460-118029	Analysis Date: 06/29/2012 1110						DryWt Corrected: Y
Prep Batch: 460-117980	Prep Date: 06/29/2012 0630						
Cyanide, Free	0,51 ~~0.20~~	VB ~~JB~~	mg/Kg	0.13	0.51	1.0	9016
Analysis Batch: 460-117483	Analysis Date: 06/21/2012 1200						DryWt Corrected: Y
Prep Batch: 460-117480	Prep Date: 06/21/2012 0600						

Client: ARCADIS U.S. Inc

Job Number: 200-11278-2
Sdg Number: 11278-2

General Chemistry

Client Sample ID: **SB-01 (10-10.8)**

Lab Sample ID: 200-11346-6
Client Matrix: Solid

% Moisture: 41.2

Date Sampled: 06/15/2012 1400
Date Received: 06/16/2012 1000

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	124		mg/Kg	0.46	4.3	5.0	9012A
Analysis Batch: 460-118029	Analysis Date: 06/29/2012 1127						DryWt Corrected: Y
Prep Batch: 460-117980	Prep Date: 06/29/2012 0630						
Cyanide, Free	9.0	B	mg/Kg	0.18	0.72	1.0	9016
Analysis Batch: 460-117483	Analysis Date: 06/21/2012 1200						DryWt Corrected: Y
Prep Batch: 460-117480	Prep Date: 06/21/2012 0600						

General Chemistry

Client Sample ID: **SB-01 (12-13)**

Lab Sample ID: 200-11346-7
Client Matrix: Solid

% Moisture: 11.1

Date Sampled: 06/15/2012 1405
Date Received: 06/16/2012 1000

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.56		mg/Kg	0.061	0.56	1.0	9012A
	Analysis Batch: 460-118029	Analysis Date: 06/29/2012 1115					DryWt Corrected: Y
	Prep Batch: 460-117980	Prep Date: 06/29/2012 0630					
Cyanide, Free	0.46 ~~0.18~~	UB ~~J B~~	mg/Kg	0.12	0.46	1.0	9016
	Analysis Batch: 460-117483	Analysis Date: 06/21/2012 1200					DryWt Corrected: Y
	Prep Batch: 460-117480	Prep Date: 06/21/2012 0600					

Client: ARCADIS U.S. Inc

Job Number: 200-11278-2
Sdg Number: 11278-2

General Chemistry

Client Sample ID: **SB-26 (10-11)**

Lab Sample ID: 200-11346-8
Client Matrix: Solid

% Moisture: 34.9

Date Sampled: 06/14/2012 1530
Date Received: 06/16/2012 1000

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	5670		mg/Kg	16.6	154	200	9012A
Analysis Batch: 460-117898	Analysis Date: 06/28/2012 1740						DryWt Corrected: Y
Prep Batch: 460-117844	Prep Date: 06/28/2012 0930						
Cyanide, Free	156	B	mg/Kg	0.81	3.2	5.0	9016
Analysis Batch: 460-117483	Analysis Date: 06/21/2012 1200						DryWt Corrected: Y
Prep Batch: 460-117480	Prep Date: 06/21/2012 0600						

Client: ARCADIS U.S. Inc

Job Number: 200-11278-2
Sdg Number: 11278-2

General Chemistry

Client Sample ID: **SB-26 (12-13)**

Lab Sample ID: 200-11346-9
Client Matrix: Solid

% Moisture: 40.2

Date Sampled: 06/14/2012 1545
Date Received: 06/16/2012 1000

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	14.5		mg/Kg	0.090	0.84	1.0	9012A
	Analysis Batch: 460-117898		Analysis Date: 06/28/2012 1744				DryWt Corrected: Y
	Prep Batch: 460-117844		Prep Date: 06/28/2012 0930				
Cyanide, Free	0.71 ~~0.36~~	UB ~~J~~B	mg/Kg	0.18	0.71	1.0	9016
	Analysis Batch: 460-117483		Analysis Date: 06/21/2012 1200				DryWt Corrected: Y
	Prep Batch: 460-117480		Prep Date: 06/21/2012 0600				

Client: ARCADIS U.S. Inc

Job Number: 200-11278-2
Sdg Number: 11278-2

General Chemistry

Client Sample ID: **SB-02 (11.5-13.1)**

Lab Sample ID: 200-11384-1
Client Matrix: Solid

% Moisture: 46.4

Date Sampled: 06/15/2012 1600
Date Received: 06/20/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	425		mg/Kg	2.0	18.7	20	9012A
Analysis Batch: 460-118029	Analysis Date: 06/29/2012 1130						DryWt Corrected: Y
Prep Batch: 460-117980	Prep Date: 06/29/2012 0630						
Cyanide, Free	8.8		mg/Kg	0.20	0.80	1.0	9016
Analysis Batch: 460-118248	Analysis Date: 06/28/2012 1200						DryWt Corrected: Y
Prep Batch: 460-118240	Prep Date: 06/28/2012 0600						

Client: ARCADIS U.S. Inc

Job Number: 200-11278-2
Sdg Number: 11278-2

General Chemistry

Client Sample ID: **SB-02 (14-15)**

Lab Sample ID: 200-11384-2
Client Matrix: Solid

% Moisture: 19.5

Date Sampled: 06/15/2012 1615
Date Received: 06/20/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	1.2		mg/Kg	0.067	0.62	1.0	9012A
	Analysis Batch: 460-118029	Analysis Date: 06/29/2012 1117					DryWt Corrected: Y
	Prep Batch: 460-117980	Prep Date: 06/29/2012 0630					
Cyanide, Free	0.70		mg/Kg	0.13	0.52	1.0	9016
	Analysis Batch: 460-118248	Analysis Date: 06/28/2012 1200					DryWt Corrected: Y
	Prep Batch: 460-118240	Prep Date: 06/28/2012 0600					

Client: ARCADIS U.S. Inc

Job Number: 200-11278-2
Sdg Number: 11278-2

General Chemistry

Client Sample ID: **SB-12 (11-12)**

Lab Sample ID: 200-11384-3
Client Matrix: Solid

% Moisture: 10.2

Date Sampled: 06/16/2012 0925
Date Received: 06/20/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.25	J	mg/Kg	0.060	0.56	1.0	9012A
Analysis Batch: 460-118029	Analysis Date: 06/29/2012 1107						DryWt Corrected: Y
Prep Batch: 460-117980	Prep Date: 06/29/2012 0630						
Cyanide, Free	0.22	J	mg/Kg	0.11	0.46	1.0	9016
Analysis Batch: 460-118248	Analysis Date: 06/28/2012 1200						DryWt Corrected: Y
Prep Batch: 460-118240	Prep Date: 06/28/2012 0600						

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Consolidated Edison Company of New York, Inc. - Krasdale

Data Usability Summary Report (DUSR)

HUNTS POINT, BRONX, NEW YORK

Volatile Organic Compounds (VOCs), Semivolatile Organic Compounds (SVOCs), Diesel Range Organics (DRO), Polychlorinated Biphenyls (PCBs), Metals, and Miscellaneous Analyses

SDG #: 200-11371

Analyses Performed By:
TestAmerica Laboratories
Burlington, Vermont

Report #: 17011R
Review Level: Tier III
Project: B0043027.0002.08000

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) # 200-11371 for samples collected in association with the Consolidated Edison Krasdale site. The review was conducted as a Tier III evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis					
					VOC	SVOC	PCB	DRO	MET	MISC
TB-06182012	200-11371-1	Water	6/18/2012		X					
SB-16 (1-1.3')	200-11371-2	Soil	6/18/2012		X	X	X		X	X
SB-09 (4-5')	200-11371-3	Soil	6/18/2012		X	X	X		X	X
SB-13 (8.2-9)	200-11382-1	Soil	6/16/2012		X	X	X		X	X
SB-13 (12-13)	200-11382-2	Soil	6/16/2012		X	X	X		X	X
SB-14 (6.5-7.5)	200-11382-3	Soil	6/16/2012		X	X	X		X	X
SB-14 (17-18)	200-11382-4	Soil	6/16/2012		X	X	X		X	X
SB-20 (8.5-9.5)	200-11382-5	Soil	6/16/2012		X	X	X		X	X
SB-21 (6-7)	200-11382-6	Soil	6/16/2012		X	X	X		X	X
TB-06162012	200-11382-7	Water	6/16/2012		X					
DUP-02-06162012	200-11382-8	Soil	6/16/2012	SB-14 (6.5-7.5)	X	X	X		X	X
SB-06 (12.2-13.2)	200-11382-10	Soil	6/19/2012		X	X	X		X	X
SB-07 (10.5-12.5)	200-11382-11	Soil	6/19/2012		X	X	X		X	X
SB-07 (16.4-17.4)	200-11382-12	Soil	6/19/2012		X	X	X		X	X
SB-10 (4.2-5)	200-11382-13	Soil	6/19/2012		X	X	X		X	X
TB-06192012	200-11382-14	Water	6/19/2012		X					
SB-05 (10.9-11.9')	200-11398-1	Soil	6/20/2012		X	X	X	X	X	X
TB-06202012	200-11398-2	Water	6/20/2012		X					
SB-04 (10.2-11.4)	200-11417-1	Soil	6/21/2012		X	X	X		X	X
SB-04 (17.2-18.2)	200-11417-2	Soil	6/21/2012		X	X	X		X	X
SB-03 (10-10.9)	200-11417-3	Soil	6/21/2012		X	X	X	X	X	X
SB-03 (10.9-11.7)	200-11417-4	Soil	6/21/2012		X	X	X	X	X	X
TB-06212012	200-11417-5	Water	6/21/2012		X					
DUP-03-06212012	200-11417-6	Soil	6/21/2012	SB-03 (10-10.9)	X	X	X	X	X	X

Note: Soil sample results were reported on a dry weight basis except for pH, corrosivity, and ammonia, which were reported on an as-received (wet weight) basis.

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

QA - Quality Assurance

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Methods 8260B, 8270C, 8082A, and 8015B as referenced in NYSDEC-ASP. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999 and USEPA Region II SOPs associated with USEPA SW-846 Validating Volatile Organic Compounds by GC/MS SW-846 Method 8260B (SOP HW-24 Revision 2, October 2006), Validating Semivolatile Organic Compounds by GC/MS SW-846 Method 8270D (SOP HW-22 Revision 3, October 2006), and Validating PCB Compounds by GC SW-846 Method 8082A (SOP HW-45 Revision 1, October 2006).

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected as unusable. The compound may or may not be present in the sample.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260B	Soil	48 hours from collection to extraction and 14 days from collection to analysis	Cool to 4±2 °C
	Water	14 days from collection to analysis	Cool to 4±2 °C; pH < 2 with HCl

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e. laboratory method blanks, trip blanks, and equipment rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure sample storage contamination. Rinse blanks also measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All compounds associated with the QA blanks exhibited a concentration less than the MDL, with the exception of the compounds listed in the following table. Sample results associated with QA blank contamination that were greater than the BAL resulted in the removal of the laboratory qualifier (B) of data. Sample results less than the BAL associated with the following sample locations were qualified as listed in the following table.

Sample Location	Analytes	Sample Result	Qualification
SB-13 (12-13)	1,2,4-Trichlorobenzene Carbon disulfide Chloroform Methylene Chloride	Detected sample results < RL and < BAL	"UB" at the RL
SB-14 (17-18)	1,2,4-Trichlorobenzene Carbon disulfide Chloroform Methylene Chloride Toluene		
SB-20 (8.5-9.5) SB-21 (6-7)	1,2,4-Trichlorobenzene Chloroform Toluene		
SB-06 (12.2-13.2)	1,2,4-Trichlorobenzene Chloroform Methylene Chloride Toluene		

Sample Location	Analytes	Sample Result	Qualification
SB-07 (16.4-17.4)	1,2,4-Trichlorobenzene Chloroform	Detected sample results < RL and < BAL	"UB" at the RL
SB-10 (4.2-5)	Carbon disulfide Chloroform Methylene Chloride Toluene		
SB-05 (10.9-11.9')	Chloroform Methylene Chloride Toluene		
SB-04 (17.2-18.2)	1,2,4-Trichlorobenzene Carbon disulfide Methylene Chloride Toluene		
SB-03 (10.9-11.7)	Chloroform Methylene Chloride		
SB-20 (8.5-9.5) SB-07 (16.4-17.4)	Carbon disulfide	Detected sample results > RL and < BAL	"UB" at detected sample concentration

RL Reporting limit

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration (ICV)

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) or a correlation coefficient greater than 0.99, and a RRF value greater than control limit (0.05).

4.2 Continuing Calibration (CCV)

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

Sample Locations	Initial / Continuing	Compound	Criteria
SB-13 (12-13) SB-14 (17-18) SB-20 (8.5-9.5) SB-21 (6-7) SB-06 (12.2-13.2) SB-07 (16.4-17.4) SB-10 (4.2-5) SB-05 (10.9-11.9') SB-04 (17.2-18.2) SB-03 (10.9-11.7)	Initial %RSD	Chloroethane	16.2 %
		Acetone	19.6 %
		2-Butanone	20.4 %
TB-06162012	Continuing %D	Dichlorodifluoromethane	-21.7 % (decrease in sensitivity)
		Bromomethane	-24.0 % (decrease in sensitivity)
		4-Methyl-2-pentanone	+20.8 % (increase in sensitivity)
TB-06182012 TB-06192012 TB-06202012 TB-06212012	Continuing %D	Dichlorodifluoromethane	-35.2 % (decrease in sensitivity)
		Chloromethane	-31.1 % (decrease in sensitivity)
		Bromomethane	-57.7 % (decrease in sensitivity)
SB-16 (1-1.3') SB-13 (8.2-9) SB-14 (6.5-7.5) DUP-02-06162012 SB-07 (10.5-12.5)	Continuing %D	Dichlorodifluoromethane	-24.9 % (decrease in sensitivity)
		Chloromethane	-28.6 % (decrease in sensitivity)
		Bromomethane	-53.0 % (decrease in sensitivity)
		Acetone	+22.4 % (increase in sensitivity)
		2-Butanone	+20.2 % (increase in sensitivity)
SB-09 (4-5') SB-04 (10.2-11.4) SB-03 (10-10.9) DUP-03-06212012	Continuing %D	Dichlorodifluoromethane	-24.5 % (decrease in sensitivity)
		Chloromethane	-21.6 % (decrease in sensitivity)
		Bromomethane	-37.8 % (decrease in sensitivity)
		Acetone	+20.5 % (increase in sensitivity)
SB-13 (12-13) SB-14 (17-18) SB-20 (8.5-9.5) SB-21 (6-7) SB-06 (12.2-13.2) SB-07 (16.4-17.4) SB-10 (4.2-5) SB-05 (10.9-11.9') SB-03 (10.9-11.7)	Continuing %D	Dichlorodifluoromethane	-30.1 % (decrease in sensitivity)
		Bromomethane	-33.5 % (decrease in sensitivity)

Sample Locations	Initial / Continuing	Compound	Criteria
SB-04 (17.2-18.2)	Continuing %D	Dichlorodifluoromethane	-34.3 % (decrease in sensitivity)
		2-Butanone	-21.8 % (decrease in sensitivity)

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Initial/Continuing	Criteria	Sample Result	Qualification
Initial and Continuing Calibration	RRF < 0.05	Non-detect	R
		Detect	J
	RRF < 0.01[1]	Non-detect	R
		Detect	J
	RRF > 0.05 or RRF > 0.01[1]	Non-detect	No Action
		Detect	
Initial Calibration	%RSD > 15% or a correlation coefficient < 0.99	Non-detect	UJ
		Detect	J
Continuing Calibration	%D > 20% (increase in sensitivity)	Non-detect	No Action
		Detect	J
	%D > 20% (decrease in sensitivity)	Non-detect	UJ
		Detect	J

[1] RRF of 0.01 only applies to typically poor responding compounds (e.g. ketones, 1,4-dioxane, etc.)

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

Sample locations associated with surrogates exhibiting recoveries outside of the control limits are presented in the following table.

Sample Locations	Surrogate	Recovery
SB-20 (8.5-9.5)	1,2-Dichloroethane-d_4	AC
	1,2-Dichlorobenzene-d_4 Toluene-d_8 4-Bromofluorobenzene	> UL
SB-21 (6-7) SB-06 (12.2-13.2) SB-07 (16.4-17.4) SB-10 (4.2-5)	1,2-Dichloroethane-d_4 1,2-Dichlorobenzene-d_4	AC
	Toluene-d_8 4-Bromofluorobenzene	> UL

Sample Locations	Surrogate	Recovery
SB-03 (10.9-11.7)	1,2-Dichloroethane-d_4	< LL but > 10%
	Toluene-d_8 1,2-Dichlorobenzene-d_4	AC
	4-Bromofluorobenzene	> UL

UL Upper control limit
AC Acceptable
LL Lower control limit

The criteria used to evaluate the surrogate recoveries are presented in the following table. In the case of a surrogate deviation, the sample results associated with the deviant fraction are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> UL	Non-detect	No Action
	Detect	J
< LL but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
Surrogates diluted below the calibration curve	Non-detect	UJ[1]
	Detect	J[1]

[1] A more concentrated analysis was not performed with surrogate compounds within the calibration range; therefore, no determination of extraction efficiency could be made.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC analysis exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

Sample locations associated with internal standards exhibiting responses outside of the control limits are presented in the following table. The laboratory reanalyzed the samples, which exhibited similar responses. The results from the initial analyses were reported.

Sample Location	Internal Standard	Response
SB-21 (6-7) SB-03 (10.9-11.7)	Fluorobenzene Chlorobenzene-d_5	AC
	1,4-Dichlorobenzene-d_4	< LL but > 25%
SB-20 (8.5-9.5) SB-06 (12.2-13.2) SB-07 (16.4-17.4)	Fluorobenzene	AC
	Chlorobenzene-d_5 1,4-Dichlorobenzene-d_4	< LL but > 25%

AC Acceptable

The criteria used to evaluate the internal standard responses are presented in the following table. In the case of an internal standard deviation, the compounds quantitated under the deviant internal standard are qualified as documented in the table below.

Control limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No action
	Detect	J
< the lower control limit (LL) but > 25%	Non-detect	UJ
	Detect	J
< 25%	Non-detect	R
	Detect	J

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The spiked compounds used in the MS/MSD analysis must exhibit recoveries within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS and MSD results must be within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSDs performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD spiking concentration by a factor of four or greater. Sample results associated with MS/MSD exceedances where the parent samples are not site-specific are not qualified.

Sample location SB-13 (12-13) was used in the MS/MSD analysis. Sample locations associated with the MS/MSD exhibiting recoveries outside of the control limits are presented in the following table.

Sample Location	Compound	MS Recovery	MSD Recovery
SB-13 (12-13)	Carbon disulfide Methyl t-butyl ether 1,1-Dichloroethane Chloroform Carbon tetrachloride Benzene	< LL but > 10%	< LL but > 10%
	1,1,1-Trichloroethane Trichloroethene 1,2-Dichloropropane Bromodichloromethane cis-1,3-Dichloropropene	AC	< LL but > 10%

AC Acceptable

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of MS/MSD deviations, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J

Control Limit	Sample Result	Qualification
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
Parent sample concentration > 4x the MS/MSD spiking solution concentration.	Detect	No Action
	Non-detect	

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The spiked compounds used in the LCS analysis must exhibit recoveries within the laboratory-established acceptance limits.

Sample locations associated with LCS analyses exhibiting recoveries outside of the control limits are presented in the following table.

Sample Locations	Compounds	LCS Recovery
TB-06182012 TB-06192012 TB-06202012 TB-06212012	Bromomethane Vinyl chloride	< LL but > 10%

LL Lower control limit

The criteria used to evaluate the LCS recoveries are presented in the following table. In the case of any LCS deviations, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J

9. Field Duplicate Sample Analysis

The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. A control limit of 50% for water matrices and 100% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the reporting limit (RL), a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results (in µg/kg) for the field duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
SB-14 (6.5-7.5) / DUP-02-06162012	Acetone	4100 J	1800 J	AC
	Benzene	830 J	640 J	AC
	Carbon disulfide	78000	65000	18.2 %
	Toluene	640 J	460 J	AC
	Xylenes, Total	1800 J	1300 J	AC
SB-03 (10-10.9) / DUP-03-06212012	Carbon disulfide	160000	300000	60.9 %
	Toluene	2900 U	700 J	AC
	Xylenes, Total	920 J	2000 J	AC

AC Acceptable
J Estimated (result is < RL)
U Not detected

The field duplicate sample results are acceptable.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW-846 8260B	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X	X		
B. Equipment/Field blanks					X
C. Trip blanks		X	X		
Laboratory Control Sample (LCS) Accuracy (%R)		X	X		
Laboratory Control Sample Duplicate (LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X	X		
Matrix Spike Duplicate (MSD) %R		X	X		
MS/MSD Precision RPD		X		X	
Field/Laboratory Duplicate Sample RPD		X		X	
Surrogate Spike %R		X	X		
Dilution Factor		X		X	
Moisture Content		X		X	
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X	X		
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X	X		
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X	X		
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Quantitation transcriptions/calculations		X		X	
E. Reporting limits adjusted for sample dilutions		X		X	

%R Percent recovery
RPD Relative percent difference
%RSD Relative standard deviation
%D Percent difference

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8270C	Water	7 days from collection to extraction and 40 days from extraction to analysis	Cool to 4±2 °C
	Soil	14 days from collection to extraction and 40 days from extraction to analysis	Cool to 4±2 °C

All samples were extracted and analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e. laboratory method blanks and equipment rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Target compounds were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution are acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration Verification (ICV)

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration Verification (CCV)

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

Sample Location	Initial/ Continuing	Compound	Criteria
SB-06 (12.2-13.2) SB-07 (16.4-17.4)	Continuing %D	Benzoic acid	-22.7 % (decrease in sensitivity)
SB-16 (1-1.3')	Continuing %D	Benzoic acid	-26.7 % (decrease in sensitivity)
SB-13 (12-13) SB-14 (17-18) SB-20 (8.5-9.5) SB-21 (6-7)	Continuing %D	3 & 4 Methylphenol	+20.4 % (increase in sensitivity)
SB-14 (6.5-7.5) DUP-02-06162012	Continuing %D	Benzoic acid	-38.4 % (decrease in sensitivity)
	Continuing %D	Hexachlorocyclopentadiene	-25.5 % (decrease in sensitivity)
	Continuing %D	2,4-Dinitrophenol	-21.7 % (decrease in sensitivity)
	Continuing %D	4-Nitroaniline	+22.9 % (increase in sensitivity)
SB-04 (10.2-11.4) SB-03 (10-10.9) SB-03 (10.9-11.7)	Continuing %D	2-Nitroaniline	+22.6 % (increase in sensitivity)

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Initial/Continuing	Criteria	Sample Result	Qualification
Initial and Continuing Calibration	RRF < 0.05	Non-detect	R
		Detect	J
	RRF < 0.01[1]	Non-detect	R
		Detect	J
	RRF > 0.05 or RRF > 0.01[1]	Non-detect	No Action
		Detect	
Initial Calibration	%RSD > 15% or a correlation coefficient < 0.99	Non-detect	UJ
		Detect	J
Continuing Calibration	%D > 20% (increase in sensitivity)	Non-detect	No Action
		Detect	J

Initial/Continuing	Criteria	Sample Result	Qualification
	%D > 20% (decrease in sensitivity)	Non-detect	UJ
		Detect	J

[1] RRF of 0.01 only applies to typically poor responding compounds (e.g. ketones, 1,4-dioxane, etc.)

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. SVOC analysis requires that two of the three SVOC surrogate compounds within each fraction exhibit recoveries within the laboratory-established acceptance limits, and that all SVOC surrogate recoveries be greater than ten percent.

Sample locations associated with surrogates exhibiting recoveries outside of the control limits presented in the following table.

Sample Locations	Surrogate	Recovery
SB-16 (1-1.3') SB-09 (4-5') SB-14 (6.5-7.5)	2,4,6-Tribromophenol 2-Fluorophenol Phenol-d_5 Nitrobenzene-d_5 2-Fluorobiphenyl Terphenyl-d_{14}	D

The criteria used to evaluate the surrogate recoveries are presented in the following table. In the case of surrogate deviations, the sample results associated with the deviant fraction are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
Surrogates diluted below the calibration range	Non-detect	J[1]
	Detect	

[1] A more concentrated analysis was not performed with surrogate compounds within the calibration range; therefore, no determination of extraction efficiency could be made.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the

SVOC analysis exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within the control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit recoveries within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS and MSD results must be within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. Sample results associated with MS/MSD exceedances where the parent samples are not site-specific are not qualified.

Sample location SB-13 (12-13) was used in the MS/MSD analyses. Sample locations associated with the MS/MSD exhibiting recoveries outside of the control limits are presented in the following table.

Sample Location	Compound	MS Recovery	MSD Recovery
SB-13 (12-13)	2,4-Dinitrophenol 4,6-Dinitro-2-methylphenol Benzoic acid	< 10%	< 10%

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of MS/MSD deviations, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
Parent sample concentration > 4x the MS/MSD spiking solution concentration.	Detect	No Action
	Non-detect	

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The spiked compounds used in the LCS analysis must exhibit recoveries within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

9. Field Duplicate Sample Analysis

The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. A control limit of 50% for water matrices and 100% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the reporting limit (RL), a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results (in µg/kg) for the field duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
SB-14 (6.5-7.5) / DUP-02-06162012	2-Methylnaphthalene	16000	2600	144.1 %
	Acenaphthene	8000 U	390 J	AC
	Acenaphthylene	1600 J	570 J	AC
	Anthracene	2800 J	2200 J	AC
	Benzo[a]anthracene	9800	1400	150.0 %
	Benzo[a]pyrene	8200	1100	152.7 %
	Benzo[b]fluoranthene	5600	960	141.5 %
	Benzo[g,h,i]perylene	4700 J	480 J	AC
	Benzo[k]fluoranthene	2200	550	120.0 %
	Carbazole	8000 U	320 J	AC
	Chrysene	12000	1300 J	160.9 %
	Dibenzofuran	4200 J	4700	11.2 %
	Fluoranthene	6000 J	2800	72.7 %
	Fluorene	7100 J	6700	5.8 %
	Indeno[1,2,3-cd]pyrene	3300	440	152.9 %
	Naphthalene	150000	26000	140.9 %
	Phenanthrene	12000	15000	22.2 %
	Pyrene	10000	2300 J	AC
SB-03 (10-10.9) / DUP-03-06212012	2-Methylnaphthalene	3000	3400	12.5 %
	Acenaphthene	430 J	2900 U	AC
	Acenaphthylene	1500 J	500 J	AC
	Anthracene	7500	2300 J	AC
	Benzo[a]anthracene	2800	2800	0.0 %
	Benzo[a]pyrene	2400	2700	11.8 %
	Benzo[b]fluoranthene	2100	1900	10.0 %
	Benzo[g,h,i]perylene	1600 J	1800 J	AC
	Benzo[k]fluoranthene	1200	760	44.9 %
	Carbazole	430 J	470 J	AC
	Chrysene	2500 J	2800 J	AC
	Dibenz(a,h)anthracene	270 U	610	AC

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
SB-03 (10-10.9) / DUP-03-06212012	Dibenzofuran	6900	6000	14.0 %
	Fluoranthene	5900	2000 J	AC
	Fluorene	11000	9800	11.5 %
	Indeno[1,2,3-cd]pyrene	1800	1700	5.7 %
	Naphthalene	28000	26000	7.4 %
	Phenanthrene	32000	12000	90.9 %
	Pyrene	5800	3000	63.6 %

AC Acceptable
J Estimated (result is < RL)
NC Not compliant
U Not detected

The 2-methylnaphthalene, benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, chrysene, benzo[k]fluoranthene, indeno[1,2,3-cd]pyrene, and naphthalene results for field duplicate samples SB-14 (6.5-7.5) and DUP-02-06162012 exhibited RPDs greater than the control limit. The 2-methylnaphthalene, benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[k]fluoranthene, chrysene, indeno[1,2,3-cd]pyrene, and naphthalene results for SB-14 (6.5-7.5) and DUP-02-06162012 were qualified as estimated.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR SVOCs

SVOCs: SW-846 8270C	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding Times		X		X	
Reporting Limits (units)		X		X	
Blanks					
A. Method Blanks		X		X	
B. Equipment/Field Blanks					X
Laboratory Control Sample (LCS) Accuracy (%R)		X		X	
Laboratory Control Sample Duplicate (LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X	X		
Matrix Spike Duplicate (MSD) %R		X	X		
MS/MSD RPD		X		X	
Field/Laboratory Duplicate Sample RPD		X	X		
Surrogate Spike %R		X	X		
Dilution Factor		X		X	
Moisture Content		X		X	
Tier III Validation					
System Performance and Column Resolution		X		X	
Initial Calibration %RSDs		X		X	
Continuing Calibration RRFs		X		X	
Continuing Calibration %Ds		X	X		
Instrument Tune and Performance Check		X		X	
Ion Abundance Criteria for Each Instrument Used		X		X	
Internal Standards		X		X	
Compound Identification and Quantitation					
A. Reconstructed Ion Chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of Sample Compounds Within the Established RT Windows		X		X	
D. Quantitation transcriptions/calculations		X		X	
E. Reporting Limits Adjusted for Sample Dilutions		X		X	

%R Percent Recovery
RPD Relative Percent Difference
%RSD Relative Standard Deviation
%D Percent Difference

DIESEL RANGE ORGANICS (DRO) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
DRO SW-846 8015B	Soil	14 days from collection to extraction and 40 days from extraction to analysis	Cool to 4±2 °C
	Water	7 days from collection to extraction and 40 days from extraction to analysis	Cool to 4±2 °C

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e. laboratory method blanks and equipment rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected analyte in an associated blank is calculated for QA blanks containing concentrations greater than the reporting limit (RL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All analytes associated with the QA blanks exhibited a concentration less than the MDL, with the exception of the compounds listed in the following table. Sample results associated with QA blank contamination that were greater than the BAL resulted in the removal of the laboratory qualifier (B) of data. Sample results less than the BAL associated with the following sample locations were qualified as listed in the following table.

Sample Location	Analyte	Sample Result	Qualification
SB-05 (10.9-11.9')	Diesel Range Organics [C10-C28]	Detected sample results < RL and < BAL	"UB" at the RL

RL Reporting limit

3. System Performance

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration (ICV)

A maximum RSD of 20% or a correlation coefficient of greater than 0.99 is allowed.

4.2 Continuing Calibration (CCV)

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (15%).

All calibration criteria were within the control limits.

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. The analysis requires surrogate compounds exhibit recoveries within the laboratory-established acceptance limits.

Sample locations associated with surrogates exhibiting recoveries outside of the control limits presented in the following table.

Sample Location	Surrogate	Recovery
SB-03 (10-10.9) DUP-03-06212012	o-Terphenyl	D

Diluted (D)

The criteria used to evaluate the surrogate recoveries are presented in the following table. In the case of a surrogate deviation, the sample results associated with the deviant fraction are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> UL	Non-detect	No Action
	Detect	J
< LL but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
D – Surrogates diluted below the calibration curve	Non-detect	J[1]
	Detect	

Note: [1] - A more concentrated analysis was not performed with surrogate compounds within the calibration range therefore no determination of extraction efficiency could be made.

6. Matrix Spike/Matrix Spike Duplicate Sample (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The spiked analytes used in the MS/MSD analysis must exhibit recoveries within the laboratory-established

acceptance limits. The relative percent difference (RPD) between the MS and MSD results must be within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSDs performed on sample locations where the analyte concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. Sample results associated with MS/MSD exceedances where the parent samples are not site-specific are not qualified.

The MS/MSD analysis was not performed on a sample location within this SDG.

7. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The spiked analytes used in the LCS analysis must exhibit recoveries within the laboratory-established acceptance limits.

All analytes associated with the LCS analysis exhibited recoveries within the control limits.

8. Field Duplicate Sample Analysis

The field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 50% for water matrices and 100% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the reporting limit (RL), a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results (in mg/kg) for the field duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
SB-03 (10-10.9) / DUP-03-06212012	Diesel Range Organics [C10-C28]	870	620	33.6 %

The field duplicate sample results are acceptable.

9. Analyte Identification

The retention times of all quantitated peaks must fall within the calculated retention time windows.

All identified analytes met the specified criteria.

10. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR DRO

DRO: SW-846 8015B	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY (GC/FID)					
Tier II Validation					
Holding Times		X		X	
Reporting Limits (Units)		X		X	
Blanks					
A. Method Blanks		X	X		
B. Equipment Blanks					X
Laboratory Control Sample (LCS) Accuracy (%R)		X		X	
Laboratory Control Sample Duplicate (LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R					X
Matrix Spike Duplicate (MSD) %R					X
MS/MSD RPD					X
Field/Laboratory Duplicate Sample RPD		X		X	
Surrogate Spike %R		X	X		
Dilution Factor		X		X	
Moisture Content		X		X	
Tier III Validation					
Initial Calibration %RSDs		X		X	
Continuing Calibration %Ds		X		X	
System Performance and Column Resolution		X		X	
Compound Identification and Quantitation					
A. Quantitation Reports		X		X	
B. RT of Sample Compounds Within Established RT Windows		X		X	
C. Pattern Identification		X		X	
D. Transcription/Calculation Errors Present		X		X	
E. Reporting Limits adjusted for Sample Dilutions		X		X	

%R Percent Recovery
RPD Relative Percent Difference
%RSD Relative Standard Deviation
%D Percent Difference

POLYCHLORINATED BIPHENYLS (PCBs) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8082A	Water	7 days from collection to extraction and 40 days from extraction to analysis	Cool to 4±2 °C
	Soil	14 days from collection to extraction and 40 days from extraction to analysis	Cool to 4±2 °C

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e. laboratory method blanks and equipment rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Target analytes were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. System Performance

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

All target analytes associated with the initial calibration standards must exhibit a relative standard deviation (RSD) less than the method-specified control limit of 20% or a correlation coefficient greater than 0.99. Multiple-point calibrations were performed for Aroclor 1016 and 1260 only. Single-point calibrations were performed for the remaining Aroclors.

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (15%).

All Aroclors associated with calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

Sample Location	Initial / Continuing	Compound	Criteria
SB-16 (1-1.3') SB-09 (4-5')	Continuing %D	Aroclor 1016	+ 50.7 % (increase in sensitivity)
DUP-03-06212012	Continuing %D	Aroclor 1260	- 22.8 % (decrease in sensitivity)

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Initial/Continuing	Criteria	Sample Result	Qualification
Initial Calibration	%RSD > 20% or a correlation coefficient <0.99	Non-detect	UJ
		Detect	J
Continuing Calibration	%D > 15% (increase in sensitivity)	Non-detect	No Action
		Detect	J
	%D > 15% (decrease in sensitivity)	Non-detect	UJ
		Detect	J

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. PCB analysis requires that at least one of the two PCB surrogate compounds exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within the control limits.

6. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit recoveries within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS and MSD must be within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. Sample results associated with MS/MSD exceedances where the parent samples are not site-specific are not qualified.

Sample location SB-13 (12-13) was used in the MS/MSD analysis. The MS/MSD exhibited acceptable recoveries and RPDs between the MS and MSD results.

7. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The spiked analytes used in the LCS analysis must exhibit recoveries within the laboratory-established acceptance limits.

All analytes associated with the LCS analysis exhibited recoveries within the control limits.

8. Field Duplicate Sample Analysis

Field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. A control limit of 50% for water matrices and 100% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the reporting limit (RL), a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results (in µg/kg) for the field duplicate samples are summarized in the following table.

Sample ID / Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
SB-14 (6.5-7.5) / DUP-02-06162012	All Aroclors	U	U	AC
SB-03 (10-10.9) / DUP-03-06212012	All Aroclors	U	U	AC

AC Acceptable
U Not detected

The field duplicate sample results are acceptable.

9. Analyte Identification

The retention times of all quantitated peaks must fall within the calculated retention time windows for both the primary and confirmation columns. When dual column analysis is performed the relative percent difference (RPD) between the detected analyte results calculated on each column must be less than 40%.

All sample results exhibited acceptable RPDs between the primary and confirmation columns.

10. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR PCBs

PCBs: SW-846 8082A	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY (GC/ECD)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment/Field blanks					X
Laboratory Control Sample (LCS) Accuracy %R		X		X	
Laboratory Control Sample Duplicate (LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD RPD		X		X	
Field/Laboratory Duplicate Sample RPD		X		X	
Surrogate Spike %R		X		X	
Column (%D) (If dual column is performed-not confirmation purposes only)		X		X	
Dilution Factor		X		X	
Moisture Content		X		X	
Tier III Validation					
Initial calibration %RSDs		X		X	
Continuing calibration %Ds		X	X		
System performance and column resolution		X		X	
Compound identification and quantitation					
A. Quantitation Reports		X		X	
B. RT of sample compounds within the established RT windows		X		X	
C. Identification/Confirmation		X		X	
D. Quantitation transcriptions/calculations		X		X	
E. Reporting limits adjusted for sample dilutions		X		X	

%R Percent recovery
RPD Relative percent difference
%RSD Relative standard deviation
%D Percent difference

INORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to (United States Environmental Protection Agency) SW-846 Methods 6010C, 7471B, 9012A, 9016, 9034, 9056, and 9045C, and Standard Methods (SM) 2320B, 4500-NH3-H, and 4500-P-E. Data were reviewed in accordance with USEPA National Functional Guidelines of July 2002.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and that it was already subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

    U The analyte was analyzed for but not detected. The associated value is the analyte instrument detection limit.

    B The reported value was obtained from a reading less than the contract-required detection limit (CRDL), but greater than or equal to the instrument detection limit (IDL).

- Quantitation (Q) Qualifiers

    E The reported value is estimated due to the presence of interference.

    N Spiked sample recovery is not within the control limits.

    * Duplicate analysis is not within the control limits.

- Validation Qualifiers

    J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.

    UJ The analyte was not detected above the reported sample detection limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.

    UB Analyte considered non-detect at the listed value due to associated blank contamination.

    R The sample results are rejected as unusable. The analyte may or may not be present in the sample.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

METALS ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 6010C	Water	180 days from collection to analysis	Cool to 4±2 °C; pH < 2 with HNO_3
	Soil	180 days from collection to analysis	Cool to 4±2 °C
SW-846 7470A	Water	28 days from collection to analysis	Cool to 4±2 °C; pH < 2 with HNO_3
SW-846 7471B	Soil	28 days from collection to analysis	Cool to 4±2 °C.

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e. laboratory method blanks and equipment rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks also measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected analyte in an associated blank (common laboratory contaminant analytes are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All analytes associated with the QA blanks exhibited a concentration less than the MDL with the exception of the analytes listed in the following table. Sample results associated with QA blank contamination that were greater than the BAL resulted in the removal of the laboratory qualifier ("B") of data. Sample results less than the BAL associated with the following sample locations were qualified as listed in the following table.

Sample Locations	Analyte	Sample Result	Qualification
SB-16 (1-1.3') SB-09 (4-5') SB-13 (8.2-9) SB-13 (12-13) SB-14 (17-18) SB-21 (6-7) SB-06 (12.2-13.2) SB-07 (10.5-12.5) SB-07 (16.4-17.4) SB-10 (4.2-5)	Sodium	Detected sample results < RL and < BAL	"UB" at the RL
SB-13 (12-13) SB-14 (17-18) SB-06 (12.2-13.2)	Mercury		

Sample Locations	Analyte	Sample Result	Qualification
SB-14 (6.5-7.5) SB-20 (8.5-9.5) DUP-02-06162012	Sodium	Detected sample results > RL and < BAL	"UB" at detected sample concentration

RL = reporting limit

3. Calibration

Satisfactory instrument calibration is established to provide that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument's continuing performance is satisfactory.

3.1 Initial Calibration

The initial calibration must exhibit a correlation coefficient greater than 0.995. A technical review of the data applies limits to all analytes with no exceptions.

3.2 Continuing Calibration

All target analytes associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (10%).

The correct number and type of standards were analyzed. The correlation coefficient of the initial calibration was greater than 0.995 for all non-ICP analytes and all initial calibration verification standard recoveries were within the control limits.

All initial and continuing calibration verification standard recoveries were within the control limits.

3.3 Reporting limit (RL) Check Standard

The RL check standard serves to verify the linearity of calibration of the analysis at the RL. The RL standard is not required for the analysis of aluminum (Al), barium (Ba), calcium (Ca), iron (Fe), magnesium (Mg), sodium (Na), and potassium (K). The criteria used to evaluate the RL standard analysis are presented below in the RL standards evaluation table.

All RL standard recoveries were within the control limits.

3.4 ICP Interference Check Standard (ICS)

The ICS verifies the laboratories inter-element and background correction factors.

All ICS exhibited recoveries within the control limits.

4. Matrix Spike (MS) and Laboratory Duplicate Sample Analysis

MS and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

4.1 MS Analysis

All metal analytes must exhibit recoveries within the established acceptance limits of 75% to 125%. The MS control limits do not apply for MSs performed on sample locations where the analyte's concentration

detected in the parent sample exceeds the MS spiking concentration by a factor of four or greater. In instance where this is true, the data will not be qualified and the laboratory qualifier "N" will be removed. Sample results associated with MS exceedances where the parent samples are not site-specific are not qualified.

Sample locations SB-13 (12-13), SB-05 (10.9-11.9'), and SB-03 (10-10.9) were used in the MS analyses. All analytes associated with MS recoveries were within the control limits with the exception of the following analytes present in the table below.

Sample Location	Analyte	MS Recovery
SB-13 (12-13)	Antimony	20 %
	Arsenic	63 %
	Barium	58 %
	Cadmium	74 %
	Chromium	65 %
	Cobalt	69 %
	Copper	74 %
	Nickel	66 %
	Selenium	71 %
	Silver	66 %
	Vanadium	71 %
	Zinc	67 %
SB-05 (10.9-11.9')	Selenium	69 %
SB-03 (10-10.9)	Thallium	74 %

The criteria used to evaluate MS recoveries are presented in the following table. In the case of MS deviations, the sample results are qualified. The qualifications are applied to all sample results associated with this analytical batch.

Control limit	Sample Result	Qualification
MS percent recovery 30% to 74%	Non-detect	UJ
	Detect	J
MS percent recovery < 30%	Non-detect	R
	Detect	J
MS percent recovery > 125%	Non-detect	No Action
	Detect	J

4.2 Laboratory Duplicate Sample Analysis

The laboratory duplicate sample relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to five times the RL. A control limit of 20% for water matrices and 35% for soil matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the RL, a control limit of one times the RL is applied for water matrices and two times the RL for soil matrices.

Sample location SB-13 (12-13) was used in the laboratory duplicate sample analyses. The laboratory duplicate sample results exhibited RPDs within the control limit.

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit recoveries between the control limits of 80% and 120%.

The LCS analyses exhibited recoveries within the control limits.

6. Field Duplicate Sample Analysis

The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. A control limit of 50% for water matrices and 100% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

The field duplicate sample results (in mg/kg) are summarized in the following table.

Sample ID / Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
SB-14 (6.5-7.5) / DUP-02-06162012	Aluminum	8380	2840	98.8 %
	Antimony	8.5 J	11.1	AC
	Arsenic	37.5	35.2	6.3 %
	Barium	51.1	36.2	34.1 %
	Beryllium	0.58 J	0.14 J	AC
	Calcium	36200	22400	47.1 %
	Chromium	202	299	38.7 %
	Cobalt	14.6	11.5	23.8 %
	Copper	644	397	47.5 %
	Iron	95200	208000	74.4 %
	Lead	116	71.6	47.3 %
	Magnesium	817 J	60.2 J	AC
	Manganese	347	272	24.2 %
	Nickel	121	96.0	23.0 %
	Potassium	885 J	597 J	AC
	Selenium	2.9 J	4.4 U	AC
	Sodium	961	702	31.1 %
	Thallium	4.4 U	1.5 J	AC
	Vanadium	61.4	41.1	39.6 %
	Zinc	342	319	7.0 %
	Mercury	0.24	0.53	75.3 %

Sample ID / Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
SB-03 (10-10.9) / DUP-03-06212012	Aluminum	271	450	49.7 %
	Antimony	17.6	12.8	31.6 %
	Arsenic	36.9	33.8	8.8 %
	Barium	11.5 J	39.9	AC
	Cadmium	2.8	0.88	AC
	Calcium	548 J	544 J	AC
	Chromium	81.8	175	72.6 %
	Cobalt	26.0	19.5	28.6 %
	Copper	591	483	20.1 %
	Iron	49400	104000	71.2 %
	Lead	449	173	88.7 %
	Magnesium	166 J	91.4 J	AC
	Manganese	235	212	10.3 %
	Nickel	165	172	4.2 %
	Potassium	372 J	165 J	AC
	Silver	1.3 U	0.21 J	AC
	Sodium	40.1 J	37.7 J	AC
	Vanadium	90.0	112	21.8 %
	Zinc	99.5	298	99.9 %
	Mercury	0.36	2.4	147.8 %

AC Acceptable
J Estimated (result is < RL)
U Not detected

The mercury results for field duplicate samples SB-03 (10-10.9) and DUP-03-06212012 exhibited a RPD greater than the control limit. The mercury results associated with sample location SB-03 (i.e. samples SB-03 (10-10.9), SB-03 (10.9-11.7), and DUP-03-06212012) were qualified as estimated.

7. Serial Dilution

The serial dilution analysis is used to assess if a significant physical or chemical interference exists due to sample matrix. Analytes exhibiting concentrations greater than 50 times the MDL in the undiluted sample are evaluated to determine if matrix interference exists. These analytes are required to have less than a 10% difference (%D) between sample results from the undiluted (parent) sample and results associated with the same sample analyzed with a five-fold dilution.

Sample locations SB-13 (12-13), SB-05 (10.9-11.9'), and SB-03 (10-10.9) were used in the serial dilution analyses. All serial dilutions were within the control limits, with the exception of the analytes presented in the following table. The sample locations associated with the deviant %D are also presented in the following table.

Sample Location	Analyte	Serial Dilution (%D)
SB-13 (12-13)	Aluminum	29 %
	Barium	31 %
	Chromium	31 %
	Cobalt	37 %
	Copper	27 %
	Iron	33 %
	Magnesium	32 %
	Manganese	35 %
	Nickel	36 %
	Potassium	30 %
	Vanadium	30 %
	Zinc	32 %

The criteria used to evaluate the serial dilution are presented in the following table. In the case of a serial dilution deviation, the sample results are qualified as documented in the table below. The qualifications are applied to all sample results associated with this analytical batch.

Control Limit	Sample Result	Qualification
> UL	Non-detect	UJ
	Detect	J

8. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR METALS

METALS: SW-846 6010C and 7471B	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Inductively Coupled Plasma – Atomic Emission Spectrometry (ICP) Atomic Absorption – Manual Cold Vapor (CV)					
Tier II Validation					
Holding Times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Instrument Blanks		X	X		
B. Method Blanks		X	X		
C. Equipment/Field Blanks					X
Laboratory Control Sample (LCS)		X		X	
Matrix Spike (MS) Accuracy (%R)		X	X		
Matrix Spike Duplicate (MSD) %R					X
MS/MSD Precision (RPD)					X
Field/Laboratory Duplicate Sample RPD		X	X		
ICP Serial Dilution		X	X		
Dilution Factor		X		X	
Moisture Content		X		X	
Tier III Validation					
Initial Calibration Verification		X		X	
Continuing Calibration Verification		X		X	
RL Standard		X		X	
ICP Interference Check		X		X	
Quantitation transcriptions/calculations		X		X	
Reporting limits adjusted to reflect sample dilutions		X		X	

%R – Percent recovery
RPD – Relative percent difference

GENERAL CHEMISTRY ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
Alkalinity by SM 2320B	Water Soil	14 days from collection to analysis	Cool to 4±2 °C
Ammonia-N by SM 4500-NH3-H	Water	28 days from collection to analysis	Cool to 4±2 °C; pH of < 2
	Soil	28 days from collection to analysis	Cool to 4±2 °C;
Cyanide by SW-846 9012, 9016	Water	14 days from collection to analysis	Cool to 4±2 °C; pH of > 12.
	Soil	14 days from collection to analysis	Cool to 4±2 °C
Corrosivity by SW-846 9045	Soil	7 days from collection to analysis	Cool to 4°C+2°C
pH by SW-846 9045	Soil	Immediately upon sample receipt	Cool to 4±2 °C
Total Phosphorus by SM 4500-P-E	Water	28 days from collection to analysis	Cool to 4±2 °C; pH of < 2
	Soil	28 days from collection to analysis	Cool to 4±2 °C;
Reactive Sulfide by SW-846 9034	Soil	7 days from collection to analysis	Cool to 4°C+2°C
Chloride, Fluoride, Sulfate by SW-846 9056	Soil	28 days from collection to analysis	Cool to 4±2 °C
Nitrate-N by SW-846 9056	Water	28 days from collection to analysis	Cool to 4±2 °C; pH of < 2
	Soil	28 days from collection to analysis	Cool to 4±2 °C;
Nitrite-N by SW-846 9056	Water Soil	48 hours from collection to analysis	Cool to 4±2 °C

The analyses that exceeded the holding time are presented in the following table.

Sample Locations	Analyte	Analysis Completed	HT Criteria
SB-04 (10.2-11.4) SB-04 (17.2-18.2) SB-03 (10-10.9) DUP-03-06212012	Corrosivity	> 14 Days	7 Days
	pH	> 14 Days	ASAP
SB-13 (8.2-9) SB-13 (12-13) SB-20 (8.5-9.5)	Ammonia	31 Days	28 Days
SB-13 (8.2-9) SB-13 (12-13) SB-20 (8.5-9.5)	Sulfide	42 Days	7 Days

Sample Locations	Analyte	Analysis Completed	HT Criteria
SB-05 (10.9-11.9')	Sulfide	38 Days	7 Days
SB-16 (1-1.3') SB-09 (4-5') SB-13 (8.2-9) SB-13 (12-13) SB-14 (6.5-7.5) SB-14 (17-18) SB-20 (8.5-9.5) SB-21 (6-7) DUP-02-06162012 SB-06 (12.2-13.2) SB-07 (10.5-12.5) SB-07 (16.4-17.4) SB-10 (4.2-5) SB-05 (10.9-11.9')	Corrosivity	> 14 Days	7 Days
	pH	> 14 Days	ASAP
SB-13 (8.2-9) SB-13 (12-13) SB-20 (8.5-9.5) SB-05 (10.9-11.9') SB-03 (10-10.9) SB-03 (10.9-11.7) DUP-03-06212012	Nitrate Nitrite	48 Hours	> 96 Hours

Sample results were qualified as specified in the table below. All other holding times were met.

Criteria	Qualification	
	Detected Analytes	Non-detect Analytes
Analysis completed < 2x holding time	J	UJ
Analysis completed > 2x holding time	J	R

Note: Due to the ready conversion of nitrite into nitrate, nitrate results for samples analyzed greater than 48 hours after collection should be considered as nitrate+nitrite. All nitrate (and nitrite) results were non-detects. Therefore, no nitrate or nitrite results required qualification.

2. Blank Contamination

Quality assurance (QA) blanks (i.e. laboratory method blanks and equipment rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected analyte in an associated blank is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were detected in the associated QA blanks; however, the associated sample results were non-detect. Therefore, no qualification of the sample results was required.

3. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

3.1 Initial Calibration

The initial calibration must exhibit a correlation coefficient greater than 0.995. A technical review of the data applies limits to all analytes with no exceptions.

3.2 Continuing Calibration

All target analytes associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (15%).

All analytes associated with the initial and continuing calibrations were within the specified control limits. The correct frequency and type of standards were analyzed.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) / Laboratory Duplicate Analyses

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

4.1 MS/MSD Analysis

All analytes must exhibit recoveries within the established acceptance limits of 75% to 125%. When a MSD analysis is performed, the relative percent difference (RPD) between the MS/MSD results must be within the established acceptance limits of 20% for water matrices and 35% for soil matrices.

Note: The MS/MSD control limits do not apply for MS/MSD analyses performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. Sample results associated with MS/MSD exceedances where the parent samples are not site-specific are not qualified.

All analytes associated with MS/MSD recoveries were within the control limits with the exception of the following analyte present in the table below.

Sample Location	Analyte	MS Recovery	MSD Recovery
SB-13 (12-13)	Sulfide	48 %	50 %
SB-03 (10-10.9)	Nitrite	19 %	---
SB-05 (10.9-11.9')	Fluoride	52 %	52 %

The criteria used to evaluate MS/MSD recoveries are presented in the following table. In the case of MS/MSD deviations, the sample results are qualified. The qualifications are applied to all sample results associated with this analytical batch.

Control limit	Sample Result	Qualification
MS/MSD percent recovery 30% to 74%	Non-detect	UJ
	Detect	J
MS/MSD percent recovery < 30%	Non-detect	R
	Detect	J
MS/MSD percent recovery > 125%	Non-detect	No Action
	Detect	J

4.2 Laboratory Duplicate Sample Analysis

The laboratory duplicate sample relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to five times the reporting limit (RL). A control limit of 20% for water matrices and 35% for soil matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the RL, a control limit of one times the RL is applied for water matrices and two times the RL for soil matrices.

MS/MSD analysis was performed in lieu of the laboratory duplicate analysis; the results are acceptable.

5. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS/LCSD analysis must exhibit recoveries between the control limits of 80% and 120%. The relative percent difference (RPD) between the LCS and LCSD results must be no greater than the established acceptance limit of 20%.

All analytes associated with the LCS/LCSD analyses exhibited recoveries and RPDs within the control limits.

6. Field Duplicate Sample Analysis

The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. A control limit of 50% for water matrices and 100% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the reporting limit (RL), a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results for the field duplicate samples are summarized in the following table.

Sample ID / Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
SB-14 (6.5-7.5) / DUP-02-06162012	Corrosivity	5.61	4.87	14.1 %
	pH	5.61	4.87	14.1 %
	Total Cyanide	2720	602	127.5 %
	Free Cyanide	32.2	87.9	92.8 %

Sample ID / Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
SB-03 (10-10.9) / DUP-03-06212012	Sulfate	8400	6470	26.0 %
	Corrosivity	4.96	2.43	68.5 %
	pH	4.96	2.43	68.5 %
	Phosphorus as P	116	274	81.0 %
	Phosphorus as PO_4	354	840	81.4 %
	Total Cyanide	2080	149	173.3 %
	Free Cyanide	35.8	11.4	103.4 %

The total cyanide results for field duplicate samples SB-14 (6.5-7.5) and DUP-02-06162012 exhibited a RPD greater than the control limit. The total cyanide results for SB-14 (6.5-7.5) and DUP-02-06162012 were qualified as estimated.

The total and free cyanide results for field duplicate samples SB-03 (10-10.9) and DUP-03-0621201 exhibited RPDs greater than the control limit. The total and free cyanide results for SB-03 (10-10.9) and DUP-03-0621201 were qualified as estimated.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR GENERAL CHEMISTRY

General Chemistry: EPA 9012A, 9016, 9034, 9056, and 9045C, and SM 2320B, 4500-NH3-H, and 4500-P-E	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Miscellaneous Instrumentation					
Tier II Validation					
Holding times		X	X		
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks					X
Laboratory Control Sample (LCS) Accuracy (%R)		X		X	
Laboratory Control Sample Duplicate (LCSD) %R		X		X	
LCS/LCSD Precision (RPD)		X		X	
Matrix Spike (MS) %R		X	X		
Matrix Spike Duplicate (MSD) %R		X	X		
MS/MSD RPD		X		X	
Field/Laboratory Duplicate Sample RPD		X	X		
Dilution Factor		X		X	
Moisture Content		X		X	
Tier III Validation					
Initial calibration %RSD or correlation coefficient		X		X	
Continuing calibration %R		X		X	
Raw Data		X		X	
Quantitation transcriptions/calculations		X		X	
Reporting limits adjusted for sample dilutions		X		X	

%RSD – relative standard deviation
%R – percent recovery
RPD – relative percent difference
%D – difference

SAMPLE COMPLIANCE REPORT

Sample Delivery Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	Compliancy[1]						Noncompliance
					VOC	SVOC	PCB	DRO	MET	MISC	
200-11371	6/18/2012	SW846	TB-06182012	Water	No	---	---	---	---	---	VOC: Calibration exceedance; LCS %R
	6/18/2012	SW846	SB-16 (1-1.3')	Soil	No	No	Yes	---	No	No	VOC: Calibration exceedance SVOC: Surrogate %R; Calibration exceedance Metals: Blank contamination; Serial dilution %D; MS %R Misc: pH & corrosivity hold time exceedance
	6/18/2012	SW846	SB-09 (4-5')	Soil	No	No	Yes	---	No	No	VOC: Calibration exceedance SVOC: Surrogate %R Metals: Blank contamination; Serial dilution %D; MS %R Misc: pH & corrosivity hold time exceedance
	6/16/2012	SW846	SB-13 (8.2-9)	Soil	No	Yes	Yes	---	No	No	VOC: Calibration exceedance Metals: Blank contamination; Serial dilution %D; MS %R Misc: Ammonia, Sulfide, pH, & corrosivity hold time exceedance; Sulfide MS/MSD %R
	6/16/2012	SW846	SB-13 (12-13)	Soil	No	No	Yes	---	No	No	VOC: Blank contamination; Calibration exceedance; MS/MSD %R SVOC: MS/MSD %R Metals: Blank contamination; Serial dilution %D; MS %R Misc: Ammonia, Sulfide, pH, & corrosivity hold time exceedance; Sulfide MS/MSD %R
	6/16/2012	SW846	SB-14 (6.5-7.5)	Soil	No	No	Yes	---	No	No	VOC: Calibration exceedance SVOC: Surrogate %R; Calibration exceedance; Field duplicate RPD Metals: Blank contamination; Serial dilution %D; MS %R Misc: pH & corrosivity hold time exceedance; Cyanide field duplicate RPD

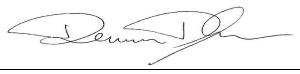
Sample Delivery Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	Compliancy[1]						Noncompliance
					VOC	SVOC	PCB	DRO	MET	MISC	
200-11371	6/16/2012	SW846	SB-14 (17-18)	Soil	No	Yes	Yes	---	No	No	VOC: Blank contamination; Calibration exceedance Metals: Blank contamination; Serial dilution %D; MS %R Misc: pH & corrosivity hold time exceedance
	6/16/2012	SW846	SB-20 (8.5-9.5)	Soil	No	Yes	Yes	---	No	No	VOC: Blank contamination; Calibration exceedance; Internal standard area; Surrogate %R Metals: Blank contamination; Serial dilution %D; MS %R Misc: Ammonia, Sulfide, pH, & corrosivity hold time exceedance; Sulfide MS/MSD %R
	6/16/2012	SW846	SB-21 (6-7)	Soil	No	Yes	Yes	---	No	No	VOC: Blank contamination; Calibration exceedance; Internal standard area; Surrogate %R Metals: Blank contamination; Serial dilution %D; MS %R Misc: pH & corrosivity hold time exceedance
	6/16/2012	SW846	TB-06162012	Water	No	---	---	---	---	---	VOC: Calibration exceedance
	6/16/2012	SW846	DUP-02-06162012	Soil	No	No	Yes	---	No	No	VOC: Calibration exceedance SVOC: Calibration exceedance; Field duplicate RPD Metals: Blank contamination; Serial dilution %D; MS %R Misc: pH & corrosivity hold time exceedance; Cyanide field duplicate RPD
	6/19/2012	SW846	SB-06 (12.2-13.2)	Soil	No	No	Yes	---	No	No	VOC: Blank contamination; Calibration exceedance; Internal standard area; Surrogate %R SVOC: Calibration exceedance Metals: Blank contamination; Serial dilution %D; MS %R Misc: pH & corrosivity hold time exceedance

Sample Delivery Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	Compliancy[1]						Noncompliance
					VOC	SVOC	PCB	DRO	MET	MISC	
200-11371	6/19/2012	SW846	SB-07 (10.5-12.5)	Soil	No	Yes	Yes	---	No	No	VOC: Calibration exceedance Metals: Blank contamination; Serial dilution %D; MS %R Misc: pH & corrosivity hold time exceedance
	6/19/2012	SW846	SB-07 (16.4-17.4)	Soil	No	No	Yes	---	No	No	VOC: Blank contamination; Calibration exceedance; Internal standard area; Surrogate %R SVOC: Calibration exceedance Metals: Blank contamination; Serial dilution %D; MS %R Misc: pH & corrosivity hold time exceedance
	6/19/2012	SW846	SB-10 (4.2-5)	Soil	No	Yes	Yes	---	No	No	VOC: Blank contamination; Calibration exceedance; Internal standard area; Surrogate %R Metals: Blank contamination; Serial dilution %D; MS %R Misc: pH & corrosivity hold time exceedance
	6/19/2012	SW846	TB-06192012	Water	No	---	---	---	---	---	VOC: Calibration exceedance; LCS %R
	6/20/2012	SW846	SB-05 (10.9-11.9')	Soil	No	No	Yes	No	No	No	VOC: Blank contamination; Calibration exceedance SVOC: Surrogate %R DRO: Blank contamination Metals: MS %R Misc: Sulfide, pH, & corrosivity hold time exceedance; Sulfide & Fluoride MS/MSD %R
	6/20/2012	SW846	TB-06202012	Water	No	---	---	---	---	---	VOC: Calibration exceedance; LCS %R
	6/21/2012	SW846	SB-04 (10.2-11.4)	Soil	No	Yes	Yes	---	No	No	VOC: Calibration exceedance Metals: MS %R Misc: pH & corrosivity hold time exceedance
	6/21/2012	SW846	SB-04 (17.2-18.2)	Soil	No	Yes	Yes	---	No	No	VOC: Blank contamination; Calibration exceedance Metals: MS %R Misc: pH & corrosivity hold time exceedance

Sample Delivery Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	Compliancy[1]						Noncompliance
					VOC	SVOC	PCB	DRO	MET	MISC	
200-11371	6/21/2012	SW846	SB-03 (10-10.9)	Soil	No	Yes	Yes	No	No	No	VOC: Calibration exceedance DRO: Surrogate %R Metals: MS %R; Field duplicate RPD Misc: pH & corrosivity hold time exceedance; Cyanide field duplicate RPD
	6/21/2012	SW846	SB-03 (10.9-11.7)	Soil	No	Yes	Yes	Yes	No	No	VOC: Blank contamination; Calibration exceedance; Internal standard area; Surrogate %R Metals: MS %R; Field duplicate RPD DRO: Surrogate %R Misc: pH & corrosivity hold time exceedance
	6/21/2012	SW846	TB-06212012	Water	No	---	---	---	---	---	VOC: Calibration exceedance; LCS %R
	6/21/2012	SW846	DUP-03-06212012	Soil	No	Yes	No	No	No	No	VOC: Calibration exceedance PCB: Calibration exceedance DRO: Surrogate %R Metals: MS %R; Field duplicate RPD Misc: pH & corrosivity hold time exceedance; Cyanide field duplicate RPD

1 Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant or which have added qualifiers are listed as "no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable

Validation Performed By: Dennis Dyke

Signature: 

Date: August 31, 2012

Peer Review: Dennis Capria

Date: September 11, 2012

CHAIN OF CUSTODY /
CORRECTED SAMPLE ANALYSIS DATA SHEETS

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice) Meredith Hayes	Samplers Name (Printed) Matt Bell	Site/Project Identification B004302 7.8 3.5
Company ARCADIS	P. O. #	State (Location of site): NJ: ☐ NY: ☒ Other:
Address 655 3rd Ave	Analysis Turnaround Time: Standard ☒	Regulatory Program: DEC
City NYC State NY	Rush Chrages Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	
Phone 212-682-9291 Fax		

Sample Identification	Date	Time	Matrix	No. of Cont.	TAL VOC	TAL SVOC	PCB	TAL Metals	Cyanide	pH						LAB USE ONLY Project No: / Job No: / Sample Numbers
TB-06182012	6/18/12	—	W	2	X											
SB-16 (1-1.3')	6/18/12	1400	So	3	X	X	X	X	X	X						
SB-09 (4-5)	6/18/12	1245	So	3	X	X	X	X	X	X						

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH

Soil:	1	1	1	1	1	1										
Water:	1	3	2	3	1	1										

6 = Other _____, 7 = Other _____

Special Instructions: ☒ TAL Metals inclues Mercury ☒ Samples are all SDG #2 Water Metals Filtered (Yes/No)? N/A

Relinquished by	Company	Date / Time	Received by	Company
1) Joshua Oliver	ARCADIS	6/18/12 1500	1)	TA NYC
2) A. Scott	TA NYC	6/18/12 15:45	2) 6/19/12 1100	TA BUK
3)			3)	
4)			4)	

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). Massachusetts (M-NJ312), North Carolina (No. 578)

TAL - 0016 (0408)

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Madison, James W	Carrier Tracking No(s):	COC No: 200-8675.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jim.madison@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Analysis Requested		Job #: 200-11371-1
Address: 777 New Durham Road, ,	Due Date Requested: 7/2/2012			Preservation Codes:
City: Edison	TAT Requested (days):			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
State, Zip: NJ, 08817				
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:			Other:
Email:	WO #:			
Project Name: Krasdale, Hunts Point Bronx, NY	Project #: 20003974			
Site:	SSOW#:			

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9012A_Calc/ (MOD) Copy Analytes	9045C	9016/9016_ExtPrep	9012A/9013	8270C/3541 (MOD) Target Compound List for BNAs								Total Number of containers	Special Instructions/Note:
			Preservation Code:																	
SB-06 (12.2-13.2) (200-11382-10)	6/19/12	12:30 Eastern		Solid			X	X	X	X	X								1	
SB-07 (10.5-12.5) (200-11382-11)	6/19/12	13:30 Eastern		Solid			X	X	X	X	X								1	
SB-07 (16.4-17.4) (200-11382-12)	6/19/12	13:50 Eastern		Solid			X	X	X	X	X								1	
SB-10 (4.2-5) (200-11382-13)	6/19/12	15:15 Eastern		Solid			X	X	X	X	X								1	

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Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	6/21/12 1615	FTBR			
Relinquished by: Fedex	Date/Time: 6/22/12 1000	Company	Received by: C Hall 6/22/12	Date/Time: 1000	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.1 C #50

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: ARCADIS	Client Project Manager: Meredith Hayes	Site Contact: M. Bell	Lab Contact: Jim Madison	COC No: 014013
Address: 655 3rd Ave 12 Floor	Telephone:	Telephone:	Telephone:	____ of ____ COCs
City/State/Zip: NYC NY	Email:	Analysis Turnaround Time (in BUS days)	Analyses	For lab use only
Phone: 212-682-9291		TAT if different from below STD		Walk-in client ☐
Project Name: KRASDALE	Method of Shipment/Carrier: TA Courier	☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Lab pickup ☐ Lab sampling ☐
Project Number: B004302 7.2.8	Shipping/Tracking No:			Job/SDG No:
PO#				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite=C / Grab=G	# TCL VOC	TCL SVOC	TAL Metals	PCBs	Cyanide (Free, Total)	pH	Sample Specific Notes / Special Instructions:
SB-06 (5.9-7.2)	6/19/12	1200				X							X		N	G	X	X	X	X	X	X	3 bottles
SB-06 (12.2-13.2)		1230				X							X		N	G	X	X	X	X	X	X	3 bottles
SB-07 (10.5-12.5)		1330				X							X		N	G	X	X	X	X	X	X	3 bottles
SB-07 (16.4-17.4)		1350				X							X		N	G	X	X	X	X	X	X	3 bottles
SB-10 (4.2-5)		1515				X							X		N	G	X	X	X	X	X	X	3 bottles
SB-07 (10.5-12.5) MS/MSD		1330				X							X		N	G	X	X	X	X	X	X	3 bottles
TB-06192012	6/19/12	—		X		X				X					N	-	X						2 bottles

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:
☆ All samples are part of SDG #2
☆ TAL Metals includes Mercury

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	ARCADIS	6/19/12 1530		TA NYC	6.19.12 1530
Relinquished by: A. Scott	Company: TA NYC	Date/Time: 6/19/12 16:00	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TA Buf	Date/Time: 6/20/12 1010

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777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice): Meredith Hayes	Samplers Name (Printed): M. Bell / S. Manning	Site/Project Identification: Con Ed - Kraclek
Company: ARCADIS	P. O. #: B00430270002.08000	State (Location of site): NJ: ☐ NY: ☒ Other:
Address: 655 Third Ave	Analysis Turnaround Time: Standard ☒	Regulatory Program:
City: New York State: NY	Rush Chrages Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	LAB USE ONLY Project No:
Phone: 212-682-9271 Fax: —		Job No: 41428

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

Sample Identification	Date	Time	Matrix	No. of Cont.	VOCs	SVOCs	Metals	Total Cyanide (Cn)	O&G	PCBs	Inorganics	Anions	Sample Numbers
SB-13 (8.2-9)	6/16/2012	1000	Soil	5	X	X	X	X	X	X	X	X	1
SB-13 (12-13)	6/16/2012	1010	Soil	5	X	X	X	X	X	X	X	X	MS/MSD 2
SB-14 (6.5-7.5)	6/16/2012	1115	Soil	4	X	X	X	X	X	X			3
SB-14 (17-18)	6/16/2012	1100	Soil	4	X	X	X	X	X	X			4
SB-20 (8.5-9.5)	6/16/2012	1230	Soil	5	X	X	X	X	X	X	X	X	5
SB-21 (6-7)	6/16/2012	1400	Soil	4	X	X	X	X	X	X			6
TB-06162012	6/16/2012	—	aq	2	X								7
DUP-02-06162012	6/16/2012	—	Soil	4	X	X	X	X	X	X			9

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH — Soil:
6 = Other _____, 7 = Other _____ — Water:

7.4° on ice # SD

Special Instructions All samples on SDG-2. Metals includes Hg. Water Metals Filtered (Yes/No)? _____

31.5° no ice

Relinquished by	Company	Date / Time	Received by	Company
1)	Arcadis	6/16/12 1725	1) D Hall 6/16/12 1725	
Relinquished by 2) D Hall	Company TA	Date / Time 6/19/12 1920	Received by 2) 6/20/12 10:10	Company TASUR
Relinquished by 3)	Company	Date / Time	Received by 3)	Company
Relinquished by 4)	Company	Date / Time	Received by 4)	Company

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).
Massachusetts (M-NJ312), North Carolina (No. 578)

TAL - 0016 (0408)

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: ARCADIS	Client Project Manager: Meredith Hayes	Site Contact: M. Bell	Lab Contact: Jim Madison	COC No: 014013
Address: 655 3rd Ave 12 Floor	Telephone:	Telephone:	Telephone:	____ of ____ COCs
City/State/Zip: NYC NY	Email:	Analysis Turnaround Time (in BUS days)	Analyses	For lab use only
Phone: 212-682-9291		TAT if different from below STD ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Walk-in client ☐ Lab pickup ☐ Lab sampling ☐
Project Name: KRASDALE	Method of Shipment/Carrier: TA Courier			Job/SDG No:
Project Number: B004302 7.2.8	Shipping/Tracking No:			
PO #				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite=C/Grab=G	# TCL VOC	TCL SVOC	TAL Metals	PCBs	Cyanide (Amn, Total)	pH					Sample Specific Notes / Special Instructions:
SB-06 (5.9-7.2)	6/19/12	1200				X							X		N	G	X	X	X	X	X	X					3 bottles
SB-06 (12.2-13.2)		1230				X							X		N	G	X	X	X	X	X	X					3 bottles
SB-07 (10.5-12.5)		1330				X							X		N	G	X	X	X	X	X	X					3 bottles
SB-07 (16.4-17.4)		1350				X							X		N	G	X	X	X	X	X	X					3 bottles
SB-10 (4.2-5)		1515				X							X		N	G	X	X	X	X	X	X					3 bottles
SB-07 (10.5-12.5) MS/MSD		1330				X							X		N	G	X	X	X	X	X	X					3 bottles
TB-06192012	6/19/12	—		X		X				X					N	—	X										2 bottles

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Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:
* All samples are part of SDG #2
# TAL Metals includes Mercury

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	ARCADIS	6/19/12 1530		TA NYC	6.19.12 1530
Relinquished by: A. Scott	Company: TA NYC	Date/Time: 6/19/12 16:00	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TA/SDG	Date/Time: 6/20/12 1010

Chain of Custody Record

TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Madison, James W	Carrier Tracking No(s):	COC No: 200-8671.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jim.madison@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Analysis Requested		Job #: 200-11371-1
Address: 5102 LaRoche Avenue, ,	Due Date Requested: 7/2/2012			Preservation Codes:
City: Savannah	TAT Requested (days):			A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2SO3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - ph 4-5; Z - other (specify)
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			Other:
Email:	WO #:			
Project Name: Krasdale, Hunts Point Bronx, NY	Project #: 20003974			
Site:	SSOW#:			

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9056_48HR/DI_LEACH (MOD) Custom Sublist	9056_28D/DI_LEACH (MOD) Custom Sublist											Total Number of containers	Special Instructions/Note:
			Preservation Code:																	
SB-13 (8.2-9) (200-11382-1)	6/16/12	10:00 Eastern		Solid			X	X											1	
SB-13 (12-13) (200-11382-2)	6/16/12	10:10 Eastern		Solid			X	X											1	
SB-20 (8.5-9.5) (200-11382-5)	6/16/12	12:30 Eastern		Solid			X	X											1	

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Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company
		6/21/12 1513	TAL		6/21/12 0956	TAL
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.5°C

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: ARCADIS	Client Project Manager: Meredith Hayes	Site Contact: M. Bell	Lab Contact: Jim Madison	COC No: 014015
Address: 655 3rd Ave 12th Floor	Telephone: 631-682-0632	Telephone: 631-806-8134	Telephone:	1 of 1 COCs
City/State/Zip: NYC NY	Email:	Analysis Turnaround Time (In BUS days)	Analyses	For lab use only
Phone:		TAT if different from below STD		Walk-in client ☐
Project Name: Krasdale Fmr. MGP	Method of Shipment/Carrier: T.A. Courier	☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Lab pickup ☐ Lab sampling ☐
Project Number: B0043029.2.8	Shipping/Tracking No:			Job/SDG No:
PO #				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite C / Grab G	TCL VOC	TCL SVOC	TAL Metals	PCBs	TPH	Inorganics ✱	Cyanide (Free/Total)	pH	Sample Specific Notes / Special Instructions:
SB-05 (10.9-11.9')	6/20/12	1000				X							4		N	G	X	X	X	X	X	X	X	X	✱ Inorganics: Ammonia, Nitrate, Nitrite, Sulfate, Sulfide, chloride, phosphate, Fluride, carbonate/bicarbonate
SB-05 (10.9-11.9) MS/MSD	6/20/12	1000				X							4		N	G	X	X	X	X	X	X	X	X	
TB-06202012				X						2					N	-	X								

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Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:
TAL Meta's includes Mercury {All samples part of SDG# 23

Relinquished by:	Company: ARCADIS	Date/Time: 6/20/12 16:00	Received by:	Company: TANYC	Date/Time: 6.20.12 16:00
Relinquished by:	Company: TA NYC	Date/Time: 6/20/12 17:15	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: JT BER	Date/Time: 6/21/12 1040

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Madison, James W	Carrier Tracking No(s):	COC No: 200-8745.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jim.madison@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Analysis Requested		Job #: 200-11371-1
Address: 777 New Durham Road,	Due Date Requested: 7/5/2012			Preservation Codes:
City: Edison	TAT Requested (days):			A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2SO3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - ph 4-5 L - EDA Z - other (specify)
State, Zip: NJ, 08817				
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:			Other:
Email:	WO #:			
Project Name: Krasdale, Hunts Point Bronx, NY	Project #: 20003974			
Site:	SSOW#:			

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9012A_Calc/ (MOD) Copy Analytes	9045C	SM4500_NH3_H/SM4500NH3_B	9016/9016_ExtPrep	9034/8030B	2320B/DI_LEACH (MOD) Local Method	4500_P_E/SM4500_P_B	8270C/3541 (MOD) Target Compound List for BNAs	9012A/9012A_Prep					Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
SB-05 (10.9-11.9') (200-11398-1)	6/20/12	10:00 Eastern		Solid			X	X	X	X	X	X	X	X	X					1	

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Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	6/28/12 1724	TAL SVR	FED EX		
Relinquished by: FED EX	Date/Time:	Company	Received by:	Date/Time: 6/29/12 1030	Company Test Amy
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.: 698520, 698519	Cooler Temperature(s) °C and Other Remarks: 1.9° IR#5

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: ARCADIS	Client Project Manager: Meredith Hayes	Site Contact: M. Bell	Lab Contact: J. Madison	COC No: 014016
Address: 655 3rd Ave 12 Floor	Telephone: 631-682-0631	Telephone: 631-806-8934	Telephone:	1 of 1 COCs
City/State/Zip: NYC NY	Email:	Analysis Turnaround Time (in BUS days)	Analyses	For lab use only
Phone:		TAT if different from below STD ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		☐ Walk-in client ☐ Lab pickup ☐ Lab sampling Job/SDG No:
Project Name: Crosdale Fmr. MGP	Method of Shipment/Carrier:			
Project Number: B0043027.2.8	Shipping/Tracking No:			
PO #				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite-C / Grab-G	TCL VOC	TCL SVOC	TAL Metal	Cyanide (Free/Total)	pH	PCB	TPH	Inorganics *			Sample Specific Notes / Special Instructions:
SB-04 (10.2-11.4)	6/21/12	0900				X							X		N	G	X	X	X	X	X	X					* Includes: Ammonia, Nitrite, Nitrate, Sulfate
SB-04 (17.2-18.2)		0915				X							X		N	G	X	X	X	X	X	X					
SB-03 (10-10.9)		1025				X							X		N	G	X	X	X	X	X	X	X	X			Sulfide, Chloride, phosphate
SB-03 (10.9-11.7)		1030				X							X		N	G	X	X	X	X	X	X	X	X			Fluoride, Carbonate/Bicarbonate
TB-06212012		—		X									X		N	G	X										
DUP-03-06212012		—				X							X		N	G	X	X	X	X	X	X	X	X			

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:
* TAL Metals includes Mercury
Samples part of *SDG#3

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	ARCADIS	6/21/12 1500	[signature]	TA NYC	6-21-12 1500
[signature]	TA NYC	6/21/12 16:30			
			[signature]	TA BUR	6/22/12 1045

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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Madison, James W	Carrier Tracking No(s):	COC No: 200-8734.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jim.madison@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.				Job #: 200-11371-1

Address: 777 New Durham Road,	Due Date Requested: 7/5/2012
City: Edison	TAT Requested (days):
State, Zip: NJ, 08817	
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:
Email:	WO #:
Project Name: Krasdale, Hunts Point Bronx, NY	Project #: 20003974
Site:	SSOW#:

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9012A_Calc/ (MOD) Copy Analytes	9045C	SM4500_NH3_H/SM4500NH3_B	9016/9016_ExtPrep	9034/9030B	2320B/DI_LEACH (MOD) Local Method	4500_P_E/SM4500_P_B	8270C/3541 (MOD) Target Compound List for BNAs	9012A/9013					Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
SB-03 (10-10.9) (200-11417-3)	6/21/12	10:25 Eastern		Solid			X	X	X	X	X	X	X	X	X					1	

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Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	6/27/12 1530	TA BUF	PEDEX		
Relinquished by: PEDEX	Date/Time:	Company	Received by:	Date/Time: 6/28/12 1045	Company Test Amer
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.: 698463	Cooler Temperature(s) °C and Other Remarks: 2.8 i #2 #50

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Madison, James W	Carrier Tracking No(s):	COC No: 200-8725.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jim.madison@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.				Job #: 200-11371-1
Address: 777 New Durham Road, ,	Due Date Requested: 7/5/2012			
City: Edison	TAT Requested (days):			
State, Zip: NJ, 08817				
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:			
Email:	WO #:			
Project Name: Krasdale, Hunts Point Bronx, NY	Project #: 20003974			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9012A_Calc/ (MOD) Copy Analytes	9045C	9016/9016_ExtPrep	8270C/3541 (MOD) Target Compound List for BNAs	9012A/9012A_Prep	4500_P_E/SM4500_P_B	9034/9030B	SM4500_NH3_H/SM4500NH3_B	2320B/DI_LEACH (MOD) Local Method					Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
SB-04 (10.2-11.4) (200-11417-1)	6/21/12	09:00 Eastern		Solid			X	X	X	X	X									1	
SB-04 (17.2-18.2) (200-11417-2)	6/21/12	09:15 Eastern		Solid			X	X	X	X	X									1	
SB-03 (10.9-11.7) (200-11417-4)	6/21/12	10:30 Eastern		Solid			X	X	X	X	X	X	X	X	X					1	
DUP-03-06212012 (200-11417-6)	6/21/12	Eastern		Solid			X	X	X	X	X	X	X	X	X					1	

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Possible Hazard Identification

Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	6/26/12 1700	TA BUR	FEDEX		
Relinquished by: FEDEX	Date/Time:	Company	Received by:	Date/Time: 6/27/12 1040	Company TestAm
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No

Custody Seal No.: 698445

Cooler Temperature(s) °C and Other Remarks: 3.1c IR#50

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: TB-06182012

Lab Sample ID: 200-11371-1
Client Matrix: Water

Date Sampled: 06/18/2012 0000
Date Received: 06/19/2012 1100

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41005	Instrument ID:	L.i
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lhbad12.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/27/2012 0215			Final Weight/Volume:	5 mL
Prep Date:	06/27/2012 0215				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	1.0	U	0.090	1.0
Chloromethane	1.0	U	0.12	1.0
Vinyl chloride	1.0	U	0.090	1.0
Bromomethane	1.0	U	0.43	1.0
Chloroethane	1.0	U	0.12	1.0
Trichlorofluoromethane	1.0	U	0.092	1.0
1,1-Dichloroethene	1.0	U	0.18	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.18	1.0
Acetone	5.0	U	0.92	5.0
Carbon disulfide	1.3		0.15	1.0
Methyl acetate	1.0	U	0.23	1.0
Methylene Chloride	0.23	J	0.21	1.0
trans-1,2-Dichloroethene	1.0	U	0.17	1.0
Methyl t-butyl ether	1.0	U	0.17	1.0
1,2-Dichloroethene, Total	1.0	U	0.32	1.0
1,1-Dichloroethane	1.0	U	0.16	1.0
cis-1,2-Dichloroethene	1.0	U	0.16	1.0
2-Butanone	5.0	U	1.1	5.0
Chloroform	1.0	U	0.16	1.0
1,1,1-Trichloroethane	1.0	U	0.16	1.0
Cyclohexane	1.0	U	0.23	1.0
Carbon tetrachloride	1.0	U	0.17	1.0
Benzene	1.0	U	0.17	1.0
1,2-Dichloroethane	1.0	U	0.15	1.0
Trichloroethene	1.0	U	0.14	1.0
Methylcyclohexane	1.0	U	0.25	1.0
1,2-Dichloropropane	1.0	U	0.17	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.16	1.0
4-Methyl-2-pentanone	5.0	U	0.90	5.0
Toluene	1.0	U	0.17	1.0
trans-1,3-Dichloropropene	1.0	U	0.18	1.0
1,1,2-Trichloroethane	1.0	U	0.18	1.0
Tetrachloroethene	1.0	U	0.18	1.0
2-Hexanone	5.0	U	1.1	5.0
Dibromochloromethane	1.0	U	0.17	1.0
1,2-Dibromoethane	1.0	U	0.18	1.0
Chlorobenzene	1.0	U	0.19	1.0
Ethylbenzene	1.0	U	0.18	1.0
Xylenes, Total	1.0	U	0.17	1.0
Styrene	1.0	U	0.17	1.0
Bromoform	1.0	U	0.17	1.0
Isopropylbenzene	1.0	U	0.17	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.17	1.0
1,3-Dichlorobenzene	1.0	U	0.18	1.0
1,4-Dichlorobenzene	1.0	U	0.15	1.0

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **TB-06182012**

Lab Sample ID: 200-11371-1
Client Matrix: Water

Date Sampled: 06/18/2012 0000
Date Received: 06/19/2012 1100

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41005	Instrument ID:	L.i
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lhbad12.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/27/2012 0215			Final Weight/Volume:	5 mL
Prep Date:	06/27/2012 0215				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,2-Dichlorobenzene	1.0	U	0.15	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	0.22	1.0
1,2,4-Trichlorobenzene	1.0	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	91		80 - 115
Toluene-d8	103		80 - 115
Bromofluorobenzene	104		85 - 120
1,2-Dichlorobenzene-d4	103		80 - 115

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-16 (1-1.3')**

Lab Sample ID: 200-11371-2
Client Matrix: Solid

% Moisture: 13.7

Date Sampled: 06/18/2012 1400
Date Received: 06/19/2012 1100

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41091	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40680	Lab File ID:	lhbae17.d
Dilution:	440			Initial Weight/Volume:	5.33 g
Analysis Date:	06/27/2012 1802			Final Weight/Volume:	10 mL
Prep Date:	06/21/2012 0952				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		51000	U J	11000	51000
Chloromethane		51000	U J	13000	51000
Vinyl chloride		51000	U	10000	51000
Bromomethane		51000	U J	13000	51000
Chloroethane		51000	U	7700	51000
Trichlorofluoromethane		51000	U	6700	51000
1,1-Dichloroethene		51000	U	11000	51000
1,1,2-Trichloro-1,2,2-trichfluoroethane		51000	U	9200	51000
Acetone		260000	U	46000	260000
Carbon disulfide		51000	U	8200	51000
Methyl acetate		51000	U	11000	51000
Methylene Chloride		51000	U	14000	51000
trans-1,2-Dichloroethene		51000	U	10000	51000
Methyl t-butyl ether		51000	U	9200	51000
1,2-Dichloroethene, Total		51000	U	9200	51000
1,1-Dichloroethane		51000	U	10000	51000
cis-1,2-Dichloroethene		51000	U	9200	51000
2-Butanone		260000	U	44000	260000
Chloroform		51000	U	9800	51000
1,1,1-Trichloroethane		51000	U	10000	51000
Cyclohexane		51000	U	10000	51000
Carbon tetrachloride		51000	U	7700	51000
Benzene		40000	J	11000	51000
1,2-Dichloroethane		51000	U	8700	51000
Trichloroethene		51000	U	8700	51000
Methylcyclohexane		51000	U	9200	51000
1,2-Dichloropropane		51000	U	9800	51000
Bromodichloromethane		51000	U	9800	51000
cis-1,3-Dichloropropene		51000	U	9200	51000
4-Methyl-2-pentanone		260000	U	55000	260000
Toluene		150000		10000	51000
trans-1,3-Dichloropropene		51000	U	8700	51000
1,1,2-Trichloroethane		51000	U	9800	51000
Tetrachloroethene		51000	U	10000	51000
2-Hexanone		260000	U	40000	260000
Dibromochloromethane		51000	U	8200	51000
1,2-Dibromoethane		51000	U	9800	51000
Chlorobenzene		51000	U	10000	51000
Ethylbenzene		150000		10000	51000
Xylenes, Total		350000		11000	51000
Styrene		36000	J	8700	51000
Bromoform		51000	U	8700	51000
Isopropylbenzene		18000	J	9800	51000
1,1,2,2-Tetrachloroethane		51000	U	9200	51000
1,3-Dichlorobenzene		51000	U	9800	51000
1,4-Dichlorobenzene		51000	U	9800	51000

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-16 (1-1.3')**

Lab Sample ID: 200-11371-2
Client Matrix: Solid

% Moisture: 13.7

Date Sampled: 06/18/2012 1400
Date Received: 06/19/2012 1100

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41091	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40680	Lab File ID:	lhbae17.d
Dilution:	440			Initial Weight/Volume:	5.33 g
Analysis Date:	06/27/2012 1802			Final Weight/Volume:	10 mL
Prep Date:	06/21/2012 0952				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		51000	U	10000	51000
1,2-Dibromo-3-Chloropropane		51000	U	8700	51000
1,2,4-Trichlorobenzene		51000	U	10000	51000

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	88		65 - 155
Toluene-d8	101		80 - 115
Bromofluorobenzene	100		80 - 115
1,2-Dichlorobenzene-d4	101		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-09 (4-5')**

Lab Sample ID: 200-11371-3
Client Matrix: Solid

% Moisture: 36.9

Date Sampled: 06/18/2012 1245
Date Received: 06/19/2012 1100

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41116	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40680	Lab File ID:	lhbaf20.d
Dilution:	8.8			Initial Weight/Volume:	5.91 g
Analysis Date:	06/28/2012 1825			Final Weight/Volume:	10 mL
Prep Date:	06/21/2012 0952				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		1400	UJ	300	1400
Chloromethane		1400	UJ	370	1400
Vinyl chloride		1400	U	290	1400
Bromomethane		1400	UJ	360	1400
Chloroethane		1400	U	220	1400
Trichlorofluoromethane		1400	U	190	1400
1,1-Dichloroethene		1400	U	320	1400
1,1,2-Trichloro-1,2,2-trichfluoroethane		1400	U	260	1400
Acetone		7200	U	1300	7200
Carbon disulfide		1400	U	230	1400
Methyl acetate		1400	U	300	1400
Methylene Chloride		1400	U	390	1400
trans-1,2-Dichloroethene		1400	U	290	1400
Methyl t-butyl ether		1400	U	260	1400
1,2-Dichloroethene, Total		1400	U	260	1400
1,1-Dichloroethane		1400	U	290	1400
cis-1,2-Dichloroethene		1400	U	260	1400
2-Butanone		7200	U	1200	7200
Chloroform		1400	U	270	1400
1,1,1-Trichloroethane		1400	U	290	1400
Cyclohexane		1400	U	290	1400
Carbon tetrachloride		1400	U	220	1400
Benzene		49000		300	1400
1,2-Dichloroethane		1400	U	240	1400
Trichloroethene		1400	U	240	1400
Methylcyclohexane		1400	U	260	1400
1,2-Dichloropropane		1400	U	270	1400
Bromodichloromethane		1400	U	270	1400
cis-1,3-Dichloropropene		1400	U	260	1400
4-Methyl-2-pentanone		7200	U	1600	7200
Toluene		120000		290	1400
trans-1,3-Dichloropropene		1400	U	240	1400
1,1,2-Trichloroethane		1400	U	270	1400
Tetrachloroethene		1400	U	290	1400
2-Hexanone		7200	U	1100	7200
Dibromochloromethane		1400	U	230	1400
1,2-Dibromoethane		1400	U	270	1400
Chlorobenzene		1400	U	290	1400
Ethylbenzene		110000		290	1400
Xylenes, Total		190000		300	1400
Styrene		15000		240	1400
Bromoform		1400	U	240	1400
Isopropylbenzene		6500		270	1400
1,1,2,2-Tetrachloroethane		1400	U	260	1400
1,3-Dichlorobenzene		1400	U	270	1400
1,4-Dichlorobenzene		1400	U	270	1400

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-09 (4-5')**

Lab Sample ID: 200-11371-3
Client Matrix: Solid

% Moisture: 36.9

Date Sampled: 06/18/2012 1245
Date Received: 06/19/2012 1100

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41116	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40680	Lab File ID:	lhbaf20.d
Dilution:	8.8			Initial Weight/Volume:	5.91 g
Analysis Date:	06/28/2012 1825			Final Weight/Volume:	10 mL
Prep Date:	06/21/2012 0952				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		1400	U	290	1400
1,2-Dibromo-3-Chloropropane		1400	U	240	1400
1,2,4-Trichlorobenzene		1400	U	290	1400

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	103		65 - 155
Toluene-d8	95		80 - 115
Bromofluorobenzene	89		80 - 115
1,2-Dichlorobenzene-d4	103		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-13 (8.2-9)**

Lab Sample ID: 200-11382-1
Client Matrix: Solid

% Moisture: 16.4

Date Sampled: 06/16/2012 1000
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41091	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40644	Lab File ID:	lhbae19.d
Dilution:	8.8			Initial Weight/Volume:	5.42 g
Analysis Date:	06/27/2012 1906			Final Weight/Volume:	10 mL
Prep Date:	06/20/2012 1425				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		1100	UJ	220	1100
Chloromethane		1100	UJ	280	1100
Vinyl chloride		1100	U	210	1100
Bromomethane		1100	UJ	260	1100
Chloroethane		1100	U	160	1100
Trichlorofluoromethane		1100	U	140	1100
1,1-Dichloroethene		1100	U	230	1100
1,1,2-Trichloro-1,2,2-trichfluoroethane		1100	U	190	1100
Acetone		5300	U	940	5300
Carbon disulfide		1100	U	170	1100
Methyl acetate		1100	U	220	1100
Methylene Chloride		1100	U	290	1100
trans-1,2-Dichloroethene		1100	U	210	1100
Methyl t-butyl ether		1100	U	190	1100
1,2-Dichloroethene, Total		1100	U	190	1100
1,1-Dichloroethane		1100	U	210	1100
cis-1,2-Dichloroethene		1100	U	190	1100
2-Butanone		5300	U	910	5300
Chloroform		1100	U	200	1100
1,1,1-Trichloroethane		1100	U	210	1100
Cyclohexane		1100	U	210	1100
Carbon tetrachloride		1100	U	160	1100
Benzene		1800		220	1100
1,2-Dichloroethane		1100	U	180	1100
Trichloroethene		1100	U	180	1100
Methylcyclohexane		1100	U	190	1100
1,2-Dichloropropane		1100	U	200	1100
Bromodichloromethane		1100	U	200	1100
cis-1,3-Dichloropropene		1100	U	190	1100
4-Methyl-2-pentanone		5300	U	1100	5300
Toluene		1100	U	210	1100
trans-1,3-Dichloropropene		1100	U	180	1100
1,1,2-Trichloroethane		1100	U	200	1100
Tetrachloroethene		1100	U	210	1100
2-Hexanone		5300	U	810	5300
Dibromochloromethane		1100	U	170	1100
1,2-Dibromoethane		1100	U	200	1100
Chlorobenzene		1100	U	210	1100
Ethylbenzene		2400		210	1100
Xylenes, Total		1400		220	1100
Styrene		1100	U	180	1100
Bromoform		1100	U	180	1100
Isopropylbenzene		1100	U	200	1100
1,1,2,2-Tetrachloroethane		1100	U	190	1100
1,3-Dichlorobenzene		1100	U	200	1100
1,4-Dichlorobenzene		1100	U	200	1100

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-13 (8.2-9)**

Lab Sample ID: 200-11382-1
Client Matrix: Solid

% Moisture: 16.4

Date Sampled: 06/16/2012 1000
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41091	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40644	Lab File ID:	lhbae19.d
Dilution:	8.8			Initial Weight/Volume:	5.42 g
Analysis Date:	06/27/2012 1906			Final Weight/Volume:	10 mL
Prep Date:	06/20/2012 1425				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		1100	U	210	1100
1,2-Dibromo-3-Chloropropane		1100	U	180	1100
1,2,4-Trichlorobenzene		1100	U	210	1100

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	88		65 - 155
Toluene-d8	101		80 - 115
Bromofluorobenzene	98		80 - 115
1,2-Dichlorobenzene-d4	100		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-13 (12-13)**

Lab Sample ID: 200-11382-2
Client Matrix: Solid % Moisture: 12.2

Date Sampled: 06/16/2012 1010
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41070	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40646	Lab File ID:	ngan10.d
Dilution:	1.0			Initial Weight/Volume:	5.57 g
Analysis Date:	06/26/2012 1617			Final Weight/Volume:	5 mL
Prep Date:	06/20/2012 1430				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		5.1	U J	0.24	5.1
Chloromethane		5.1	U	0.27	5.1
Vinyl chloride		5.1	U	0.31	5.1
Bromomethane		5.1	U J	0.76	5.1
Chloroethane		5.1	U J	0.39	5.1
Trichlorofluoromethane		5.1	U	0.34	5.1
1,1-Dichloroethene		5.1	U	0.38	5.1
1,1,2-Trichloro-1,2,2-trichfluoroethane		5.1	U	0.34	5.1
Acetone		34	J	1.0	5.1
Carbon disulfide		5.1 ~~2.0~~	~~J~~ UB	0.32	5.1
Methyl acetate		5.1	U	0.64	5.1
Methylene Chloride		5.1 ~~3.8~~	~~J~~ UB	0.56	5.1
trans-1,2-Dichloroethene		5.1	U	0.38	5.1
Methyl t-butyl ether		5.1	U J	0.31	5.1
1,2-Dichloroethene, Total		5.1	U	0.79	5.1
1,1-Dichloroethane		5.1	U J	0.42	5.1
cis-1,2-Dichloroethene		5.1	U	0.43	5.1
2-Butanone		5.1	U J	1.5	5.1
Chloroform		5.1 ~~0.64~~	~~J B~~ UB	0.33	5.1
1,1,1-Trichloroethane		5.1	U J	0.72	5.1
Cyclohexane		5.1	U	0.87	5.1
Carbon tetrachloride		5.1	U J	0.78	5.1
Benzene		5.1	U J	0.73	5.1
1,2-Dichloroethane		5.1	U	0.63	5.1
Trichloroethene		5.1	U J	0.49	5.1
Methylcyclohexane		5.1	U	0.17	5.1
1,2-Dichloropropane		5.1	U J	0.30	5.1
Bromodichloromethane		5.1	U J	0.21	5.1
cis-1,3-Dichloropropene		5.1	U J	0.36	5.1
4-Methyl-2-pentanone		5.1	U	0.61	5.1
Toluene		5.1	U	0.10	5.1
trans-1,3-Dichloropropene		5.1	U	0.13	5.1
1,1,2-Trichloroethane		5.1	U	0.35	5.1
Tetrachloroethene		5.1	U	0.11	5.1
2-Hexanone		5.1	U	0.50	5.1
Dibromochloromethane		5.1	U	0.11	5.1
1,2-Dibromoethane		5.1	U	0.15	5.1
Chlorobenzene		5.1	U	0.078	5.1
Ethylbenzene		5.1	U	0.057	5.1
Xylenes, Total		5.1	U	0.75	5.1
Styrene		5.1	U	0.10	5.1
Bromoform		5.1	U	0.20	5.1
Isopropylbenzene		5.1	U	0.079	5.1
1,1,2,2-Tetrachloroethane		5.1	U	0.27	5.1
1,3-Dichlorobenzene		5.1	U	0.15	5.1
1,4-Dichlorobenzene		5.1	U	0.24	5.1

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-13 (12-13)**

Lab Sample ID: 200-11382-2
Client Matrix: Solid

% Moisture: 12.2

Date Sampled: 06/16/2012 1010
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41070	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40646	Lab File ID:	ngan10.d
Dilution:	1.0			Initial Weight/Volume:	5.57 g
Analysis Date:	06/26/2012 1617			Final Weight/Volume:	5 mL
Prep Date:	06/20/2012 1430				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		5.1	U	0.22	5.1
1,2-Dibromo-3-Chloropropane		5.1	U	0.93	5.1
1,2,4-Trichlorobenzene		5.1 ~~0.57~~	~~J B~~ UB	0.20	5.1

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	82		65 - 155
Toluene-d8	92		80 - 115
Bromofluorobenzene	95		80 - 115
1,2-Dichlorobenzene-d4	97		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-14 (6.5-7.5)**

Lab Sample ID: 200-11382-3
Client Matrix: Solid % Moisture: 58.6

Date Sampled: 06/16/2012 1045
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41091	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40644	Lab File ID:	lhbae20.d
Dilution:	8.8			Initial Weight/Volume:	6.69 g
Analysis Date:	06/27/2012 1938			Final Weight/Volume:	10 mL
Prep Date:	06/20/2012 1425				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		2200	UJ	460	2200
Chloromethane		2200	UJ	580	2200
Vinyl chloride		2200	U	440	2200
Bromomethane		2200	UJ	550	2200
Chloroethane		2200	U	330	2200
Trichlorofluoromethane		2200	U	290	2200
1,1-Dichloroethene		2200	U	490	2200
1,1,2-Trichloro-1,2,2-trichfluoroethane		2200	U	400	2200
Acetone		4100	J	2000	11000
Carbon disulfide		78000		350	2200
Methyl acetate		2200	U	460	2200
Methylene Chloride		2200	U	600	2200
trans-1,2-Dichloroethene		2200	U	440	2200
Methyl t-butyl ether		2200	U	400	2200
1,2-Dichloroethene, Total		2200	U	400	2200
1,1-Dichloroethane		2200	U	440	2200
cis-1,2-Dichloroethene		2200	U	400	2200
2-Butanone		11000	U	1900	11000
Chloroform		2200	U	420	2200
1,1,1-Trichloroethane		2200	U	440	2200
Cyclohexane		2200	U	440	2200
Carbon tetrachloride		2200	U	330	2200
Benzene		830	J	460	2200
1,2-Dichloroethane		2200	U	380	2200
Trichloroethene		2200	U	380	2200
Methylcyclohexane		2200	U	400	2200
1,2-Dichloropropane		2200	U	420	2200
Bromodichloromethane		2200	U	420	2200
cis-1,3-Dichloropropene		2200	U	400	2200
4-Methyl-2-pentanone		11000	U	2400	11000
Toluene		640	J	440	2200
trans-1,3-Dichloropropene		2200	U	380	2200
1,1,2-Trichloroethane		2200	U	420	2200
Tetrachloroethene		2200	U	440	2200
2-Hexanone		11000	U	1700	11000
Dibromochloromethane		2200	U	350	2200
1,2-Dibromoethane		2200	U	420	2200
Chlorobenzene		2200	U	440	2200
Ethylbenzene		2200	U	440	2200
Xylenes, Total		1800	J	460	2200
Styrene		2200	U	380	2200
Bromoform		2200	U	380	2200
Isopropylbenzene		2200	U	420	2200
1,1,2,2-Tetrachloroethane		2200	U	400	2200
1,3-Dichlorobenzene		2200	U	420	2200
1,4-Dichlorobenzene		2200	U	420	2200

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-14 (6.5-7.5)**

Lab Sample ID: 200-11382-3
Client Matrix: Solid

% Moisture: 58.6

Date Sampled: 06/16/2012 1045
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41091	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40644	Lab File ID:	lhbae20.d
Dilution:	8.8			Initial Weight/Volume:	6.69 g
Analysis Date:	06/27/2012 1938			Final Weight/Volume:	10 mL
Prep Date:	06/20/2012 1425				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		2200	U	440	2200
1,2-Dibromo-3-Chloropropane		2200	U	380	2200
1,2,4-Trichlorobenzene		2200	U	440	2200

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	88		65 - 155
Toluene-d8	101		80 - 115
Bromofluorobenzene	100		80 - 115
1,2-Dichlorobenzene-d4	101		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-14 (17-18)**

Lab Sample ID: 200-11382-4
Client Matrix: Solid

% Moisture: 12.6

Date Sampled: 06/16/2012 1100
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41070	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40646	Lab File ID:	ngan13.d
Dilution:	1.0			Initial Weight/Volume:	6.1 g
Analysis Date:	06/26/2012 1749			Final Weight/Volume:	5 mL
Prep Date:	06/20/2012 1430				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		4.7	UJ	0.22	4.7
Chloromethane		4.7	U	0.24	4.7
Vinyl chloride		4.7	U	0.28	4.7
Bromomethane		4.7	UJ	0.69	4.7
Chloroethane		4.7	UJ	0.36	4.7
Trichlorofluoromethane		4.7	U	0.31	4.7
1,1-Dichloroethene		4.7	U	0.35	4.7
1,1,2-Trichloro-1,2,2-trichfluoroethane		4.7	U	0.31	4.7
Acetone		26	J	0.94	4.7
Carbon disulfide		4.7 ~~3.2~~	~~J~~ UB	0.29	4.7
Methyl acetate		4.7	U	0.59	4.7
Methylene Chloride		4.7 ~~3.0~~	~~J~~ UB	0.52	4.7
trans-1,2-Dichloroethene		4.7	U	0.35	4.7
Methyl t-butyl ether		4.7	U	0.28	4.7
1,2-Dichloroethene, Total		4.7	U	0.72	4.7
1,1-Dichloroethane		4.7	U	0.38	4.7
cis-1,2-Dichloroethene		4.7	U	0.39	4.7
2-Butanone		4.2	J	1.4	4.7
Chloroform		4.7 ~~0.65~~	~~JB~~ UB	0.30	4.7
1,1,1-Trichloroethane		4.7	U	0.66	4.7
Cyclohexane		4.7	U	0.80	4.7
Carbon tetrachloride		4.7	U	0.71	4.7
Benzene		1.6	J	0.67	4.7
1,2-Dichloroethane		4.7	U	0.58	4.7
Trichloroethene		4.7	U	0.45	4.7
Methylcyclohexane		4.7	U	0.16	4.7
1,2-Dichloropropane		4.7	U	0.27	4.7
Bromodichloromethane		4.7	U	0.20	4.7
cis-1,3-Dichloropropene		4.7	U	0.33	4.7
4-Methyl-2-pentanone		4.7	U	0.56	4.7
Toluene		4.7 ~~0.12~~	~~JB~~ UB	0.094	4.7
trans-1,3-Dichloropropene		4.7	U	0.12	4.7
1,1,2-Trichloroethane		4.7	U	0.32	4.7
Tetrachloroethene		4.7	U	0.10	4.7
2-Hexanone		4.7	U	0.46	4.7
Dibromochloromethane		4.7	U	0.10	4.7
1,2-Dibromoethane		4.7	U	0.14	4.7
Chlorobenzene		4.7	U	0.071	4.7
Ethylbenzene		4.7	U	0.053	4.7
Xylenes, Total		4.7	U	0.68	4.7
Styrene		4.7	U	0.094	4.7
Bromoform		4.7	U	0.19	4.7
Isopropylbenzene		4.7	U	0.072	4.7
1,1,2,2-Tetrachloroethane		4.7	U	0.24	4.7
1,3-Dichlorobenzene		4.7	U	0.14	4.7
1,4-Dichlorobenzene		4.7	U	0.22	4.7

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-14 (17-18)**

Lab Sample ID: 200-11382-4
Client Matrix: Solid

% Moisture: 12.6

Date Sampled: 06/16/2012 1100
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41070	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40646	Lab File ID:	ngan13.d
Dilution:	1.0			Initial Weight/Volume:	6.1 g
Analysis Date:	06/26/2012 1749			Final Weight/Volume:	5 mL
Prep Date:	06/20/2012 1430				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		4.7	U	0.21	4.7
1,2-Dibromo-3-Chloropropane		0.90	J	0.85	4.7
1,2,4-Trichlorobenzene		4.7 ~~0.98~~	~~JB~~ UB	0.19	4.7

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	80		65 - 155
Toluene-d8	94		80 - 115
Bromofluorobenzene	104		80 - 115
1,2-Dichlorobenzene-d4	98		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-20 (8.5-9.5)**

Lab Sample ID: 200-11382-5
Client Matrix: Solid

% Moisture: 12.0

Date Sampled: 06/16/2012 1230
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41070	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40646	Lab File ID:	ngan14.d
Dilution:	1.0			Initial Weight/Volume:	5.56 g
Analysis Date:	06/26/2012 1819			Final Weight/Volume:	5 mL
Prep Date:	06/20/2012 1430				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		5.1	U J	0.23	5.1
Chloromethane		5.1	U	0.27	5.1
Vinyl chloride		5.1	U	0.31	5.1
Bromomethane		5.1	U J	0.76	5.1
Chloroethane		5.1	U J	0.39	5.1
Trichlorofluoromethane		5.1	U	0.34	5.1
1,1-Dichloroethene		5.1	U	0.38	5.1
1,1,2-Trichloro-1,2,2-trichfluoroethane		5.1	U	0.34	5.1
Acetone		19	J	1.0	5.1
Carbon disulfide		7.4	UB	0.32	~~5.1~~ 7.4
Methyl acetate		5.1	U	0.64	5.1
Methylene Chloride		4.9	J	0.56	5.1
trans-1,2-Dichloroethene		5.1	U	0.38	5.1
Methyl t-butyl ether		5.1	U	0.31	5.1
1,2-Dichloroethene, Total		5.1	U	0.79	5.1
1,1-Dichloroethane		5.1	U	0.42	5.1
cis-1,2-Dichloroethene		5.1	U	0.43	5.1
2-Butanone		5.1	U J	1.5	5.1
Chloroform		5.1 ~~0.80~~	~~JB~~ UB	0.33	5.1
1,1,1-Trichloroethane		5.1	U	0.72	5.1
Cyclohexane		5.1	U	0.87	5.1
Carbon tetrachloride		5.1	U	0.78	5.1
Benzene		5.1	U	0.73	5.1
1,2-Dichloroethane		5.1	U	0.63	5.1
Trichloroethene		5.1	U	0.49	5.1
Methylcyclohexane		5.1	U	0.17	5.1
1,2-Dichloropropane		5.1	U	0.30	5.1
Bromodichloromethane		5.1	U	0.21	5.1
cis-1,3-Dichloropropene		5.1	U	0.36	5.1
4-Methyl-2-pentanone		5.1	U	0.61	5.1
Toluene		5.1 ~~0.19~~	~~JB~~ UB	0.10	5.1
trans-1,3-Dichloropropene		5.1	U J	0.13	5.1
1,1,2-Trichloroethane		5.1	U J	0.35	5.1
Tetrachloroethene		5.1	U J	0.11	5.1
2-Hexanone		5.1	U J	0.50	5.1
Dibromochloromethane		5.1	U J	0.11	5.1
1,2-Dibromoethane		5.1	U J	0.15	5.1
Chlorobenzene		5.1	U J	0.078	5.1
Ethylbenzene		5.1	U J	0.057	5.1
Xylenes, Total		5.1	U J	0.75	5.1
Styrene		5.1	U J	0.10	5.1
Bromoform		5.1	U J	0.20	5.1
Isopropylbenzene		5.1	U J	0.079	5.1
1,1,2,2-Tetrachloroethane		5.1	U J	0.27	5.1
1,3-Dichlorobenzene		5.1	U J	0.15	5.1
1,4-Dichlorobenzene		5.1	U J	0.23	5.1

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-20 (8.5-9.5)**

Lab Sample ID: 200-11382-5
Client Matrix: Solid

% Moisture: 12.0

Date Sampled: 06/16/2012 1230
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41070	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40646	Lab File ID:	ngan14.d
Dilution:	1.0			Initial Weight/Volume:	5.56 g
Analysis Date:	06/26/2012 1819			Final Weight/Volume:	5 mL
Prep Date:	06/20/2012 1430				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		5.1	U J	0.22	5.1
1,2-Dibromo-3-Chloropropane		5.1	U J	0.93	5.1
1,2,4-Trichlorobenzene		5.1 ~~1.2~~	~~JB~~ UB	0.20	5.1

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	70		65 - 155
Toluene-d8	138	X	80 - 115
Bromofluorobenzene	166	X	80 - 115
1,2-Dichlorobenzene-d4	162	X	45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-20 (8.5-9.5)**

Lab Sample ID: 200-11382-5
Client Matrix: Solid % Moisture: 12.0

Date Sampled: 06/16/2012 1230
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41242	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40646	Lab File ID:	ngao18.d
Dilution:	1.0			Initial Weight/Volume:	5.2 g
Analysis Date:	06/29/2012 1728	Run Type:	RE	Final Weight/Volume:	5 mL
Prep Date:	06/20/2012 1430				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		5.5	U	0.25	5.5
Chloromethane		5.5	U	0.28	5.5
Vinyl chloride		5.5	U	0.33	5.5
Bromomethane		5.5	U	0.81	5.5
Chloroethane		5.5	U	0.42	5.5
Trichlorofluoromethane		5.5	U	0.36	5.5
1,1-Dichloroethene		5.5	U	0.40	5.5
1,1,2-Trichloro-1,2,2-trichfluoroethane		5.5	U	0.36	5.5
Acetone		26		1.1	5.5
Carbon disulfide		15		0.34	5.5
Methyl acetate		5.5	U	0.69	5.5
Methylene Chloride		6.8		0.60	5.5
trans-1,2-Dichloroethene		5.5	U	0.40	5.5
Methyl t-butyl ether		5.5	U	0.33	5.5
1,2-Dichloroethene, Total		5.5	U	0.84	5.5
1,1-Dichloroethane		5.5	U	0.45	5.5
cis-1,2-Dichloroethene		5.5	U	0.46	5.5
2-Butanone		5.5	U	1.6	5.5
Chloroform		5.5	U	0.35	5.5
1,1,1-Trichloroethane		5.5	U	0.76	5.5
Cyclohexane		5.5	U	0.93	5.5
Carbon tetrachloride		5.5	U	0.83	5.5
Benzene		5.5	U	0.78	5.5
1,2-Dichloroethane		5.5	U	0.68	5.5
Trichloroethene		5.5	U	0.52	5.5
Methylcyclohexane		0.55	J	0.19	5.5
1,2-Dichloropropane		5.5	U	0.32	5.5
Bromodichloromethane		5.5	U	0.23	5.5
cis-1,3-Dichloropropene		5.5	U	0.38	5.5
4-Methyl-2-pentanone		5.5	U	0.66	5.5
Toluene		0.37	J B	0.11	5.5
trans-1,3-Dichloropropene		5.5	U	0.14	5.5
1,1,2-Trichloroethane		5.5	U	0.37	5.5
Tetrachloroethene		5.5	U	0.12	5.5
2-Hexanone		5.5	U	0.54	5.5
Dibromochloromethane		5.5	U	0.12	5.5
1,2-Dibromoethane		5.5	U	0.16	5.5
Chlorobenzene		5.5	U	0.083	5.5
Ethylbenzene		5.5	U	0.061	5.5
Xylenes, Total		5.5	U	0.80	5.5
Styrene		5.5	U	0.11	5.5
Bromoform		5.5	U	0.22	5.5
Isopropylbenzene		5.5	U	0.084	5.5
1,1,2,2-Tetrachloroethane		5.5	U	0.28	5.5
1,3-Dichlorobenzene		5.5	U	0.16	5.5
1,4-Dichlorobenzene		5.5	U	0.25	5.5

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-20 (8.5-9.5)**

Lab Sample ID: 200-11382-5
Client Matrix: Solid

% Moisture: 12.0

Date Sampled: 06/16/2012 1230
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41242	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40646	Lab File ID:	ngao18.d
Dilution:	1.0			Initial Weight/Volume:	5.2 g
Analysis Date:	06/29/2012 1728	Run Type:	RE	Final Weight/Volume:	5 mL
Prep Date:	06/20/2012 1430				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		5.5	U	0.24	5.5
1,2-Dibromo-3-Chloropropane		5.5	U	0.99	5.5
1,2,4-Trichlorobenzene		5.5	U	0.22	5.5

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	67		65 - 155
Toluene-d8	169	X	80 - 115
Bromofluorobenzene	168	X	80 - 115
1,2-Dichlorobenzene-d4	165	X	45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-21 (6-7)**

Lab Sample ID: 200-11382-6
Client Matrix: Solid

% Moisture: 24.9

Date Sampled: 06/16/2012 1400
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41070	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40646	Lab File ID:	ngan15.d
Dilution:	1.0			Initial Weight/Volume:	5.68 g
Analysis Date:	06/26/2012 1850			Final Weight/Volume:	5 mL
Prep Date:	06/20/2012 1430				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		5.9	U J	0.27	5.9
Chloromethane		5.9	U	0.30	5.9
Vinyl chloride		5.9	U	0.35	5.9
Bromomethane		5.9	U J	0.87	5.9
Chloroethane		5.9	U J	0.45	5.9
Trichlorofluoromethane		5.9	U	0.39	5.9
1,1-Dichloroethene		5.9	U	0.43	5.9
1,1,2-Trichloro-1,2,2-trichfluoroethane		5.9	U	0.39	5.9
Acetone		25	J	1.2	5.9
Carbon disulfide		66	J	0.36	5.9
Methyl acetate		5.9	U	0.74	5.9
Methylene Chloride		46	J	0.64	5.9
trans-1,2-Dichloroethene		5.9	U	0.43	5.9
Methyl t-butyl ether		5.9	U	0.35	5.9
1,2-Dichloroethene, Total		5.9	U	0.90	5.9
1,1-Dichloroethane		5.9	U	0.48	5.9
cis-1,2-Dichloroethene		5.9	U	0.49	5.9
2-Butanone		5.9	U J	1.8	5.9
Chloroform		5.9 ~~0.86~~	~~JB~~ UB	0.38	5.9
1,1,1-Trichloroethane		5.9	U	0.82	5.9
Cyclohexane		5.9	U	1.0	5.9
Carbon tetrachloride		5.9	U	0.89	5.9
Benzene		5.9	U	0.83	5.9
1,2-Dichloroethane		5.9	U	0.73	5.9
Trichloroethene		5.9	U	0.56	5.9
Methylcyclohexane		5.9	U	0.20	5.9
1,2-Dichloropropane		5.9	U	0.34	5.9
Bromodichloromethane		5.9	U	0.25	5.9
cis-1,3-Dichloropropene		5.9	U	0.41	5.9
4-Methyl-2-pentanone		5.9	U	0.70	5.9
Toluene		5.9 ~~0.28~~	~~JB~~ UB	0.12	5.9
trans-1,3-Dichloropropene		5.9	U	0.15	5.9
1,1,2-Trichloroethane		5.9	U	0.40	5.9
Tetrachloroethene		5.9	U	0.13	5.9
2-Hexanone		5.9	U	0.57	5.9
Dibromochloromethane		5.9	U	0.13	5.9
1,2-Dibromoethane		5.9	U	0.18	5.9
Chlorobenzene		5.9	U	0.089	5.9
Ethylbenzene		5.9	U	0.066	5.9
Xylenes, Total		5.9	U	0.86	5.9
Styrene		5.9	U	0.12	5.9
Bromoform		5.9	U	0.23	5.9
Isopropylbenzene		5.9	U J	0.090	5.9
1,1,2,2-Tetrachloroethane		5.9	U J	0.30	5.9
1,3-Dichlorobenzene		5.9	U J	0.18	5.9
1,4-Dichlorobenzene		5.9	U J	0.27	5.9

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-21 (6-7)**

Lab Sample ID: 200-11382-6
Client Matrix: Solid

% Moisture: 24.9

Date Sampled: 06/16/2012 1400
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41070	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40646	Lab File ID:	ngan15.d
Dilution:	1.0			Initial Weight/Volume:	5.68 g
Analysis Date:	06/26/2012 1850			Final Weight/Volume:	5 mL
Prep Date:	06/20/2012 1430				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		5.9	U J	0.26	5.9
1,2-Dibromo-3-Chloropropane		5.9	U J	1.1	5.9
1,2,4-Trichlorobenzene		5.9 ~~0.60~~	~~JB~~ UB	0.23	5.9

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	82		65 - 155
Toluene-d8	122	X	80 - 115
Bromofluorobenzene	139	X	80 - 115
1,2-Dichlorobenzene-d4	118		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-21 (6-7)**

Lab Sample ID: 200-11382-6
Client Matrix: Solid % Moisture: 24.9

Date Sampled: 06/16/2012 1400
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41242	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40646	Lab File ID:	ngao19.d
Dilution:	1.0			Initial Weight/Volume:	5.25 g
Analysis Date:	06/29/2012 1759	Run Type:	RE	Final Weight/Volume:	5 mL
Prep Date:	06/20/2012 1430				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		6.3	U	0.29	6.3
Chloromethane		6.3	U	0.33	6.3
Vinyl chloride		6.3	U	0.38	6.3
Bromomethane		6.3	U	0.94	6.3
Chloroethane		6.3	U	0.48	6.3
Trichlorofluoromethane		6.3	U	0.42	6.3
1,1-Dichloroethene		6.3	U	0.47	6.3
1,1,2-Trichloro-1,2,2-trichfluoroethane		6.3	U	0.42	6.3
Acetone		29		1.3	6.3
Carbon disulfide		99		0.39	6.3
Methyl acetate		6.3	U	0.80	6.3
Methylene Chloride		44		0.70	6.3
trans-1,2-Dichloroethene		6.3	U	0.47	6.3
Methyl t-butyl ether		6.3	U	0.38	6.3
1,2-Dichloroethene, Total		6.3	U	0.98	6.3
1,1-Dichloroethane		6.3	U	0.52	6.3
cis-1,2-Dichloroethene		6.3	U	0.53	6.3
2-Butanone		6.3	U	1.9	6.3
Chloroform		6.3	U	0.41	6.3
1,1,1-Trichloroethane		6.3	U	0.89	6.3
Cyclohexane		6.3	U	1.1	6.3
Carbon tetrachloride		6.3	U	0.96	6.3
Benzene		6.3	U	0.90	6.3
1,2-Dichloroethane		6.3	U	0.79	6.3
Trichloroethene		6.3	U	0.61	6.3
Methylcyclohexane		6.3	U	0.22	6.3
1,2-Dichloropropane		6.3	U	0.37	6.3
Bromodichloromethane		6.3	U	0.27	6.3
cis-1,3-Dichloropropene		6.3	U	0.44	6.3
4-Methyl-2-pentanone		6.3	U	0.76	6.3
Toluene		0.44	J B	0.13	6.3
trans-1,3-Dichloropropene		6.3	U	0.16	6.3
1,1,2-Trichloroethane		6.3	U	0.43	6.3
Tetrachloroethene		6.3	U	0.14	6.3
2-Hexanone		6.3	U	0.62	6.3
Dibromochloromethane		6.3	U	0.14	6.3
1,2-Dibromoethane		6.3	U	0.19	6.3
Chlorobenzene		6.3	U	0.096	6.3
Ethylbenzene		6.3	U	0.071	6.3
Xylenes, Total		6.3	U	0.93	6.3
Styrene		6.3	U	0.13	6.3
Bromoform		6.3	U	0.25	6.3
Isopropylbenzene		6.3	U	0.098	6.3
1,1,2,2-Tetrachloroethane		6.3	U	0.33	6.3
1,3-Dichlorobenzene		6.3	U	0.19	6.3
1,4-Dichlorobenzene		6.3	U	0.29	6.3

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-21 (6-7)**

Lab Sample ID: 200-11382-6
Client Matrix: Solid

% Moisture: 24.9

Date Sampled: 06/18/2012 1400
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41242	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40646	Lab File ID:	ngao19.d
Dilution:	1.0			Initial Weight/Volume:	5.25 g
Analysis Date:	06/29/2012 1759	Run Type:	RE	Final Weight/Volume:	5 mL
Prep Date:	06/20/2012 1430				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		6.3	U	0.28	6.3
1,2-Dibromo-3-Chloropropane		6.3	U	1.2	6.3
1,2,4-Trichlorobenzene		6.3	U	0.25	6.3

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	80		65 - 155
Toluene-d8	137	X	80 - 115
Bromofluorobenzene	147	X	80 - 115
1,2-Dichlorobenzene-d4	117		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **TB-06162012**

Lab Sample ID: 200-11382-7
Client Matrix: Water

Date Sampled: 06/16/2012 0000
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40972	Instrument ID:	L.i
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lhbab22.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/25/2012 2324			Final Weight/Volume:	5 mL
Prep Date:	06/25/2012 2324				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	1.0	U J	0.090	1.0
Chloromethane	1.0	U	0.12	1.0
Vinyl chloride	1.0	U	0.090	1.0
Bromomethane	1.0	U J	0.43	1.0
Chloroethane	1.0	U	0.12	1.0
Trichlorofluoromethane	1.0	U	0.092	1.0
1,1-Dichloroethene	1.0	U	0.18	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.18	1.0
Acetone	5.0	U	0.92	5.0
Carbon disulfide	1.8		0.15	1.0
Methyl acetate	1.0	U	0.23	1.0
Methylene Chloride	0.41	J	0.21	1.0
trans-1,2-Dichloroethene	1.0	U	0.17	1.0
Methyl t-butyl ether	1.0	U	0.17	1.0
1,2-Dichloroethene, Total	1.0	U	0.32	1.0
1,1-Dichloroethane	1.0	U	0.16	1.0
cis-1,2-Dichloroethene	1.0	U	0.16	1.0
2-Butanone	5.0	U	1.1	5.0
Chloroform	1.0	U	0.16	1.0
1,1,1-Trichloroethane	1.0	U	0.16	1.0
Cyclohexane	1.0	U	0.23	1.0
Carbon tetrachloride	1.0	U	0.17	1.0
Benzene	1.0	U	0.17	1.0
1,2-Dichloroethane	1.0	U	0.15	1.0
Trichloroethene	1.0	U	0.14	1.0
Methylcyclohexane	1.0	U	0.25	1.0
1,2-Dichloropropane	1.0	U	0.17	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.16	1.0
4-Methyl-2-pentanone	5.0	U J	0.90	5.0
Toluene	1.0	U	0.17	1.0
trans-1,3-Dichloropropene	1.0	U	0.18	1.0
1,1,2-Trichloroethane	1.0	U	0.18	1.0
Tetrachloroethene	1.0	U	0.18	1.0
2-Hexanone	5.0	U	1.1	5.0
Dibromochloromethane	1.0	U	0.17	1.0
1,2-Dibromoethane	1.0	U	0.18	1.0
Chlorobenzene	1.0	U	0.19	1.0
Ethylbenzene	1.0	U	0.18	1.0
Xylenes, Total	1.0	U	0.17	1.0
Styrene	1.0	U	0.17	1.0
Bromoform	1.0	U	0.17	1.0
Isopropylbenzene	1.0	U	0.17	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.17	1.0
1,3-Dichlorobenzene	1.0	U	0.18	1.0
1,4-Dichlorobenzene	1.0	U	0.15	1.0

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **TB-06162012**

Lab Sample ID: 200-11382-7
Client Matrix: Water

Date Sampled: 06/16/2012 0000
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-40972	Instrument ID:	L.i
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lhbab22.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/25/2012 2324			Final Weight/Volume:	5 mL
Prep Date:	06/25/2012 2324				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,2-Dichlorobenzene	1.0	U	0.15	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	0.22	1.0
1,2,4-Trichlorobenzene	1.0	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	91		80 - 115
Toluene-d8	102		80 - 115
Bromofluorobenzene	103		85 - 120
1,2-Dichlorobenzene-d4	104		80 - 115

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **DUP-02-06162012**

Lab Sample ID: 200-11382-8
Client Matrix: Solid

% Moisture: 36.2

Date Sampled: 06/16/2012 0000
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41091	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40644	Lab File ID:	lhbae21.d
Dilution:	8.8			Initial Weight/Volume:	5.76 g
Analysis Date:	06/27/2012 2011			Final Weight/Volume:	10 mL
Prep Date:	06/20/2012 1425				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		1400	UJ	300	1400
Chloromethane		1400	UJ	380	1400
Vinyl chloride		1400	U	290	1400
Bromomethane		1400	UJ	360	1400
Chloroethane		1400	U	220	1400
Trichlorofluoromethane		1400	U	190	1400
1,1-Dichloroethene		1400	U	320	1400
1,1,2-Trichloro-1,2,2-trichfluoroethane		1400	U	260	1400
Acetone		1800	J	1300	7200
Carbon disulfide		65000		230	1400
Methyl acetate		1400	U	300	1400
Methylene Chloride		1400	U	390	1400
trans-1,2-Dichloroethene		1400	U	290	1400
Methyl t-butyl ether		1400	U	260	1400
1,2-Dichloroethene, Total		1400	U	260	1400
1,1-Dichloroethane		1400	U	290	1400
cis-1,2-Dichloroethene		1400	U	260	1400
2-Butanone		7200	U	1200	7200
Chloroform		1400	U	270	1400
1,1,1-Trichloroethane		1400	U	290	1400
Cyclohexane		1400	U	290	1400
Carbon tetrachloride		1400	U	220	1400
Benzene		640	J	300	1400
1,2-Dichloroethane		1400	U	250	1400
Trichloroethene		1400	U	250	1400
Methylcyclohexane		1400	U	260	1400
1,2-Dichloropropane		1400	U	270	1400
Bromodichloromethane		1400	U	270	1400
cis-1,3-Dichloropropene		1400	U	260	1400
4-Methyl-2-pentanone		7200	U	1600	7200
Toluene		460	J	290	1400
trans-1,3-Dichloropropene		1400	U	250	1400
1,1,2-Trichloroethane		1400	U	270	1400
Tetrachloroethene		1400	U	290	1400
2-Hexanone		7200	U	1100	7200
Dibromochloromethane		1400	U	230	1400
1,2-Dibromoethane		1400	U	270	1400
Chlorobenzene		1400	U	290	1400
Ethylbenzene		1400	U	290	1400
Xylenes, Total		1300	J	300	1400
Styrene		1400	U	250	1400
Bromoform		1400	U	250	1400
Isopropylbenzene		1400	U	270	1400
1,1,2,2-Tetrachloroethane		1400	U	260	1400
1,3-Dichlorobenzene		1400	U	270	1400
1,4-Dichlorobenzene		1400	U	270	1400

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **DUP-02-06162012**

Lab Sample ID: 200-11382-8
Client Matrix: Solid

% Moisture: 36.2

Date Sampled: 06/16/2012 0000
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41091	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40644	Lab File ID:	lhbae21.d
Dilution:	8.8			Initial Weight/Volume:	5.76 g
Analysis Date:	06/27/2012 2011			Final Weight/Volume:	10 mL
Prep Date:	06/20/2012 1425				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		1400	U	290	1400
1,2-Dibromo-3-Chloropropane		1400	U	250	1400
1,2,4-Trichlorobenzene		1400	U	290	1400

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	89		65 - 155
Toluene-d8	100		80 - 115
Bromofluorobenzene	99		80 - 115
1,2-Dichlorobenzene-d4	101		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-06 (12.2-13.2)**

Lab Sample ID: 200-11382-10
Client Matrix: Solid

% Moisture: 53.2

Date Sampled: 06/19/2012 1230
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41070	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40646	Lab File ID:	ngan16.d
Dilution:	1.0			Initial Weight/Volume:	5.24 g
Analysis Date:	06/26/2012 1920			Final Weight/Volume:	5 mL
Prep Date:	06/20/2012 1430				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		10	U J	0.47	10
Chloromethane		10	U	0.53	10
Vinyl chloride		10	U	0.61	10
Bromomethane		10	U J	1.5	10
Chloroethane		10	U J	0.77	10
Trichlorofluoromethane		10	U	0.67	10
1,1-Dichloroethene		10	U	0.75	10
1,1,2-Trichloro-1,2,2-trichfluoroethane		10	U	0.67	10
Acetone		140	J	2.0	10
Carbon disulfide		75	J	0.63	10
Methyl acetate		10	U	1.3	10
Methylene Chloride		10 ~~3.2~~	~~J~~ UB	1.1	10
trans-1,2-Dichloroethene		10	U	0.75	10
Methyl t-butyl ether		10	U	0.61	10
1,2-Dichloroethene, Total		10	U	1.6	10
1,1-Dichloroethane		10	U	0.84	10
cis-1,2-Dichloroethene		10	U	0.86	10
2-Butanone		33	J	3.1	10
Chloroform		10 ~~1.6~~	~~J B~~ UB	0.65	10
1,1,1-Trichloroethane		10	U	1.4	10
Cyclohexane		10	U	1.7	10
Carbon tetrachloride		10	U	1.5	10
Benzene		90	J	1.4	10
1,2-Dichloroethane		10	U	1.3	10
Trichloroethene		10	U	0.98	10
Methylcyclohexane		10	U	0.35	10
1,2-Dichloropropane		10	U	0.59	10
Bromodichloromethane		10	U	0.43	10
cis-1,3-Dichloropropene		10	U	0.71	10
4-Methyl-2-pentanone		10	U	1.2	10
Toluene		10 ~~0.81~~	~~J B~~ UB	0.20	10
trans-1,3-Dichloropropene		10	U J	0.26	10
1,1,2-Trichloroethane		10	U J	0.69	10
Tetrachloroethene		10	U J	0.22	10
2-Hexanone		10	U J	1.0	10
Dibromochloromethane		10	U J	0.22	10
1,2-Dibromoethane		10	U J	0.31	10
Chlorobenzene		10	U J	0.15	10
Ethylbenzene		10	U J	0.11	10
Xylenes, Total		10	U J	1.5	10
Styrene		10	U J	0.20	10
Bromoform		10	U J	0.41	10
Isopropylbenzene		10	U J	0.16	10
1,1,2,2-Tetrachloroethane		10	U J	0.53	10
1,3-Dichlorobenzene		10	U J	0.31	10
1,4-Dichlorobenzene		10	U J	0.47	10

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-06 (12.2-13.2)**

Lab Sample ID: 200-11382-10
Client Matrix: Solid
% Moisture: 53.2

Date Sampled: 06/19/2012 1230
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41070	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40646	Lab File ID:	ngan16.d
Dilution:	1.0			Initial Weight/Volume:	5.24 g
Analysis Date:	06/26/2012 1920			Final Weight/Volume:	5 mL
Prep Date:	06/20/2012 1430				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		10	U 5	0.45	10
1,2-Dibromo-3-Chloropropane		10	U 5	1.9	10
1,2,4-Trichlorobenzene		10 ~~0.77~~	~~JB~~ UB	0.41	10

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	70		65 - 155
Toluene-d8	125	X	80 - 115
Bromofluorobenzene	143	X	80 - 115
1,2-Dichlorobenzene-d4	109		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-06 (12.2-13.2)**

Lab Sample ID: 200-11382-10
Client Matrix: Solid

% Moisture: 53.2

Date Sampled: 06/19/2012 1230
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41242	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40646	Lab File ID:	ngao20.d
Dilution:	1.0			Initial Weight/Volume:	4.94 g
Analysis Date:	06/29/2012 1829	Run Type:	RE	Final Weight/Volume:	5 mL
Prep Date:	06/20/2012 1430				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		11	U	0.50	11
Chloromethane		11	U	0.56	11
Vinyl chloride		11	U	0.65	11
Bromomethane		11	U	1.6	11
Chloroethane		11	U	0.82	11
Trichlorofluoromethane		11	U	0.71	11
1,1-Dichloroethene		11	U	0.80	11
1,1,2-Trichloro-1,2,2-trichfluoroethane		11	U	0.71	11
Acetone		110		2.2	11
Carbon disulfide		70		0.67	11
Methyl acetate		11	U	1.4	11
Methylene Chloride		2.2	J	1.2	11
trans-1,2-Dichloroethene		11	U	0.80	11
Methyl t-butyl ether		11	U	0.65	11
1,2-Dichloroethene, Total		11	U	1.7	11
1,1-Dichloroethane		11	U	0.89	11
cis-1,2-Dichloroethene		11	U	0.91	11
2-Butanone		27		3.2	11
Chloroform		11	U	0.69	11
1,1,1-Trichloroethane		11	U	1.5	11
Cyclohexane		11	U	1.8	11
Carbon tetrachloride		11	U	1.6	11
Benzene		50		1.5	11
1,2-Dichloroethane		11	U	1.3	11
Trichloroethene		11	U	1.0	11
Methylcyclohexane		11	U	0.37	11
1,2-Dichloropropane		11	U	0.63	11
Bromodichloromethane		11	U	0.45	11
cis-1,3-Dichloropropene		11	U	0.76	11
4-Methyl-2-pentanone		11	U	1.3	11
Toluene		0.70	J B	0.22	11
trans-1,3-Dichloropropene		11	U	0.28	11
1,1,2-Trichloroethane		11	U	0.73	11
Tetrachloroethene		11	U	0.24	11
2-Hexanone		11	U	1.1	11
Dibromochloromethane		11	U	0.24	11
1,2-Dibromoethane		11	U	0.32	11
Chlorobenzene		11	U	0.16	11
Ethylbenzene		11	U	0.12	11
Xylenes, Total		11	U	1.6	11
Styrene		11	U	0.22	11
Bromoform		11	U	0.43	11
Isopropylbenzene		11	U	0.17	11
1,1,2,2-Tetrachloroethane		11	U	0.56	11
1,3-Dichlorobenzene		11	U	0.32	11
1,4-Dichlorobenzene		11	U	0.50	11

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-06 (12.2-13.2)**

Lab Sample ID: 200-11382-10
Client Matrix: Solid

% Moisture: 53.2

Date Sampled: 06/19/2012 1230
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41242	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40646	Lab File ID:	ngao20.d
Dilution:	1.0			Initial Weight/Volume:	4.94 g
Analysis Date:	06/29/2012 1829	Run Type:	RE	Final Weight/Volume:	5 mL
Prep Date:	06/20/2012 1430				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		11	U	0.48	11
1,2-Dibromo-3-Chloropropane		11	U	2.0	11
1,2,4-Trichlorobenzene		11	U	0.43	11

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	73		65 - 155
Toluene-d8	122	X	80 - 115
Bromofluorobenzene	131	X	80 - 115
1,2-Dichlorobenzene-d4	102		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-07 (10.5-12.5)**

Lab Sample ID: 200-11382-11
Client Matrix: Solid

% Moisture: 17.4

Date Sampled: 06/19/2012 1330
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41091	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40644	Lab File ID:	lhbae22.d
Dilution:	2.0			Initial Weight/Volume:	6.11 g
Analysis Date:	06/27/2012 2043			Final Weight/Volume:	10 mL
Prep Date:	06/20/2012 1425				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		220	UJ	46	220
Chloromethane		220	UJ	57	220
Vinyl chloride		220	U	44	220
Bromomethane		220	UJ	55	220
Chloroethane		220	U	33	220
Trichlorofluoromethane		220	U	29	220
1,1-Dichloroethene		220	U	48	220
1,1,2-Trichloro-1,2,2-trichfluoroethane		220	U	39	220
Acetone		360	J	200	1100
Carbon disulfide		16000		35	220
Methyl acetate		220	U	46	220
Methylene Chloride		220	U	59	220
trans-1,2-Dichloroethene		220	U	44	220
Methyl t-butyl ether		220	U	39	220
1,2-Dichloroethene, Total		220	U	39	220
1,1-Dichloroethane		220	U	44	220
cis-1,2-Dichloroethene		220	U	39	220
2-Butanone		1100	U	190	1100
Chloroform		220	U	42	220
1,1,1-Trichloroethane		220	U	44	220
Cyclohexane		220	U	44	220
Carbon tetrachloride		220	U	33	220
Benzene		73	J	46	220
1,2-Dichloroethane		220	U	37	220
Trichloroethene		220	U	37	220
Methylcyclohexane		220	U	39	220
1,2-Dichloropropane		220	U	42	220
Bromodichloromethane		220	U	42	220
cis-1,3-Dichloropropene		220	U	39	220
4-Methyl-2-pentanone		1100	U	240	1100
Toluene		63	J	44	220
trans-1,3-Dichloropropene		220	U	37	220
1,1,2-Trichloroethane		220	U	42	220
Tetrachloroethene		220	U	44	220
2-Hexanone		1100	U	170	1100
Dibromochloromethane		220	U	35	220
1,2-Dibromoethane		220	U	42	220
Chlorobenzene		220	U	44	220
Ethylbenzene		220	U	44	220
Xylenes, Total		160	J	46	220
Styrene		220	U	37	220
Bromoform		220	U	37	220
Isopropylbenzene		220	U	42	220
1,1,2,2-Tetrachloroethane		220	U	39	220
1,3-Dichlorobenzene		220	U	42	220
1,4-Dichlorobenzene		220	U	42	220

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-07 (10.5-12.5)**

Lab Sample ID: 200-11382-11
Client Matrix: Solid

% Moisture: 17.4

Date Sampled: 06/19/2012 1330
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41091	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40644	Lab File ID:	lhbae22.d
Dilution:	2.0			Initial Weight/Volume:	6.11 g
Analysis Date:	06/27/2012 2043			Final Weight/Volume:	10 mL
Prep Date:	06/20/2012 1425				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		220	U	44	220
1,2-Dibromo-3-Chloropropane		220	U	37	220
1,2,4-Trichlorobenzene		220	U	44	220

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	91		65 - 155
Toluene-d8	101		80 - 115
Bromofluorobenzene	99		80 - 115
1,2-Dichlorobenzene-d4	100		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-07 (16.4-17.4)**

Lab Sample ID: 200-11382-12
Client Matrix: Solid

% Moisture: 41.9

Date Sampled: 06/19/2012 1350
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41070	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40646	Lab File ID:	ngan17.d
Dilution:	1.0			Initial Weight/Volume:	5.09 g
Analysis Date:	06/26/2012 1951			Final Weight/Volume:	5 mL
Prep Date:	06/20/2012 1430				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		8.5	UJ	0.39	8.5
Chloromethane		8.5	U	0.44	8.5
Vinyl chloride		8.5	U	0.51	8.5
Bromomethane		8.5	UJ	1.3	8.5
Chloroethane		8.5	UJ	0.64	8.5
Trichlorofluoromethane		8.5	U	0.56	8.5
1,1-Dichloroethene		8.5	U	0.63	8.5
1,1,2-Trichloro-1,2,2-trichfluoroethane		8.5	U	0.56	8.5
Acetone		220	J	1.7	8.5
Carbon disulfide		13	UB	0.52	~~8.5~~ 13
Methyl acetate		8.5	U	1.1	8.5
Methylene Chloride		8.5	U	0.93	8.5
trans-1,2-Dichloroethene		8.5	U	0.63	8.5
Methyl t-butyl ether		8.5	U	0.51	8.5
1,2-Dichloroethene, Total		8.5	U	1.3	8.5
1,1-Dichloroethane		8.5	U	0.69	8.5
cis-1,2-Dichloroethene		8.5	U	0.71	8.5
2-Butanone		57	J	2.5	8.5
Chloroform		8.5 ~~1.4~~	~~JB~~ UB	0.54	8.5
1,1,1-Trichloroethane		8.5	U	1.2	8.5
Cyclohexane		8.5	U	1.4	8.5
Carbon tetrachloride		8.5	U	1.3	8.5
Benzene		48	J	1.2	8.5
1,2-Dichloroethane		8.5	U	1.0	8.5
Trichloroethene		8.5	U	0.81	8.5
Methylcyclohexane		0.49	J	0.29	8.5
1,2-Dichloropropane		8.5	U	0.49	8.5
Bromodichloromethane		8.5	U	0.36	8.5
cis-1,3-Dichloropropene		8.5	U	0.59	8.5
4-Methyl-2-pentanone		8.5	U	1.0	8.5
Toluene		5.3	J~~B~~	0.17	8.5
trans-1,3-Dichloropropene		8.5	UJ	0.22	8.5
1,1,2-Trichloroethane		8.5	UJ	0.58	8.5
Tetrachloroethene		8.5	UJ	0.19	8.5
2-Hexanone		8.5	UJ	0.83	8.5
Dibromochloromethane		8.5	UJ	0.19	8.5
1,2-Dibromoethane		8.5	UJ	0.25	8.5
Chlorobenzene		8.5	UJ	0.13	8.5
Ethylbenzene		1.8	J~~B~~	0.095	8.5
Xylenes, Total		8.4	J	1.2	8.5
Styrene		8.5	UJ	0.17	8.5
Bromoform		8.5	UJ	0.34	8.5
Isopropylbenzene		1.4	J	0.13	8.5
1,1,2,2-Tetrachloroethane		8.5	UJ	0.44	8.5
1,3-Dichlorobenzene		8.5	UJ	0.25	8.5
1,4-Dichlorobenzene		8.5	UJ	0.39	8.5

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-07 (16.4-17.4)**

Lab Sample ID: 200-11382-12
Client Matrix: Solid

% Moisture: 41.9

Date Sampled: 06/19/2012 1350
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41070	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40646	Lab File ID:	ngan17.d
Dilution:	1.0			Initial Weight/Volume:	5.09 g
Analysis Date:	06/26/2012 1951			Final Weight/Volume:	5 mL
Prep Date:	06/20/2012 1430				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		8.5	U J	0.37	8.5
1,2-Dibromo-3-Chloropropane		8.5	U J	1.5	8.5
1,2,4-Trichlorobenzene		85 ~~0.73~~	~~JB~~ UB	0.34	8.5

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	82		65 - 155
Toluene-d8	122	X	80 - 115
Bromofluorobenzene	155	X	80 - 115
1,2-Dichlorobenzene-d4	107		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-07 (16.4-17.4)**

Lab Sample ID: 200-11382-12
Client Matrix: Solid

% Moisture: 41.9

Date Sampled: 06/19/2012 1350
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41242	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40646	Lab File ID:	ngao21.d
Dilution:	1.0			Initial Weight/Volume:	5.35 g
Analysis Date:	06/29/2012 1900	Run Type:	RE	Final Weight/Volume:	5 mL
Prep Date:	06/20/2012 1430				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		8.0	U	0.37	8.0
Chloromethane		8.0	U	0.42	8.0
Vinyl chloride		8.0	U	0.48	8.0
Bromomethane		8.0	U	1.2	8.0
Chloroethane		8.0	U	0.61	8.0
Trichlorofluoromethane		8.0	U	0.53	8.0
1,1-Dichloroethene		8.0	U	0.60	8.0
1,1,2-Trichloro-1,2,2-trichfluoroethane		8.0	U	0.53	8.0
Acetone		300		1.6	8.0
Carbon disulfide		16		0.50	8.0
Methyl acetate		8.0	U	1.0	8.0
Methylene Chloride		1.5	J	0.89	8.0
trans-1,2-Dichloroethene		8.0	U	0.60	8.0
Methyl t-butyl ether		8.0	U	0.48	8.0
1,2-Dichloroethene, Total		8.0	U	1.2	8.0
1,1-Dichloroethane		8.0	U	0.66	8.0
cis-1,2-Dichloroethene		8.0	U	0.68	8.0
2-Butanone		68		2.4	8.0
Chloroform		8.0	U	0.51	8.0
1,1,1-Trichloroethane		8.0	U	1.1	8.0
Cyclohexane		8.0	U	1.4	8.0
Carbon tetrachloride		8.0	U	1.2	8.0
Benzene		43		1.1	8.0
1,2-Dichloroethane		8.0	U	1.0	8.0
Trichloroethene		8.0	U	0.77	8.0
Methylcyclohexane		8.0	U	0.27	8.0
1,2-Dichloropropane		8.0	U	0.47	8.0
Bromodichloromethane		8.0	U	0.34	8.0
cis-1,3-Dichloropropene		8.0	U	0.56	8.0
4-Methyl-2-pentanone		8.0	U	0.97	8.0
Toluene		5.0	J B	0.16	8.0
trans-1,3-Dichloropropene		8.0	U	0.21	8.0
1,1,2-Trichloroethane		8.0	U	0.55	8.0
Tetrachloroethene		8.0	U	0.18	8.0
2-Hexanone		8.0	U	0.79	8.0
Dibromochloromethane		8.0	U	0.18	8.0
1,2-Dibromoethane		8.0	U	0.24	8.0
Chlorobenzene		8.0	U	0.12	8.0
Ethylbenzene		1.7	J	0.090	8.0
Xylenes, Total		8.1		1.2	8.0
Styrene		8.0	U	0.16	8.0
Bromoform		8.0	U	0.32	8.0
Isopropylbenzene		0.97	J	0.12	8.0
1,1,2,2-Tetrachloroethane		8.0	U	0.42	8.0
1,3-Dichlorobenzene		8.0	U	0.24	8.0
1,4-Dichlorobenzene		8.0	U	0.37	8.0

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-07 (16.4-17.4)**

Lab Sample ID: 200-11382-12
Client Matrix: Solid

% Moisture: 41.9

Date Sampled: 06/19/2012 1350
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41242	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40646	Lab File ID:	ngao21.d
Dilution:	1.0			Initial Weight/Volume:	5.35 g
Analysis Date:	06/29/2012 1900	Run Type:	RE	Final Weight/Volume:	5 mL
Prep Date:	06/20/2012 1430				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		8.0	U	0.35	8.0
1,2-Dibromo-3-Chloropropane		8.0	U	1.5	8.0
1,2,4-Trichlorobenzene		8.0	U	0.32	8.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	75		65 - 155
Toluene-d8	125	X	80 - 115
Bromofluorobenzene	134	X	80 - 115
1,2-Dichlorobenzene-d4	103		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-10 (4.2-5)**

Lab Sample ID: 200-11382-13
Client Matrix: Solid % Moisture: 21.4

Date Sampled: 06/19/2012 1515
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41070	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40646	Lab File ID:	ngan18.d
Dilution:	1.0			Initial Weight/Volume:	6.92 g
Analysis Date:	06/26/2012 2021			Final Weight/Volume:	5 mL
Prep Date:	06/20/2012 1430				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		4.6	UJ	0.21	4.6
Chloromethane		4.6	U	0.24	4.6
Vinyl chloride		4.6	U	0.28	4.6
Bromomethane		4.6	UJ	0.68	4.6
Chloroethane		4.6	UJ	0.35	4.6
Trichlorofluoromethane		4.6	U	0.30	4.6
1,1-Dichloroethene		4.6	U	0.34	4.6
1,1,2-Trichloro-1,2,2-trichfluoroethane		4.6	U	0.30	4.6
Acetone		23	J	0.92	4.6
Carbon disulfide		4.6 ~~1.9~~	~~J~~ UB	0.29	4.6
Methyl acetate		4.6	U	0.58	4.6
Methylene Chloride		4.6 ~~1.2~~	~~J~~ UB	0.51	4.6
trans-1,2-Dichloroethene		4.6	U	0.34	4.6
Methyl t-butyl ether		4.6	U	0.28	4.6
1,2-Dichloroethene, Total		4.6	U	0.71	4.6
1,1-Dichloroethane		4.6	U	0.38	4.6
cis-1,2-Dichloroethene		4.6	U	0.39	4.6
2-Butanone		4.6	U J	1.4	4.6
Chloroform		4.6 ~~0.78~~	~~JB~~ UB	0.29	4.6
1,1,1-Trichloroethane		4.6	U	0.64	4.6
Cyclohexane		4.6	U	0.78	4.6
Carbon tetrachloride		4.6	U	0.70	4.6
Benzene		4.6	U	0.65	4.6
1,2-Dichloroethane		4.6	U	0.57	4.6
Trichloroethene		4.6	U	0.44	4.6
Methylcyclohexane		4.6	U	0.16	4.6
1,2-Dichloropropane		4.6	U	0.27	4.6
Bromodichloromethane		4.6	U	0.19	4.6
cis-1,3-Dichloropropene		4.6	U	0.32	4.6
4-Methyl-2-pentanone		4.6	U	0.55	4.6
Toluene		4.6 ~~0.44~~	~~JB~~ UB	0.092	4.6
trans-1,3-Dichloropropene		4.6	U J	0.12	4.6
1,1,2-Trichloroethane		4.6	U J	0.31	4.6
Tetrachloroethene		4.6	U J	0.10	4.6
2-Hexanone		4.6	U J	0.45	4.6
Dibromochloromethane		4.6	U J	0.10	4.6
1,2-Dibromoethane		4.6	U J	0.14	4.6
Chlorobenzene		4.6	U J	0.070	4.6
Ethylbenzene		4.6	U J	0.051	4.6
Xylenes, Total		4.6	U J	0.67	4.6
Styrene		4.6	U J	0.092	4.6
Bromoform		4.6	U J	0.18	4.6
Isopropylbenzene		0.57	J	0.071	4.6
1,1,2,2-Tetrachloroethane		4.6	U J	0.24	4.6
1,3-Dichlorobenzene		4.6	U J	0.14	4.6
1,4-Dichlorobenzene		4.6	U J	0.21	4.6

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-10 (4.2-5)**

Lab Sample ID: 200-11382-13
Client Matrix: Solid

% Moisture: 21.4

Date Sampled: 06/19/2012 1515
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41070	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40646	Lab File ID:	ngan18.d
Dilution:	1.0			Initial Weight/Volume:	6.92 g
Analysis Date:	06/26/2012 2021			Final Weight/Volume:	5 mL
Prep Date:	06/20/2012 1430				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		4.6	U J	0.20	4.6
1,2-Dibromo-3-Chloropropane		4.6	U J	0.84	4.6
1,2,4-Trichlorobenzene		4.6	U J	0.18	4.6

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	81		65 - 155
Toluene-d8	127	X	80 - 115
Bromofluorobenzene	147	X	80 - 115
1,2-Dichlorobenzene-d4	131		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-10 (4.2-5)**

Lab Sample ID: 200-11382-13
Client Matrix: Solid % Moisture: 21.4

Date Sampled: 06/19/2012 1515
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41242	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40646	Lab File ID:	nga022.d
Dilution:	1.0			Initial Weight/Volume:	7.77 g
Analysis Date:	06/29/2012 1930	Run Type:	RE	Final Weight/Volume:	5 mL
Prep Date:	06/20/2012 1430				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		4.1	U	0.19	4.1
Chloromethane		4.1	U	0.21	4.1
Vinyl chloride		4.1	U	0.25	4.1
Bromomethane		4.1	U	0.61	4.1
Chloroethane		4.1	U	0.31	4.1
Trichlorofluoromethane		4.1	U	0.27	4.1
1,1-Dichloroethene		4.1	U	0.30	4.1
1,1,2-Trichloro-1,2,2-trichfluoroethane		4.1	U	0.27	4.1
Acetone		26		0.82	4.1
Carbon disulfide		1.2	J	0.25	4.1
Methyl acetate		4.1	U	0.52	4.1
Methylene Chloride		1.0	J	0.45	4.1
trans-1,2-Dichloroethene		4.1	U	0.30	4.1
Methyl t-butyl ether		4.1	U	0.25	4.1
1,2-Dichloroethene, Total		4.1	U	0.63	4.1
1,1-Dichloroethane		4.1	U	0.34	4.1
cis-1,2-Dichloroethene		4.1	U	0.34	4.1
2-Butanone		4.1	U	1.2	4.1
Chloroform		4.1	U	0.26	4.1
1,1,1-Trichloroethane		4.1	U	0.57	4.1
Cyclohexane		4.1	U	0.70	4.1
Carbon tetrachloride		4.1	U	0.62	4.1
Benzene		4.1	U	0.58	4.1
1,2-Dichloroethane		4.1	U	0.51	4.1
Trichloroethene		4.1	U	0.39	4.1
Methylcyclohexane		0.56	J	0.14	4.1
1,2-Dichloropropane		4.1	U	0.24	4.1
Bromodichloromethane		4.1	U	0.17	4.1
cis-1,3-Dichloropropene		4.1	U	0.29	4.1
4-Methyl-2-pentanone		4.1	U	0.49	4.1
Toluene		0.37	J B	0.082	4.1
trans-1,3-Dichloropropene		4.1	U	0.11	4.1
1,1,2-Trichloroethane		4.1	U	0.28	4.1
Tetrachloroethene		4.1	U	0.090	4.1
2-Hexanone		4.1	U	0.40	4.1
Dibromochloromethane		4.1	U	0.090	4.1
1,2-Dibromoethane		4.1	U	0.12	4.1
Chlorobenzene		4.1	U	0.062	4.1
Ethylbenzene		4.1	U	0.046	4.1
Xylenes, Total		4.1	U	0.60	4.1
Styrene		4.1	U	0.082	4.1
Bromoform		4.1	U	0.16	4.1
Isopropylbenzene		4.1	U	0.063	4.1
1,1,2,2-Tetrachloroethane		4.1	U	0.21	4.1
1,3-Dichlorobenzene		4.1	U	0.12	4.1
1,4-Dichlorobenzene		4.1	U	0.19	4.1

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-10 (4.2-5)**

Lab Sample ID: 200-11382-13
Client Matrix: Solid

% Moisture: 21.4

Date Sampled: 06/19/2012 1515
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41242	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40646	Lab File ID:	ngao22.d
Dilution:	1.0			Initial Weight/Volume:	7.77 g
Analysis Date:	06/29/2012 1930	Run Type:	RE	Final Weight/Volume:	5 mL
Prep Date:	06/20/2012 1430				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		4.1	U	0.18	4.1
1,2-Dibromo-3-Chloropropane		4.1	U	0.75	4.1
1,2,4-Trichlorobenzene		4.1	U	0.16	4.1

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	71		65 - 155
Toluene-d8	141	X	80 - 115
Bromofluorobenzene	122	X	80 - 115
1,2-Dichlorobenzene-d4	113		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **TB-06192012**

Lab Sample ID: 200-11382-14
Client Matrix: Water

Date Sampled: 06/19/2012 0000
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41005	Instrument ID:	L.i
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lhbad14.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/27/2012 0320			Final Weight/Volume:	5 mL
Prep Date:	06/27/2012 0320				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	1.0	U J	0.090	1.0
Chloromethane	1.0	U J	0.12	1.0
Vinyl chloride	1.0	U J	0.090	1.0
Bromomethane	1.0	U J	0.43	1.0
Chloroethane	1.0	U	0.12	1.0
Trichlorofluoromethane	1.0	U	0.092	1.0
1,1-Dichloroethene	1.0	U	0.18	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.18	1.0
Acetone	5.0	U	0.92	5.0
Carbon disulfide	0.61	J	0.15	1.0
Methyl acetate	1.0	U	0.23	1.0
Methylene Chloride	0.24	J	0.21	1.0
trans-1,2-Dichloroethene	1.0	U	0.17	1.0
Methyl t-butyl ether	1.0	U	0.17	1.0
1,2-Dichloroethene, Total	1.0	U	0.32	1.0
1,1-Dichloroethane	1.0	U	0.16	1.0
cis-1,2-Dichloroethene	1.0	U	0.16	1.0
2-Butanone	5.0	U	1.1	5.0
Chloroform	1.0	U	0.16	1.0
1,1,1-Trichloroethane	1.0	U	0.16	1.0
Cyclohexane	1.0	U	0.23	1.0
Carbon tetrachloride	1.0	U	0.17	1.0
Benzene	1.0	U	0.17	1.0
1,2-Dichloroethane	1.0	U	0.15	1.0
Trichloroethene	1.0	U	0.14	1.0
Methylcyclohexane	1.0	U	0.25	1.0
1,2-Dichloropropane	1.0	U	0.17	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.16	1.0
4-Methyl-2-pentanone	5.0	U	0.90	5.0
Toluene	1.0	U	0.17	1.0
trans-1,3-Dichloropropene	1.0	U	0.18	1.0
1,1,2-Trichloroethane	1.0	U	0.18	1.0
Tetrachloroethene	1.0	U	0.18	1.0
2-Hexanone	5.0	U	1.1	5.0
Dibromochloromethane	1.0	U	0.17	1.0
1,2-Dibromoethane	1.0	U	0.18	1.0
Chlorobenzene	1.0	U	0.19	1.0
Ethylbenzene	1.0	U	0.18	1.0
Xylenes, Total	1.0	U	0.17	1.0
Styrene	1.0	U	0.17	1.0
Bromoform	1.0	U	0.17	1.0
Isopropylbenzene	1.0	U	0.17	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.17	1.0
1,3-Dichlorobenzene	1.0	U	0.18	1.0
1,4-Dichlorobenzene	1.0	U	0.15	1.0

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **TB-06192012**

Lab Sample ID: 200-11382-14
Client Matrix: Water

Date Sampled: 06/19/2012 0000
Date Received: 06/20/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41005	Instrument ID:	L.i
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lhbad14.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/27/2012 0320			Final Weight/Volume:	5 mL
Prep Date:	06/27/2012 0320				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,2-Dichlorobenzene	1.0	U	0.15	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	0.22	1.0
1,2,4-Trichlorobenzene	1.0	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	92		80 - 115
Toluene-d8	101		80 - 115
Bromofluorobenzene	103		85 - 120
1,2-Dichlorobenzene-d4	102		80 - 115

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-05 (10.9-11.9')**

Lab Sample ID: 200-11398-1
Client Matrix: Solid % Moisture: 6.3

Date Sampled: 06/20/2012 1000
Date Received: 06/21/2012 1040

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41070	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40798	Lab File ID:	ngan21.d
Dilution:	1.0			Initial Weight/Volume:	5.15 g
Analysis Date:	06/26/2012 2153			Final Weight/Volume:	5 mL
Prep Date:	06/22/2012 1321				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		5.2	U J	0.24	5.2
Chloromethane		5.2	U	0.27	5.2
Vinyl chloride		5.2	U	0.31	5.2
Bromomethane		5.2	U J	0.77	5.2
Chloroethane		5.2	U J	0.39	5.2
Trichlorofluoromethane		5.2	U	0.34	5.2
1,1-Dichloroethene		5.2	U	0.38	5.2
1,1,2-Trichloro-1,2,2-trichfluoroethane		5.2	U	0.34	5.2
Acetone		7.9	J	1.0	5.2
Carbon disulfide		5.2	U	0.32	5.2
Methyl acetate		5.2	U	0.65	5.2
Methylene Chloride		5.2 ~~1.9~~	~~J~~ UB	0.57	5.2
trans-1,2-Dichloroethene		5.2	U	0.38	5.2
Methyl t-butyl ether		5.2	U	0.31	5.2
1,2-Dichloroethene, Total		5.2	U	0.80	5.2
1,1-Dichloroethane		5.2	U	0.42	5.2
cis-1,2-Dichloroethene		5.2	U	0.44	5.2
2-Butanone		5.2	U J	1.6	5.2
Chloroform		5.2 ~~0.55~~	~~J B~~ UB	0.33	5.2
1,1,1-Trichloroethane		5.2	U	0.73	5.2
Cyclohexane		5.2	U	0.88	5.2
Carbon tetrachloride		5.2	U	0.79	5.2
Benzene		5.2	U	0.74	5.2
1,2-Dichloroethane		5.2	U	0.64	5.2
Trichloroethene		5.2	U	0.50	5.2
Methylcyclohexane		5.2	U	0.18	5.2
1,2-Dichloropropane		5.2	U	0.30	5.2
Bromodichloromethane		5.2	U	0.22	5.2
cis-1,3-Dichloropropene		5.2	U	0.36	5.2
4-Methyl-2-pentanone		5.2	U	0.62	5.2
Toluene		5.2 ~~0.14~~	~~J B~~ UB	0.10	5.2
trans-1,3-Dichloropropene		5.2	U	0.13	5.2
1,1,2-Trichloroethane		5.2	U	0.35	5.2
Tetrachloroethene		5.2	U	0.11	5.2
2-Hexanone		5.2	U	0.51	5.2
Dibromochloromethane		5.2	U	0.11	5.2
1,2-Dibromoethane		5.2	U	0.16	5.2
Chlorobenzene		5.2	U	0.079	5.2
Ethylbenzene		5.2	U	0.058	5.2
Xylenes, Total		5.2	U	0.76	5.2
Styrene		5.2	U	0.10	5.2
Bromoform		5.2	U	0.21	5.2
Isopropylbenzene		5.2	U	0.080	5.2
1,1,2,2-Tetrachloroethane		5.2	U	0.27	5.2
1,3-Dichlorobenzene		5.2	U	0.16	5.2
1,4-Dichlorobenzene		5.2	U	0.24	5.2

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-05 (10.9-11.9')**

Lab Sample ID: 200-11398-1
Client Matrix: Solid
% Moisture: 6.3

Date Sampled: 06/20/2012 1000
Date Received: 06/21/2012 1040

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41070	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40798	Lab File ID:	ngan21.d
Dilution:	1.0			Initial Weight/Volume:	5.15 g
Analysis Date:	06/26/2012 2153			Final Weight/Volume:	5 mL
Prep Date:	06/22/2012 1321				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		5.2	U	0.23	5.2
1,2-Dibromo-3-Chloropropane		5.2	U	0.94	5.2
1,2,4-Trichlorobenzene		5.2	U	0.21	5.2

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	76		65 - 155
Toluene-d8	89		80 - 115
Bromofluorobenzene	100		80 - 115
1,2-Dichlorobenzene-d4	97		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **TB-06202012**

Lab Sample ID: 200-11398-2
Client Matrix: Water

Date Sampled: 06/20/2012 1000
Date Received: 06/21/2012 1040

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41005	Instrument ID:	L.i
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lhbad13.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/27/2012 0248			Final Weight/Volume:	5 mL
Prep Date:	06/27/2012 0248				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	1.0	U	0.090	1.0
Chloromethane	1.0	U	0.12	1.0
Vinyl chloride	1.0	U	0.090	1.0
Bromomethane	1.0	U	0.43	1.0
Chloroethane	1.0	U	0.12	1.0
Trichlorofluoromethane	1.0	U	0.092	1.0
1,1-Dichloroethene	1.0	U	0.18	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.18	1.0
Acetone	5.0	U	0.92	5.0
Carbon disulfide	1.0	U	0.15	1.0
Methyl acetate	1.0	U	0.23	1.0
Methylene Chloride	1.0	U	0.21	1.0
trans-1,2-Dichloroethene	1.0	U	0.17	1.0
Methyl t-butyl ether	1.0	U	0.17	1.0
1,2-Dichloroethene, Total	1.0	U	0.32	1.0
1,1-Dichloroethane	1.0	U	0.16	1.0
cis-1,2-Dichloroethene	1.0	U	0.16	1.0
2-Butanone	5.0	U	1.1	5.0
Chloroform	1.0	U	0.16	1.0
1,1,1-Trichloroethane	1.0	U	0.16	1.0
Cyclohexane	1.0	U	0.23	1.0
Carbon tetrachloride	1.0	U	0.17	1.0
Benzene	1.0	U	0.17	1.0
1,2-Dichloroethane	1.0	U	0.15	1.0
Trichloroethene	1.0	U	0.14	1.0
Methylcyclohexane	1.0	U	0.25	1.0
1,2-Dichloropropane	1.0	U	0.17	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.16	1.0
4-Methyl-2-pentanone	5.0	U	0.90	5.0
Toluene	1.0	U	0.17	1.0
trans-1,3-Dichloropropene	1.0	U	0.18	1.0
1,1,2-Trichloroethane	1.0	U	0.18	1.0
Tetrachloroethene	1.0	U	0.18	1.0
2-Hexanone	5.0	U	1.1	5.0
Dibromochloromethane	1.0	U	0.17	1.0
1,2-Dibromoethane	1.0	U	0.18	1.0
Chlorobenzene	1.0	U	0.19	1.0
Ethylbenzene	1.0	U	0.18	1.0
Xylenes, Total	1.0	U	0.17	1.0
Styrene	1.0	U	0.17	1.0
Bromoform	1.0	U	0.17	1.0
Isopropylbenzene	1.0	U	0.17	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.17	1.0
1,3-Dichlorobenzene	1.0	U	0.18	1.0
1,4-Dichlorobenzene	1.0	U	0.15	1.0

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **TB-06202012**

Lab Sample ID: 200-11398-2
Client Matrix: Water

Date Sampled: 06/20/2012 1000
Date Received: 06/21/2012 1040

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41005	Instrument ID:	L.i
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lhbad13.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/27/2012 0248			Final Weight/Volume:	5 mL
Prep Date:	06/27/2012 0248				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,2-Dichlorobenzene	1.0	U	0.15	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	0.22	1.0
1,2,4-Trichlorobenzene	1.0	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	88		80 - 115
Toluene-d8	100		80 - 115
Bromofluorobenzene	102		85 - 120
1,2-Dichlorobenzene-d4	102		80 - 115

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-04 (10.2-11.4)**

Lab Sample ID: 200-11417-1
Client Matrix: Solid

% Moisture: 19.5

Date Sampled: 06/21/2012 0900
Date Received: 06/22/2012 1045

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41116	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40873	Lab File ID:	lhbaf22.d
Dilution:	7.3			Initial Weight/Volume:	6.19 g
Analysis Date:	06/28/2012 1929			Final Weight/Volume:	10 mL
Prep Date:	06/25/2012 0936				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		820	UJ	170	820
Chloromethane		820	UJ	210	820
Vinyl chloride		820	U	160	820
Bromomethane		820	UJ	210	820
Chloroethane		820	U	120	820
Trichlorofluoromethane		820	U	110	820
1,1-Dichloroethene		820	U	180	820
1,1,2-Trichloro-1,2,2-trichfluoroethane		820	U	150	820
Acetone		4100	U	730	4100
Carbon disulfide		54000		130	820
Methyl acetate		820	U	170	820
Methylene Chloride		820	U	220	820
trans-1,2-Dichloroethene		820	U	160	820
Methyl t-butyl ether		820	U	150	820
1,2-Dichloroethene, Total		820	U	150	820
1,1-Dichloroethane		820	U	160	820
cis-1,2-Dichloroethene		820	U	150	820
2-Butanone		4100	U	710	4100
Chloroform		820	U	160	820
1,1,1-Trichloroethane		820	U	160	820
Cyclohexane		820	U	160	820
Carbon tetrachloride		820	U	120	820
Benzene		390	J	170	820
1,2-Dichloroethane		820	U	140	820
Trichloroethene		820	U	140	820
Methylcyclohexane		820	U	150	820
1,2-Dichloropropane		820	U	160	820
Bromodichloromethane		820	U	160	820
cis-1,3-Dichloropropene		820	U	150	820
4-Methyl-2-pentanone		4100	U	890	4100
Toluene		380	J	160	820
trans-1,3-Dichloropropene		820	U	140	820
1,1,2-Trichloroethane		820	U	160	820
Tetrachloroethene		820	U	160	820
2-Hexanone		4100	U	630	4100
Dibromochloromethane		820	U	130	820
1,2-Dibromoethane		820	U	160	820
Chlorobenzene		820	U	160	820
Ethylbenzene		820	U	160	820
Xylenes, Total		850		170	820
Styrene		820	U	140	820
Bromoform		820	U	140	820
Isopropylbenzene		820	U	160	820
1,1,2,2-Tetrachloroethane		820	U	150	820
1,3-Dichlorobenzene		820	U	160	820
1,4-Dichlorobenzene		820	U	160	820

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-04 (10.2-11.4)**

Lab Sample ID: 200-11417-1
Client Matrix: Solid
% Moisture: 19.5

Date Sampled: 06/21/2012 0900
Date Received: 06/22/2012 1045

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41116	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40873	Lab File ID:	lhbaf22.d
Dilution:	7.3			Initial Weight/Volume:	6.19 g
Analysis Date:	06/28/2012 1929			Final Weight/Volume:	10 mL
Prep Date:	06/25/2012 0936				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		820	U	160	820
1,2-Dibromo-3-Chloropropane		820	U	140	820
1,2,4-Trichlorobenzene		820	U	160	820

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	89		65 - 155
Toluene-d8	102		80 - 115
Bromofluorobenzene	100		80 - 115
1,2-Dichlorobenzene-d4	102		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-04 (17.2-18.2)**

Lab Sample ID: 200-11417-2
Client Matrix: Solid

% Moisture: 42.1

Date Sampled: 06/21/2012 0915
Date Received: 06/22/2012 1045

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41307	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40874	Lab File ID:	ngap06.d
Dilution:	1.0			Initial Weight/Volume:	5.07 g
Analysis Date:	07/02/2012 1135			Final Weight/Volume:	5 mL
Prep Date:	06/25/2012 0944				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		8.5	U J	0.39	8.5
Chloromethane		8.5	U	0.44	8.5
Vinyl chloride		8.5	U	0.51	8.5
Bromomethane		8.5	U	1.3	8.5
Chloroethane		8.5	U J	0.65	8.5
Trichlorofluoromethane		8.5	U	0.56	8.5
1,1-Dichloroethene		8.5	U	0.63	8.5
1,1,2-Trichloro-1,2,2-trichfluoroethane		8.5	U	0.56	8.5
Acetone		110	J	1.7	8.5
Carbon disulfide		8.5 ~~3.6~~	~~J~~ UB	0.53	8.5
Methyl acetate		8.5	U	1.1	8.5
Methylene Chloride		8.5 ~~1.4~~	~~J~~ UB	0.94	8.5
trans-1,2-Dichloroethene		8.5	U	0.63	8.5
Methyl t-butyl ether		8.5	U	0.51	8.5
1,2-Dichloroethene, Total		8.5	U	1.3	8.5
1,1-Dichloroethane		8.5	U	0.70	8.5
cis-1,2-Dichloroethene		8.5	U	0.72	8.5
2-Butanone		23	J	2.6	8.5
Chloroform		8.5	U	0.55	8.5
1,1,1-Trichloroethane		8.5	U	1.2	8.5
Cyclohexane		8.5	U	1.4	8.5
Carbon tetrachloride		8.5	U	1.3	8.5
Benzene		14		1.2	8.5
1,2-Dichloroethane		8.5	U	1.1	8.5
Trichloroethene		8.5	U	0.82	8.5
Methylcyclohexane		8.5	U	0.29	8.5
1,2-Dichloropropane		8.5	U	0.49	8.5
Bromodichloromethane		8.5	U	0.36	8.5
cis-1,3-Dichloropropene		8.5	U	0.60	8.5
4-Methyl-2-pentanone		8.5	U	1.0	8.5
Toluene		8.5 ~~0.49~~	~~JB~~ UB	0.17	8.5
trans-1,3-Dichloropropene		8.5	U	0.22	8.5
1,1,2-Trichloroethane		8.5	U	0.58	8.5
Tetrachloroethene		8.5	U	0.19	8.5
2-Hexanone		8.5	U	0.83	8.5
Dibromochloromethane		8.5	U	0.19	8.5
1,2-Dibromoethane		8.5	U	0.26	8.5
Chlorobenzene		8.5	U	0.13	8.5
Ethylbenzene		8.5	U	0.095	8.5
Xylenes, Total		8.5	U	1.2	8.5
Styrene		8.5	U	0.17	8.5
Bromoform		8.5	U	0.34	8.5
Isopropylbenzene		0.35	J	0.13	8.5
1,1,2,2-Tetrachloroethane		8.5	U	0.44	8.5
1,3-Dichlorobenzene		8.5	U	0.26	8.5
1,4-Dichlorobenzene		8.5	U	0.39	8.5

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-04 (17.2-18.2)**

Lab Sample ID: 200-11417-2
Client Matrix: Solid

% Moisture: 42.1

Date Sampled: 06/21/2012 0915
Date Received: 06/22/2012 1045

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41307	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40874	Lab File ID:	ngap06.d
Dilution:	1.0			Initial Weight/Volume:	5.07 g
Analysis Date:	07/02/2012 1135			Final Weight/Volume:	5 mL
Prep Date:	06/25/2012 0944				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		8.5	U	0.37	8.5
1,2-Dibromo-3-Chloropropane		8.5	U	1.6	8.5
1,2,4-Trichlorobenzene		~~0.40~~ 8.5	~~JB~~ UB	0.34	8.5

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	77		65 - 155
Toluene-d8	95		80 - 115
Bromofluorobenzene	104		80 - 115
1,2-Dichlorobenzene-d4	86		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-03 (10-10.9)**

Lab Sample ID: 200-11417-3
Client Matrix: Solid % Moisture: 38.4

Date Sampled: 06/21/2012 1025
Date Received: 06/22/2012 1045

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41116	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40873	Lab File ID:	lhbaf13.d
Dilution:	17.6			Initial Weight/Volume:	6.13 g
Analysis Date:	06/28/2012 1441			Final Weight/Volume:	10 mL
Prep Date:	06/25/2012 0936				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		2900	U J	600	2900
Chloromethane		2900	U J	750	2900
Vinyl chloride		2900	U	580	2900
Bromomethane		2900	U J	720	2900
Chloroethane		2900	U	430	2900
Trichlorofluoromethane		2900	U	370	2900
1,1-Dichloroethene		2900	U	630	2900
1,1,2-Trichloro-1,2,2-trichfluoroethane		2900	U	520	2900
Acetone		14000	U	2600	14000
Carbon disulfide		160000		460	2900
Methyl acetate		2900	U	600	2900
Methylene Chloride		2900	U	780	2900
trans-1,2-Dichloroethene		2900	U	580	2900
Methyl t-butyl ether		2900	U	520	2900
1,2-Dichloroethene, Total		2900	U	520	2900
1,1-Dichloroethane		2900	U	580	2900
cis-1,2-Dichloroethene		2900	U	520	2900
2-Butanone		14000	U	2500	14000
Chloroform		2900	U	550	2900
1,1,1-Trichloroethane		2900	U	580	2900
Cyclohexane		2900	U	580	2900
Carbon tetrachloride		2900	U	430	2900
Benzene		2900	U	600	2900
1,2-Dichloroethane		2900	U	490	2900
Trichloroethene		2900	U	490	2900
Methylcyclohexane		2900	U	520	2900
1,2-Dichloropropane		2900	U	550	2900
Bromodichloromethane		2900	U	550	2900
cis-1,3-Dichloropropene		2900	U	520	2900
4-Methyl-2-pentanone		14000	U	3100	14000
Toluene		2900	U	580	2900
trans-1,3-Dichloropropene		2900	U	490	2900
1,1,2-Trichloroethane		2900	U	550	2900
Tetrachloroethene		2900	U	580	2900
2-Hexanone		14000	U	2200	14000
Dibromochloromethane		2900	U	460	2900
1,2-Dibromoethane		2900	U	550	2900
Chlorobenzene		2900	U	580	2900
Ethylbenzene		2900	U	580	2900
Xylenes, Total		920	J	600	2900
Styrene		2900	U	490	2900
Bromoform		2900	U	490	2900
Isopropylbenzene		2900	U	550	2900
1,1,2,2-Tetrachloroethane		2900	U	520	2900
1,3-Dichlorobenzene		2900	U	550	2900
1,4-Dichlorobenzene		2900	U	550	2900

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-03 (10-10.9)**

Lab Sample ID: 200-11417-3
Client Matrix: Solid % Moisture: 38.4

Date Sampled: 06/21/2012 1025
Date Received: 06/22/2012 1045

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41116	Instrument ID: .	L.i
Prep Method:	5035	Prep Batch:	200-40873	Lab File ID:	lhbaf13.d
Dilution:	17.6			Initial Weight/Volume:	6.13 g
Analysis Date:	06/28/2012 1441			Final Weight/Volume:	10 mL
Prep Date:	06/25/2012 0936				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		2900	U	580	2900
1,2-Dibromo-3-Chloropropane		2900	U	490	2900
1,2,4-Trichlorobenzene		2900	U	580	2900

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	101		65 - 155
Toluene-d8	102		80 - 115
Bromofluorobenzene	102		80 - 115
1,2-Dichlorobenzene-d4	101		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-03 (10.9-11.7)**

Lab Sample ID: 200-11417-4
Client Matrix: Solid

% Moisture: 47.9

Date Sampled: 06/21/2012 1030
Date Received: 06/22/2012 1045

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41070	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40874	Lab File ID:	ngan23.d
Dilution:	1.0			Initial Weight/Volume:	5.21 g
Analysis Date:	06/26/2012 2254			Final Weight/Volume:	5 mL
Prep Date:	06/25/2012 0944				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		9.2	U J	0.42	9.2
Chloromethane		9.2	U	0.48	9.2
Vinyl chloride		9.2	U	0.55	9.2
Bromomethane		9.2	U	1.4	9.2
Chloroethane		9.2	U	0.70	9.2
Trichlorofluoromethane		9.2	U	0.61	9.2
1,1-Dichloroethene		9.2	U	0.68	9.2
1,1,2-Trichloro-1,2,2-trichfluoroethane		9.2	U	0.61	9.2
Acetone		180	J	1.8	9.2
Carbon disulfide		110	J	0.57	9.2
Methyl acetate		2.3	J	1.2	9.2
Methylene Chloride		~~1.7~~ 9.2	~~J~~ UB	1.0	9.2
trans-1,2-Dichloroethene		9.2	U J	0.68	9.2
Methyl t-butyl ether		9.2	U	0.55	9.2
1,2-Dichloroethene, Total		9.2	U	1.4	9.2
1,1-Dichloroethane		9.2	U	0.76	9.2
cis-1,2-Dichloroethene		9.2	U	0.77	9.2
2-Butanone		35	J	2.8	9.2
Chloroform		~~1.2~~ 9.2	~~JB~~ UB	0.59	9.2
1,1,1-Trichloroethane		9.2	U J	1.3	9.2
Cyclohexane		9.2	U J	1.6	9.2
Carbon tetrachloride		9.2	U J	1.4	9.2
Benzene		330	J	1.3	9.2
1,2-Dichloroethane		9.2	U J	1.1	9.2
Trichloroethene		9.2	U	0.88	9.2
Methylcyclohexane		9.2	U	0.31	9.2
1,2-Dichloropropane		9.2	U	0.53	9.2
Bromodichloromethane		9.2	U	0.39	9.2
cis-1,3-Dichloropropene		9.2	U	0.64	9.2
4-Methyl-2-pentanone		9.2	U	1.1	9.2
Toluene		~~6.0~~ 9.2	~~JB~~ UB	0.18	9.2
trans-1,3-Dichloropropene		9.2	U J	0.24	9.2
1,1,2-Trichloroethane		9.2	U	0.63	9.2
Tetrachloroethene		9.2	U	0.20	9.2
2-Hexanone		9.2	U	0.90	9.2
Dibromochloromethane		9.2	U	0.20	9.2
1,2-Dibromoethane		9.2	U	0.28	9.2
Chlorobenzene		9.2	U	0.14	9.2
Ethylbenzene		9.2	U	0.10	9.2
Xylenes, Total		1.4	J	1.3	9.2
Styrene		9.2	U J	0.18	9.2
Bromoform		9.2	U	0.37	9.2
Isopropylbenzene		9.2	U	0.14	9.2
1,1,2,2-Tetrachloroethane		9.2	U	0.48	9.2
1,3-Dichlorobenzene		9.2	U	0.28	9.2
1,4-Dichlorobenzene		9.2	U	0.42	9.2

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-03 (10.9-11.7)**

Lab Sample ID: 200-11417-4
Client Matrix: Solid

% Moisture: 47.9

Date Sampled: 06/21/2012 1030
Date Received: 06/22/2012 1045

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41070	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40874	Lab File ID:	ngan23.d
Dilution:	1.0			Initial Weight/Volume:	5.21 g
Analysis Date:	06/26/2012 2254			Final Weight/Volume:	5 mL
Prep Date:	06/25/2012 0944				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		9.2	U J	0.41	9.2
1,2-Dibromo-3-Chloropropane		9.2	U	1.7	9.2
1,2,4-Trichlorobenzene		9.2	U	0.37	9.2

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	64	X	65 - 155
Toluene-d8	110		80 - 115
Bromofluorobenzene	119	X	80 - 115
1,2-Dichlorobenzene-d4	92		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-03 (10.9-11.7)**

Lab Sample ID: 200-11417-4
Client Matrix: Solid

% Moisture: 47.9

Date Sampled: 06/21/2012 1030
Date Received: 06/22/2012 1045

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41307	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40874	Lab File ID:	ngap07.d
Dilution:	1.0			Initial Weight/Volume:	5.67 g
Analysis Date:	07/02/2012 1206	Run Type:	RE	Final Weight/Volume:	5 mL
Prep Date:	06/25/2012 0944				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		8.5	U	0.39	8.5
Chloromethane		8.5	U	0.44	8.5
Vinyl chloride		8.5	U	0.51	8.5
Bromomethane		8.5	U	1.3	8.5
Chloroethane		8.5	U	0.64	8.5
Trichlorofluoromethane		8.5	U	0.56	8.5
1,1-Dichloroethene		8.5	U	0.63	8.5
1,1,2-Trichloro-1,2,2-trichfluoroethane		8.5	U	0.56	8.5
Acetone		180		1.7	8.5
Carbon disulfide		130		0.52	8.5
Methyl acetate		8.5	U	1.1	8.5
Methylene Chloride		1.3	J	0.93	8.5
trans-1,2-Dichloroethene		8.5	U	0.63	8.5
Methyl t-butyl ether		8.5	U	0.51	8.5
1,2-Dichloroethene, Total		8.5	U	1.3	8.5
1,1-Dichloroethane		8.5	U	0.69	8.5
cis-1,2-Dichloroethene		8.5	U	0.71	8.5
2-Butanone		34		2.5	8.5
Chloroform		8.5	U	0.54	8.5
1,1,1-Trichloroethane		8.5	U	1.2	8.5
Cyclohexane		8.5	U	1.4	8.5
Carbon tetrachloride		8.5	U	1.3	8.5
Benzene		290		1.2	8.5
1,2-Dichloroethane		8.5	U	1.0	8.5
Trichloroethene		8.5	U	0.81	8.5
Methylcyclohexane		8.5	U	0.29	8.5
1,2-Dichloropropane		8.5	U	0.49	8.5
Bromodichloromethane		8.5	U	0.36	8.5
cis-1,3-Dichloropropene		8.5	U	0.59	8.5
4-Methyl-2-pentanone		1.1	J	1.0	8.5
Toluene		4.8	J B	0.17	8.5
trans-1,3-Dichloropropene		8.5	U	0.22	8.5
1,1,2-Trichloroethane		8.5	U	0.58	8.5
Tetrachloroethene		8.5	U	0.19	8.5
2-Hexanone		8.5	U	0.83	8.5
Dibromochloromethane		8.5	U	0.19	8.5
1,2-Dibromoethane		8.5	U	0.25	8.5
Chlorobenzene		8.5	U	0.13	8.5
Ethylbenzene		8.5	U	0.095	8.5
Xylenes, Total		1.2	J	1.2	8.5
Styrene		8.5	U	0.17	8.5
Bromoform		8.5	U	0.34	8.5
Isopropylbenzene		8.5	U	0.13	8.5
1,1,2,2-Tetrachloroethane		8.5	U	0.44	8.5
1,3-Dichlorobenzene		8.5	U	0.25	8.5
1,4-Dichlorobenzene		8.5	U	0.39	8.5

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-03 (10.9-11.7)**

Lab Sample ID: 200-11417-4
Client Matrix: Solid

% Moisture: 47.9

Date Sampled: 06/21/2012 1030
Date Received: 06/22/2012 1045

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41307	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40874	Lab File ID:	ngap07.d
Dilution:	1.0			Initial Weight/Volume:	5.67 g
Analysis Date:	07/02/2012 1206	Run Type:	RE	Final Weight/Volume:	5 mL
Prep Date:	06/25/2012 0944				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		8.5	U	0.37	8.5
1,2-Dibromo-3-Chloropropane		8.5	U	1.5	8.5
1,2,4-Trichlorobenzene		0.37	J B	0.34	8.5

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	77		65 - 155
Toluene-d8	104		80 - 115
Bromofluorobenzene	115		80 - 115
1,2-Dichlorobenzene-d4	91		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **TB-06212012**

Lab Sample ID: 200-11417-5
Client Matrix: Water

Date Sampled: 06/21/2012 0000
Date Received: 06/22/2012 1045

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41005	Instrument ID:	L.i
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lhbad10.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/27/2012 0111			Final Weight/Volume:	5 mL
Prep Date:	06/27/2012 0111				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	1.0	U J	0.090	1.0
Chloromethane	1.0	U J	0.12	1.0
Vinyl chloride	1.0	U J	0.090	1.0
Bromomethane	1.0	U J	0.43	1.0
Chloroethane	1.0	U	0.12	1.0
Trichlorofluoromethane	1.0	U	0.092	1.0
1,1-Dichloroethene	1.0	U	0.18	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.18	1.0
Acetone	5.0	U	0.92	5.0
Carbon disulfide	2.0		0.15	1.0
Methyl acetate	1.0	U	0.23	1.0
Methylene Chloride	1.0	U	0.21	1.0
trans-1,2-Dichloroethene	1.0	U	0.17	1.0
Methyl t-butyl ether	1.0	U	0.17	1.0
1,2-Dichloroethene, Total	1.0	U	0.32	1.0
1,1-Dichloroethane	1.0	U	0.16	1.0
cis-1,2-Dichloroethene	1.0	U	0.16	1.0
2-Butanone	5.0	U	1.1	5.0
Chloroform	1.0	U	0.16	1.0
1,1,1-Trichloroethane	1.0	U	0.16	1.0
Cyclohexane	1.0	U	0.23	1.0
Carbon tetrachloride	1.0	U	0.17	1.0
Benzene	1.0	U	0.17	1.0
1,2-Dichloroethane	1.0	U	0.15	1.0
Trichloroethene	1.0	U	0.14	1.0
Methylcyclohexane	1.0	U	0.25	1.0
1,2-Dichloropropane	1.0	U	0.17	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.16	1.0
4-Methyl-2-pentanone	5.0	U	0.90	5.0
Toluene	1.0	U	0.17	1.0
trans-1,3-Dichloropropene	1.0	U	0.18	1.0
1,1,2-Trichloroethane	1.0	U	0.18	1.0
Tetrachloroethene	1.0	U	0.18	1.0
2-Hexanone	5.0	U	1.1	5.0
Dibromochloromethane	1.0	U	0.17	1.0
1,2-Dibromoethane	1.0	U	0.18	1.0
Chlorobenzene	1.0	U	0.19	1.0
Ethylbenzene	1.0	U	0.18	1.0
Xylenes, Total	1.0	U	0.17	1.0
Styrene	1.0	U	0.17	1.0
Bromoform	1.0	U	0.17	1.0
Isopropylbenzene	1.0	U	0.17	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.17	1.0
1,3-Dichlorobenzene	1.0	U	0.18	1.0
1,4-Dichlorobenzene	1.0	U	0.15	1.0

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **TB-06212012**

Lab Sample ID: 200-11417-5
Client Matrix: Water

Date Sampled: 06/21/2012 0000
Date Received: 06/22/2012 1045

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41005	Instrument ID:	L.i
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lhbad10.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/27/2012 0111			Final Weight/Volume:	5 mL
Prep Date:	06/27/2012 0111				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,2-Dichlorobenzene	1.0	U	0.15	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	0.22	1.0
1,2,4-Trichlorobenzene	1.0	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	86		80 - 115
Toluene-d8	102		80 - 115
Bromofluorobenzene	103		85 - 120
1,2-Dichlorobenzene-d4	102		80 - 115

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **DUP-03-06212012**

Lab Sample ID: 200-11417-6
Client Matrix: Solid % Moisture: 43.4

Date Sampled: 06/21/2012 0000
Date Received: 06/22/2012 1045

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41116	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40873	Lab File ID:	lhbaf14.d
Dilution:	17.6			Initial Weight/Volume:	6.62 g
Analysis Date:	06/28/2012 1513			Final Weight/Volume:	10 mL
Prep Date:	06/25/2012 0936				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		3000	U J	630	3000
Chloromethane		3000	U J	790	3000
Vinyl chloride		3000	U	600	3000
Bromomethane		3000	U J	760	3000
Chloroethane		3000	U	450	3000
Trichlorofluoromethane		3000	U	390	3000
1,1-Dichloroethene		3000	U	670	3000
1,1,2-Trichloro-1,2,2-trichfluoroethane		3000	U	540	3000
Acetone		15000	U	2700	15000
Carbon disulfide		300000		480	3000
Methyl acetate		3000	U	630	3000
Methylene Chloride		3000	U	820	3000
trans-1,2-Dichloroethene		3000	U	600	3000
Methyl t-butyl ether		3000	U	540	3000
1,2-Dichloroethene, Total		3000	U	540	3000
1,1-Dichloroethane		3000	U	600	3000
cis-1,2-Dichloroethene		3000	U	540	3000
2-Butanone		15000	U	2600	15000
Chloroform		3000	U	570	3000
1,1,1-Trichloroethane		3000	U	600	3000
Cyclohexane		3000	U	600	3000
Carbon tetrachloride		3000	U	450	3000
Benzene		3000	U	630	3000
1,2-Dichloroethane		3000	U	510	3000
Trichloroethene		3000	U	510	3000
Methylcyclohexane		3000	U	540	3000
1,2-Dichloropropane		3000	U	570	3000
Bromodichloromethane		3000	U	570	3000
cis-1,3-Dichloropropene		3000	U	540	3000
4-Methyl-2-pentanone		15000	U	3300	15000
Toluene		700	J	600	3000
trans-1,3-Dichloropropene		3000	U	510	3000
1,1,2-Trichloroethane		3000	U	570	3000
Tetrachloroethene		3000	U	600	3000
2-Hexanone		15000	U	2300	15000
Dibromochloromethane		3000	U	480	3000
1,2-Dibromoethane		3000	U	570	3000
Chlorobenzene		3000	U	600	3000
Ethylbenzene		3000	U	600	3000
Xylenes, Total		2000	J	630	3000
Styrene		3000	U	510	3000
Bromoform		3000	U	510	3000
Isopropylbenzene		3000	U	570	3000
1,1,2,2-Tetrachloroethane		3000	U	540	3000
1,3-Dichlorobenzene		3000	U	570	3000
1,4-Dichlorobenzene		3000	U	570	3000

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **DUP-03-06212012**

Lab Sample ID: 200-11417-6
Client Matrix: Solid % Moisture: 43.4

Date Sampled: 06/21/2012 0000
Date Received: 06/22/2012 1045

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41116	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40873	Lab File ID:	lhbaf14.d
Dilution:	17.6			Initial Weight/Volume:	6.62 g
Analysis Date:	06/28/2012 1513.			Final Weight/Volume:	10 mL
Prep Date:	06/25/2012 0936				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		3000	U	600	3000
1,2-Dibromo-3-Chloropropane		3000	U	510	3000
1,2,4-Trichlorobenzene		3000	U	600	3000

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	100		65 - 155
Toluene-d8	100		80 - 115
Bromofluorobenzene	105		80 - 115
1,2-Dichlorobenzene-d4	103		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-16 (1-1.3')**

Lab Sample ID: 200-11371-2
Client Matrix: Solid

% Moisture: 13.7

Date Sampled: 06/18/2012 1400
Date Received: 06/19/2012 1100

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118849	Instrument ID:	BNAMS10
Prep Method:	3541	Prep Batch:	460-117517	Lab File ID:	p31650.d
Dilution:	100			Initial Weight/Volume:	15.03 g
Analysis Date:	07/06/2012 1241	Run Type:	DL	Final Weight/Volume:	1 mL
Prep Date:	06/26/2012 1230			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		38000	U J	5100	38000
2-Chlorophenol		38000	U	5000	38000
2-Methylphenol		38000	U	6500	38000
2-Nitrophenol		38000	U	4300	38000
3 & 4 Methylphenol		38000	U	6500	38000
2,4-Dimethylphenol		38000	U	9400	38000
2,4-Dichlorophenol		38000	U	5600	38000
4-Chloro-3-methylphenol		38000	U	5800	38000
2,4,6-Trichlorophenol		38000	U	4500	38000
2,4,5-Trichlorophenol		38000	U	4900	38000
2,4-Dinitrophenol		120000	U	22000	120000
4-Nitrophenol		120000	U	25000	120000
4,6-Dinitro-2-methylphenol		120000	U	10000	120000
Pentachlorophenol		120000	U	11000	120000
Bis(2-chloroethyl)ether		3800	U	520	3800
1,3-Dichlorobenzene		38000	U	3500	38000
Benzoic acid		38000	U	38000	38000
1,4-Dichlorobenzene		38000	U	4300	38000
1,2-Dichlorobenzene		38000	U	4400	38000
N-Nitrosodi-n-propylamine		3800	U	640	3800
Hexachloroethane		3800	U	430	3800
Nitrobenzene		3800	U	540	3800
Isophorone		38000	U	4600	38000
Bis(2-chloroethoxy)methane		38000	U	4900	38000
1,2,4-Trichlorobenzene		3800	U	430	3800
Naphthalene		770000	D J	4400	38000
4-Chloroaniline		38000	U J	10000	38000
Hexachlorobutadiene		7800	U J	930	7800
2-Methylnaphthalene		260000	D J	4900	38000
Hexachlorocyclopentadiene		38000	U J	4500	38000
2-Chloronaphthalene		38000	U	4300	38000
2-Nitroaniline		78000	U	16000	78000
Dimethyl phthalate		38000	U	4500	38000
Acenaphthylene		29000	J D	4500	38000
2,6-Dinitrotoluene		7800	U J	1200	7800
3-Nitroaniline		78000	U J	14000	78000
Acenaphthene		58000	D J	5600	38000
Dibenzofuran		27000	J D	4500	38000
2,4-Dinitrotoluene		7800	U J	1300	7800
Diethyl phthalate		38000	U J	4600	38000
4-Chlorophenyl phenyl ether		38000	U J	4500	38000
Fluorene		130000	D J	4900	38000
4-Nitroaniline		78000	U J	12000	78000
N-Nitrosodiphenylamine		38000	U	3800	38000
4-Bromophenyl phenyl ether		38000	U	3800	38000
Hexachlorobenzene		3800	U	520	3800

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-16 (1-1.3')**

Lab Sample ID: 200-11371-2
Client Matrix: Solid

% Moisture: 13.7

Date Sampled: 06/18/2012 1400
Date Received: 06/19/2012 1100

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118849	Instrument ID:	BNAMS10
Prep Method:	3541	Prep Batch:	460-117517	Lab File ID:	p31650.d
Dilution:	100			Initial Weight/Volume:	15.03 g
Analysis Date:	07/06/2012 1241	Run Type:	DL	Final Weight/Volume:	1 mL
Prep Date:	06/26/2012 1230			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		480000	D J	4900	38000
Anthracene		88000	D J	4700	38000
Carbazole		15000	J D	4500	38000
Di-n-butyl phthalate		38000	U J	4700	38000
Fluoranthene		190000	D J	5100	38000
Pyrene		270000	D J	3200	38000
Butyl benzyl phthalate		38000	U J	3500	38000
3,3'-Dichlorobenzidine		78000	U J	13000	78000
Benzo[a]anthracene		120000	D J	270	3800
Chrysene		130000	D J	4500	38000
Bis(2-ethylhexyl) phthalate		38000	U J	13000	38000
Di-n-octyl phthalate		38000	U J	2400	38000
Benzo[b]fluoranthene		94000	D J	240	3800
Benzo[k]fluoranthene		31000	D	290	3800
Benzo[a]pyrene		110000	D	270	3800
Indeno[1,2,3-cd]pyrene		51000	D	710	3800
Dibenz(a,h)anthracene		13000	D	480	3800
Benzo[g,h,i]perylene		60000	D	2800	38000
2,2'-oxybis[1-chloropropane]		38000	U J	4200	38000

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	0	D	38 - 105
Phenol-d5	0	D	41 - 118
Terphenyl-d14	0	D	16 - 151
2,4,6-Tribromophenol	0	D	10 - 120
2-Fluorophenol	0	D	37 - 125
2-Fluorobiphenyl	0	D	40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-09 (4-5')**

Lab Sample ID: 200-11371-3
Client Matrix: Solid

% Moisture: 36.9

Date Sampled: 06/18/2012 1245
Date Received: 06/19/2012 1100

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-119065	Instrument ID:	BNAMS10
Prep Method:	3541	Prep Batch:	460-117517	Lab File ID:	p31684.d
Dilution:	20			Initial Weight/Volume:	15.00 g
Analysis Date:	07/08/2012 1729	Run Type:	DL	Final Weight/Volume:	1 mL
Prep Date:	06/26/2012 1230			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		10000	U	1400	10000
2-Chlorophenol		10000	U	1400	10000
2-Methylphenol		10000	U	1800	10000
2-Nitrophenol		10000	U	1200	10000
3 & 4 Methylphenol		10000	U	1800	10000
2,4-Dimethylphenol		10000	U	2600	10000
2,4-Dichlorophenol		10000	U	1500	10000
4-Chloro-3-methylphenol		10000	U	1600	10000
2,4,6-Trichlorophenol		10000	U	1200	10000
2,4,5-Trichlorophenol		10000	U	1400	10000
2,4-Dinitrophenol		32000	U	6000	32000
4-Nitrophenol		32000	U	6700	32000
4,6-Dinitro-2-methylphenol		32000	U	2900	32000
Pentachlorophenol		32000	U	3100	32000
Bis(2-chloroethyl)ether		1000	U	140	1000
1,3-Dichlorobenzene		10000	U	950	10000
Benzoic acid		10000	U	10000	10000
1,4-Dichlorobenzene		10000	U	1200	10000
1,2-Dichlorobenzene		10000	U	1200	10000
N-Nitrosodi-n-propylamine		1000	U	170	1000
Hexachloroethane		1000	U	120	1000
Nitrobenzene		1000	U	150	1000
Isophorone		10000	U	1300	10000
Bis(2-chloroethoxy)methane		10000	U	1400	10000
1,2,4-Trichlorobenzene		1000	U	120	1000
Naphthalene		120000	D	1200	10000
4-Chloroaniline		10000	U	2800	10000
Hexachlorobutadiene		2100	U	260	2100
2-Methylnaphthalene		18000	D	1300	10000
Hexachlorocyclopentadiene		10000	U	1200	10000
2-Chloronaphthalene		10000	U	1200	10000
2-Nitroaniline		21000	U	4400	21000
Dimethyl phthalate		10000	U	1200	10000
Acenaphthylene		9900	J D	1200	10000
2,6-Dinitrotoluene		2100	U	320	2100
3-Nitroaniline		21000	U	3700	21000
Acenaphthene		6200	J D	1500	10000
Dibenzofuran		8600	J D	1200	10000
2,4-Dinitrotoluene		2100	U	350	2100
Diethyl phthalate		10000	U	1200	10000
4-Chlorophenyl phenyl ether		10000	U	1200	10000
Fluorene		11000	D	1300	10000
4-Nitroaniline		21000	U	3300	21000
N-Nitrosodiphenylamine		10000	U	1000	10000
4-Bromophenyl phenyl ether		10000	U	1000	10000
Hexachlorobenzene		1000	U	140	1000

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-09 (4-5')**

Lab Sample ID: 200-11371-3
Client Matrix: Solid

% Moisture: 36.9

Date Sampled: 06/18/2012 1245
Date Received: 06/19/2012 1100

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-119065	Instrument ID:	BNAMS10
Prep Method:	3541	Prep Batch:	460-117517	Lab File ID:	p31684.d
Dilution:	20			Initial Weight/Volume:	15.00 g
Analysis Date:	07/08/2012 1729	Run Type:	DL	Final Weight/Volume:	1 mL
Prep Date:	06/26/2012 1230			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		27000	D J	1300	10000
Anthracene		6700	J D	1300	10000
Carbazole		12000	D J	1200	10000
Di-n-butyl phthalate		10000	U J	1300	10000
Fluoranthene		20000	D J	1400	10000
Pyrene		20000	D J	880	10000
Butyl benzyl phthalate		10000	U J	960	10000
3,3'-Dichlorobenzidine		21000	U J	3700	21000
Benzo[a]anthracene		17000	D J	73	1000
Chrysene		15000	D J	1200	10000
Bis(2-ethylhexyl) phthalate		10000	U J	3500	10000
Di-n-octyl phthalate		10000	U J	670	10000
Benzo[b]fluoranthene		17000	D J	66	1000
Benzo[k]fluoranthene		8500	D	80	1000
Benzo[a]pyrene		17000	D	74	1000
Indeno[1,2,3-cd]pyrene		10000	D	190	1000
Dibenz(a,h)anthracene		2300	D	130	1000
Benzo[g,h,i]perylene		9400	J D	780	10000
2,2'-oxybis[1-chloropropane]		10000	U J	1200	10000

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	0	D	38 - 105
Phenol-d5	0	D	41 - 118
Terphenyl-d14	0	D	16 - 151
2,4,6-Tribromophenol	0	D	10 - 120
2-Fluorophenol	0	D	37 - 125
2-Fluorobiphenyl	0	D	40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-13 (8.2-9)**

Lab Sample ID: 200-11382-1
Client Matrix: Solid % Moisture: 16.4

Date Sampled: 06/16/2012 1000
Date Received: 06/20/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-116982	Instrument ID:	BNAMS4
Prep Method:	3541	Prep Batch:	460-117691	Lab File ID:	uu77593.d
Dilution:	5.0			Initial Weight/Volume:	15.00 g
Analysis Date:	06/21/2012 0846			Final Weight/Volume:	1 mL
Prep Date:	06/19/2012 1507			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		2000	U	270	2000
2-Chlorophenol		2000	U	260	2000
2-Methylphenol		2000	U	340	2000
2-Nitrophenol		2000	U	220	2000
3 & 4 Methylphenol		2000	U	340	2000
2,4-Dimethylphenol		2000	U	490	2000
2,4-Dichlorophenol		2000	U	290	2000
4-Chloro-3-methylphenol		2000	U	300	2000
2,4,6-Trichlorophenol		2000	U	230	2000
2,4,5-Trichlorophenol		2000	U	260	2000
2,4-Dinitrophenol		6000	U	1100	6000
4-Nitrophenol		6000	U	1300	6000
4,6-Dinitro-2-methylphenol		6000	U	540	6000
Pentachlorophenol		6000	U	590	6000
Bis(2-chloroethyl)ether		200	U	27	200
1,3-Dichlorobenzene		2000	U	180	2000
Benzoic acid		2000	U	2000	2000
1,4-Dichlorobenzene		2000	U	220	2000
1,2-Dichlorobenzene		2000	U	230	2000
N-Nitrosodi-n-propylamine		200	U	33	200
Hexachloroethane		200	U	22	200
Nitrobenzene		200	U	28	200
Isophorone		2000	U	240	2000
Bis(2-chloroethoxy)methane		2000	U	260	2000
1,2,4-Trichlorobenzene		200	U	22	200
Naphthalene		41000		230	2000
4-Chloroaniline		2000	U	520	2000
Hexachlorobutadiene		400	U	48	400
2-Methylnaphthalene		4800		250	2000
Hexachlorocyclopentadiene		2000	U	230	2000
2-Chloronaphthalene		2000	U	220	2000
2-Nitroaniline		4000	U	830	4000
Dimethyl phthalate		2000	U	230	2000
Acenaphthylene		960	J	230	2000
2,6-Dinitrotoluene		400	U	60	400
3-Nitroaniline		4000	U	700	4000
Acenaphthene		1800	J	290	2000
Dibenzofuran		7600		230	2000
2,4-Dinitrotoluene		400	U	65	400
Diethyl phthalate		2000	U	240	2000
4-Chlorophenyl phenyl ether		2000	U	230	2000
Fluorene		9500		250	2000
4-Nitroaniline		4000	U	620	4000
N-Nitrosodiphenylamine		2000	U	200	2000
4-Bromophenyl phenyl ether		2000	U	200	2000
Hexachlorobenzene		200	U	27	200

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-13 (8.2-9)**

Lab Sample ID: 200-11382-1
Client Matrix: Solid
% Moisture: 16.4

Date Sampled: 06/16/2012 1000
Date Received: 06/20/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-116982	Instrument ID:	BNAMS4
Prep Method:	3541	Prep Batch:	460-117691	Lab File ID:	uu77593.d
Dilution:	5.0			Initial Weight/Volume:	15.00 g
Analysis Date:	06/21/2012 0846			Final Weight/Volume:	1 mL
Prep Date:	06/19/2012 1507			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		25000		250	2000
Anthracene		7200		240	2000
Carbazole		11000		230	2000
Di-n-butyl phthalate		2000	U	240	2000
Fluoranthene		9900		260	2000
Pyrene		11000		170	2000
Butyl benzyl phthalate		2000	U	180	2000
3,3'-Dichlorobenzidine		4000	U	690	4000
Benzo[a]anthracene		4200		14	200
Chrysene		4600		230	2000
Bis(2-ethylhexyl) phthalate		2000	U	660	2000
Di-n-octyl phthalate		2000	U	130	2000
Benzo[b]fluoranthene		2300		13	200
Benzo[k]fluoranthene		1500		15	200
Benzo[a]pyrene		2800		14	200
Indeno[1,2,3-cd]pyrene		1500		37	200
Dibenz(a,h)anthracene		460		25	200
Benzo[g,h,i]perylene		1600	J	150	2000
2,2'-oxybis[1-chloropropane]		2000	U	220	2000

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	63		38 - 105
Phenol-d5	68		41 - 118
Terphenyl-d14	94		16 - 151
2,4,6-Tribromophenol	40		10 - 120
2-Fluorophenol	64		37 - 125
2-Fluorobiphenyl	64		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-13 (12-13)**

Lab Sample ID: 200-11382-2
Client Matrix: Solid

% Moisture: 12.2

Date Sampled: 06/16/2012 1010
Date Received: 06/20/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-116828	Instrument ID:	BNAMS4
Prep Method:	3541	Prep Batch:	460-117691	Lab File ID:	uu77544.d
Dilution:	1.0			Initial Weight/Volume:	15.02 g
Analysis Date:	06/20/2012 0401			Final Weight/Volume:	1 mL
Prep Date:	06/19/2012 1507			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		380	U	50	380
2-Chlorophenol		380	U	49	380
2-Methylphenol		380	U	64	380
2-Nitrophenol		380	U	42	380
3 & 4 Methylphenol		380	U	64	380
2,4-Dimethylphenol		380	U	93	380
2,4-Dichlorophenol		380	U	55	380
4-Chloro-3-methylphenol		380	U	57	380
2,4,6-Trichlorophenol		380	U	44	380
2,4,5-Trichlorophenol		380	U	49	380
2,4-Dinitrophenol		~~1100~~	~~U~~ R	~~210~~	~~1100~~
4-Nitrophenol		1100	U	240	1100
4,6-Dinitro-2-methylphenol		~~1100~~	~~U~~ R	~~100~~	~~1100~~
Pentachlorophenol		1100	U	110	1100
Bis(2-chloroethyl)ether		38	U	5.1	38
1,3-Dichlorobenzene		380	U	34	380
Benzoic acid		~~380~~	~~U~~ R	~~380~~	~~380~~
1,4-Dichlorobenzene		380	U	42	380
1,2-Dichlorobenzene		380	U	44	380
N-Nitrosodi-n-propylamine		38	U	6.3	38
Hexachloroethane		38	U	4.2	38
Nitrobenzene		38	U	5.3	38
Isophorone		380	U	46	380
Bis(2-chloroethoxy)methane		380	U	49	380
1,2,4-Trichlorobenzene		38	U	4.3	38
Naphthalene		380	U	44	380
4-Chloroaniline		380	U	100	380
Hexachlorobutadiene		76	U	9.2	76
2-Methylnaphthalene		380	U	48	380
Hexachlorocyclopentadiene		380	U	44	380
2-Chloronaphthalene		380	U	42	380
2-Nitroaniline		760	U	160	760
Dimethyl phthalate		380	U	45	380
Acenaphthylene		380	U	44	380
2,6-Dinitrotoluene		76	U	11	76
3-Nitroaniline		760	U	130	760
Acenaphthene		380	U	55	380
Dibenzofuran		380	U	44	380
2,4-Dinitrotoluene		76	U	12	76
Diethyl phthalate		380	U	45	380
4-Chlorophenyl phenyl ether		380	U	44	380
Fluorene		380	U	48	380
4-Nitroaniline		760	U	120	760
N-Nitrosodiphenylamine		380	U	37	380
4-Bromophenyl phenyl ether		380	U	37	380
Hexachlorobenzene		38	U	5.1	38

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-13 (12-13)**

Lab Sample ID: 200-11382-2
Client Matrix: Solid
% Moisture: 12.2

Date Sampled: 06/16/2012 1010
Date Received: 06/20/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-116828	Instrument ID:	BNAMS4
Prep Method:	3541	Prep Batch:	460-117691	Lab File ID:	uu77544.d
Dilution:	1.0			Initial Weight/Volume:	15.02 g
Analysis Date:	06/20/2012 0401			Final Weight/Volume:	1 mL
Prep Date:	06/19/2012 1507			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		380	U	48	380
Anthracene		380	U	46	380
Carbazole		380	U	44	380
Di-n-butyl phthalate		380	U	46	380
Fluoranthene		380	U	50	380
Pyrene		380	U	32	380
Butyl benzyl phthalate		380	U	34	380
3,3'-Dichlorobenzidine		760	U	130	760
Benzo[a]anthracene		38	U	2.6	38
Chrysene		380	U	44	380
Bis(2-ethylhexyl) phthalate		380	U	130	380
Di-n-octyl phthalate		380	U	24	380
Benzo[b]fluoranthene		38	U	2.4	38
Benzo[k]fluoranthene		38	U	2.9	38
Benzo[a]pyrene		38	U	2.7	38
Indeno[1,2,3-cd]pyrene		38	U	7.0	38
Dibenz(a,h)anthracene		38	U	4.7	38
Benzo[g,h,i]perylene		380	U	28	380
2,2'-oxybis[1-chloropropane]		380	U	42	380

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	53		38 - 105
Phenol-d5	83		41 - 118
Terphenyl-d14	82		16 - 151
2,4,6-Tribromophenol	78		10 - 120
2-Fluorophenol	75		37 - 125
2-Fluorobiphenyl	53		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-14 (6.5-7.5)**

Lab Sample ID: 200-11382-3
Client Matrix: Solid

% Moisture: 58.6

Date Sampled: 06/16/2012 1045
Date Received: 06/20/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-117392	Instrument ID:	BNAMS4
Prep Method:	3541	Prep Batch:	460-117691	Lab File ID:	uu77684.d
Dilution:	10			Initial Weight/Volume:	15.03 g
Analysis Date:	06/24/2012 1158	Run Type:	DL	Final Weight/Volume:	1 mL
Prep Date:	06/19/2012 1507			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		8000	U J	1100	8000
2-Chlorophenol		8000	U	1000	8000
2-Methylphenol		8000	U	1400	8000
2-Nitrophenol		8000	U	890	8000
3 & 4 Methylphenol		8000	U	1400	8000
2,4-Dimethylphenol		8000	U	2000	8000
2,4-Dichlorophenol		8000	U	1200	8000
4-Chloro-3-methylphenol		8000	U	1200	8000
2,4,6-Trichlorophenol		8000	U	930	8000
2,4,5-Trichlorophenol		8000	U	1000	8000
2,4-Dinitrophenol		24000	U	4500	24000
4-Nitrophenol		24000	U	5100	24000
4,6-Dinitro-2-methylphenol		24000	U	2200	24000
Pentachlorophenol		24000	U	2400	24000
Bis(2-chloroethyl)ether		800	U	110	800
1,3-Dichlorobenzene		8000	U	720	8000
Benzoic acid		8000	U	8000	8000
1,4-Dichlorobenzene		8000	U	900	8000
1,2-Dichlorobenzene		8000	U	930	8000
N-Nitrosodi-n-propylamine		800	U	130	800
Hexachloroethane		800	U	89	800
Nitrobenzene		800	U	110	800
Isophorone		8000	U	970	8000
Bis(2-chloroethoxy)methane		8000	U	1000	8000
1,2,4-Trichlorobenzene		800	U	90	800
Naphthalene		150000	D J	920	8000
4-Chloroaniline		8000	U J	2100	8000
Hexachlorobutadiene		1600	U J	190	1600
2-Methylnaphthalene		16000	D J	1000	8000
Hexachlorocyclopentadiene		8000	U J	940	8000
2-Chloronaphthalene		8000	U	890	8000
2-Nitroaniline		16000	U	3300	16000
Dimethyl phthalate		8000	U	950	8000
Acenaphthylene		1600	J D	940	8000
2,6-Dinitrotoluene		1600	U J	240	1600
3-Nitroaniline		16000	U J	2800	16000
Acenaphthene		8000	U J	1200	8000
Dibenzofuran		4200	J D	940	8000
2,4-Dinitrotoluene		1600	U J	260	1600
Diethyl phthalate		8000	U J	950	8000
4-Chlorophenyl phenyl ether		8000	U J	940	8000
Fluorene		7100	J D	1000	8000
4-Nitroaniline		16000	U J	2500	16000
N-Nitrosodiphenylamine		8000	U	790	8000
4-Bromophenyl phenyl ether		8000	U	790	8000
Hexachlorobenzene		800	U	110	800

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-14 (6.5-7.5)**

Lab Sample ID: 200-11382-3
Client Matrix: Solid

% Moisture: 58.6

Date Sampled: 06/16/2012 1045
Date Received: 06/20/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-117392	Instrument ID:	BNAMS4
Prep Method:	3541	Prep Batch:	460-117691	Lab File ID:	uu77684.d
Dilution:	10			Initial Weight/Volume:	15.03 g
Analysis Date:	06/24/2012 1158	Run Type:	DL	Final Weight/Volume:	1 mL
Prep Date:	06/19/2012 1507			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		12000	D J	1000	8000
Anthracene		2800	J D	970	8000
Carbazole		8000	U J	940	8000
Di-n-butyl phthalate		8000	U J	980	8000
Fluoranthene		6000	J D	1100	8000
Pyrene		10000	D J	670	8000
Butyl benzyl phthalate		8000	U J	730	8000
3,3'-Dichlorobenzidine		16000	U J	2800	16000
Benzo[a]anthracene		9800	D J	56	800
Chrysene		12000	D J	930	8000
Bis(2-ethylhexyl) phthalate		8000	U J	2700	8000
Di-n-octyl phthalate		8000	U J	510	8000
Benzo[b]fluoranthene		5600	D J	50	800
Benzo[k]fluoranthene		2200	D	61	800
Benzo[a]pyrene		8200	D	56	800
Indeno[1,2,3-cd]pyrene		3300	D	150	800
Dibenz(a,h)anthracene		800	U J	100	800
Benzo[g,h,i]perylene		4700	J D	590	8000
2,2'-oxybis[1-chloropropane]		8000	U J	880	8000

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	0	D	38 - 105
Phenol-d5	0	D	41 - 118
Terphenyl-d14	0	D	16 - 151
2,4,6-Tribromophenol	0	D	10 - 120
2-Fluorophenol	0	D	37 - 125
2-Fluorobiphenyl	0	D	40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-14 (17-18)**

Lab Sample ID: 200-11382-4
Client Matrix: Solid % Moisture: 12.6

Date Sampled: 06/16/2012 1100
Date Received: 06/20/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-116828	Instrument ID:	BNAMS4
Prep Method:	3541	Prep Batch:	460-117691	Lab File ID:	uu77545.d
Dilution:	1.0			Initial Weight/Volume:	15.00 g
Analysis Date:	06/20/2012 0421			Final Weight/Volume:	1 mL
Prep Date:	06/19/2012 1507			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		380	U	51	380
2-Chlorophenol		380	U	50	380
2-Methylphenol		380	U	65	380
2-Nitrophenol		380	U	42	380
3 & 4 Methylphenol		380	U	65	380
2,4-Dimethylphenol		380	U	93	380
2,4-Dichlorophenol		380	U	55	380
4-Chloro-3-methylphenol		380	U	57	380
2,4,6-Trichlorophenol		380	U	44	380
2,4,5-Trichlorophenol		380	U	49	380
2,4-Dinitrophenol		1100	U	220	1100
4-Nitrophenol		1100	U	240	1100
4,6-Dinitro-2-methylphenol		1100	U	100	1100
Pentachlorophenol		1100	U	110	1100
Bis(2-chloroethyl)ether		38	U	5.2	38
1,3-Dichlorobenzene		380	U	34	380
Benzoic acid		380	U	380	380
1,4-Dichlorobenzene		380	U	43	380
1,2-Dichlorobenzene		380	U	44	380
N-Nitrosodi-n-propylamine		38	U	6.3	38
Hexachloroethane		38	U	4.2	38
Nitrobenzene		38	U	5.4	38
Isophorone		380	U	46	380
Bis(2-chloroethoxy)methane		380	U	49	380
1,2,4-Trichlorobenzene		38	U	4.3	38
Naphthalene		380	U	44	380
4-Chloroaniline		380	U	100	380
Hexachlorobutadiene		77	U	9.2	77
2-Methylnaphthalene		380	U	49	380
Hexachlorocyclopentadiene		380	U	44	380
2-Chloronaphthalene		380	U	42	380
2-Nitroaniline		770	U	160	770
Dimethyl phthalate		380	U	45	380
Acenaphthylene		380	U	45	380
2,6-Dinitrotoluene		77	U	11	77
3-Nitroaniline		770	U	130	770
Acenaphthene		380	U	55	380
Dibenzofuran		380	U	44	380
2,4-Dinitrotoluene		77	U	12	77
Diethyl phthalate		380	U	45	380
4-Chlorophenyl phenyl ether		380	U	44	380
Fluorene		380	U	48	380
4-Nitroaniline		770	U	120	770
N-Nitrosodiphenylamine		380	U	37	380
4-Bromophenyl phenyl ether		380	U	38	380
Hexachlorobenzene		38	U	5.2	38

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-14 (17-18)**

Lab Sample ID: 200-11382-4
Client Matrix: Solid
% Moisture: 12.6

Date Sampled: 06/16/2012 1100
Date Received: 06/20/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-116828	Instrument ID:	BNAMS4
Prep Method:	3541	Prep Batch:	460-117691	Lab File ID:	uu77545.d
Dilution:	1.0			Initial Weight/Volume:	15.00 g
Analysis Date:	06/20/2012 0421			Final Weight/Volume:	1 mL
Prep Date:	06/19/2012 1507			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		380	U	48	380
Anthracene		380	U	46	380
Carbazole		380	U	45	380
Di-n-butyl phthalate		380	U	47	380
Fluoranthene		380	U	50	380
Pyrene		380	U	32	380
Butyl benzyl phthalate		380	U	35	380
3,3'-Dichlorobenzidine		770	U	130	770
Benzo[a]anthracene		38	U	2.6	38
Chrysene		380	U	44	380
Bis(2-ethylhexyl) phthalate		380	U	130	380
Di-n-octyl phthalate		380	U	24	380
Benzo[b]fluoranthene		38	U	2.4	38
Benzo[k]fluoranthene		38	U	2.9	38
Benzo[a]pyrene		38	U	2.7	38
Indeno[1,2,3-cd]pyrene		38	U	7.0	38
Dibenz(a,h)anthracene		38	U	4.8	38
Benzo[g,h,i]perylene		380	U	28	380
2,2'-oxybis[1-chloropropane]		380	U	42	380

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	60		38 - 105
Phenol-d5	98		41 - 118
Terphenyl-d14	106		16 - 151
2,4,6-Tribromophenol	99		10 - 120
2-Fluorophenol	89		37 - 125
2-Fluorobiphenyl	60		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-20 (8.5-9.5)**

Lab Sample ID: 200-11382-5
Client Matrix: Solid % Moisture: 12.0

Date Sampled: 06/16/2012 1230
Date Received: 06/20/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-116828	Instrument ID:	BNAMS4
Prep Method:	3541	Prep Batch:	460-117691	Lab File ID:	uu77559.d
Dilution:	1.0			Initial Weight/Volume:	15.05 g
Analysis Date:	06/20/2012 1024			Final Weight/Volume:	1 mL
Prep Date:	06/19/2012 1507			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		370	U	50	370
2-Chlorophenol		370	U	49	370
2-Methylphenol		370	U	64	370
2-Nitrophenol		370	U	42	370
3 & 4 Methylphenol		370	U	64	370
2,4-Dimethylphenol		370	U	92	370
2,4-Dichlorophenol		370	U	55	370
4-Chloro-3-methylphenol		370	U	57	370
2,4,6-Trichlorophenol		370	U	44	370
2,4,5-Trichlorophenol		370	U	48	370
2,4-Dinitrophenol		1100	U	210	1100
4-Nitrophenol		1100	U	240	1100
4,6-Dinitro-2-methylphenol		1100	U	100	1100
Pentachlorophenol		1100	U	110	1100
Bis(2-chloroethyl)ether		37	U	5.1	37
1,3-Dichlorobenzene		370	U	34	370
Benzoic acid		370	U	370	370
1,4-Dichlorobenzene		370	U	42	370
1,2-Dichlorobenzene		370	U	43	370
N-Nitrosodi-n-propylamine		37	U	6.3	37
Hexachloroethane		37	U	4.2	37
Nitrobenzene		37	U	5.3	37
Isophorone		370	U	45	370
Bis(2-chloroethoxy)methane		370	U	48	370
1,2,4-Trichlorobenzene		37	U	4.2	37
Naphthalene		700		43	370
4-Chloroaniline		370	U	99	370
Hexachlorobutadiene		76	U	9.1	76
2-Methylnaphthalene		610		48	370
Hexachlorocyclopentadiene		370	U	44	370
2-Chloronaphthalene		370	U	42	370
2-Nitroaniline		760	U	160	760
Dimethyl phthalate		370	U	44	370
Acenaphthylene		720		44	370
2,6-Dinitrotoluene		76	U	11	76
3-Nitroaniline		760	U	130	760
Acenaphthene		190	J	55	370
Dibenzofuran		210	J	44	370
2,4-Dinitrotoluene		76	U	12	76
Diethyl phthalate		370	U	45	370
4-Chlorophenyl phenyl ether		370	U	44	370
Fluorene		460		48	370
4-Nitroaniline		760	U	120	760
N-Nitrosodiphenylamine		370	U	37	370
4-Bromophenyl phenyl ether		370	U	37	370
Hexachlorobenzene		37	U	5.1	37

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-20 (8.5-9.5)**

Lab Sample ID: 200-11382-5
Client Matrix: Solid
% Moisture: 12.0

Date Sampled: 06/16/2012 1230
Date Received: 06/20/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-116828	Instrument ID:	BNAMS4
Prep Method:	3541	Prep Batch:	460-117691	Lab File ID:	uu77559.d
Dilution:	1.0			Initial Weight/Volume:	15.05 g
Analysis Date:	06/20/2012 1024			Final Weight/Volume:	1 mL
Prep Date:	06/19/2012 1507			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		6000		48	370
Anthracene		1400		46	370
Carbazole		290	J	44	370
Di-n-butyl phthalate		370	U	46	370
Fluoranthene		6900		50	370
Pyrene		6500		31	370
Butyl benzyl phthalate		370	U	34	370
3,3'-Dichlorobenzidine		760	U	130	760
Benzo[a]anthracene		4100		2.6	37
Chrysene		4400		44	370
Bis(2-ethylhexyl) phthalate		370	U	120	370
Di-n-octyl phthalate		370	U	24	370
Benzo[b]fluoranthene		4400		2.4	37
Benzo[k]fluoranthene		1800		2.8	37
Benzo[a]pyrene		3700		2.6	37
Indeno[1,2,3-cd]pyrene		2600		7.0	37
Dibenz(a,h)anthracene		660		4.7	37
Benzo[g,h,i]perylene		2600		28	370
2,2'-oxybis[1-chloropropane]		370	U	41	370

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	66		38 - 105
Phenol-d5	89		41 - 118
Terphenyl-d14	77		16 - 151
2,4,6-Tribromophenol	87		10 - 120
2-Fluorophenol	87		37 - 125
2-Fluorobiphenyl	78		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: SB-21 (6-7)

Lab Sample ID: 200-11382-6
Client Matrix: Solid % Moisture: 24.9

Date Sampled: 06/16/2012 1400
Date Received: 06/20/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-116828	Instrument ID:	BNAMS4
Prep Method:	3541	Prep Batch:	460-117691	Lab File ID:	uu77557.d
Dilution:	1.0			Initial Weight/Volume:	15.00 g
Analysis Date:	06/20/2012 0944			Final Weight/Volume:	1 mL
Prep Date:	06/19/2012 1507			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		440	U	59	440
2-Chlorophenol		440	U	58	440
2-Methylphenol		440	U	75	440
2-Nitrophenol		440	U	49	440
3 & 4 Methylphenol		440	U	75	440
2,4-Dimethylphenol		440	U	110	440
2,4-Dichlorophenol		440	U	64	440
4-Chloro-3-methylphenol		440	U	66	440
2,4,6-Trichlorophenol		440	U	52	440
2,4,5-Trichlorophenol		440	U	57	440
2,4-Dinitrophenol		1300	U	250	1300
4-Nitrophenol		1300	U	280	1300
4,6-Dinitro-2-methylphenol		1300	U	120	1300
Pentachlorophenol		1300	U	130	1300
Bis(2-chloroethyl)ether		44	U	6.0	44
1,3-Dichlorobenzene		440	U	40	440
Benzoic acid		440	U	440	440
1,4-Dichlorobenzene		440	U	50	440
1,2-Dichlorobenzene		440	U	51	440
N-Nitrosodi-n-propylamine		44	U	7.4	44
Hexachloroethane		44	U	4.9	44
Nitrobenzene		44	U	6.3	44
Isophorone		440	U	53	440
Bis(2-chloroethoxy)methane		440	U	57	440
1,2,4-Trichlorobenzene		44	U	5.0	44
Naphthalene		440	U	51	440
4-Chloroaniline		440	U	120	440
Hexachlorobutadiene		89	U	11	89
2-Methylnaphthalene		440	U	57	440
Hexachlorocyclopentadiene		440	U	52	440
2-Chloronaphthalene		440	U	49	440
2-Nitroaniline		890	U	180	890
Dimethyl phthalate		440	U	52	440
Acenaphthylene		440	U	52	440
2,6-Dinitrotoluene		89	U	13	89
3-Nitroaniline		890	U	160	890
Acenaphthene		440	U	64	440
Dibenzofuran		440	U	52	440
2,4-Dinitrotoluene		89	U	15	89
Diethyl phthalate		440	U	52	440
4-Chlorophenyl phenyl ether		440	U	52	440
Fluorene		440	U	56	440
4-Nitroaniline		890	U	140	890
N-Nitrosodiphenylamine		440	U	43	440
4-Bromophenyl phenyl ether		440	U	44	440
Hexachlorobenzene		44	U	6.0	44

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-21 (6-7)**

Lab Sample ID: 200-11382-6
Client Matrix: Solid
% Moisture: 24.9

Date Sampled: 06/16/2012 1400
Date Received: 06/20/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-116828	Instrument ID:	BNAMS4
Prep Method:	3541	Prep Batch:	460-117691	Lab File ID:	uu77557.d
Dilution:	1.0			Initial Weight/Volume:	15.00 g
Analysis Date:	06/20/2012 0944			Final Weight/Volume:	1 mL
Prep Date:	06/19/2012 1507			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		480		56	440
Anthracene		140	J	54	440
Carbazole		440	U	52	440
Di-n-butyl phthalate		440	U	54	440
Fluoranthene		850		59	440
Pyrene		930		37	440
Butyl benzyl phthalate		440	U	40	440
3,3'-Dichlorobenzidine		890	U	150	890
Benzo[a]anthracene		630		3.1	44
Chrysene		610		51	440
Bis(2-ethylhexyl) phthalate		440	U	150	440
Di-n-octyl phthalate		440	U	28	440
Benzo[b]fluoranthene		710		2.8	44
Benzo[k]fluoranthene		330		3.3	44
Benzo[a]pyrene		590		3.1	44
Indeno[1,2,3-cd]pyrene		510		8.2	44
Dibenz(a,h)anthracene		130		5.6	44
Benzo[g,h,i]perylene		510		33	440
2,2'-oxybis[1-chloropropane]		440	U	49	440

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	57		38 - 105
Phenol-d5	74		41 - 118
Terphenyl-d14	104		16 - 151
2,4,6-Tribromophenol	64		10 - 120
2-Fluorophenol	72		37 - 125
2-Fluorobiphenyl	60		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: DUP-02-06162012

Lab Sample ID: 200-11382-8
Client Matrix: Solid

% Moisture: 36.2

Date Sampled: 06/16/2012 0000
Date Received: 06/20/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-117392	Instrument ID:	BNAMS4
Prep Method:	3541	Prep Batch:	460-117691	Lab File ID:	uu77683.d
Dilution:	5.0			Initial Weight/Volume:	15.02 g
Analysis Date:	06/24/2012 1138			Final Weight/Volume:	1 mL
Prep Date:	06/19/2012 1507			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		2600	U	350	2600
2-Chlorophenol		2600	U	340	2600
2-Methylphenol		2600	U	440	2600
2-Nitrophenol		2600	U	290	2600
3 & 4 Methylphenol		2600	U	440	2600
2,4-Dimethylphenol		2600	U	640	2600
2,4-Dichlorophenol		2600	U	380	2600
4-Chloro-3-methylphenol		2600	U	390	2600
2,4,6-Trichlorophenol		2600	U	300	2600
2,4,5-Trichlorophenol		2600	U	330	2600
2,4-Dinitrophenol		7800	UJ	1500	7800
4-Nitrophenol		7800	U	1700	7800
4,6-Dinitro-2-methylphenol		7800	U	710	7800
Pentachlorophenol		7800	U	770	7800
Bis(2-chloroethyl)ether		260	U	35	260
1,3-Dichlorobenzene		2600	U	230	2600
Benzoic acid		2600	UJ	2600	2600
1,4-Dichlorobenzene		2600	U	290	2600
1,2-Dichlorobenzene		2600	U	300	2600
N-Nitrosodi-n-propylamine		260	U	43	260
Hexachloroethane		260	U	29	260
Nitrobenzene		260	U	37	260
Isophorone		2600	U	310	2600
Bis(2-chloroethoxy)methane		2600	U	330	2600
1,2,4-Trichlorobenzene		260	U	29	260
Naphthalene		26000	J	300	2600
4-Chloroaniline		2600	U	690	2600
Hexachlorobutadiene		520	U	63	520
2-Methylnaphthalene		2600	J	330	2600
Hexachlorocyclopentadiene		2600	UJ	300	2600
2-Chloronaphthalene		2600	U	290	2600
2-Nitroaniline		5200	U	1100	5200
Dimethyl phthalate		2600	U	310	2600
Acenaphthylene		570	J	310	2600
2,6-Dinitrotoluene		520	U	78	520
3-Nitroaniline		5200	U	920	5200
Acenaphthene		390	J	380	2600
Dibenzofuran		4700		300	2600
2,4-Dinitrotoluene		520	U	85	520
Diethyl phthalate		2600	U	310	2600
4-Chlorophenyl phenyl ether		2600	U	300	2600
Fluorene		6700		330	2600
4-Nitroaniline		5200	U	810	5200
N-Nitrosodiphenylamine		2600	U	260	2600
4-Bromophenyl phenyl ether		2600	U	260	2600
Hexachlorobenzene		260	U	35	260

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **DUP-02-06162012**

Lab Sample ID: 200-11382-8
Client Matrix: Solid

% Moisture: 36.2

Date Sampled: 06/16/2012 0000
Date Received: 06/20/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-117392	Instrument ID:	BNAMS4
Prep Method:	3541	Prep Batch:	460-117691	Lab File ID:	uu77683.d
Dilution:	5.0			Initial Weight/Volume:	15.02 g
Analysis Date:	06/24/2012 1138			Final Weight/Volume:	1 mL
Prep Date:	06/19/2012 1507			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		15000		330	2600
Anthracene		2200	J	310	2600
Carbazole		320	J	310	2600
Di-n-butyl phthalate		2600	U	320	2600
Fluoranthene		2800		350	2600
Pyrene		2300	J	220	2600
Butyl benzyl phthalate		2600	U	240	2600
3,3'-Dichlorobenzidine		5200	U	910	5200
Benzo[a]anthracene		1400	J	18	260
Chrysene		1300	J	300	2600
Bis(2-ethylhexyl) phthalate		2600	U	860	2600
Di-n-octyl phthalate		2600	U	170	2600
Benzo[b]fluoranthene		960	J	16	260
Benzo[k]fluoranthene		550	J	20	260
Benzo[a]pyrene		1100	J	18	260
Indeno[1,2,3-cd]pyrene		440	J	48	260
Dibenz(a,h)anthracene		260	U	33	260
Benzo[g,h,i]perylene		480	J	190	2600
2,2'-oxybis[1-chloropropane]		2600	U	290	2600

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	45		38 - 105
Phenol-d5	66		41 - 118
Terphenyl-d14	88		16 - 151
2,4,6-Tribromophenol	69		10 - 120
2-Fluorophenol	51		37 - 125
2-Fluorobiphenyl	62		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-06 (12.2-13.2)**

Lab Sample ID: 200-11382-10
Client Matrix: Solid % Moisture: 53.2

Date Sampled: 06/19/2012 1230
Date Received: 06/20/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118466	Instrument ID:	BNAMS10
Prep Method:	3541	Prep Batch:	460-117514	Lab File ID:	p31561.d
Dilution:	1.0			Initial Weight/Volume:	15.00 g
Analysis Date:	07/02/2012 1848			Final Weight/Volume:	1 mL
Prep Date:	06/26/2012 1227			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		700	U	95	700
2-Chlorophenol		700	U	93	700
2-Methylphenol		700	U	120	700
2-Nitrophenol		700	U	79	700
3 & 4 Methylphenol		700	U	120	700
2,4-Dimethylphenol		700	U	170	700
2,4-Dichlorophenol		700	U	100	700
4-Chloro-3-methylphenol		700	U	110	700
2,4,6-Trichlorophenol		700	U	83	700
2,4,5-Trichlorophenol		700	U	91	700
2,4-Dinitrophenol		2100	U	400	2100
4-Nitrophenol		2100	U	450	2100
4,6-Dinitro-2-methylphenol		2100	U	190	2100
Pentachlorophenol		2100	U	210	2100
Bis(2-chloroethyl)ether		70	U	9.6	70
1,3-Dichlorobenzene		700	U	64	700
Benzoic acid		700	U J	700	700
1,4-Dichlorobenzene		700	U	80	700
1,2-Dichlorobenzene		700	U	82	700
N-Nitrosodi-n-propylamine		70	U	12	70
Hexachloroethane		70	U	7.9	70
Nitrobenzene		70	U	10	70
Isophorone		700	U	86	700
Bis(2-chloroethoxy)methane		700	U	91	700
1,2,4-Trichlorobenzene		70	U	8.0	70
Naphthalene		700	U	82	700
4-Chloroaniline		700	U	190	700
Hexachlorobutadiene		140	U	17	140
2-Methylnaphthalene		700	U	91	700
Hexachlorocyclopentadiene		700	U	83	700
2-Chloronaphthalene		700	U	79	700
2-Nitroaniline		1400	U	290	1400
Dimethyl phthalate		700	U	84	700
Acenaphthylene		700	U	84	700
2,6-Dinitrotoluene		140	U	21	140
3-Nitroaniline		1400	U	250	1400
Acenaphthene		700	U	100	700
Dibenzofuran		700	U	83	700
2,4-Dinitrotoluene		140	U	23	140
Diethyl phthalate		700	U	84	700
4-Chlorophenyl phenyl ether		700	U	83	700
Fluorene		700	U	90	700
4-Nitroaniline		1400	U	220	1400
N-Nitrosodiphenylamine		700	U	70	700
4-Bromophenyl phenyl ether		700	U	70	700
Hexachlorobenzene		70	U	9.7	70

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-06 (12.2-13.2)**

Lab Sample ID: 200-11382-10
Client Matrix: Solid

% Moisture: 53.2

Date Sampled: 06/19/2012 1230
Date Received: 06/20/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118466	Instrument ID:	BNAMS10
Prep Method:	3541	Prep Batch:	460-117514	Lab File ID:	p31561.d
Dilution:	1.0			Initial Weight/Volume:	15.00 g
Analysis Date:	07/02/2012 1848			Final Weight/Volume:	1 mL
Prep Date:	06/26/2012 1227			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		700	U	90	700
Anthracene		700	U	86	700
Carbazole		700	U	84	700
Di-n-butyl phthalate		700	U	87	700
Fluoranthene		700	U	94	700
Pyrene		700	U	59	700
Butyl benzyl phthalate		160	J	65	700
3,3'-Dichlorobenzidine		1400	U	250	1400
Benzo[a]anthracene		70	U	4.9	70
Chrysene		700	U	82	700
Bis(2-ethylhexyl) phthalate		700	U	230	700
Di-n-octyl phthalate		700	U	45	700
Benzo[b]fluoranthene		70	U	4.5	70
Benzo[k]fluoranthene		70	U	5.4	70
Benzo[a]pyrene		70	U	5.0	70
Indeno[1,2,3-cd]pyrene		70	U	13	70
Dibenz(a,h)anthracene		70	U	8.9	70
Benzo[g,h,i]perylene		700	U	52	700
2,2'-oxybis[1-chloropropane]		700	U	78	700

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	53		38 - 105
Phenol-d5	55		41 - 118
Terphenyl-d14	83		16 - 151
2,4,6-Tribromophenol	67		10 - 120
2-Fluorophenol	52		37 - 125
2-Fluorobiphenyl	64		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-07 (10.5-12.5)**

Lab Sample ID: 200-11382-11
Client Matrix: Solid % Moisture: 17.4

Date Sampled: 06/19/2012 1330
Date Received: 06/20/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118685	Instrument ID:	BNAMS10
Prep Method:	3541	Prep Batch:	460-117514	Lab File ID:	p31608.d
Dilution:	1.0			Initial Weight/Volume:	15.03 g
Analysis Date:	07/04/2012 0643			Final Weight/Volume:	1 mL
Prep Date:	06/26/2012 1227			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		400	U	54	400
2-Chlorophenol		400	U	53	400
2-Methylphenol		400	U	68	400
2-Nitrophenol		400	U	45	400
3 & 4 Methylphenol		400	U	68	400
2,4-Dimethylphenol		400	U	99	400
2,4-Dichlorophenol		400	U	59	400
4-Chloro-3-methylphenol		400	U	60	400
2,4,6-Trichlorophenol		400	U	47	400
2,4,5-Trichlorophenol		400	U	52	400
2,4-Dinitrophenol		1200	U	230	1200
4-Nitrophenol		1200	U	260	1200
4,6-Dinitro-2-methylphenol		1200	U	110	1200
Pentachlorophenol		1200	U	120	1200
Bis(2-chloroethyl)ether		40	U	5.5	40
1,3-Dichlorobenzene		400	U	36	400
Benzoic acid		400	U	400	400
1,4-Dichlorobenzene		400	U	45	400
1,2-Dichlorobenzene		400	U	46	400
N-Nitrosodi-n-propylamine		40	U	6.7	40
Hexachloroethane		40	U	4.4	40
Nitrobenzene		40	U	5.7	40
Isophorone		400	U	48	400
Bis(2-chloroethoxy)methane		400	U	52	400
1,2,4-Trichlorobenzene		40	U	4.5	40
Naphthalene		3300		46	400
4-Chloroaniline		400	U	110	400
Hexachlorobutadiene		81	U	9.8	81
2-Methylnaphthalene		590		51	400
Hexachlorocyclopentadiene		400	U	47	400
2-Chloronaphthalene		400	U	45	400
2-Nitroaniline		810	U	170	810
Dimethyl phthalate		400	U	47	400
Acenaphthylene		130	J	47	400
2,6-Dinitrotoluene		81	U	12	81
3-Nitroaniline		810	U	140	810
Acenaphthene		270	J	58	400
Dibenzofuran		370	J	47	400
2,4-Dinitrotoluene		81	U	13	81
Diethyl phthalate		400	U	48	400
4-Chlorophenyl phenyl ether		400	U	47	400
Fluorene		1100		51	400
4-Nitroaniline		810	U	120	810
N-Nitrosodiphenylamine		400	U	39	400
4-Bromophenyl phenyl ether		400	U	40	400
Hexachlorobenzene		40	U	5.5	40

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-07 (10.5-12.5)**

Lab Sample ID: 200-11382-11
Client Matrix: Solid

% Moisture: 17.4

Date Sampled: 06/19/2012 1330
Date Received: 06/20/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118685	Instrument ID:	BNAMS10
Prep Method:	3541	Prep Batch:	460-117514	Lab File ID:	p31608.d
Dilution:	1.0			Initial Weight/Volume:	15.03 g
Analysis Date:	07/04/2012 0643			Final Weight/Volume:	1 mL
Prep Date:	06/26/2012 1227			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		2900		51	400
Anthracene		1100		49	400
Carbazole		280	J	47	400
Di-n-butyl phthalate		400	U	49	400
Fluoranthene		2000		53	400
Pyrene		2200		33	400
Butyl benzyl phthalate		400	U	37	400
3,3'-Dichlorobenzidine		810	U	140	810
Benzo[a]anthracene		1000		2.8	40
Chrysene		1100		47	400
Bis(2-ethylhexyl) phthalate		400	U	130	400
Di-n-octyl phthalate		400	U	26	400
Benzo[b]fluoranthene		920		2.5	40
Benzo[k]fluoranthene		340		3.0	40
Benzo[a]pyrene		990		2.8	40
Indeno[1,2,3-cd]pyrene		570		7.4	40
Dibenz(a,h)anthracene		130		5.0	40
Benzo[g,h,i]perylene		650		30	400
2,2'-oxybis[1-chloropropane]		400	U	44	400

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	56		38 - 105
Phenol-d5	54		41 - 118
Terphenyl-d14	73		16 - 151
2,4,6-Tribromophenol	66		10 - 120
2-Fluorophenol	53		37 - 125
2-Fluorobiphenyl	69		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-07 (16.4-17.4)**

Lab Sample ID: 200-11382-12
Client Matrix: Solid % Moisture: 41.9

Date Sampled: 06/19/2012 1350
Date Received: 06/20/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118466	Instrument ID:	BNAMS10
Prep Method:	3541	Prep Batch:	460-117514	Lab File ID:	p31566.d
Dilution:	1.0			Initial Weight/Volume:	15.00 g
Analysis Date:	07/02/2012 2045			Final Weight/Volume:	1 mL
Prep Date:	06/26/2012 1227			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		570	U	76	570
2-Chlorophenol		570	U	75	570
2-Methylphenol		570	U	97	570
2-Nitrophenol		570	U	64	570
3 & 4 Methylphenol		570	U	97	570
2,4-Dimethylphenol		570	U	140	570
2,4-Dichlorophenol		570	U	83	570
4-Chloro-3-methylphenol		570	U	86	570
2,4,6-Trichlorophenol		570	U	67	570
2,4,5-Trichlorophenol		570	U	74	570
2,4-Dinitrophenol		1700	U	320	1700
4-Nitrophenol		1700	U	370	1700
4,6-Dinitro-2-methylphenol		1700	U	160	1700
Pentachlorophenol		1700	U	170	1700
Bis(2-chloroethyl)ether		57	U	7.8	57
1,3-Dichlorobenzene		570	U	52	570
Benzoic acid		570	U J	570	570
1,4-Dichlorobenzene		570	U	64	570
1,2-Dichlorobenzene		570	U	66	570
N-Nitrosodi-n-propylamine		57	U	9.5	57
Hexachloroethane		57	U	6.3	57
Nitrobenzene		57	U	8.1	57
Isophorone		570	U	69	570
Bis(2-chloroethoxy)methane		570	U	74	570
1,2,4-Trichlorobenzene		57	U	6.5	57
Naphthalene		520	J	66	570
4-Chloroaniline		570	U	150	570
Hexachlorobutadiene		120	U	14	120
2-Methylnaphthalene		400	J	73	570
Hexachlorocyclopentadiene		570	U	67	570
2-Chloronaphthalene		570	U	64	570
2-Nitroaniline		1200	U	240	1200
Dimethyl phthalate		570	U	68	570
Acenaphthylene		580		67	570
2,6-Dinitrotoluene		120	U	17	120
3-Nitroaniline		1200	U	200	1200
Acenaphthene		650		83	570
Dibenzofuran		570	U	67	570
2,4-Dinitrotoluene		120	U	19	120
Diethyl phthalate		570	U	68	570
4-Chlorophenyl phenyl ether		570	U	67	570
Fluorene		430	J	73	570
4-Nitroaniline		1200	U	180	1200
N-Nitrosodiphenylamine		570	U	56	570
4-Bromophenyl phenyl ether		570	U	56	570
Hexachlorobenzene		57	U	7.8	57

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-07 (16.4-17.4)**

Lab Sample ID: 200-11382-12
Client Matrix: Solid % Moisture: 41.9

Date Sampled: 06/19/2012 1350
Date Received: 06/20/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118466	Instrument ID:	BNAMS10
Prep Method:	3541	Prep Batch:	460-117514	Lab File ID:	p31566.d
Dilution:	1.0			Initial Weight/Volume:	15.00 g
Analysis Date:	07/02/2012 2045			Final Weight/Volume:	1 mL
Prep Date:	06/26/2012 1227			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		2400		72	570
Anthracene		990		69	570
Carbazole		100	J	67	570
Di-n-butyl phthalate		570	U	70	570
Fluoranthene		4800		76	570
Pyrene		6400		48	570
Butyl benzyl phthalate		570	U	52	570
3,3'-Dichlorobenzidine		1200	U	200	1200
Benzo[a]anthracene		3000		4.0	57
Chrysene		3300		66	570
Bis(2-ethylhexyl) phthalate		570	U	190	570
Di-n-octyl phthalate		570	U	36	570
Benzo[b]fluoranthene		2700		3.6	57
Benzo[k]fluoranthene		1100		4.3	57
Benzo[a]pyrene		3500		4.0	57
Indeno[1,2,3-cd]pyrene		2000		11	57
Dibenz(a,h)anthracene		490		7.2	57
Benzo[g,h,i]perylene		2700		42	570
2,2'-oxybis[1-chloropropane]		570	U	63	570

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	66		38 - 105
Phenol-d5	64		41 - 118
Terphenyl-d14	77		16 - 151
2,4,6-Tribromophenol	56		10 - 120
2-Fluorophenol	63		37 - 125
2-Fluorobiphenyl	77		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-10 (4.2-5)**

Lab Sample ID: 200-11382-13
Client Matrix: Solid
% Moisture: 21.4

Date Sampled: 06/19/2012 1515
Date Received: 06/20/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118685	Instrument ID:	BNAMS10
Prep Method:	3541	Prep Batch:	460-117514	Lab File ID:	p31610.d
Dilution:	1.0			Initial Weight/Volume:	15.02 g
Analysis Date:	07/04/2012 0730			Final Weight/Volume:	1 mL
Prep Date:	06/26/2012 1227			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		420	U	56	420
2-Chlorophenol		420	U	55	420
2-Methylphenol		420	U	72	420
2-Nitrophenol		420	U	47	420
3 & 4 Methylphenol		420	U	72	420
2,4-Dimethylphenol		420	U	100	420
2,4-Dichlorophenol		420	U	62	420
4-Chloro-3-methylphenol		420	U	63	420
2,4,6-Trichlorophenol		420	U	49	420
2,4,5-Trichlorophenol		420	U	54	420
2,4-Dinitrophenol		1300	U	240	1300
4-Nitrophenol		1300	U	270	1300
4,6-Dinitro-2-methylphenol		1300	U	110	1300
Pentachlorophenol		1300	U	130	1300
Bis(2-chloroethyl)ether		42	U	5.7	42
1,3-Dichlorobenzene		420	U	38	420
Benzoic acid		420	U	420	420
1,4-Dichlorobenzene		420	U	47	420
1,2-Dichlorobenzene		420	U	49	420
N-Nitrosodi-n-propylamine		42	U	7.0	42
Hexachloroethane		42	U	4.7	42
Nitrobenzene		42	U	6.0	42
Isophorone		420	U	51	420
Bis(2-chloroethoxy)methane		420	U	54	420
1,2,4-Trichlorobenzene		42	U	4.8	42
Naphthalene		51	J	49	420
4-Chloroaniline		420	U	110	420
Hexachlorobutadiene		85	U	10	85
2-Methylnaphthalene		420	U	54	420
Hexachlorocyclopentadiene		420	U	49	420
2-Chloronaphthalene		420	U	47	420
2-Nitroaniline		850	U	180	850
Dimethyl phthalate		420	U	50	420
Acenaphthylene		420	U	50	420
2,6-Dinitrotoluene		85	U	13	85
3-Nitroaniline		850	U	150	850
Acenaphthene		420	U	61	420
Dibenzofuran		420	U	49	420
2,4-Dinitrotoluene		85	U	14	85
Diethyl phthalate		420	U	50	420
4-Chlorophenyl phenyl ether		420	U	49	420
Fluorene		420	U	54	420
4-Nitroaniline		850	U	130	850
N-Nitrosodiphenylamine		420	U	41	420
4-Bromophenyl phenyl ether		420	U	42	420
Hexachlorobenzene		42	U	5.7	42

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-10 (4.2-5)**

Lab Sample ID: 200-11382-13
Client Matrix: Solid
% Moisture: 21.4

Date Sampled: 06/19/2012 1515
Date Received: 06/20/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118685	Instrument ID:	BNAMS10
Prep Method:	3541	Prep Batch:	460-117514	Lab File ID:	p31610.d
Dilution:	1.0			Initial Weight/Volume:	15.02 g
Analysis Date:	07/04/2012 0730			Final Weight/Volume:	1 mL
Prep Date:	06/26/2012 1227			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		100	J	53	420
Anthracene		420	U	51	420
Carbazole		420	U	50	420
Di-n-butyl phthalate		420	U	52	420
Fluoranthene		180	J	56	420
Pyrene		280	J	35	420
Butyl benzyl phthalate		420	U	39	420
3,3'-Dichlorobenzidine		850	U	150	850
Benzo[a]anthracene		140		2.9	42
Chrysene		120	J	49	420
Bis(2-ethylhexyl) phthalate		420	U	140	420
Di-n-octyl phthalate		420	U	27	420
Benzo[b]fluoranthene		130		2.7	42
Benzo[k]fluoranthene		76		3.2	42
Benzo[a]pyrene		170		3.0	42
Indeno[1,2,3-cd]pyrene		110		7.8	42
Dibenz(a,h)anthracene		42	U	5.3	42
Benzo[g,h,i]perylene		140	J	31	420
2,2'-oxybis[1-chloropropane]		420	U	47	420

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	60		38 - 105
Phenol-d5	58		41 - 118
Terphenyl-d14	82		16 - 151
2,4,6-Tribromophenol	65		10 - 120
2-Fluorophenol	57		37 - 125
2-Fluorobiphenyl	68		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-05 (10.9-11.9')**

Lab Sample ID: 200-11398-1
Client Matrix: Solid % Moisture: 6.3

Date Sampled: 06/20/2012 1000
Date Received: 06/21/2012 1040

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-119055	Instrument ID:	BNAMS4
Prep Method:	3541	Prep Batch:	460-118325	Lab File ID:	u78063.d
Dilution:	1.0			Initial Weight/Volume:	15.00 g
Analysis Date:	07/08/2012 0240			Final Weight/Volume:	1 mL
Prep Date:	07/02/2012 1328			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		350	U	47	350
2-Chlorophenol		350	U	46	350
2-Methylphenol		350	U	60	350
2-Nitrophenol		350	U	39	350
3 & 4 Methylphenol		350	U	60	350
2,4-Dimethylphenol		350	U	87	350
2,4-Dichlorophenol		350	U	52	350
4-Chloro-3-methylphenol		350	U	53	350
2,4,6-Trichlorophenol		350	U	41	350
2,4,5-Trichlorophenol		350	U	46	350
2,4-Dinitrophenol		1100	U	200	1100
4-Nitrophenol		1100	U	230	1100
4,6-Dinitro-2-methylphenol		1100	U	96	1100
Pentachlorophenol		1100	U	110	1100
Bis(2-chloroethyl)ether		35	U	4.8	35
1,3-Dichlorobenzene		350	U	32	350
Benzoic acid		350	U	350	350
1,4-Dichlorobenzene		350	U	40	350
1,2-Dichlorobenzene		350	U	41	350
N-Nitrosodi-n-propylamine		35	U	5.9	35
Hexachloroethane		35	U	3.9	35
Nitrobenzene		35	U	5.0	35
Isophorone		350	U	43	350
Bis(2-chloroethoxy)methane		350	U	46	350
1,2,4-Trichlorobenzene		35	U	4.0	35
Naphthalene		350	U	41	350
4-Chloroaniline		350	U	94	350
Hexachlorobutadiene		72	U	8.6	72
2-Methylnaphthalene		350	U	45	350
Hexachlorocyclopentadiene		350	U	42	350
2-Chloronaphthalene		350	U	39	350
2-Nitroaniline		720	U	150	720
Dimethyl phthalate		350	U	42	350
Acenaphthylene		350	U	42	350
2,6-Dinitrotoluene		72	U	11	72
3-Nitroaniline		720	U	120	720
Acenaphthene		350	U	51	350
Dibenzofuran		350	U	41	350
2,4-Dinitrotoluene		72	U	12	72
Diethyl phthalate		350	U	42	350
4-Chlorophenyl phenyl ether		350	U	41	350
Fluorene		350	U	45	350
4-Nitroaniline		720	U	110	720
N-Nitrosodiphenylamine		350	U	35	350
4-Bromophenyl phenyl ether		350	U	35	350
Hexachlorobenzene		35	U	4.8	35

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-05 (10.9-11.9')**

Lab Sample ID: 200-11398-1
Client Matrix: Solid
% Moisture: 6.3

Date Sampled: 06/20/2012 1000
Date Received: 06/21/2012 1040

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-119055	Instrument ID:	BNAMS4
Prep Method:	3541	Prep Batch:	460-118325	Lab File ID:	u78063.d
Dilution:	1.0			Initial Weight/Volume:	15.00 g
Analysis Date:	07/08/2012 0240			Final Weight/Volume:	1 mL
Prep Date:	07/02/2012 1328			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		350	U	45	350
Anthracene		350	U	43	350
Carbazole		350	U	42	350
Di-n-butyl phthalate		350	U	44	350
Fluoranthene		350	U	47	350
Pyrene		350	U	30	350
Butyl benzyl phthalate		350	U	32	350
3,3'-Dichlorobenzidine		720	U	120	720
Benzo[a]anthracene		35	U	2.5	35
Chrysene		350	U	41	350
Bis(2-ethylhexyl) phthalate		350	U	120	350
Di-n-octyl phthalate		350	U	23	350
Benzo[b]fluoranthene		35	U	2.2	35
Benzo[k]fluoranthene		35	U	2.7	35
Benzo[a]pyrene		35	U	2.5	35
Indeno[1,2,3-cd]pyrene		35	U	6.6	35
Dibenz(a,h)anthracene		35	U	4.5	35
Benzo[g,h,i]perylene		350	U	26	350
2,2'-oxybis[1-chloropropane]		350	U	39	350

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	70		38 - 105
Phenol-d5	85		41 - 118
Terphenyl-d14	87		16 - 151
2,4,6-Tribromophenol	67		10 - 120
2-Fluorophenol	96		37 - 125
2-Fluorobiphenyl	78		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-04 (10.2-11.4)**

Lab Sample ID: 200-11417-1
Client Matrix: Solid
% Moisture: 19.5

Date Sampled: 06/21/2012 0900
Date Received: 06/22/2012 1045

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118282	Instrument ID:	BNAMS4
Prep Method:	3541	Prep Batch:	460-117875	Lab File ID:	u77948.d
Dilution:	1.0			Initial Weight/Volume:	15.04 g
Analysis Date:	07/02/2012 1627			Final Weight/Volume:	1 mL
Prep Date:	06/28/2012 1551			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		410	U	55	410
2-Chlorophenol		410	U	54	410
2-Methylphenol		410	U	70	410
2-Nitrophenol		410	U	46	410
3 & 4 Methylphenol		410	U	70	410
2,4-Dimethylphenol		410	U	100	410
2,4-Dichlorophenol		410	U	60	410
4-Chloro-3-methylphenol		410	U	62	410
2,4,6-Trichlorophenol		410	U	48	410
2,4,5-Trichlorophenol		410	U	53	410
2,4-Dinitrophenol		1200	U	230	1200
4-Nitrophenol		1200	U	260	1200
4,6-Dinitro-2-methylphenol		1200	U	110	1200
Pentachlorophenol		1200	U	120	1200
Bis(2-chloroethyl)ether		41	U	5.6	41
1,3-Dichlorobenzene		410	U	37	410
Benzoic acid		410	U	410	410
1,4-Dichlorobenzene		410	U	46	410
1,2-Dichlorobenzene		410	U	48	410
N-Nitrosodi-n-propylamine		41	U	6.8	41
Hexachloroethane		41	U	4.6	41
Nitrobenzene		41	U	5.8	41
Isophorone		410	U	50	410
Bis(2-chloroethoxy)methane		410	U	53	410
1,2,4-Trichlorobenzene		41	U	4.6	41
Naphthalene		3700		47	410
4-Chloroaniline		410	U	110	410
Hexachlorobutadiene		83	U	10	83
2-Methylnaphthalene		140	J	53	410
Hexachlorocyclopentadiene		410	U	48	410
2-Chloronaphthalene		410	U	46	410
2-Nitroaniline		830	U	170	830
Dimethyl phthalate		410	U	49	410
Acenaphthylene		410	U	48	410
2,6-Dinitrotoluene		83	U	12	83
3-Nitroaniline		830	U	140	830
Acenaphthene		62	J	60	410
Dibenzofuran		71	J	48	410
2,4-Dinitrotoluene		83	U	13	83
Diethyl phthalate		410	U	49	410
4-Chlorophenyl phenyl ether		410	U	48	410
Fluorene		80	J	52	410
4-Nitroaniline		830	U	130	830
N-Nitrosodiphenylamine		410	U	40	410
4-Bromophenyl phenyl ether		410	U	41	410
Hexachlorobenzene		41	U	5.6	41

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-04 (10.2-11.4)**

Lab Sample ID: 200-11417-1
Client Matrix: Solid
% Moisture: 19.5

Date Sampled: 06/21/2012 0900
Date Received: 06/22/2012 1045

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118282	Instrument ID:	BNAMS4
Prep Method:	3541	Prep Batch:	460-117875	Lab File ID:	u77948.d
Dilution:	1.0			Initial Weight/Volume:	15.04 g
Analysis Date:	07/02/2012 1627			Final Weight/Volume:	1 mL
Prep Date:	06/28/2012 1551			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		370	J	52	410
Anthracene		410	U	50	410
Carbazole		410	U	48	410
Di-n-butyl phthalate		410	U	51	410
Fluoranthene		280	J	55	410
Pyrene		360	J	34	410
Butyl benzyl phthalate		410	U	38	410
3,3'-Dichlorobenzidine		830	U	140	830
Benzo[a]anthracene		150		2.9	41
Chrysene		170	J	48	410
Bis(2-ethylhexyl) phthalate		410	U	140	410
Di-n-octyl phthalate		410	U	26	410
Benzo[b]fluoranthene		190		2.6	41
Benzo[k]fluoranthene		87		3.1	41
Benzo[a]pyrene		190		2.9	41
Indeno[1,2,3-cd]pyrene		200		7.6	41
Dibenz(a,h)anthracene		51		5.2	41
Benzo[g,h,i]perylene		190	J	30	410
2,2'-oxybis[1-chloropropane]		410	U	45	410

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	67		38 - 105
Phenol-d5	84		41 - 118
Terphenyl-d14	126		16 - 151
2,4,6-Tribromophenol	85		10 - 120
2-Fluorophenol	62		37 - 125
2-Fluorobiphenyl	75		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-04 (17.2-18.2)**

Lab Sample ID: 200-11417-2
Client Matrix: Solid % Moisture: 42.1

Date Sampled: 06/21/2012 0915
Date Received: 06/22/2012 1045

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118475	Instrument ID:	BNAMS4
Prep Method:	3541	Prep Batch:	460-117875	Lab File ID:	u77977.d
Dilution:	1.0			Initial Weight/Volume:	15.00 g
Analysis Date:	07/03/2012 1111			Final Weight/Volume:	1 mL
Prep Date:	06/28/2012 1551			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		570	U	77	570
2-Chlorophenol		570	U	75	570
2-Methylphenol		570	U	97	570
2-Nitrophenol		570	U	64	570
3 & 4 Methylphenol		570	U	97	570
2,4-Dimethylphenol		170	J	140	570
2,4-Dichlorophenol		570	U	84	570
4-Chloro-3-methylphenol		570	U	86	570
2,4,6-Trichlorophenol		570	U	67	570
2,4,5-Trichlorophenol		570	U	74	570
2,4-Dinitrophenol		1700	U	320	1700
4-Nitrophenol		1700	U	370	1700
4,6-Dinitro-2-methylphenol		1700	U	160	1700
Pentachlorophenol		1700	U	170	1700
Bis(2-chloroethyl)ether		57	U	7.8	57
1,3-Dichlorobenzene		570	U	52	570
Benzoic acid		570	U	570	570
1,4-Dichlorobenzene		570	U	64	570
1,2-Dichlorobenzene		570	U	66	570
N-Nitrosodi-n-propylamine		57	U	9.5	57
Hexachloroethane		57	U	6.4	57
Nitrobenzene		57	U	8.1	57
Isophorone		570	U	69	570
Bis(2-chloroethoxy)methane		570	U	74	570
1,2,4-Trichlorobenzene		57	U	6.5	57
Naphthalene		570	U	66	570
4-Chloroaniline		570	U	150	570
Hexachlorobutadiene		120	U	14	120
2-Methylnaphthalene		570	U	73	570
Hexachlorocyclopentadiene		570	U	67	570
2-Chloronaphthalene		570	U	64	570
2-Nitroaniline		1200	U	240	1200
Dimethyl phthalate		570	U	68	570
Acenaphthylene		570	U	68	570
2,6-Dinitrotoluene		120	U	17	120
3-Nitroaniline		1200	U	200	1200
Acenaphthene		570	U	83	570
Dibenzofuran		570	U	67	570
2,4-Dinitrotoluene		120	U	19	120
Diethyl phthalate		570	U	68	570
4-Chlorophenyl phenyl ether		570	U	67	570
Fluorene		570	U	73	570
4-Nitroaniline		1200	U	180	1200
N-Nitrosodiphenylamine		570	U	56	570
4-Bromophenyl phenyl ether		570	U	57	570
Hexachlorobenzene		57	U	7.8	57

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-04 (17.2-18.2)**

Lab Sample ID: 200-11417-2
Client Matrix: Solid
% Moisture: 42.1

Date Sampled: 06/21/2012 0915
Date Received: 06/22/2012 1045

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118475	Instrument ID:	BNAMS4
Prep Method:	3541	Prep Batch:	460-117875	Lab File ID:	u77977.d
Dilution:	1.0			Initial Weight/Volume:	15.00 g
Analysis Date:	07/03/2012 1111			Final Weight/Volume:	1 mL
Prep Date:	06/28/2012 1551			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		200	J	73	570
Anthracene		110	J	69	570
Carbazole		570	U	68	570
Di-n-butyl phthalate		570	U	70	570
Fluoranthene		510	J	76	570
Pyrene		660		48	570
Butyl benzyl phthalate		570	U	52	570
3,3'-Dichlorobenzidine		1200	U	200	1200
Benzo[a]anthracene		370		4.0	57
Chrysene		270	J	67	570
Bis(2-ethylhexyl) phthalate		570	U	190	570
Di-n-octyl phthalate		570	U	36	570
Benzo[b]fluoranthene		320		3.6	57
Benzo[k]fluoranthene		170		4.3	57
Benzo[a]pyrene		350		4.0	57
Indeno[1,2,3-cd]pyrene		260		11	57
Dibenz(a,h)anthracene		82		7.2	57
Benzo[g,h,i]perylene		250	J	42	570
2,2'-oxybis[1-chloropropane]		570	U	63	570

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	83		38 - 105
Phenol-d5	93		41 - 118
Terphenyl-d14	119		16 - 151
2,4,6-Tribromophenol	82		10 - 120
2-Fluorophenol	100		37 - 125
2-Fluorobiphenyl	87		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-03 (10-10.9)**

Lab Sample ID: 200-11417-3
Client Matrix: Solid % Moisture: 38.4

Date Sampled: 06/21/2012 1025
Date Received: 06/22/2012 1045

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118282	Instrument ID:	BNAMS4
Prep Method:	3541	Prep Batch:	460-117875	Lab File ID:	u77941.d
Dilution:	5.0			Initial Weight/Volume:	15.02 g
Analysis Date:	07/02/2012 1406			Final Weight/Volume:	1 mL
Prep Date:	06/28/2012 1551			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		2700	U	360	2700
2-Chlorophenol		2700	U	350	2700
2-Methylphenol		2700	U	460	2700
2-Nitrophenol		2700	U	300	2700
3 & 4 Methylphenol		2700	U	460	2700
2,4-Dimethylphenol		2700	U	660	2700
2,4-Dichlorophenol		2700	U	390	2700
4-Chloro-3-methylphenol		2700	U	400	2700
2,4,6-Trichlorophenol		2700	U	310	2700
2,4,5-Trichlorophenol		2700	U	350	2700
2,4-Dinitrophenol		8100	U	1500	8100
4-Nitrophenol		8100	U	1700	8100
4,6-Dinitro-2-methylphenol		8100	U	730	8100
Pentachlorophenol		8100	U	800	8100
Bis(2-chloroethyl)ether		270	U	37	270
1,3-Dichlorobenzene		2700	U	240	2700
Benzoic acid		2700	U	2700	2700
1,4-Dichlorobenzene		2700	U	300	2700
1,2-Dichlorobenzene		2700	U	310	2700
N-Nitrosodi-n-propylamine		270	U	45	270
Hexachloroethane		270	U	30	270
Nitrobenzene		270	U	38	270
Isophorone		2700	U	320	2700
Bis(2-chloroethoxy)methane		2700	U	350	2700
1,2,4-Trichlorobenzene		270	U	30	270
Naphthalene		28000		310	2700
4-Chloroaniline		2700	U	710	2700
Hexachlorobutadiene		540	U	65	540
2-Methylnaphthalene		3000		340	2700
Hexachlorocyclopentadiene		2700	U	320	2700
2-Chloronaphthalene		2700	U	300	2700
2-Nitroaniline		5400	U	1100	5400
Dimethyl phthalate		2700	U	320	2700
Acenaphthylene		1500	J	320	2700
2,6-Dinitrotoluene		540	U	81	540
3-Nitroaniline		5400	U	950	5400
Acenaphthene		430	J	390	2700
Dibenzofuran		6900		310	2700
2,4-Dinitrotoluene		540	U	88	540
Diethyl phthalate		2700	U	320	2700
4-Chlorophenyl phenyl ether		2700	U	310	2700
Fluorene		11000		340	2700
4-Nitroaniline		5400	U	830	5400
N-Nitrosodiphenylamine		2700	U	260	2700
4-Bromophenyl phenyl ether		2700	U	270	2700
Hexachlorobenzene		270	U	37	270

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-03 (10-10.9)**

Lab Sample ID: 200-11417-3
Client Matrix: Solid

% Moisture: 38.4

Date Sampled: 06/21/2012 1025
Date Received: 06/22/2012 1045

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118282	Instrument ID:	BNAMS4
Prep Method:	3541	Prep Batch:	460-117875	Lab File ID:	u77941.d
Dilution:	5.0			Initial Weight/Volume:	15.02 g
Analysis Date:	07/02/2012 1406			Final Weight/Volume:	1 mL
Prep Date:	06/28/2012 1551			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		32000		340	2700
Anthracene		7500		330	2700
Carbazole		430	J	320	2700
Di-n-butyl phthalate		2700	U	330	2700
Fluoranthene		5900		360	2700
Pyrene		5800		220	2700
Butyl benzyl phthalate		2700	U	250	2700
3,3'-Dichlorobenzidine		5400	U	940	5400
Benzo[a]anthracene		2800		19	270
Chrysene		2500	J	310	2700
Bis(2-ethylhexyl) phthalate		2700	U	890	2700
Di-n-octyl phthalate		2700	U	170	2700
Benzo[b]fluoranthene		2100		17	270
Benzo[k]fluoranthene		1200		20	270
Benzo[a]pyrene		2400		19	270
Indeno[1,2,3-cd]pyrene		1800		50	270
Dibenz(a,h)anthracene		270	U	34	270
Benzo[g,h,i]perylene		1600	J	200	2700
2,2'-oxybis[1-chloropropane]		2700	U	300	2700

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	64		38 - 105
Phenol-d5	66		41 - 118
Terphenyl-d14	93		16 - 151
2,4,6-Tribromophenol	71		10 - 120
2-Fluorophenol	59		37 - 125
2-Fluorobiphenyl	62		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-03 (10.9-11.7)**

Lab Sample ID: 200-11417-4
Client Matrix: Solid

% Moisture: 47.9

Date Sampled: 06/21/2012 1030
Date Received: 06/22/2012 1045

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118282	Instrument ID:	BNAMS4
Prep Method:	3541	Prep Batch:	460-117875	Lab File ID:	u77945.d
Dilution:	1.0			Initial Weight/Volume:	14.99 g
Analysis Date:	07/02/2012 1527			Final Weight/Volume:	1 mL
Prep Date:	06/28/2012 1551			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		630	U	85	630
2-Chlorophenol		630	U	84	630
2-Methylphenol		630	U	110	630
2-Nitrophenol		630	U	71	630
3 & 4 Methylphenol		180	J	110	630
2,4-Dimethylphenol		310	J	160	630
2,4-Dichlorophenol		630	U	93	630
4-Chloro-3-methylphenol		630	U	96	630
2,4,6-Trichlorophenol		630	U	74	630
2,4,5-Trichlorophenol		630	U	82	630
2,4-Dinitrophenol		1900	U	360	1900
4-Nitrophenol		1900	U	410	1900
4,6-Dinitro-2-methylphenol		1900	U	170	1900
Pentachlorophenol		1900	U	190	1900
Bis(2-chloroethyl)ether		63	U	8.7	63
1,3-Dichlorobenzene		630	U	58	630
Benzoic acid		630	U	630	630
1,4-Dichlorobenzene		630	U	72	630
1,2-Dichlorobenzene		630	U	74	630
N-Nitrosodi-n-propylamine		63	U	11	63
Hexachloroethane		63	U	7.1	63
Nitrobenzene		63	U	9.0	63
Isophorone		630	U	77	630
Bis(2-chloroethoxy)methane		630	U	82	630
1,2,4-Trichlorobenzene		63	U	7.2	63
Naphthalene		1400		74	630
4-Chloroaniline		630	U	170	630
Hexachlorobutadiene		130	U	16	130
2-Methylnaphthalene		630	U	82	630
Hexachlorocyclopentadiene		630	U	75	630
2-Chloronaphthalene		630	U	71	630
2-Nitroaniline		1300	U	270	1300
Dimethyl phthalate		630	U	75	630
Acenaphthylene		630	U	75	630
2,6-Dinitrotoluene		130	U	19	130
3-Nitroaniline		1300	U	220	1300
Acenaphthene		630	U	93	630
Dibenzofuran		630	U	75	630
2,4-Dinitrotoluene		130	U	21	130
Diethyl phthalate		630	U	76	630
4-Chlorophenyl phenyl ether		630	U	75	630
Fluorene		110	J	81	630
4-Nitroaniline		1300	U	200	1300
N-Nitrosodiphenylamine		630	U	63	630
4-Bromophenyl phenyl ether		630	U	63	630
Hexachlorobenzene		63	U	8.7	63

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-03 (10.9-11.7)**

Lab Sample ID: 200-11417-4
Client Matrix: Solid
% Moisture: 47.9

Date Sampled: 06/21/2012 1030
Date Received: 06/22/2012 1045

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118282	Instrument ID:	BNAMS4
Prep Method:	3541	Prep Batch:	460-117875	Lab File ID:	u77945.d
Dilution:	1.0			Initial Weight/Volume:	14.99 g
Analysis Date:	07/02/2012 1527			Final Weight/Volume:	1 mL
Prep Date:	06/28/2012 1551			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		260	J	81	630
Anthracene		630	U	77	630
Carbazole		630	U	75	630
Di-n-butyl phthalate		630	U	78	630
Fluoranthene		630	U	85	630
Pyrene		75	J	53	630
Butyl benzyl phthalate		630	U	58	630
3,3'-Dichlorobenzidine		1300	U	220	1300
Benzo[a]anthracene		51	J	4.4	63
Chrysene		630	U	74	630
Bis(2-ethylhexyl) phthalate		630	U	210	630
Di-n-octyl phthalate		630	U	41	630
Benzo[b]fluoranthene		63	U	4.0	63
Benzo[k]fluoranthene		63	U	4.8	63
Benzo[a]pyrene		63	U	4.5	63
Indeno[1,2,3-cd]pyrene		63	U	12	63
Dibenz(a,h)anthracene		63	U	8.0	63
Benzo[g,h,i]perylene		630	U	47	630
2,2'-oxybis[1-chloropropane]		630	U	70	630

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	70		38 - 105
Phenol-d5	91		41 - 118
Terphenyl-d14	135		16 - 151
2,4,6-Tribromophenol	100		10 - 120
2-Fluorophenol	101		37 - 125
2-Fluorobiphenyl	81		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: DUP-03-06212012

Lab Sample ID: 200-11417-6
Client Matrix: Solid

% Moisture: 43.4

Date Sampled: 06/21/2012 0000
Date Received: 06/22/2012 1045

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118475	Instrument ID:	BNAMS4
Prep Method:	3541	Prep Batch:	460-117875	Lab File ID:	u77976.d
Dilution:	5.0			Initial Weight/Volume:	15.00 g
Analysis Date:	07/03/2012 1051			Final Weight/Volume:	1 mL
Prep Date:	06/28/2012 1551			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		2900	U	390	2900
2-Chlorophenol		2900	U	380	2900
2-Methylphenol		2900	U	500	2900
2-Nitrophenol		2900	U	330	2900
3 & 4 Methylphenol		2900	U	500	2900
2,4-Dimethylphenol		2900	U	720	2900
2,4-Dichlorophenol		2900	U	430	2900
4-Chloro-3-methylphenol		2900	U	440	2900
2,4,6-Trichlorophenol		2900	U	340	2900
2,4,5-Trichlorophenol		2900	U	380	2900
2,4-Dinitrophenol		8800	U	1700	8800
4-Nitrophenol		8800	U	1900	8800
4,6-Dinitro-2-methylphenol		8800	U	800	8800
Pentachlorophenol		8800	U	870	8800
Bis(2-chloroethyl)ether		290	U	40	290
1,3-Dichlorobenzene		2900	U	270	2900
Benzoic acid		2900	U	2900	2900
1,4-Dichlorobenzene		2900	U	330	2900
1,2-Dichlorobenzene		2900	U	340	2900
N-Nitrosodi-n-propylamine		290	U	49	290
Hexachloroethane		290	U	33	290
Nitrobenzene		290	U	42	290
Isophorone		2900	U	350	2900
Bis(2-chloroethoxy)methane		2900	U	380	2900
1,2,4-Trichlorobenzene		290	U	33	290
Naphthalene		26000		340	2900
4-Chloroaniline		2900	U	770	2900
Hexachlorobutadiene		590	U	71	590
2-Methylnaphthalene		3400		380	2900
Hexachlorocyclopentadiene		2900	U	340	2900
2-Chloronaphthalene		2900	U	330	2900
2-Nitroaniline		5900	U	1200	5900
Dimethyl phthalate		2900	U	350	2900
Acenaphthylene		500	J	350	2900
2,6-Dinitrotoluene		590	U	88	590
3-Nitroaniline		5900	U	1000	5900
Acenaphthene		2900	U	430	2900
Dibenzofuran		6000		340	2900
2,4-Dinitrotoluene		590	U	96	590
Diethyl phthalate		2900	U	350	2900
4-Chlorophenyl phenyl ether		2900	U	340	2900
Fluorene		9800		370	2900
4-Nitroaniline		5900	U	910	5900
N-Nitrosodiphenylamine		2900	U	290	2900
4-Bromophenyl phenyl ether		2900	U	290	2900
Hexachlorobenzene		290	U	40	290

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **DUP-03-06212012**

Lab Sample ID: 200-11417-6
Client Matrix: Solid
% Moisture: 43.4

Date Sampled: 06/21/2012 0000
Date Received: 06/22/2012 1045

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118475	Instrument ID:	BNAMS4
Prep Method:	3541	Prep Batch:	460-117875	Lab File ID:	u77976.d
Dilution:	5.0			Initial Weight/Volume:	15.00 g
Analysis Date:	07/03/2012 1051			Final Weight/Volume:	1 mL
Prep Date:	06/28/2012 1551			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		12000		370	2900
Anthracene		2300	J	360	2900
Carbazole		470	J	350	2900
Di-n-butyl phthalate		2900	U	360	2900
Fluoranthene		2000	J	390	2900
Pyrene		3000		240	2900
Butyl benzyl phthalate		2900	U	270	2900
3,3'-Dichlorobenzidine		5900	U	1000	5900
Benzo[a]anthracene		2800		20	290
Chrysene		2800	J	340	2900
Bis(2-ethylhexyl) phthalate		2900	U	970	2900
Di-n-octyl phthalate		2900	U	190	2900
Benzo[b]fluoranthene		1900		18	290
Benzo[k]fluoranthene		760		22	290
Benzo[a]pyrene		2700		21	290
Indeno[1,2,3-cd]pyrene		1700		54	290
Dibenz(a,h)anthracene		610		37	290
Benzo[g,h,i]perylene		1800	J	220	2900
2,2'-oxybis[1-chloropropane]		2900	U	320	2900

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	64		38 - 105
Phenol-d5	61		41 - 118
Terphenyl-d14	80		16 - 151
2,4,6-Tribromophenol	62		10 - 120
2-Fluorophenol	54		37 - 125
2-Fluorobiphenyl	69		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-05 (10.9-11.9')**

Lab Sample ID: 200-11398-1
Client Matrix: Solid

% Moisture: 6.3

Date Sampled: 06/20/2012 1000
Date Received: 06/21/2012 1040

8015B Diesel Range Organics (DRO) (GC)

Analysis Method:	8015B	Analysis Batch:	200-41066	Instrument ID:	3012.i
Prep Method:	3550B	Prep Batch:	200-40766	Initial Weight/Volume:	30.43 g
Dilution:	1.0			Final Weight/Volume:	2000 uL
Analysis Date:	06/28/2012 0325			Injection Volume:	2 uL
Prep Date:	06/22/2012 1046			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Diesel Range Organics [C10-C28]		7.1 ~~5.0~~	~~JB~~ UB	1.1	7.1

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	74		40 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-03 (10-10.9)**

Lab Sample ID: 200-11417-3
Client Matrix: Solid

% Moisture: 38.4

Date Sampled: 06/21/2012 1025
Date Received: 06/22/2012 1045

8015B Diesel Range Organics (DRO) (GC)

Analysis Method:	8015B	Analysis Batch:	200-41317	Instrument ID:	3012.i
Prep Method:	3550B	Prep Batch:	200-41124	Initial Weight/Volume:	29.77 g
Dilution:	20			Final Weight/Volume:	2000 uL
Analysis Date:	07/03/2012 1039			Injection Volume:	2 uL
Prep Date:	06/29/2012 0832			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Diesel Range Organics [C10-C28]		870	B 5	33	220

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	0	X	40 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-03 (10.9-11.7)**

Lab Sample ID: 200-11417-4
Client Matrix: Solid

% Moisture: 47.9

Date Sampled: 06/21/2012 1030
Date Received: 06/22/2012 1045

8015B Diesel Range Organics (DRO) (GC)

Analysis Method:	8015B	Analysis Batch:	200-41102	Instrument ID:	3012.i
Prep Method:	3550B	Prep Batch:	200-40929	Initial Weight/Volume:	29.86 g
Dilution:	5.0			Final Weight/Volume:	2000 uL
Analysis Date:	06/28/2012 1237			Injection Volume:	2 uL
Prep Date:	06/26/2012 0914			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Diesel Range Organics [C10-C28]		190	B	9.6	65

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	99		40 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **DUP-03-06212012**

Lab Sample ID: 200-11417-6
Client Matrix: Solid % Moisture: 43.4

Date Sampled: 06/21/2012 0000
Date Received: 06/22/2012 1045

8015B Diesel Range Organics (DRO) (GC)

Analysis Method:	8015B	Analysis Batch:	200-41102	Instrument ID:	3012.i
Prep Method:	3550B	Prep Batch:	200-40929	Initial Weight/Volume:	29.66 g
Dilution:	10			Final Weight/Volume:	2000 uL
Analysis Date:	06/28/2012 1427			Injection Volume:	2 uL
Prep Date:	06/26/2012 0914			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Diesel Range Organics [C10-C28]		620	B J	18	120

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	0	X	40 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-16 (1-1.3')**

Lab Sample ID: 200-11371-2
Client Matrix: Solid
% Moisture: 13.7

Date Sampled: 06/18/2012 1400
Date Received: 06/19/2012 1100

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41144	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40596	Initial Weight/Volume:	15.06 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/27/2012 1828			Injection Volume:	1 uL
Prep Date:	06/20/2012 0815			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		20	U	6.5	20
PCB-1221		20	U	5.0	20
PCB-1232		20	U	3.8	20
PCB-1242		20	U	7.7	20
PCB-1248		20	U	2.3	20
PCB-1254		20	U	3.2	20
PCB-1260		36		2.8	20
PCB-1262		20	U	1.7	20
PCB-1268		20	U	1.6	20

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	36		30 - 130
DCB Decachlorobiphenyl	47		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-16 (1-1.3')**

Lab Sample ID: 200-11371-2
Client Matrix: Solid % Moisture: 13.7

Date Sampled: 06/18/2012 1400
Date Received: 06/19/2012 1100

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41144	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40596	Initial Weight/Volume:	15.06 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/27/2012 1828			Injection Volume:	1 uL
Prep Date:	06/20/2012 0815			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	37		30 - 130
DCB Decachlorobiphenyl	51		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-09 (4-5')**

Lab Sample ID: 200-11371-3
Client Matrix: Solid

% Moisture: 36.9

Date Sampled: 06/18/2012 1245
Date Received: 06/19/2012 1100

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41144	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40596	Initial Weight/Volume:	15.02 g
Dilution:	10			Final Weight/Volume:	5000 uL
Analysis Date:	06/27/2012 1927			Injection Volume:	1 uL
Prep Date:	06/20/2012 0815			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		270	U	89	270
PCB-1221		270	U	68	270
PCB-1232		270	U	52	270
PCB-1242		270	U	110	270
PCB-1248		270	U	32	270
PCB-1254		270	U	44	270
PCB-1260		270	U	38	270
PCB-1262		270	U	24	270
PCB-1268		270	U	22	270

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	54	p	30 - 130
DCB Decachlorobiphenyl	102		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-09 (4-5')**

Lab Sample ID: 200-11371-3
Client Matrix: Solid
% Moisture: 36.9

Date Sampled: 06/18/2012 1245
Date Received: 06/19/2012 1100

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41144	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40596	Initial Weight/Volume:	15.02 g
Dilution:	10			Final Weight/Volume:	5000 uL
Analysis Date:	06/27/2012 1927			Injection Volume:	1 uL
Prep Date:	06/20/2012 0815			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	105		30 - 130
DCB Decachlorobiphenyl	125		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-13 (8.2-9)**

Lab Sample ID: 200-11382-1
Client Matrix: Solid % Moisture: 16.4

Date Sampled: 06/16/2012 1000
Date Received: 06/20/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40902	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40636	Initial Weight/Volume:	14.83 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/22/2012 2212			Injection Volume:	1 uL
Prep Date:	06/20/2012 1403			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		21	U	6.8	21
PCB-1221		21	U	5.2	21
PCB-1232		21	U	4.0	21
PCB-1242		21	U	8.1	21
PCB-1248		21	U	2.4	21
PCB-1254		21	U	3.4	21
PCB-1260		21	U	2.9	21
PCB-1262		21	U	1.8	21
PCB-1268		21	U	1.7	21

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	73		30 - 130
DCB Decachlorobiphenyl	71		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-13 (8.2-9)**

Lab Sample ID: 200-11382-1
Client Matrix: Solid % Moisture: 16.4

Date Sampled: 06/16/2012 1000
Date Received: 06/20/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40902	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40636	Initial Weight/Volume:	14.83 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/22/2012 2212			Injection Volume:	1 uL
Prep Date:	06/20/2012 1403			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	92		30 - 130
DCB Decachlorobiphenyl	82		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-13 (12-13)**

Lab Sample ID: 200-11382-2
Client Matrix: Solid % Moisture: 12.2

Date Sampled: 06/16/2012 1010
Date Received: 06/20/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40902	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40636	Initial Weight/Volume:	15.08 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/22/2012 2242			Injection Volume:	1 uL
Prep Date:	06/20/2012 1403			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		19	U	6.3	19
PCB-1221		19	U	4.9	19
PCB-1232		19	U	3.7	19
PCB-1242		19	U	7.6	19
PCB-1248		19	U	2.3	19
PCB-1254		19	U	3.2	19
PCB-1260		19	U	2.7	19
PCB-1262		19	U	1.7	19
PCB-1268		19	U	1.6	19

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	88		30 - 130
DCB Decachlorobiphenyl	91		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-13 (12-13)**

Lab Sample ID: 200-11382-2
Client Matrix: Solid

% Moisture: 12.2

Date Sampled: 06/16/2012 1010
Date Received: 06/20/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40902	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40636	Initial Weight/Volume:	15.08 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/22/2012 2242			Injection Volume:	1 uL
Prep Date:	06/20/2012 1403			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	94		30 - 130
DCB Decachlorobiphenyl	92		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-14 (6.5-7.5)**

Lab Sample ID: 200-11382-3
Client Matrix: Solid % Moisture: 58.6

Date Sampled: 06/16/2012 1045
Date Received: 06/20/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40902	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40636	Initial Weight/Volume:	15.27 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/23/2012 0011			Injection Volume:	1 uL
Prep Date:	06/20/2012 1403			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		40	U	13	40
PCB-1221		40	U	10	40
PCB-1232		40	U	7.8	40
PCB-1242		40	U	16	40
PCB-1248		40	U	4.8	40
PCB-1254		40	U	6.7	40
PCB-1260		40	U	5.7	40
PCB-1262		40	U	3.6	40
PCB-1268		40	U	3.3	40

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	45		30 - 130
DCB Decachlorobiphenyl	38	X	45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-14 (6.5-7.5)**

Lab Sample ID: 200-11382-3
Client Matrix: Solid
% Moisture: 58.6

Date Sampled: 06/16/2012 1045
Date Received: 06/20/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40902	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40636	Initial Weight/Volume:	15.27 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/23/2012 0011			Injection Volume:	1 uL
Prep Date:	06/20/2012 1403			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	53		30 - 130
DCB Decachlorobiphenyl	41	X	45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-14 (17-18)**

Lab Sample ID: 200-11382-4
Client Matrix: Solid % Moisture: 12.6

Date Sampled: 06/16/2012 1100
Date Received: 06/20/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40902	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40636	Initial Weight/Volume:	15.21 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/23/2012 0041			Injection Volume:	1 uL
Prep Date:	06/20/2012 1403			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		19	U	6.3	19
PCB-1221		19	U	4.9	19
PCB-1232		19	U	3.7	19
PCB-1242		19	U	7.6	19
PCB-1248		19	U	2.3	19
PCB-1254		19	U	3.2	19
PCB-1260		19	U	2.7	19
PCB-1262		19	U	1.7	19
PCB-1268		19	U	1.6	19

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	68		30 - 130
DCB Decachlorobiphenyl	69		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-14 (17-18)**

Lab Sample ID: 200-11382-4
Client Matrix: Solid

% Moisture: 12.6

Date Sampled: 06/16/2012 1100
Date Received: 06/20/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40902	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40636	Initial Weight/Volume:	15.21 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/23/2012 0041			Injection Volume:	1 uL
Prep Date:	06/20/2012 1403			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	69		30 - 130
DCB Decachlorobiphenyl	70		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-20 (8.5-9.5)**

Lab Sample ID: 200-11382-5
Client Matrix: Solid % Moisture: 12.0

Date Sampled: 06/16/2012 1230
Date Received: 06/20/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40902	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40636	Initial Weight/Volume:	15.48 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/23/2012 0111			Injection Volume:	1 uL
Prep Date:	06/20/2012 1403			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		19	U	6.2	19
PCB-1221		19	U	4.7	19
PCB-1232		19	U	3.6	19
PCB-1242		19	U	7.4	19
PCB-1248		19	U	2.2	19
PCB-1254		19	U	3.1	19
PCB-1260		16	J	2.6	19
PCB-1262		19	U	1.7	19
PCB-1268		19	U	1.5	19

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	52		30 - 130
DCB Decachlorobiphenyl	46		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-20 (8.5-9.5)**

Lab Sample ID: 200-11382-5
Client Matrix: Solid
% Moisture: 12.0

Date Sampled: 06/16/2012 1230
Date Received: 06/20/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40902	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40636	Initial Weight/Volume:	15.48 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/23/2012 0111			Injection Volume:	1 uL
Prep Date:	06/20/2012 1403			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	55		30 - 130
DCB Decachlorobiphenyl	49		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: SB-21 (6-7)

Lab Sample ID: 200-11382-6
Client Matrix: Solid

% Moisture: 24.9

Date Sampled: 06/16/2012 1400
Date Received: 06/20/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40902	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40636	Initial Weight/Volume:	15.55 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/23/2012 0141			Injection Volume:	1 uL
Prep Date:	06/20/2012 1403			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		22	U	7.2	22
PCB-1221		22	U	5.5	22
PCB-1232		22	U	4.2	22
PCB-1242		22	U	8.6	22
PCB-1248		22	U	2.6	22
PCB-1254		22	U	3.6	22
PCB-1260		22	U	3.1	22
PCB-1262		22	U	1.9	22
PCB-1268		22	U	1.8	22

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	69		30 - 130
DCB Decachlorobiphenyl	56		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-21 (6-7)**

Lab Sample ID: 200-11382-6
Client Matrix: Solid
% Moisture: 24.9

Date Sampled: 06/16/2012 1400
Date Received: 06/20/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40902	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40636	Initial Weight/Volume:	15.55 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/23/2012 0141			Injection Volume:	1 uL
Prep Date:	06/20/2012 1403			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	73		30 - 130
DCB Decachlorobiphenyl	67		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **DUP-02-06162012**

Lab Sample ID: 200-11382-8
Client Matrix: Solid % Moisture: 36.2

Date Sampled: 06/16/2012 0000
Date Received: 06/20/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40902	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40636	Initial Weight/Volume:	15.25 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/23/2012 0240			Injection Volume:	1 uL
Prep Date:	06/20/2012 1403			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		26	U	8.6	26
PCB-1221		26	U	6.6	26
PCB-1232		26	U	5.1	26
PCB-1242		26	U	10	26
PCB-1248		26	U	3.1	26
PCB-1254		26	U	4.3	26
PCB-1260		26	U	3.7	26
PCB-1262		26	U	2.3	26
PCB-1268		26	U	2.2	26

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	60		30 - 130
DCB Decachlorobiphenyl	54		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **DUP-02-06162012**

Lab Sample ID: 200-11382-8
Client Matrix: Solid
% Moisture: 36.2

Date Sampled: 06/16/2012 0000
Date Received: 06/20/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40902	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40636	Initial Weight/Volume:	15.25 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/23/2012 0240			Injection Volume:	1 uL
Prep Date:	06/20/2012 1403			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	86		30 - 130
DCB Decachlorobiphenyl	58		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-06 (12.2-13.2)**

Lab Sample ID: 200-11382-10
Client Matrix: Solid % Moisture: 53.2

Date Sampled: 06/19/2012 1230
Date Received: 06/20/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40902	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40636	Initial Weight/Volume:	15.27 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/23/2012 0339			Injection Volume:	1 uL
Prep Date:	06/20/2012 1403			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		36	U	12	36
PCB-1221		36	U	9.0	36
PCB-1232		36	U	6.9	36
PCB-1242		36	U	14	36
PCB-1248		36	U	4.2	36
PCB-1254		36	U	5.9	36
PCB-1260		36	U	5.0	36
PCB-1262		36	U	3.1	36
PCB-1268		36	U	2.9	36

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	35		30 - 130
DCB Decachlorobiphenyl	51		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-06 (12.2-13.2)**

Lab Sample ID: 200-11382-10
Client Matrix: Solid % Moisture: 53.2

Date Sampled: 06/19/2012 1230
Date Received: 06/20/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40902	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40636	Initial Weight/Volume:	15.27 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/23/2012 0339			Injection Volume:	1 uL
Prep Date:	06/20/2012 1403			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	41		30 - 130
DCB Decachlorobiphenyl	52		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-07 (10.5-12.5)**

Lab Sample ID: 200-11382-11
Client Matrix: Solid

% Moisture: 17.4

Date Sampled: 06/19/2012 1330
Date Received: 06/20/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40902	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40636	Initial Weight/Volume:	15.10 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/23/2012 0409			Injection Volume:	1 uL
Prep Date:	06/20/2012 1403			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		20	U	6.7	20
PCB-1221		20	U	5.2	20
PCB-1232		20	U	4.0	20
PCB-1242		20	U	8.1	20
PCB-1248		20	U	2.4	20
PCB-1254		20	U	3.4	20
PCB-1260		10	J	2.9	20
PCB-1262		20	U	1.8	20
PCB-1268		20	U	1.7	20

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	62		30 - 130
DCB Decachlorobiphenyl	59		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-07 (10.5-12.5)**

Lab Sample ID: 200-11382-11
Client Matrix: Solid
% Moisture: 17.4

Date Sampled: 06/19/2012 1330
Date Received: 06/20/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40902	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40636	Initial Weight/Volume:	15.10 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/23/2012 0409			Injection Volume:	1 uL
Prep Date:	06/20/2012 1403			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	66		30 - 130
DCB Decachlorobiphenyl	59		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-07 (16.4-17.4)**

Lab Sample ID: 200-11382-12
Client Matrix: Solid

% Moisture: 41.9

Date Sampled: 06/19/2012 1350
Date Received: 06/20/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40902	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40636	Initial Weight/Volume:	14.82 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/23/2012 0438			Injection Volume:	1 uL
Prep Date:	06/20/2012 1403			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		30	U	9.8	30
PCB-1221		30	U	7.5	30
PCB-1232		30	U	5.8	30
PCB-1242		30	U	12	30
PCB-1248		30	U	3.5	30
PCB-1254		30	U	4.9	30
PCB-1260		30	U	4.2	30
PCB-1262		30	U	2.6	30
PCB-1268		30	U	2.4	30

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	65		30 - 130
DCB Decachlorobiphenyl	72		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-07 (16.4-17.4)**

Lab Sample ID: 200-11382-12
Client Matrix: Solid % Moisture: 41.9

Date Sampled: 06/19/2012 1350
Date Received: 06/20/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40902	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40636	Initial Weight/Volume:	14.82 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/23/2012 0438			Injection Volume:	1 uL
Prep Date:	06/20/2012 1403			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	68		30 - 130
DCB Decachlorobiphenyl	72		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-10 (4.2-5)**

Lab Sample ID: 200-11382-13
Client Matrix: Solid

% Moisture: 21.4

Date Sampled: 06/19/2012 1515
Date Received: 06/20/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40902	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40636	Initial Weight/Volume:	15.15 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/23/2012 0508			Injection Volume:	1 uL
Prep Date:	06/20/2012 1403			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		21	U	7.1	21
PCB-1221		21	U	5.4	21
PCB-1232		21	U	4.2	21
PCB-1242		21	U	8.4	21
PCB-1248		21	U	2.5	21
PCB-1254		21	U	3.5	21
PCB-1260		21	U	3.0	21
PCB-1262		21	U	1.9	21
PCB-1268		21	U	1.8	21

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	64		30 - 130
DCB Decachlorobiphenyl	45		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-10 (4.2-5)**

Lab Sample ID: 200-11382-13
Client Matrix: Solid % Moisture: 21.4

Date Sampled: 06/19/2012 1515
Date Received: 06/20/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40902	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40636	Initial Weight/Volume:	15.15 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/23/2012 0508			Injection Volume:	1 uL
Prep Date:	06/20/2012 1403			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	72		30 - 130
DCB Decachlorobiphenyl	49		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-05 (10.9-11.9')**

Lab Sample ID: 200-11398-1
Client Matrix: Solid % Moisture: 6.3

Date Sampled: 06/20/2012 1000
Date Received: 06/21/2012 1040

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41125	Instrument ID:	5253.i
Prep Method:	3541	Prep Batch:	200-40763	Initial Weight/Volume:	15.09 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/28/2012 0518			Injection Volume:	1 uL
Prep Date:	06/22/2012 1020			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		18	U	5.9	18
PCB-1221		18	U	4.6	18
PCB-1232		18	U	3.5	18
PCB-1242		18	U	7.1	18
PCB-1248		18	U	2.1	18
PCB-1254		18	U	3.0	18
PCB-1260		18	U	2.5	18
PCB-1262		18	U	1.6	18
PCB-1268		18	U	1.5	18

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	83		30 - 130
DCB Decachlorobiphenyl	87		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-05 (10.9-11.9')**

Lab Sample ID: 200-11398-1
Client Matrix: Solid
% Moisture: 6.3

Date Sampled: 06/20/2012 1000
Date Received: 06/21/2012 1040

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41125	Instrument ID:	5253.i
Prep Method:	3541	Prep Batch:	200-40763	Initial Weight/Volume:	15.09 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/28/2012 0518			Injection Volume:	1 uL
Prep Date:	06/22/2012 1020			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	84		30 - 130
DCB Decachlorobiphenyl	91		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-04 (10.2-11.4)**

Lab Sample ID: 200-11417-1
Client Matrix: Solid % Moisture: 19.5

Date Sampled: 06/21/2012 0900
Date Received: 06/22/2012 1045

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41296	Instrument ID:	5253.i
Prep Method:	3541	Prep Batch:	200-40879	Initial Weight/Volume:	14.93 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/29/2012 1011			Injection Volume:	1 uL
Prep Date:	06/25/2012 1030			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		21	U	7.0	21
PCB-1221		21	U	5.4	21
PCB-1232		21	U	4.1	21
PCB-1242		21	U	8.4	21
PCB-1248		21	U	2.5	21
PCB-1254		21	U	3.5	21
PCB-1260		21	U	3.0	21
PCB-1262		21	U	1.9	21
PCB-1268		21	U	1.7	21

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	94		30 - 130
DCB Decachlorobiphenyl	37	X	45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-04 (10.2-11.4)**

Lab Sample ID: 200-11417-1
Client Matrix: Solid
% Moisture: 19.5

Date Sampled: 06/21/2012 0900
Date Received: 06/22/2012 1045

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41296	Instrument ID:	5253.i
Prep Method:	3541	Prep Batch:	200-40879	Initial Weight/Volume:	14.93 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/29/2012 1011			Injection Volume:	1 uL
Prep Date:	06/25/2012 1030			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	96		30 - 130
DCB Decachlorobiphenyl	44	X	45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-04 (17.2-18.2)**

Lab Sample ID: 200-11417-2
Client Matrix: Solid % Moisture: 42.1

Date Sampled: 06/21/2012 0915
Date Received: 06/22/2012 1045

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41296	Instrument ID:	5253.i
Prep Method:	3541	Prep Batch:	200-40879	Initial Weight/Volume:	14.72 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/29/2012 1035			Injection Volume:	1 uL
Prep Date:	06/25/2012 1030			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		30	U	9.9	30
PCB-1221		30	U	7.6	30
PCB-1232		30	U	5.8	30
PCB-1242		30	U	12	30
PCB-1248		30	U	3.5	30
PCB-1254		30	U	4.9	30
PCB-1260		30	U	4.2	30
PCB-1262		30	U	2.6	30
PCB-1268		30	U	2.5	30

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	85		30 - 130
DCB Decachlorobiphenyl	57		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-04 (17.2-18.2)**

Lab Sample ID: 200-11417-2
Client Matrix: Solid
% Moisture: 42.1

Date Sampled: 06/21/2012 0915
Date Received: 06/22/2012 1045

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41296	Instrument ID:	5253.i
Prep Method:	3541	Prep Batch:	200-40879	Initial Weight/Volume:	14.72 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/29/2012 1035			Injection Volume:	1 uL
Prep Date:	06/25/2012 1030			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	88		30 - 130
DCB Decachlorobiphenyl	62		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-03 (10-10.9)**

Lab Sample ID: 200-11417-3
Client Matrix: Solid % Moisture: 38.4

Date Sampled: 06/21/2012 1025
Date Received: 06/22/2012 1045

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41135	Instrument ID:	7227.i
Prep Method:	3541	Prep Batch:	200-41065	Initial Weight/Volume:	15.19 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/29/2012 1008			Injection Volume:	1 uL
Prep Date:	06/28/2012 1021			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		27	U	9.0	27
PCB-1221		27	U	6.9	27
PCB-1232		27	U	5.3	27
PCB-1242		27	U	11	27
PCB-1248		27	U	3.2	27
PCB-1254		27	U	4.5	27
PCB-1260		27	U	3.8	27
PCB-1262		27	U	2.4	27
PCB-1268		27	U	2.2	27

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	49		30 - 130
DCB Decachlorobiphenyl	38	X	45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-03 (10-10.9)**

Lab Sample ID: 200-11417-3
Client Matrix: Solid % Moisture: 38.4

Date Sampled: 06/21/2012 1025
Date Received: 06/22/2012 1045

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41135	Instrument ID:	7227.i
Prep Method:	3541	Prep Batch:	200-41065	Initial Weight/Volume:	15.19 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/29/2012 1008			Injection Volume:	1 uL
Prep Date:	06/28/2012 1021			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	59		30 - 130
DCB Decachlorobiphenyl	43	X	45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-03 (10.9-11.7)**

Lab Sample ID: 200-11417-4
Client Matrix: Solid

% Moisture: 47.9

Date Sampled: 06/21/2012 1030
Date Received: 06/22/2012 1045

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41296	Instrument ID:	5253.i
Prep Method:	3541	Prep Batch:	200-40879	Initial Weight/Volume:	14.92 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/29/2012 1059			Injection Volume:	1 uL
Prep Date:	06/25/2012 1030			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		33	U	11	33
PCB-1221		33	U	8.3	33
PCB-1232		33	U	6.4	33
PCB-1242		33	U	13	33
PCB-1248		33	U	3.9	33
PCB-1254		33	U	5.4	33
PCB-1260		33	U	4.6	33
PCB-1262		33	U	2.9	33
PCB-1268		33	U	2.7	33

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	70		30 - 130
DCB Decachlorobiphenyl	56		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-03 (10.9-11.7)**

Lab Sample ID: 200-11417-4
Client Matrix: Solid

% Moisture: 47.9

Date Sampled: 06/21/2012 1030
Date Received: 06/22/2012 1045

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41296	Instrument ID:	5253.i
Prep Method:	3541	Prep Batch:	200-40879	Initial Weight/Volume:	14.92 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/29/2012 1059			Injection Volume:	1 uL
Prep Date:	06/25/2012 1030			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	75		30 - 130
DCB Decachlorobiphenyl	57		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **DUP-03-06212012**

Lab Sample ID: 200-11417-6
Client Matrix: Solid % Moisture: 43.4

Date Sampled: 06/21/2012 0000
Date Received: 06/22/2012 1045

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41316	Instrument ID:	5253.i
Prep Method:	3541	Prep Batch:	200-40879	Initial Weight/Volume:	14.90 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	07/03/2012 0230			Injection Volume:	1 uL
Prep Date:	06/25/2012 1030			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		30	U	10	30
PCB-1221		30	U	7.6	30
PCB-1232		30	U	5.9	30
PCB-1242		30	U	12	30
PCB-1248		30	U J	3.6	30
PCB-1254		30	U J	5.0	30
PCB-1260		30	U J	4.3	30
PCB-1262		30	U J	2.7	30
PCB-1268		30	U J	2.5	30

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	50		30 - 130
DCB Decachlorobiphenyl	50		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **DUP-03-06212012**

Lab Sample ID: 200-11417-6
Client Matrix: Solid

% Moisture: 43.4

Date Sampled: 06/21/2012 0000
Date Received: 06/22/2012 1045

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41316	Instrument ID:	5253.i
Prep Method:	3541	Prep Batch:	200-40879	Initial Weight/Volume:	14.90 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	07/03/2012 0230			Injection Volume:	1 uL
Prep Date:	06/25/2012 1030			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	53		30 - 130
DCB Decachlorobiphenyl	70		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-16 (1-1.3')**

Lab Sample ID: 200-11371-2
Client Matrix: Solid
% Moisture: 13.7

Date Sampled: 06/18/2012 1400
Date Received: 06/19/2012 1100

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41205	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40836	Lab File ID:	070112-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.46 g
Analysis Date:	07/01/2012 0047			Final Weight/Volume:	100 mL
Prep Date:	06/23/2012 0838				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		920	J	13.5	15.9
Antimony		4.8	UJ	0.39	4.8
Arsenic		1.9	J	0.44	0.79
Barium		20.6	J	0.41	15.9
Beryllium		0.38	J	0.025	0.40
Cadmium		0.40	UJ	0.062	0.40
Calcium		352	J	40.5	397
Chromium		2.9	J	0.087	0.79
Cobalt		3.0	J	0.064	4.0
Copper		10.6	J	0.17	2.0
Iron		2920	J	10.3	15.9
Lead		22.0		0.35	0.79
Magnesium		166	J	11.1	397
Manganese		14.5	J	0.36	1.2
Nickel		14.9	J	0.23	3.2
Potassium		219	J	11.9	397
Selenium		0.87	J	0.69	2.8
Silver		0.79	UJ	0.10	0.79
Sodium		397 ~~486~~	~~JB~~ UB	6.0	397
Thallium		2.0	U	0.33	2.0
Vanadium		35.1	J	0.10	4.0
Zinc		14.1	J	0.44	1.6

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41039	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41014	Lab File ID:	062712CC.PRN
Dilution:	1.0			Initial Weight/Volume:	0.31 g
Analysis Date:	06/27/2012 1519			Final Weight/Volume:	50 mL
Prep Date:	06/26/2012 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.37		0.0025	0.037

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-09 (4-5')**

Lab Sample ID: 200-11371-3
Client Matrix: Solid
% Moisture: 36.9

Date Sampled: 06/18/2012 1245
Date Received: 06/19/2012 1100

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41205	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40836	Lab File ID:	070112-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.26 g
Analysis Date:	07/01/2012 0052			Final Weight/Volume:	100 mL
Prep Date:	06/23/2012 0838				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		11200	J	21.4	25.1
Antimony		0.73	J	0.62	7.5
Arsenic		28.4	J	0.70	1.3
Barium		58.1	J	0.65	25.1
Beryllium		0.83		0.040	0.63
Cadmium		0.47	J	0.098	0.63
Chromium		16.9	J	0.14	1.3
Cobalt		4.8	J	0.10	6.3
Copper		49.1	J	0.28	3.1
Iron		11700		16.3	25.1
Lead		33.2	J	0.55	1.3
Magnesium		3550	J	17.6	629
Manganese		262	J	0.57	1.9
Nickel		15.5	J	0.36	5.0
Potassium		1600	J	18.9	629
Selenium		2.9	J	1.1	4.4
Silver		1.3	UJ	0.16	1.3
Sodium		629 ~~252~~	~~JB~~ UB	9.4	629
Thallium		1.3	J	0.52	3.1
Vanadium		25.7	J	0.16	6.3
Zinc		152	J	0.70	2.5

Analysis Method:	6010C	Analysis Batch:	200-41285	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40836	Lab File ID:	070212-01.ttx
Dilution:	2.0			Initial Weight/Volume:	1.26 g
Analysis Date:	07/02/2012 1556			Final Weight/Volume:	100 mL
Prep Date:	06/23/2012 0838				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Calcium		110000		128	1260

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41039	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41014	Lab File ID:	062712CC.PRN
Dilution:	1.0			Initial Weight/Volume:	0.33 g
Analysis Date:	06/27/2012 1521			Final Weight/Volume:	50 mL
Prep Date:	06/26/2012 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		1.5		0.0032	0.048

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-13 (8.2-9)**

Lab Sample ID: 200-11382-1
Client Matrix: Solid

% Moisture: 16.4

Date Sampled: 06/16/2012 1000
Date Received: 06/20/2012 1010

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41205	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40836	Lab File ID:	070112-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.48 g
Analysis Date:	07/01/2012 0058			Final Weight/Volume:	100 mL
Prep Date:	06/23/2012 0838				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		14100	J	13.7	16.2
Antimony		0.44	J	0.40	4.9
Arsenic		4.5	J	0.45	0.81
Barium		52.3	J	0.42	16.2
Beryllium		0.38	J	0.026	0.40
Cadmium		0.15	J	0.063	0.40
Calcium		1900		41.2	404
Chromium		35.4	J	0.089	0.81
Cobalt		6.8	J	0.065	4.0
Copper		36.5	J	0.18	2.0
Iron		24300	J	10.5	16.2
Lead		22.0		0.36	0.81
Magnesium		3340	J	11.3	404
Manganese		211	J	0.36	1.2
Nickel		20.4	J	0.23	3.2
Potassium		2000	J	12.1	404
Selenium		0.84	J	0.70	2.8
Silver		0.81	U J	0.11	0.81
Sodium		404 ~~268~~	~~J B~~ UB	6.1	404
Thallium		0.69	J	0.33	2.0
Vanadium		36.2	J	0.11	4.0
Zinc		50.9	J	0.45	1.6

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41074	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41036	Lab File ID:	062812CC.PRN
Dilution:	1.0			Initial Weight/Volume:	0.33 g
Analysis Date:	06/28/2012 1108			Final Weight/Volume:	50 mL
Prep Date:	06/26/2012 1630				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.11	~~B~~	0.0024	0.036

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-13 (12-13)**

Lab Sample ID: 200-11382-2
Client Matrix: Solid
% Moisture: 12.2

Date Sampled: 06/16/2012 1010
Date Received: 06/20/2012 1010

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41205	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40836	Lab File ID:	070112-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.42 g
Analysis Date:	07/01/2012 0102			Final Weight/Volume:	100 mL
Prep Date:	06/23/2012 0838				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		15500	J	13.6	16.0
Antimony		0.44	J	0.39	4.8
Arsenic		1.4	J	0.45	0.80
Barium		157	J	0.42	16.0
Beryllium		0.46		0.026	0.40
Cadmium		0.40	U J	0.063	0.40
Calcium		922		40.9	401
Chromium		30.5	J	0.088	0.80
Cobalt		9.9	J	0.065	4.0
Copper		37.4	J	0.18	2.0
Iron		23500	J	10.4	16.0
Lead		6.8		0.35	0.80
Magnesium		5340	J	11.2	401
Manganese		326	J	0.36	1.2
Nickel		22.9	J	0.23	3.2
Potassium		5760	J	12.0	401
Selenium		2.8	U J	0.70	2.8
Silver		0.80	U J	0.10	0.80
Sodium		401 ~~441~~	~~J B~~ UB	6.0	401
Thallium		0.66	J	0.33	2.0
Vanadium		38.0	J	0.10	4.0
Zinc		44.0	J	0.45	1.6

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41074	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41036	Lab File ID:	062812CC.PRN
Dilution:	1.0			Initial Weight/Volume:	0.30 g
Analysis Date:	06/28/2012 1111			Final Weight/Volume:	50 mL
Prep Date:	06/26/2012 1630				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.038 ~~0.011~~	~~J B~~ UB	0.0025	0.038

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-14 (6.5-7.5)**

Lab Sample ID: 200-11382-3
Client Matrix: Solid % Moisture: 58.6

Date Sampled: 06/16/2012 1045
Date Received: 06/20/2012 1010

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41205	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40836	Lab File ID:	070112-01.tbx
Dilution:	1.0			Initial Weight/Volume:	1.36 g
Analysis Date:	07/01/2012 0128			Final Weight/Volume:	100 mL
Prep Date:	06/23/2012 0838				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8380	J	30.2	35.6
Antimony		8.5	J	0.87	10.7
Arsenic		37.5	J	1.0	1.8
Barium		51.1	J	0.92	35.6
Beryllium		0.58	J	0.057	0.89
Cadmium		0.89	U J	0.14	0.89
Calcium		36200		90.7	889
Chromium		202	J	0.20	1.8
Cobalt		14.6	J	0.14	8.9
Copper		644	J	0.39	4.4
Iron		95200	J	23.1	35.6
Lead		116		0.78	1.8
Magnesium		817	J	24.9	889
Manganese		347	J	0.80	2.7
Nickel		121	J	0.52	7.1
Potassium		885	J	26.7	889
Selenium		2.9	J	1.5	6.2
Silver		1.8	U J	0.23	1.8
Sodium		961	U B	13.3	~~889~~ 96
Thallium		4.4	U	0.73	4.4
Vanadium		61.4	J	0.23	8.9
Zinc		342	J	1.0	3.6

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41074	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41036	Lab File ID:	062812CC.PRN
Dilution:	1.0			Initial Weight/Volume:	0.30 g
Analysis Date:	06/28/2012 1118			Final Weight/Volume:	50 mL
Prep Date:	06/26/2012 1630				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.24	~~B~~	0.0053	0.080

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-14 (17-18)**

Lab Sample ID: 200-11382-4
Client Matrix: Solid % Moisture: 12.6

Date Sampled: 06/16/2012 1100
Date Received: 06/20/2012 1010

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41205	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40836	Lab File ID:	070112-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.32 g
Analysis Date:	07/01/2012 0148			Final Weight/Volume:	100 mL
Prep Date:	06/23/2012 0838				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		7590	J	14.7	17.3
Antimony		5.2	U J	0.42	5.2
Arsenic		1.1	J	0.49	0.87
Barium		58.2	J	0.45	17.3
Beryllium		0.26	J	0.028	0.43
Cadmium		0.43	U J	0.068	0.43
Calcium		478		44.2	433
Chromium		15.8	J	0.095	0.87
Cobalt		4.3	J	0.070	4.3
Copper		14.2	J	0.19	2.2
Iron		13900	J	11.3	17.3
Lead		3.9		0.38	0.87
Magnesium		2220	J	12.1	433
Manganese		85.5	J	0.39	1.3
Nickel		8.5	J	0.25	3.5
Potassium		2140	J	13.0	433
Selenium		3.0	U J	0.75	3.0
Silver		0.87	U J	0.11	0.87
Sodium		433 ~~85.3~~	~~J B~~ UB	6.5	433
Thallium		2.2	U	0.36	2.2
Vanadium		19.5	J	0.11	4.3
Zinc		19.9	J	0.49	1.7

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41074	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41036	Lab File ID:	062812CC.PRN
Dilution:	1.0			Initial Weight/Volume:	0.30 g
Analysis Date:	06/28/2012 1120			Final Weight/Volume:	50 mL
Prep Date:	06/26/2012 1630				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.038 ~~0.0040~~	~~J B~~ UB	0.0025	0.038

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-20 (8.5-9.5)**

Lab Sample ID: 200-11382-5
Client Matrix: Solid % Moisture: 12.0

Date Sampled: 06/16/2012 1230
Date Received: 06/20/2012 1010

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41205	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40836	Lab File ID:	070112-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.49 g
Analysis Date:	07/01/2012 0153			Final Weight/Volume:	100 mL
Prep Date:	06/23/2012 0838				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8010	J	13.0	15.2
Antimony		1.1	J	0.37	4.6
Arsenic		8.8	J	0.43	0.76
Barium		117	J	0.40	15.2
Beryllium		0.52		0.024	0.38
Cadmium		0.13	J	0.059	0.38
Calcium		17000		38.9	381
Chromium		19.3	J	0.084	0.76
Cobalt		5.9	J	0.062	3.8
Copper		49.3	J	0.17	1.9
Iron		48400	J	9.9	15.2
Lead		202		0.34	0.76
Magnesium		6720	J	10.7	381
Manganese		326	J	0.34	1.1
Nickel		16.7	J	0.22	3.0
Potassium		1700	J	11.4	381
Selenium		2.7	U J	0.66	2.7
Silver		0.76	U J	0.099	0.76
Sodium		788	U B	5.7	~~381~~ 788
Thallium		0.49	J	0.31	1.9
Vanadium		33.6	J	0.099	3.8
Zinc		139	J	0.43	1.5

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41074	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41036	Lab File ID:	062812CC.PRN
Dilution:	1.0			Initial Weight/Volume:	0.30 g
Analysis Date:	06/28/2012 1123			Final Weight/Volume:	50 mL
Prep Date:	06/26/2012 1630				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.50	~~B~~	0.0025	0.037

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: SB-21 (6-7)

Lab Sample ID: 200-11382-6
Client Matrix: Solid

% Moisture: 24.9

Date Sampled: 06/16/2012 1400
Date Received: 06/20/2012 1010

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41205	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40836	Lab File ID:	070112-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.50 g
Analysis Date:	07/01/2012 0158			Final Weight/Volume:	100 mL
Prep Date:	06/23/2012 0838				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		4300	J	15.1	17.8
Antimony		5.3	U J	0.43	5.3
Arsenic		2.1	J	0.50	0.89
Barium		67.3	J	0.46	17.8
Beryllium		0.16	J	0.028	0.44
Cadmium		0.15	J	0.069	0.44
Calcium		3870		45.3	444
Chromium		9.1	J	0.098	0.89
Cobalt		3.0	J	0.072	4.4
Copper		24.7	J	0.20	2.2
Iron		8280	J	11.5	17.8
Lead		99.2		0.39	0.89
Magnesium		1630	J	12.4	444
Manganese		87.5	J	0.40	1.3
Nickel		8.1	J	0.26	3.6
Potassium		2110	J	13.3	444
Selenium		3.1	U J	0.77	3.1
Silver		0.89	U J	0.12	0.89
Sodium		444 ~~381~~	~~J B~~ UB	6.7	444
Thallium		0.44	J	0.36	2.2
Vanadium		13.7	J	0.12	4.4
Zinc		65.1	J	0.50	1.8

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41074	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41036	Lab File ID:	062812CC.PRN
Dilution:	1.0			Initial Weight/Volume:	0.31 g
Analysis Date:	06/28/2012 1130			Final Weight/Volume:	50 mL
Prep Date:	06/26/2012 1630				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.34	~~B~~	0.0028	0.043

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: DUP-02-06162012

Lab Sample ID: 200-11382-8
Client Matrix: Solid % Moisture: 36.2

Date Sampled: 06/16/2012 0000
Date Received: 06/20/2012 1010

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41205	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40836	Lab File ID:	070112-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.25 g
Analysis Date:	07/01/2012 0203			Final Weight/Volume:	100 mL
Prep Date:	06/23/2012 0838				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		2840	J	21.3	25.1
Antimony		11.1	J	0.61	7.5
Arsenic		35.2	J	0.70	1.3
Barium		36.2	J	0.65	25.1
Beryllium		0.14	J	0.040	0.63
Cadmium		0.63	U J	0.098	0.63
Calcium		22400		64.0	627
Chromium		299	J	0.14	1.3
Cobalt		11.5	J	0.10	6.3
Copper		397	J	0.28	3.1
Lead		71.6		0.55	1.3
Magnesium		60.2	J	17.6	627
Manganese		272	J	0.56	1.9
Nickel		96.0	J	0.36	5.0
Potassium		597	J	18.8	627
Selenium		4.4	U J	1.1	4.4
Silver		1.3	U J	0.16	1.3
Sodium		702	U B	9.4	~~627~~ 702
Thallium		1.5	J	0.51	3.1
Vanadium		41.1	J	0.16	6.3
Zinc		319	J	0.70	2.5

Analysis Method:	6010C	Analysis Batch:	200-41285	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40836	Lab File ID:	070212-01.ttx
Dilution:	100			Initial Weight/Volume:	1.25 g
Analysis Date:	07/02/2012 1606			Final Weight/Volume:	100 mL
Prep Date:	06/23/2012 0838				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Iron		208000	J	1630	2510

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41074	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41036	Lab File ID:	062812CC.PRN
Dilution:	1.0			Initial Weight/Volume:	0.34 g
Analysis Date:	06/28/2012 1134			Final Weight/Volume:	50 mL
Prep Date:	06/26/2012 1630				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.53	~~B~~	0.0030	0.046

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-06 (12.2-13.2)**

Lab Sample ID: 200-11382-10
Client Matrix: Solid

% Moisture: 53.2

Date Sampled: 06/19/2012 1230
Date Received: 06/20/2012 1010

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41205	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40836	Lab File ID:	070112-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.33 g
Analysis Date:	07/01/2012 0208			Final Weight/Volume:	100 mL
Prep Date:	06/23/2012 0838				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		13800	J	27.3	32.1
Antimony		9.6	UJ	0.79	9.6
Arsenic		7.8	J	0.90	1.6
Barium		28.1	J	0.83	32.1
Beryllium		0.72	J	0.051	0.80
Cadmium		0.20	J	0.13	0.80
Calcium		1480		81.9	803
Chromium		25.7	J	0.18	1.6
Cobalt		7.9	J	0.13	8.0
Copper		10.1	J	0.35	4.0
Iron		44000	J	20.9	32.1
Lead		10.7		0.71	1.6
Magnesium		5270	J	22.5	803
Manganese		369	J	0.72	2.4
Nickel		17.9	J	0.47	6.4
Potassium		2960	J	24.1	803
Selenium		5.6	U J	1.4	5.6
Silver		1.6	U J	0.21	1.6
Sodium		803 ~~596~~	~~J B~~ UB	12.0	803
Thallium		4.0	U	0.66	4.0
Vanadium		39.7	J	0.21	8.0
Zinc		61.0	J	0.90	3.2

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41074	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41036	Lab File ID:	062812CC.PRN
Dilution:	1.0			Initial Weight/Volume:	0.31 g
Analysis Date:	06/28/2012 1136			Final Weight/Volume:	50 mL
Prep Date:	06/26/2012 1630				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.068 ~~0.059~~	~~J B~~ UB	0.0045	0.068

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-07 (10.5-12.5)**

Lab Sample ID: 200-11382-11
Client Matrix: Solid
% Moisture: 17.4

Date Sampled: 06/19/2012 1330
Date Received: 06/20/2012 1010

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41205	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40836	Lab File ID:	070112-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.21 g
Analysis Date:	07/01/2012 0213			Final Weight/Volume:	100 mL
Prep Date:	06/23/2012 0838				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		15200	J	17.0	20.0
Antimony		0.77	J	0.49	6.0
Arsenic		3.1	J	0.56	1.0
Barium		95.4	J	0.52	20.0
Beryllium		0.096	J	0.032	0.50
Cadmium		0.15	J	0.078	0.50
Calcium		6820		51.1	501
Chromium		62.3	J	0.11	1.0
Cobalt		10.0	J	0.081	5.0
Copper		67.9	J	0.22	2.5
Iron		28700	J	13.0	20.0
Lead		21.9		0.44	1.0
Magnesium		11600	J	14.0	501
Manganese		285	J	0.45	1.5
Nickel		41.7	J	0.29	4.0
Selenium		3.5	U J	0.87	3.5
Silver		1.0	U J	0.13	1.0
Sodium		501 ~~110~~	~~J B~~ UB	7.5	501
Thallium		1.9	J	0.41	2.5
Vanadium		75.3	J	0.13	5.0
Zinc		115	J	0.56	2.0

Analysis Method:	6010C	Analysis Batch:	200-41285	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40836	Lab File ID:	070212-01.ttx
Dilution:	5.0			Initial Weight/Volume:	1.21 g
Analysis Date:	07/02/2012 1611			Final Weight/Volume:	100 mL
Prep Date:	06/23/2012 0838				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Potassium		14100	J	75.1	2500

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41074	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41036	Lab File ID:	062812CC.PRN
Dilution:	1.0			Initial Weight/Volume:	0.30 g
Analysis Date:	06/28/2012 1139			Final Weight/Volume:	50 mL
Prep Date:	06/26/2012 1630				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.23	~~B~~	0.0027	0.040

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: SB-07 (16.4-17.4)

Lab Sample ID: 200-11382-12
Client Matrix: Solid

% Moisture: 41.9

Date Sampled: 06/19/2012 1350
Date Received: 06/20/2012 1010

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41205	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40836	Lab File ID:	070112-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.20 g
Analysis Date:	07/01/2012 0218			Final Weight/Volume:	100 mL
Prep Date:	06/23/2012 0838				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		18000	J	24.4	28.7
Antimony		8.6	UJ	0.70	8.6
Arsenic		10.5	J	0.80	1.4
Barium		63.8	J	0.75	28.7
Beryllium		0.87		0.046	0.72
Cadmium		0.21	J	0.11	0.72
Calcium		2240		73.2	717
Chromium		42.1	J	0.16	1.4
Cobalt		10.9	J	0.12	7.2
Copper		32.5	J	0.32	3.6
Iron		42500	J	18.7	28.7
Lead		103		0.63	1.4
Magnesium		6820	J	20.1	717
Manganese		945	J	0.65	2.2
Nickel		25.1	J	0.42	5.7
Potassium		3530	J	21.5	717
Selenium		5.0	UJ	1.2	5.0
Silver		1.4	UJ	0.19	1.4
Sodium		717 ~~265~~	~~JB~~ UB	10.8	717
Thallium		0.64	J	0.59	3.6
Vanadium		47.3	J	0.19	7.2
Zinc		97.4	J	0.80	2.9

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41074	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41036	Lab File ID:	062812CC.PRN
Dilution:	2.0			Initial Weight/Volume:	0.32 g
Analysis Date:	06/28/2012 1201			Final Weight/Volume:	50 mL
Prep Date:	06/26/2012 1630				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		3.2	~~B~~	0.0071	0.11

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: SB-10 (4.2-5)

Lab Sample ID: 200-11382-13
Client Matrix: Solid

% Moisture: 21.4

Date Sampled: 06/19/2012 1515
Date Received: 06/20/2012 1010

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41205	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40836	Lab File ID:	070112-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.44 g
Analysis Date:	07/01/2012 0223			Final Weight/Volume:	100 mL
Prep Date:	06/23/2012 0838				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		4490	J	15.0	17.7
Antimony		0.60	J	0.43	5.3
Arsenic		26.5	J	0.49	0.88
Barium		71.5	J	0.46	17.7
Beryllium		0.55		0.028	0.44
Cadmium		0.28	J	0.069	0.44
Calcium		9850		45.1	442
Chromium		34.1	J	0.097	0.88
Cobalt		5.6	J	0.072	4.4
Copper		43.0	J	0.19	2.2
Iron		19300	J	11.5	17.7
Lead		59.0		0.39	0.88
Magnesium		2030	J	12.4	442
Manganese		607	J	0.40	1.3
Nickel		25.3	J	0.26	3.5
Potassium		715	J	13.3	442
Selenium		0.83	J	0.77	3.1
Silver		0.88	U J	0.11	0.88
Sodium		442 ~~126~~	~~JB~~ UB	6.6	442
Thallium		2.2	U	0.36	2.2
Vanadium		59.0	J	0.11	4.4
Zinc		118	J	0.49	1.8

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41074	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41036	Lab File ID:	062812CC.PRN
Dilution:	1.0			Initial Weight/Volume:	0.30 g
Analysis Date:	06/28/2012 1144			Final Weight/Volume:	50 mL
Prep Date:	06/26/2012 1630				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.60	~~B~~	0.0028	0.042

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-05 (10.9-11.9')**

Lab Sample ID: 200-11398-1
Client Matrix: Solid % Moisture: 6.3

Date Sampled: 06/20/2012 1000
Date Received: 06/21/2012 1040

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41473	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40979	Lab File ID:	070712-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.48 g
Analysis Date:	07/06/2012 2114			Final Weight/Volume:	100 mL
Prep Date:	06/26/2012 1708				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		1390		12.3	14.4
Antimony		0.46	J	0.35	4.3
Arsenic		1.6		0.40	0.72
Barium		9.0	J	0.38	14.4
Beryllium		0.064	J	0.023	0.36
Cadmium		0.36	U	0.056	0.36
Calcium		184	J	36.8	361
Chromium		6.9		0.079	0.72
Cobalt		1.2	J	0.058	3.6
Copper		3.9		0.16	1.8
Iron		42000		9.4	14.4
Lead		3.9		0.32	0.72
Magnesium		596		10.1	361
Manganese		29.6		0.32	1.1
Nickel		3.3		0.21	2.9
Potassium		2120		10.8	361
Selenium		2.5	U J	0.63	2.5
Silver		0.72	U	0.094	0.72
Sodium		156	J	5.4	361
Thallium		1.8	U	0.30	1.8
Vanadium		9.1		0.094	3.6
Zinc		7.6		0.40	1.4

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41238	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41224	Lab File ID:	070212AA.PRN
Dilution:	1.0			Initial Weight/Volume:	0.32 g
Analysis Date:	07/02/2012 1250			Final Weight/Volume:	50 mL
Prep Date:	06/28/2012 1600				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0028	J	0.0022	0.033

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-04 (10.2-11.4)**

Lab Sample ID: 200-11417-1
Client Matrix: Solid % Moisture: 19.5

Date Sampled: 06/21/2012 0900
Date Received: 06/22/2012 1045

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41473	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40979	Lab File ID:	070712-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.41 g
Analysis Date:	07/06/2012 2130			Final Weight/Volume:	100 mL
Prep Date:	06/26/2012 1708				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		16700		15.0	17.6
Antimony		0.93	J	0.43	5.3
Arsenic		2.7		0.49	0.88
Barium		61.3		0.46	17.6
Beryllium		0.39	J	0.028	0.44
Cadmium		0.14	J	0.069	0.44
Calcium		3830		44.9	440
Chromium		111		0.097	0.88
Cobalt		13.8		0.071	4.4
Copper		60.3		0.19	2.2
Iron		17700		11.4	17.6
Lead		146		0.39	0.88
Magnesium		2890		12.3	440
Manganese		102		0.40	1.3
Nickel		129		0.26	3.5
Potassium		1600		13.2	440
Selenium		3.1	U J	0.77	3.1
Silver		0.88	U	0.11	0.88
Sodium		122	J	6.6	440
Vanadium		167		0.11	4.4
Zinc		89.1		0.49	1.8

Analysis Method:	6010C	Analysis Batch:	200-41689	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40979	Lab File ID:	071112-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.41 g
Analysis Date:	07/11/2012 1006			Final Weight/Volume:	100 mL
Prep Date:	06/26/2012 1708				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Thallium		2.2	U	0.36	2.2

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41238	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41224	Lab File ID:	070212AA.PRN
Dilution:	1.0			Initial Weight/Volume:	0.30 g
Analysis Date:	07/02/2012 1253			Final Weight/Volume:	50 mL
Prep Date:	06/28/2012 1600				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.20		0.0027	0.041

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-04 (17.2-18.2)**

Lab Sample ID: 200-11417-2
Client Matrix: Solid
% Moisture: 42.1

Date Sampled: 06/21/2012 0915
Date Received: 06/22/2012 1045

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41473	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40979	Lab File ID:	070712-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.24 g
Analysis Date:	07/06/2012 2135			Final Weight/Volume:	100 mL
Prep Date:	06/26/2012 1708				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		16300		23.7	27.9
Antimony		8.4	U	0.68	8.4
Arsenic		13.0		0.78	1.4
Barium		64.5		0.72	27.9
Beryllium		0.78		0.045	0.70
Cadmium		0.25	J	0.11	0.70
Calcium		2010		71.1	697
Chromium		44.8		0.15	1.4
Cobalt		9.9		0.11	7.0
Copper		36.4		0.31	3.5
Iron		34900		18.1	27.9
Lead		125		0.61	1.4
Magnesium		6240		19.5	697
Manganese		484		0.63	2.1
Nickel		23.4		0.40	5.6
Potassium		3390		20.9	697
Selenium		4.9	U J	1.2	4.9
Silver		1.4	U	0.18	1.4
Sodium		329	J	10.4	697
Thallium		3.5	U	0.57	3.5
Vanadium		44.0		0.18	7.0
Zinc		99.0		0.78	2.8

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41238	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41224	Lab File ID:	070212AA.PRN
Dilution:	1.0			Initial Weight/Volume:	0.31 g
Analysis Date:	07/02/2012 1255			Final Weight/Volume:	50 mL
Prep Date:	06/28/2012 1600				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		1.4		0.0037	0.055

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: SB-03 (10-10.9)

Lab Sample ID: 200-11417-3
Client Matrix: Solid
% Moisture: 38.4

Date Sampled: 06/21/2012 1025
Date Received: 06/22/2012 1045

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41474	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-41175	Lab File ID:	070712-02.ttx
Dilution:	1.0			Initial Weight/Volume:	1.28 g
Analysis Date:	07/07/2012 0147			Final Weight/Volume:	100 mL
Prep Date:	06/29/2012 1430				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		271		21.5	25.3
Antimony		17.6		0.62	7.6
Arsenic		36.9		0.71	1.3
Barium		11.5	J	0.66	25.3
Beryllium		0.63	U	0.041	0.63
Cadmium		2.8		0.099	0.63
Calcium		548	J	64.6	634
Chromium		81.8		0.14	1.3
Cobalt		26.0		0.10	6.3
Copper		591		0.28	3.2
Iron		49400		16.5	25.3
Lead		449		0.56	1.3
Magnesium		166	J	17.7	634
Manganese		235		0.57	1.9
Nickel		165		0.37	5.1
Potassium		372	J	19.0	634
Selenium		4.4	U	1.1	4.4
Silver		1.3	U	0.16	1.3
Sodium		40.1	J	9.5	634
Thallium		3.2	U J	0.52	3.2
Vanadium		90.0		0.16	6.3
Zinc		99.5		0.71	2.5

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41330	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41294	Lab File ID:	070312FF.PRN
Dilution:	1.0			Initial Weight/Volume:	0.31 g
Analysis Date:	07/03/2012 1531			Final Weight/Volume:	50 mL
Prep Date:	07/03/2012 1000				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.36	~~B~~ J	0.0035	0.052

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: **SB-03 (10.9-11.7)**

Lab Sample ID: 200-11417-4
Client Matrix: Solid % Moisture: 47.9

Date Sampled: 06/21/2012 1030
Date Received: 06/22/2012 1045

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41473	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40979	Lab File ID:	070712-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.45 g
Analysis Date:	07/06/2012 2140			Final Weight/Volume:	100 mL
Prep Date:	06/26/2012 1708				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		10100		22.5	26.5
Antimony		3.4	J	0.65	7.9
Arsenic		25.4		0.74	1.3
Barium		51.2		0.69	26.5
Beryllium		0.54	J	0.042	0.66
Cadmium		0.15	J	0.10	0.66
Calcium		2790		67.5	662
Chromium		103		0.15	1.3
Cobalt		17.6		0.11	6.6
Copper		314		0.29	3.3
Iron		129000		17.2	26.5
Lead		99.4		0.58	1.3
Magnesium		2960		18.5	662
Manganese		400		0.60	2.0
Nickel		151		0.38	5.3
Potassium		1900		19.9	662
Selenium		4.6	U J	1.2	4.6
Silver		0.39	J	0.17	1.3
Sodium		203	J	9.9	662
Thallium		0.86	J	0.54	3.3
Vanadium		43.3		0.17	6.6
Zinc		103		0.74	2.6

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41238	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41224	Lab File ID:	070212AA.PRN
Dilution:	1.0			Initial Weight/Volume:	0.32 g
Analysis Date:	07/02/2012 1257			Final Weight/Volume:	50 mL
Prep Date:	06/28/2012 1600				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.52	J	0.0040	0.059

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

Client Sample ID: DUP-03-06212012

Lab Sample ID: 200-11417-6
Client Matrix: Solid

% Moisture: 43.4

Date Sampled: 06/21/2012 0000
Date Received: 06/22/2012 1045

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41473	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40979	Lab File ID:	070712-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.36 g
Analysis Date:	07/06/2012 2145			Final Weight/Volume:	100 mL
Prep Date:	06/26/2012 1708				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		450		22.1	26.0
Antimony		12.8		0.64	7.8
Arsenic		33.8		0.73	1.3
Barium		39.9		0.68	26.0
Beryllium		0.65	U	0.042	0.65
Cadmium		0.88		0.10	0.65
Calcium		544	J	66.3	650
Chromium		175		0.14	1.3
Cobalt		19.5		0.11	6.5
Copper		483		0.29	3.2
Iron		104000		16.9	26.0
Lead		173		0.57	1.3
Magnesium		91.4	J	18.2	650
Manganese		212		0.58	1.9
Nickel		172		0.38	5.2
Potassium		165	J	19.5	650
Selenium		4.5	UJ	1.1	4.5
Silver		0.21	J	0.17	1.3
Sodium		37.7	J	9.7	650
Thallium		3.2	U	0.53	3.2
Vanadium		112		0.17	6.5
Zinc		298		0.73	2.6

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41238	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41224	Lab File ID:	070212AA.PRN
Dilution:	1.0			Initial Weight/Volume:	0.33 g
Analysis Date:	07/02/2012 1300			Final Weight/Volume:	50 mL
Prep Date:	06/28/2012 1600				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		2.4	J	0.0035	0.053

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

General Chemistry

Client Sample ID: **SB-16 (1-1.3')**

Lab Sample ID: 200-11371-2
Client Matrix: Solid

Date Sampled: 06/18/2012 1400
Date Received: 06/19/2012 1100

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	7.32	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1603					DryWt Corrected: N
Corrosivity	7.32	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1603					DryWt Corrected: N
Percent Solids	86.3		%	0.25	0.25	1.0	Moisture
	Analysis Batch: 200-40570	Analysis Date: 06/19/2012 1545					DryWt Corrected: N

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

General Chemistry

Client Sample ID: **SB-09 (4-5')**

Lab Sample ID: 200-11371-3
Client Matrix: Solid

Date Sampled: 06/18/2012 1245
Date Received: 06/19/2012 1100

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	7.65	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1604					DryWt Corrected: N
Corrosivity	7.65	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1604					DryWt Corrected: N
Percent Solids	63.1		%	0.25	0.25	1.0	Moisture
	Analysis Batch: 200-40570	Analysis Date: 06/19/2012 1545					DryWt Corrected: N

General Chemistry

Client Sample ID: **SB-13 (8.2-9)**

Lab Sample ID: 200-11382-1
Client Matrix: Solid

Date Sampled: 06/16/2012 1000
Date Received: 06/20/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia (as N)-ASTM Leach	3.5	J	mg/L	0.013	0.10	1.0	4500 NH3 H
Analysis Batch: 460-120125	Analysis Date: 07/17/2012 1151						DryWt Corrected: N
Prep Batch: 460-120071	Prep Date: 07/17/2012 0630						
Sulfide	~~10.4~~	R UH	mg/Kg	~~3.9~~	~~10.4~~	1.0	9034
Analysis Batch: 460-121720	Analysis Date: 07/28/2012 1800						DryWt Corrected: Y
Prep Batch: 460-121719	Prep Date: 07/28/2012 1115						
pH	5.85	~~HF~~ J	SU			1.0	9045C
Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1550						DryWt Corrected: N
Corrosivity	5.85	~~HF~~ J	SU			1.0	9045C
Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1550						DryWt Corrected: N
Chloride-Soluble	152		mg/Kg	23.6	118	5.0	9056
Analysis Batch: 680-242043	Analysis Date: 06/30/2012 0305						DryWt Corrected: Y
Nitrate as N-Soluble	5.9	U	mg/Kg	1.8	5.9	5.0	9056
Analysis Batch: 680-241960	Analysis Date: 06/28/2012 2035						DryWt Corrected: Y
Nitrite as N-Soluble	5.9	U	mg/Kg	1.8	5.9	5.0	9056
Analysis Batch: 680-241960	Analysis Date: 06/28/2012 2035						DryWt Corrected: Y
Sulfate-Soluble	1830		mg/Kg	23.6	118	5.0	9056
Analysis Batch: 680-242043	Analysis Date: 06/30/2012 0305						DryWt Corrected: Y
Fluoride-Soluble	6.1	J	mg/Kg	4.7	23.6	5.0	9056
Analysis Batch: 680-242043	Analysis Date: 06/30/2012 0305						DryWt Corrected: Y
Percent Solids	83.6		%	0.25	0.25	1.0	Moisture
Analysis Batch: 200-40632	Analysis Date: 06/20/2012 1333						DryWt Corrected: N
Bicarbonate Alkalinity as CaCO3-Soluble	23.9	U	mg/Kg	23.9	23.9	1.0	SM 2320B
Analysis Batch: 460-118089	Analysis Date: 06/29/2012 1646						DryWt Corrected: Y
Carbonate Alkalinity as CaCO3-Soluble	23.9	U	mg/Kg	23.9	23.9	1.0	SM 2320B
Analysis Batch: 460-118089	Analysis Date: 06/29/2012 1646						DryWt Corrected: Y
Alkalinity-Soluble	23.9	U	mg/Kg	23.9	23.9	1.0	SM 2320B
Analysis Batch: 460-118089	Analysis Date: 06/29/2012 1646						DryWt Corrected: Y
Phosphorus as PO4	667		mg/Kg	7.2	18.0	10	SM 4500 P E
Analysis Batch: 460-119560	Analysis Date: 07/11/2012 1530						DryWt Corrected: Y
Prep Batch: 460-119552	Prep Date: 07/11/2012 1138						
Phosphorus as P	218		mg/Kg	7.2	18.0	10	SM 4500 P E
Analysis Batch: 460-119560	Analysis Date: 07/11/2012 1530						DryWt Corrected: Y
Prep Batch: 460-119552	Prep Date: 07/11/2012 1138						

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

General Chemistry

Client Sample ID: **SB-13 (12-13)**

Lab Sample ID: 200-11382-2
Client Matrix: Solid

Date Sampled: 06/16/2012 1010
Date Received: 06/20/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia (as N)-ASTM Leach	0.79	J	mg/L	0.013	0.10	1.0	4500 NH3 H
Analysis Batch: 460-120125	Analysis Date: 07/17/2012 1131						DryWt Corrected: N
Prep Batch: 460-120071	Prep Date: 07/17/2012 0630						
Sulfide	~~9.9~~	R ~~UH~~	mg/Kg	~~3.7~~	~~9.9~~	1.0	9034
Analysis Batch: 460-121720	Analysis Date: 07/28/2012 1800						DryWt Corrected: Y
Prep Batch: 460-121719	Prep Date: 07/28/2012 1115						
pH	6.20	~~HF~~ J	SU			1.0	9045C
Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1552						DryWt Corrected: N
Corrosivity	6.20	~~HF~~ J	SU			1.0	9045C
Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1552						DryWt Corrected: N
Chloride-Soluble	43.5	J	mg/Kg	23.0	115	5.0	9056
Analysis Batch: 680-242043	Analysis Date: 06/30/2012 0317						DryWt Corrected: Y
Nitrate as N-Soluble	5.7	U	mg/Kg	1.7	5.7	5.0	9056
Analysis Batch: 680-241960	Analysis Date: 06/28/2012 2050						DryWt Corrected: Y
Nitrite as N-Soluble	5.7	U	mg/Kg	1.7	5.7	5.0	9056
Analysis Batch: 680-241960	Analysis Date: 06/28/2012 2050						DryWt Corrected: Y
Sulfate-Soluble	111	J	mg/Kg	23.0	115	5.0	9056
Analysis Batch: 680-242043	Analysis Date: 06/30/2012 0317						DryWt Corrected: Y
Fluoride-Soluble	23.0	U	mg/Kg	4.6	23.0	5.0	9056
Analysis Batch: 680-242043	Analysis Date: 06/30/2012 0317						DryWt Corrected: Y
Percent Solids	87.8		%	0.25	0.25	1.0	Moisture
Analysis Batch: 200-40632	Analysis Date: 06/20/2012 1333						DryWt Corrected: N
Bicarbonate Alkalinity as CaCO3-Soluble	22.8	U	mg/Kg	22.8	22.8	1.0	SM 2320B
Analysis Batch: 460-118089	Analysis Date: 06/29/2012 1641						DryWt Corrected: Y
Carbonate Alkalinity as CaCO3-Soluble	22.8	U	mg/Kg	22.8	22.8	1.0	SM 2320B
Analysis Batch: 460-118089	Analysis Date: 06/29/2012 1641						DryWt Corrected: Y
Alkalinity-Soluble	22.8	U	mg/Kg	22.8	22.8	1.0	SM 2320B
Analysis Batch: 460-118089	Analysis Date: 06/29/2012 1641						DryWt Corrected: Y
Phosphorus as PO4	1170		mg/Kg	13.6	34.2	20	SM 4500 P E
Analysis Batch: 460-119560	Analysis Date: 07/11/2012 1530						DryWt Corrected: Y
Prep Batch: 460-119552	Prep Date: 07/11/2012 1138						
Phosphorus as P	380		mg/Kg	13.6	34.2	20	SM 4500 P E
Analysis Batch: 460-119560	Analysis Date: 07/11/2012 1530						DryWt Corrected: Y
Prep Batch: 460-119552	Prep Date: 07/11/2012 1138						

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

General Chemistry

Client Sample ID: **SB-14 (6.5-7.5)**

Lab Sample ID: 200-11382-3
Client Matrix: Solid

Date Sampled: 06/16/2012 1045
Date Received: 06/20/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	5.61	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1553					DryWt Corrected: N
Corrosivity	5.61	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1553					DryWt Corrected: N
Percent Solids	41.4		%	0.25	0.25	1.0	Moisture
	Analysis Batch: 200-40632	Analysis Date: 06/20/2012 1333					DryWt Corrected: N

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

General Chemistry

Client Sample ID: **SB-14 (17-18)**

Lab Sample ID: 200-11382-4
Client Matrix: Solid

Date Sampled: 06/16/2012 1100
Date Received: 06/20/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	3.65	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1554					DryWt Corrected: N
Corrosivity	3.65	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1554					DryWt Corrected: N
Percent Solids	87.4		%	0.25	0.25	1.0	Moisture
	Analysis Batch: 200-40632	Analysis Date: 06/20/2012 1333					DryWt Corrected: N

General Chemistry

Client Sample ID: **SB-20 (8.5-9.5)**

Lab Sample ID: 200-11382-5
Client Matrix: Solid

Date Sampled: 06/16/2012 1230
Date Received: 06/20/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia (as N)-ASTM Leach	0.10	J	mg/L	0.013	0.10	1.0	4500 NH3 H
Analysis Batch: 460-120125	Analysis Date: 07/17/2012 1152						DryWt Corrected: N
Prep Batch: 460-120071	Prep Date: 07/17/2012 0630						
Sulfide	~~9.9~~	R ~~UH~~	mg/Kg	~~3.7~~	~~9.9~~	1.0	9034
Analysis Batch: 460-121720	Analysis Date: 07/28/2012 1800						DryWt Corrected: Y
Prep Batch: 460-121719	Prep Date: 07/28/2012 1115						
pH	8.21	~~HF~~ J	SU			1.0	9045C
Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1555						DryWt Corrected: N
Corrosivity	8.21	~~HF~~ J	SU			1.0	9045C
Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1555						DryWt Corrected: N
Chloride-Soluble	1130		mg/Kg	22.7	114	5.0	9056
Analysis Batch: 680-242043	Analysis Date: 06/30/2012 0407						DryWt Corrected: Y
Nitrate as N-Soluble	5.7	U	mg/Kg	1.7	5.7	5.0	9056
Analysis Batch: 680-241960	Analysis Date: 06/28/2012 2152						DryWt Corrected: Y
Nitrite as N-Soluble	5.7	U	mg/Kg	1.7	5.7	5.0	9056
Analysis Batch: 680-241960	Analysis Date: 06/28/2012 2152						DryWt Corrected: Y
Sulfate-Soluble	970		mg/Kg	22.7	114	5.0	9056
Analysis Batch: 680-242043	Analysis Date: 06/30/2012 0407						DryWt Corrected: Y
Fluoride-Soluble	22.7	U	mg/Kg	4.5	22.7	5.0	9056
Analysis Batch: 680-242043	Analysis Date: 06/30/2012 0407						DryWt Corrected: Y
Percent Solids	88.0		%	0.25	0.25	1.0	Moisture
Analysis Batch: 200-40632	Analysis Date: 06/20/2012 1333						DryWt Corrected: N
Bicarbonate Alkalinity as CaCO3-Soluble	24.7		mg/Kg	22.7	22.7	1.0	SM 2320B
Analysis Batch: 460-118089	Analysis Date: 06/29/2012 1652						DryWt Corrected: Y
Carbonate Alkalinity as CaCO3-Soluble	22.7	U	mg/Kg	22.7	22.7	1.0	SM 2320B
Analysis Batch: 460-118089	Analysis Date: 06/29/2012 1652						DryWt Corrected: Y
Alkalinity-Soluble	24.7		mg/Kg	22.7	22.7	1.0	SM 2320B
Analysis Batch: 460-118089	Analysis Date: 06/29/2012 1652						DryWt Corrected: Y
Phosphorus as PO4	503		mg/Kg	6.8	17.0	10	SM 4500 P E
Analysis Batch: 460-119560	Analysis Date: 07/11/2012 1530						DryWt Corrected: Y
Prep Batch: 460-119552	Prep Date: 07/11/2012 1138						
Phosphorus as P	164		mg/Kg	6.8	17.0	10	SM 4500 P E
Analysis Batch: 460-119560	Analysis Date: 07/11/2012 1530						DryWt Corrected: Y
Prep Batch: 460-119552	Prep Date: 07/11/2012 1138						

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

General Chemistry

Client Sample ID: **SB-21 (6-7)**

Lab Sample ID: 200-11382-6
Client Matrix: Solid

Date Sampled: 06/16/2012 1400
Date Received: 06/20/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	11.7	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1556					DryWt Corrected: N
Corrosivity	11.7	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1556					DryWt Corrected: N
Percent Solids	75.1		%	0.25	0.25	1.0	Moisture
	Analysis Batch: 200-40632	Analysis Date: 06/20/2012 1333					DryWt Corrected: N

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

General Chemistry

Client Sample ID: **DUP-02-06162012**

Lab Sample ID: 200-11382-8
Client Matrix: Solid

Date Sampled: 06/16/2012 0000
Date Received: 06/20/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	4.87	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1557					DryWt Corrected: N
Corrosivity	4.87	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1557					DryWt Corrected: N
Percent Solids	63.8		%	0.25	0.25	1.0	Moisture
	Analysis Batch: 200-40632	Analysis Date: 06/20/2012 1333					DryWt Corrected: N

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

General Chemistry

Client Sample ID: **SB-06 (12.2-13.2)**

Lab Sample ID: 200-11382-10
Client Matrix: Solid

Date Sampled: 06/19/2012 1230
Date Received: 06/20/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	3.75	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1559					DryWt Corrected: N
Corrosivity	3.75	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1559					DryWt Corrected: N
Percent Solids	46.8		%	0.25	0.25	1.0	Moisture
	Analysis Batch: 200-40632	Analysis Date: 06/20/2012 1333					DryWt Corrected: N

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

General Chemistry

Client Sample ID: **SB-07 (10.5-12.5)**

Lab Sample ID: 200-11382-11
Client Matrix: Solid

Date Sampled: 06/19/2012 1330
Date Received: 06/20/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	6.41	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1600					DryWt Corrected: N
Corrosivity	6.41	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1600					DryWt Corrected: N
Percent Solids	82.6		%	0.25	0.25	1.0	Moisture
	Analysis Batch: 200-40632	Analysis Date: 06/20/2012 1333					DryWt Corrected: N

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

General Chemistry

Client Sample ID: **SB-07 (16.4-17.4)**

Lab Sample ID: 200-11382-12
Client Matrix: Solid

Date Sampled: 06/19/2012 1350
Date Received: 06/20/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	3.88	~~HF~~ J	SU			1.0	9045C
Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1601						DryWt Corrected: N
Corrosivity	3.88	~~HF~~ J	SU			1.0	9045C
Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1601						DryWt Corrected: N
Percent Solids	58.1		%	0.25	0.25	1.0	Moisture
Analysis Batch: 200-40632	Analysis Date: 06/20/2012 1333						DryWt Corrected: N

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

General Chemistry

Client Sample ID: **SB-10 (4.2-5)**

Lab Sample ID: 200-11382-13
Client Matrix: Solid

Date Sampled: 06/19/2012 1515
Date Received: 06/20/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	7.62	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1602					DryWt Corrected: N
Corrosivity	7.62	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1602					DryWt Corrected: N
Percent Solids	78.6		%	0.25	0.25	1.0	Moisture
	Analysis Batch: 200-40632	Analysis Date: 06/20/2012 1333					DryWt Corrected: N

General Chemistry

Client Sample ID: **SB-05 (10.9-11.9')**

Lab Sample ID: 200-11398-1
Client Matrix: Solid

Date Sampled: 06/20/2012 1000
Date Received: 06/21/2012 1040

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia (as N)-ASTM Leach	0.57		mg/L	0.013	0.10	1.0	4500 NH3 H
Analysis Batch: 460-120125	Analysis Date: 07/17/2012 1159						DryWt Corrected: N
Prep Batch: 460-120071	Prep Date: 07/17/2012 0630						
Sulfide	~~9.3~~	R UH	mg/Kg	~~3.4~~	~~9.3~~	1.0	9034
Analysis Batch: 460-121720	Analysis Date: 07/28/2012 1800						DryWt Corrected: Y
Prep Batch: 460-121719	Prep Date: 07/28/2012 1115						
pH	3.80	~~HF~~ J	SU			1.0	9045C
Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1612						DryWt Corrected: N
Corrosivity	3.80	~~HF~~ J	SU			1.0	9045C
Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1612						DryWt Corrected: N
Chloride-Soluble	107	U	mg/Kg	21.5	107	5.0	9056
Analysis Batch: 680-242969	Analysis Date: 07/11/2012 1147						DryWt Corrected: Y
Nitrate as N-Soluble	5.4	U	mg/Kg	1.6	5.4	5.0	9056
Analysis Batch: 680-243196	Analysis Date: 07/12/2012 0349						DryWt Corrected: Y
Nitrite as N-Soluble	5.4	U	mg/Kg	1.6	5.4	5.0	9056
Analysis Batch: 680-243196	Analysis Date: 07/12/2012 0349						DryWt Corrected: Y
Sulfate-Soluble	699		mg/Kg	21.5	107	5.0	9056
Analysis Batch: 680-242969	Analysis Date: 07/11/2012 1147						DryWt Corrected: Y
Fluoride-Soluble	21.5	U J	mg/Kg	4.3	21.5	5.0	9056
Analysis Batch: 680-242969	Analysis Date: 07/11/2012 1147						DryWt Corrected: Y
Percent Solids	93.7		%	0.25	0.25	1.0	Moisture
Analysis Batch: 200-40724	Analysis Date: 06/21/2012 1625						DryWt Corrected: N
Bicarbonate Alkalinity as CaCO3-Soluble	21.3	U	mg/Kg	21.3	21.3	1.0	SM 2320B
Analysis Batch: 460-118518	Analysis Date: 07/03/2012 1727						DryWt Corrected: Y
Carbonate Alkalinity as CaCO3-Soluble	21.3	U	mg/Kg	21.3	21.3	1.0	SM 2320B
Analysis Batch: 460-118518	Analysis Date: 07/03/2012 1727						DryWt Corrected: Y
Alkalinity-Soluble	21.3	U	mg/Kg	21.3	21.3	1.0	SM 2320B
Analysis Batch: 460-118518	Analysis Date: 07/03/2012 1727						DryWt Corrected: Y
Phosphorus as PO4	302		mg/Kg	3.2	8.0	5.0	SM 4500 P E
Analysis Batch: 460-119560	Analysis Date: 07/11/2012 1530						DryWt Corrected: Y
Prep Batch: 460-119552	Prep Date: 07/11/2012 1138						
Phosphorus as P	98.6		mg/Kg	3.2	8.0	5.0	SM 4500 P E
Analysis Batch: 460-119560	Analysis Date: 07/11/2012 1530						DryWt Corrected: Y
Prep Batch: 460-119552	Prep Date: 07/11/2012 1138						

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

General Chemistry

Client Sample ID: **SB-04 (10.2-11.4)**

Lab Sample ID: 200-11417-1
Client Matrix: Solid

Date Sampled: 06/21/2012 0900
Date Received: 06/22/2012 1045

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	5.44	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-119669	Analysis Date: 07/12/2012 1602					DryWt Corrected: N
Corrosivity	5.44	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-119669	Analysis Date: 07/12/2012 1602					DryWt Corrected: N
Percent Solids	80.5		%	0.25	0.25	1.0	Moisture
	Analysis Batch: 200-40897	Analysis Date: 06/25/2012 1331					DryWt Corrected: N

General Chemistry

Client Sample ID: **SB-04 (17.2-18.2)**

Lab Sample ID: 200-11417-2
Client Matrix: Solid

Date Sampled: 06/21/2012 0915
Date Received: 06/22/2012 1045

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	4.27	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-119669	Analysis Date: 07/12/2012 1604					DryWt Corrected: N
Corrosivity	4.27	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-119669	Analysis Date: 07/12/2012 1604					DryWt Corrected: N
Percent Solids	57.9		%	0.25	0.25	1.0	Moisture
	Analysis Batch: 200-40897	Analysis Date: 06/25/2012 1331					DryWt Corrected: N

General Chemistry

Client Sample ID: **SB-03 (10-10.9)**

Lab Sample ID: 200-11417-3
Client Matrix: Solid

Date Sampled: 06/21/2012 1025
Date Received: 06/22/2012 1045

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	4.96	~~HF~~ J	SU			1.0	9045C
Analysis Batch: 460-119669	Analysis Date: 07/12/2012 1605						DryWt Corrected: N
Corrosivity	4.96	~~HF~~ J	SU			1.0	9045C
Analysis Batch: 460-119669	Analysis Date: 07/12/2012 1605						DryWt Corrected: N
Chloride-Soluble	159	U	mg/Kg	31.8	159	5.0	9056
Analysis Batch: 680-242409	Analysis Date: 07/04/2012 0822						DryWt Corrected: Y
Nitrate as N-Soluble	8.0	U	mg/Kg	2.4	8.0	5.0	9056
Analysis Batch: 680-242406	Analysis Date: 07/04/2012 0640						DryWt Corrected: Y
Nitrite as N-Soluble	8.0	U	mg/Kg	2.4	8.0	5.0	9056
Analysis Batch: 680-242406	Analysis Date: 07/04/2012 0640						DryWt Corrected: Y
Sulfate-Soluble	8400		mg/Kg	63.6	318	10	9056
Analysis Batch: 680-242525	Analysis Date: 07/05/2012 2319						DryWt Corrected: Y
Fluoride-Soluble	63.6	U	mg/Kg	12.7	63.6	10	9056
Analysis Batch: 680-242525	Analysis Date: 07/05/2012 2319						DryWt Corrected: Y
Percent Solids	61.6		%	0.25	0.25	1.0	Moisture
Analysis Batch: 200-41101	Analysis Date: 06/28/2012 1543						DryWt Corrected: N
Bicarbonate Alkalinity as CaCO3-Soluble	32.4	U	mg/Kg	32.4	32.4	1.0	SM 2320B
Analysis Batch: 460-118518	Analysis Date: 07/03/2012 1735						DryWt Corrected: Y
Carbonate Alkalinity as CaCO3-Soluble	32.4	U	mg/Kg	32.4	32.4	1.0	SM 2320B
Analysis Batch: 460-118518	Analysis Date: 07/03/2012 1735						DryWt Corrected: Y
Alkalinity-Soluble	32.4	U	mg/Kg	32.4	32.4	1.0	SM 2320B
Analysis Batch: 460-118518	Analysis Date: 07/03/2012 1735						DryWt Corrected: Y
Phosphorus as PO4	354		mg/Kg	9.7	24.3	10	SM 4500 P E
Analysis Batch: 460-119560	Analysis Date: 07/11/2012 1530						DryWt Corrected: Y
Prep Batch: 460-119552	Prep Date: 07/11/2012 1138						
Phosphorus as P	116		mg/Kg	9.7	24.3	10	SM 4500 P E
Analysis Batch: 460-119560	Analysis Date: 07/11/2012 1530						DryWt Corrected: Y
Prep Batch: 460-119552	Prep Date: 07/11/2012 1138						

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

General Chemistry

Client Sample ID: **SB-03 (10.9-11.7)**

Lab Sample ID: 200-11417-4
Client Matrix: Solid

% Moisture: 47.9

Date Sampled: 06/21/2012 1030
Date Received: 06/22/2012 1045

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Chloride-Soluble	171	J	mg/Kg	37.9	189	5.0	9056
Analysis Batch: 680-242043	Analysis Date: 06/30/2012 0444						DryWt Corrected: Y
Nitrate as N-Soluble	9.5	U	mg/Kg	2.8	9.5	5.0	9056
Analysis Batch: 680-241960	Analysis Date: 06/28/2012 2238						DryWt Corrected: Y
Nitrite as N-Soluble	9.5	U	mg/Kg	2.8	9.5	5.0	9056
Analysis Batch: 680-241960	Analysis Date: 06/28/2012 2238						DryWt Corrected: Y
Sulfate-Soluble	30000		mg/Kg	379	1890	50	9056
Analysis Batch: 680-242310	Analysis Date: 07/02/2012 2329						DryWt Corrected: Y
Fluoride-Soluble	16.3	J	mg/Kg	7.6	37.9	5.0	9056
Analysis Batch: 680-242043	Analysis Date: 06/30/2012 0444						DryWt Corrected: Y
Percent Solids	52.1		%	0.25	0.25	1.0	Moisture
Analysis Batch: 200-40897	Analysis Date: 06/25/2012 1331						DryWt Corrected: N
Bicarbonate Alkalinity as CaCO3-Soluble	38.4	U	mg/Kg	38.4	38.4	1.0	SM 2320B
Analysis Batch: 460-118518	Analysis Date: 07/03/2012 1731						DryWt Corrected: Y
Carbonate Alkalinity as CaCO3-Soluble	38.4	U	mg/Kg	38.4	38.4	1.0	SM 2320B
Analysis Batch: 460-118518	Analysis Date: 07/03/2012 1731						DryWt Corrected: Y
Alkalinity-Soluble	38.4	U	mg/Kg	38.4	38.4	1.0	SM 2320B
Analysis Batch: 460-118518	Analysis Date: 07/03/2012 1731						DryWt Corrected: Y
Phosphorus as PO4	1210		mg/Kg	11.5	28.8	10	SM 4500 P E
Analysis Batch: 460-119560	Analysis Date: 07/11/2012 1530						DryWt Corrected: Y
Prep Batch: 460-119552	Prep Date: 07/11/2012 1138						
Phosphorus as P	395		mg/Kg	11.5	28.8	10	SM 4500 P E
Analysis Batch: 460-119560	Analysis Date: 07/11/2012 1530						DryWt Corrected: Y
Prep Batch: 460-119552	Prep Date: 07/11/2012 1138						

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1
Sdg Number: 11371

General Chemistry

Client Sample ID: **DUP-03-06212012**

Lab Sample ID: 200-11417-6
Client Matrix: Solid

Date Sampled: 06/21/2012 0000
Date Received: 06/22/2012 1045

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	2.43	~~HF~~ J	SU			1.0	9045C
Analysis Batch: 460-119669	Analysis Date: 07/12/2012 1606						DryWt Corrected: N
Corrosivity	2.43	~~HF~~ J	SU			1.0	9045C
Analysis Batch: 460-119669	Analysis Date: 07/12/2012 1606						DryWt Corrected: N
Chloride-Soluble	178	U	mg/Kg	35.6	178	5.0	9056
Analysis Batch: 680-242043	Analysis Date: 06/30/2012 0456						DryWt Corrected: Y
Nitrate as N-Soluble	8.9	U	mg/Kg	2.7	8.9	5.0	9056
Analysis Batch: 680-241960	Analysis Date: 06/28/2012 2253						DryWt Corrected: Y
Nitrite as N-Soluble	8.9	U	mg/Kg	2.7	8.9	5.0	9056
Analysis Batch: 680-241960	Analysis Date: 06/28/2012 2253						DryWt Corrected: Y
Sulfate-Soluble	6470		mg/Kg	35.6	178	5.0	9056
Analysis Batch: 680-242043	Analysis Date: 06/30/2012 0456						DryWt Corrected: Y
Fluoride-Soluble	35.6	U	mg/Kg	7.1	35.6	5.0	9056
Analysis Batch: 680-242043	Analysis Date: 06/30/2012 0456						DryWt Corrected: Y
Percent Solids	56.6		%	0.25	0.25	1.0	Moisture
Analysis Batch: 200-40897	Analysis Date: 06/25/2012 1331						DryWt Corrected: N
Phosphorus as PO4	840		mg/Kg	10.6	26.5	10	SM 4500 P E
Analysis Batch: 460-119560	Analysis Date: 07/11/2012 1530						DryWt Corrected: Y
Prep Batch: 460-119552	Prep Date: 07/11/2012 1138						
Phosphorus as P	274		mg/Kg	10.6	26.5	10	SM 4500 P E
Analysis Batch: 460-119560	Analysis Date: 07/11/2012 1530						DryWt Corrected: Y
Prep Batch: 460-119552	Prep Date: 07/11/2012 1138						

Client: ARCADIS U.S. Inc

Job Number: 200-11371-2
Sdg Number: 11371-2

General Chemistry

Client Sample ID: **SB-16 (1-1.3')**

Lab Sample ID: 200-11371-2
Client Matrix: Solid

% Moisture: 13.7

Date Sampled: 06/18/2012 1400
Date Received: 06/19/2012 1100

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	32.7		mg/Kg	0.13	1.2	2.0	9012A
	Analysis Batch: 460-118346	Analysis Date: 07/02/2012 1517					DryWt Corrected: Y
	Prep Batch: 460-118311	Prep Date: 07/02/2012 1030					
Cyanide, Free	1.8		mg/Kg	0.12	0.50	1.0	9016
	Analysis Batch: 460-118248	Analysis Date: 06/28/2012 1200					DryWt Corrected: Y
	Prep Batch: 460-118240	Prep Date: 06/28/2012 0600					

General Chemistry

Client Sample ID: **SB-09 (4-5')**

Lab Sample ID: 200-11371-3
Client Matrix: Solid
% Moisture: 36.9

Date Sampled: 06/18/2012 1245
Date Received: 06/19/2012 1100

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	19.2		mg/Kg	0.086	0.79	1.0	9012A
Analysis Batch: 460-118346	Analysis Date: 07/02/2012 1455						DryWt Corrected: Y
Prep Batch: 460-118311	Prep Date: 07/02/2012 1030						
Cyanide, Free	0.91		mg/Kg	0.17	0.68	1.0	9016
Analysis Batch: 460-118248	Analysis Date: 06/28/2012 1200						DryWt Corrected: Y
Prep Batch: 460-118240	Prep Date: 06/28/2012 0600						

Client: ARCADIS U.S. Inc

Job Number: 200-11371-2
Sdg Number: 11371-2

General Chemistry

Client Sample ID: **SB-13 (8.2-9)**

Lab Sample ID: 200-11382-1
Client Matrix: Solid

% Moisture: 16.4

Date Sampled: 06/16/2012 1000
Date Received: 06/20/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	2.0		mg/Kg	0.065	0.60	1.0	9012A
Analysis Batch: 460-118081	Analysis Date: 06/29/2012 1519						DryWt Corrected: Y
Prep Batch: 460-118019	Prep Date: 06/29/2012 0930						
Cyanide, Free	0.89		mg/Kg	0.13	0.52	1.0	9016
Analysis Batch: 460-118248	Analysis Date: 06/28/2012 1200						DryWt Corrected: Y
Prep Batch: 460-118240	Prep Date: 06/28/2012 0600						

Client: ARCADIS U.S. Inc

Job Number: 200-11371-2
Sdg Number: 11371-2

General Chemistry

Client Sample ID: **SB-13 (12-13)**

Lab Sample ID: 200-11382-2
Client Matrix: Solid

% Moisture: 12.2

Date Sampled: 06/16/2012 1010
Date Received: 06/20/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.71		mg/Kg	0.061	0.57	1.0	9012A
	Analysis Batch: 460-118081	Analysis Date: 06/29/2012 1518					DryWt Corrected: Y
	Prep Batch: 460-118019	Prep Date: 06/29/2012 0930					
Cyanide, Free	0.23	J	mg/Kg	0.12	0.47	1.0	9016
	Analysis Batch: 460-118248	Analysis Date: 06/28/2012 1200					DryWt Corrected: Y
	Prep Batch: 460-118240	Prep Date: 06/28/2012 0600					

Client: ARCADIS U.S. Inc

Job Number: 200-11371-2
Sdg Number: 11371-2

General Chemistry

Client Sample ID: **SB-14 (6.5-7.5)**

Lab Sample ID: 200-11382-3
Client Matrix: Solid

% Moisture: 58.6

Date Sampled: 06/16/2012 1045
Date Received: 06/20/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	2720	J	mg/Kg	13.1	121	100	9012A
	Analysis Batch: 460-118081	Analysis Date: 06/29/2012 1532					DryWt Corrected: Y
	Prep Batch: 460-118019	Prep Date: 06/29/2012 0930					
Cyanide, Free	32.2		mg/Kg	0.25	1.0	1.0	9016
	Analysis Batch: 460-118248	Analysis Date: 06/28/2012 1200					DryWt Corrected: Y
	Prep Batch: 460-118240	Prep Date: 06/28/2012 0600					

Client: ARCADIS U.S. Inc

Job Number: 200-11371-2
Sdg Number: 11371-2

General Chemistry

Client Sample ID: **SB-14 (17-18)**

Lab Sample ID: 200-11382-4
Client Matrix: Solid

% Moisture: 12.6

Date Sampled: 06/16/2012 1100
Date Received: 06/20/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	4.7		mg/Kg	0.062	0.57	1.0	9012A
	Analysis Batch: 460-118081	Analysis Date: 06/29/2012 1534					DryWt Corrected: Y
	Prep Batch: 460-118019	Prep Date: 06/29/2012 0930					
Cyanide, Free	0.17	J	mg/Kg	0.12	0.49	1.0	9016
	Analysis Batch: 460-118248	Analysis Date: 06/28/2012 1200					DryWt Corrected: Y
	Prep Batch: 460-118240	Prep Date: 06/28/2012 0600					

Client: ARCADIS U.S. Inc

Job Number: 200-11371-2
Sdg Number: 11371-2

General Chemistry

Client Sample ID: **SB-20 (8.5-9.5)**

Lab Sample ID: 200-11382-5
Client Matrix: Solid

% Moisture: 12.0

Date Sampled: 06/16/2012 1230
Date Received: 06/20/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	4.8		mg/Kg	0.061	0.57	1.0	9012A
Analysis Batch: 460-118081	Analysis Date: 06/29/2012 1525						DryWt Corrected: Y
Prep Batch: 460-118019	Prep Date: 06/29/2012 0930						
Cyanide, Free	0.24	J	mg/Kg	0.12	0.49	1.0	9016
Analysis Batch: 460-118248	Analysis Date: 06/28/2012 1200						DryWt Corrected: Y
Prep Batch: 460-118240	Prep Date: 06/28/2012 0600						

Client: ARCADIS U.S. Inc

Job Number: 200-11371-2
Sdg Number: 11371-2

General Chemistry

Client Sample ID: **SB-21 (6-7)**

Lab Sample ID: 200-11382-6
Client Matrix: Solid

% Moisture: 24.9

Date Sampled: 06/16/2012 1400
Date Received: 06/20/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	4.4		mg/Kg	0.072	0.67	1.0	9012A
Analysis Batch: 460-118081	Analysis Date: 06/29/2012 1526						DryWt Corrected: Y
Prep Batch: 460-118019	Prep Date: 06/29/2012 0930						
Cyanide, Free	0.55	U	mg/Kg	0.14	0.55	1.0	9016
Analysis Batch: 460-118248	Analysis Date: 06/28/2012 1200						DryWt Corrected: Y
Prep Batch: 460-118240	Prep Date: 06/28/2012 0600						

Client: ARCADIS U.S. Inc

Job Number: 200-11371-2
Sdg Number: 11371-2

General Chemistry

Client Sample ID: **DUP-02-06162012**

Lab Sample ID: 200-11382-8
Client Matrix: Solid

% Moisture: 36.2

Date Sampled: 06/16/2012 0000
Date Received: 06/20/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	602	J	mg/Kg	4.2	39.2	50	9012A
	Analysis Batch: 460-118081	Analysis Date: 06/29/2012 1535					DryWt Corrected: Y
	Prep Batch: 460-118019	Prep Date: 06/29/2012 0930					
Cyanide, Free	87.9		mg/Kg	0.67	2.7	4.0	9016
	Analysis Batch: 460-118248	Analysis Date: 06/28/2012 1200					DryWt Corrected: Y
	Prep Batch: 460-118240	Prep Date: 06/28/2012 0600					

Client: ARCADIS U.S. Inc

Job Number: 200-11371-2
Sdg Number: 11371-2

General Chemistry

Client Sample ID: **SB-06 (12.2-13.2)**

Lab Sample ID: 200-11382-10
Client Matrix: Solid

% Moisture: 53.2

Date Sampled: 06/19/2012 1230
Date Received: 06/20/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	6.3		mg/Kg	0.12	1.1	1.0	9012A
Analysis Batch: 460-118346	Analysis Date: 07/02/2012 1456						DryWt Corrected: Y
Prep Batch: 460-118311	Prep Date: 07/02/2012 1030						
Cyanide, Free	3.8		mg/Kg	0.23	0.91	1.0	9016
Analysis Batch: 460-118248	Analysis Date: 06/28/2012 1200						DryWt Corrected: Y
Prep Batch: 460-118240	Prep Date: 06/28/2012 0600						

Client: ARCADIS U.S. Inc

Job Number: 200-11371-2
Sdg Number: 11371-2

General Chemistry

Client Sample ID: **SB-07 (10.5-12.5)**

Lab Sample ID: 200-11382-11
Client Matrix: Solid

% Moisture: 17.4

Date Sampled: 06/19/2012 1330
Date Received: 06/20/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.61	U	mg/Kg	0.065	0.61	1.0	9012A
Analysis Batch: 460-118346	Analysis Date: 07/02/2012 1458						DryWt Corrected: Y
Prep Batch: 460-118311	Prep Date: 07/02/2012 1030						
Cyanide, Free	0.51	U	mg/Kg	0.13	0.51	1.0	9016
Analysis Batch: 460-118248	Analysis Date: 06/28/2012 1200						DryWt Corrected: Y
Prep Batch: 460-118240	Prep Date: 06/28/2012 0600						

Client: ARCADIS U.S. Inc

Job Number: 200-11371-2
Sdg Number: 11371-2

General Chemistry

Client Sample ID: **SB-07 (16.4-17.4)**

Lab Sample ID: 200-11382-12
Client Matrix: Solid

% Moisture: 41.9

Date Sampled: 06/19/2012 1350
Date Received: 06/20/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.52	J	mg/Kg	0.093	0.86	1.0	9012A
	Analysis Batch: 460-118346	Analysis Date: 07/02/2012 1459					DryWt Corrected: Y
	Prep Batch: 460-118311	Prep Date: 07/02/2012 1030					
Cyanide, Free	0.60	J	mg/Kg	0.18	0.71	1.0	9016
	Analysis Batch: 460-118248	Analysis Date: 06/28/2012 1200					DryWt Corrected: Y
	Prep Batch: 460-118240	Prep Date: 06/28/2012 0600					

Client: ARCADIS U.S. Inc

Job Number: 200-11371-2
Sdg Number: 11371-2

General Chemistry

Client Sample ID: **SB-10 (4.2-5)**

Lab Sample ID: 200-11382-13
Client Matrix: Solid

% Moisture: 21.4

Date Sampled: 06/19/2012 1515
Date Received: 06/20/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	3.2		mg/Kg	0.069	0.64	1.0	9012A
Analysis Batch: 460-118346	Analysis Date: 07/02/2012 1500						DryWt Corrected: Y
Prep Batch: 460-118311	Prep Date: 07/02/2012 1030						
Cyanide, Free	2.1		mg/Kg	0.14	0.54	1.0	9016
Analysis Batch: 460-118248	Analysis Date: 06/28/2012 1200						DryWt Corrected: Y
Prep Batch: 460-118240	Prep Date: 06/28/2012 0600						

Client: ARCADIS U.S. Inc

Job Number: 200-11371-2
Sdg Number: 11371-2

General Chemistry

Client Sample ID: **SB-05 (10.9-11.9')**

Lab Sample ID: 200-11398-1
Client Matrix: Solid

% Moisture: 6.3

Date Sampled: 06/20/2012 1000
Date Received: 06/21/2012 1040

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	5.3		mg/Kg	0.058	0.53	1.0	9012A
	Analysis Batch: 460-118452	Analysis Date: 07/03/2012 1158					DryWt Corrected: Y
	Prep Batch: 460-118408	Prep Date: 07/03/2012 0630					
Cyanide, Free	0.49		mg/Kg	0.11	0.45	1.0	9016
	Analysis Batch: 460-118469	Analysis Date: 07/03/2012 1200					DryWt Corrected: Y
	Prep Batch: 460-118468	Prep Date: 07/03/2012 0600					

Client: ARCADIS U.S. Inc

Job Number: 200-11371-2
Sdg Number: 11371-2

General Chemistry

Client Sample ID: **SB-04 (10.2-11.4)**

Lab Sample ID: 200-11417-1
Client Matrix: Solid

% Moisture: 19.5

Date Sampled: 06/21/2012 0900
Date Received: 06/22/2012 1045

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.62	U	mg/Kg	0.067	0.62	1.0	9012A
Analysis Batch: 460-118512	Analysis Date: 07/03/2012 1550						DryWt Corrected: Y
Prep Batch: 460-118476	Prep Date: 07/03/2012 1100						
Cyanide, Free	3.5		mg/Kg	0.13	0.53	1.0	9016
Analysis Batch: 460-118248	Analysis Date: 06/28/2012 1200						DryWt Corrected: Y
Prep Batch: 460-118240	Prep Date: 06/28/2012 0600						

Client: ARCADIS U.S. Inc

Job Number: 200-11371-2
Sdg Number: 11371-2

General Chemistry

Client Sample ID: **SB-04 (17.2-18.2)**

Lab Sample ID: 200-11417-2
Client Matrix: Solid

% Moisture: 42.1

Date Sampled: 06/21/2012 0915
Date Received: 06/22/2012 1045

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.46	J	mg/Kg	0.093	0.86	1.0	9012A
Analysis Batch: 460-118512	Analysis Date: 07/03/2012 1551						DryWt Corrected: Y
Prep Batch: 460-118476	Prep Date: 07/03/2012 1100						
Cyanide, Free	1.1		mg/Kg	0.18	0.73	1.0	9016
Analysis Batch: 460-118248	Analysis Date: 06/28/2012 1200						DryWt Corrected: Y
Prep Batch: 460-118240	Prep Date: 06/28/2012 0600						

General Chemistry

Client Sample ID: **SB-03 (10-10.9)**

Lab Sample ID: 200-11417-3
Client Matrix: Solid

% Moisture: 38.4

Date Sampled: 06/21/2012 1025
Date Received: 06/22/2012 1045

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	2080	J	mg/Kg	8.8	81.1	100	9012A
Analysis Batch: 460-118512	Analysis Date: 07/03/2012 1606						DryWt Corrected: Y
Prep Batch: 460-118476	Prep Date: 07/03/2012 1100						
Cyanide, Free	35.8	J	mg/Kg	0.17	0.68	1.0	9016
Analysis Batch: 460-118469	Analysis Date: 07/03/2012 1200						DryWt Corrected: Y
Prep Batch: 460-118468	Prep Date: 07/03/2012 0600						

Client: ARCADIS U.S. Inc

Job Number: 200-11371-2
Sdg Number: 11371-2

General Chemistry

Client Sample ID: **SB-03 (10.9-11.7)**

Lab Sample ID: 200-11417-4
Client Matrix: Solid
% Moisture: 47.9

Date Sampled: 06/21/2012 1030
Date Received: 06/22/2012 1045

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	21.5		mg/Kg	0.10	0.96	1.0	9012A
Analysis Batch: 460-118512	Analysis Date: 07/03/2012 1608						DryWt Corrected: Y
Prep Batch: 460-118476	Prep Date: 07/03/2012 1100						
Cyanide, Free	1.3		mg/Kg	0.20	0.80	1.0	9016
Analysis Batch: 460-118248	Analysis Date: 06/28/2012 1200						DryWt Corrected: Y
Prep Batch: 460-118240	Prep Date: 06/28/2012 0600						

Client: ARCADIS U.S. Inc

Job Number: 200-11371-2
Sdg Number: 11371-2

General Chemistry

Client Sample ID: DUP-03-06212012

Lab Sample ID: 200-11417-6
Client Matrix: Solid

% Moisture: 43.4

Date Sampled: 06/21/2012 0000
Date Received: 06/22/2012 1045

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	149	J	mg/Kg	0.48	4.4	5.0	9012A
	Analysis Batch: 460-118512	Analysis Date: 07/03/2012 1603					DryWt Corrected: Y
	Prep Batch: 460-118476	Prep Date: 07/03/2012 1100					
Cyanide, Free	11.4	J	mg/Kg	0.19	0.74	1.0	9016
	Analysis Batch: 460-118248	Analysis Date: 06/28/2012 1200					DryWt Corrected: Y
	Prep Batch: 460-118240	Prep Date: 06/28/2012 0600					

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Consolidated Edison Company of New York, Inc. - Krasdale

Data Usability Summary Report (DUSR)

HUNTS POINT, BRONX, NEW YORK

Volatile Organic Compounds (VOCs), Semivolatile Organic Compounds (SVOCs), Diesel Range Organics (DRO), Polychlorinated Biphenyls (PCBs), Metals, and Miscellaneous Analyses

SDG #: 200-11392

Analyses Performed By:
TestAmerica Laboratories
Burlington, Vermont

Report #: 17012R
Review Level: Tier III
Project: B0043027.0002.08000

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) # 200-11392 for samples collected in association with the Consolidated Edison Krasdale site. The review was conducted as a Tier III evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis					
					VOC	SVOC	PCB	DRO	MET	MISC
OF-1	200-11392-1	Water	6/20/2012		X	X	X	X	X	X
I-120	200-11392-2	Water	6/20/2012		X	X	X	X	X	X
I-111	200-11392-3	Water	6/20/2012		X	X	X	X	X	X
I-112	200-11392-4	Water	6/20/2012		X	X	X	X	X	X
TB-SW-06202012	200-11392-5	Water	6/20/2012		X					
DUP-SW-01-06202012	200-11392-6	Water	6/20/2012	OF-1	X	X	X	X	X	X

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

QA - Quality Assurance

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Methods 8260B, 8270C, 8082A, and 8015B as referenced in NYSDEC-ASP. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999 and USEPA Region II SOPs associated with USEPA SW-846 Validating Volatile Organic Compounds by GC/MS SW-846 Method 8260B (SOP HW-24 Revision 2, October 2006), Validating Semivolatile Organic Compounds by GC/MS SW-846 Method 8270D (SOP HW-22 Revision 3, October 2006), and Validating PCB Compounds by GC SW-846 Method 8082A (SOP HW-45 Revision 1, October 2006).

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected as unusable. The compound may or may not be present in the sample.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260B	Soil	48 hours from collection to extraction and 14 days from collection to analysis	Cool to 4±2 °C
	Water	14 days from collection to analysis	Cool to 4±2 °C; pH < 2 with HCl

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e. laboratory method blanks, trip blanks, and equipment rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure sample storage contamination. Rinse blanks also measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All compounds associated with the QA blanks exhibited a concentration less than the MDL, with the exception of the compounds listed in the following table. Sample results associated with QA blank contamination that were greater than the BAL resulted in the removal of the laboratory qualifier (B) of data. Sample results less than the BAL associated with the following sample locations were qualified as listed in the following table.

Sample Location	Analyte	Sample Result	Qualification
I-111 I-112	Acetone	Detected sample results < RL and < BAL	"UB" at the RL

RL Reporting limit

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration (ICV)

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) or a correlation coefficient greater than 0.99, and a RRF value greater than control limit (0.05).

4.2 Continuing Calibration (CCV)

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

Sample Locations	Initial / Continuing	Compound	Criteria
OF-1 I-120 I-111 I-112 TB-SW-06202012 DUP-SW-01-06202012	Continuing %D	Dichlorodifluoromethane	-24.9 % (decrease in sensitivity)
		Chloromethane	-28.6 % (decrease in sensitivity)
		Bromomethane	-53.0 % (decrease in sensitivity)
		Acetone	+22.4 % (increase in sensitivity)
		2-Butanone	+20.2 % (increase in sensitivity)

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Initial/Continuing	Criteria	Sample Result	Qualification
Initial and Continuing Calibration	RRF < 0.05	Non-detect	R
		Detect	J
	RRF < 0.01[1]	Non-detect	R
		Detect	J
	RRF > 0.05 or RRF > 0.01[1]	Non-detect	No Action
		Detect	
Initial Calibration	%RSD > 15% or a correlation coefficient < 0.99	Non-detect	UJ
		Detect	J

Initial/Continuing	Criteria	Sample Result	Qualification
Continuing Calibration	%D > 20% (increase in sensitivity)	Non-detect	No Action
		Detect	J
	%D > 20% (decrease in sensitivity)	Non-detect	UJ
		Detect	J

[1] RRF of 0.01 only applies to typically poor responding compounds (e.g. ketones, 1,4-dioxane, etc.)

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within the control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC analysis exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard area counts were within the control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The spiked compounds used in the MS/MSD analysis must exhibit recoveries within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS and MSD results must be within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSDs performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD spiking concentration by a factor of four or greater. Sample results associated with MS/MSD exceedances where the parent samples are not site-specific are not qualified.

Sample location I-120 was used in the MS/MSD analysis. Sample locations associated with the MS/MSD exhibiting recoveries outside of the control limits are presented in the following table.

Sample Location	Compound	MS Recovery	MSD Recovery
I-120	Vinyl chloride	< LL but > 10%	< LL but > 10%
	Carbon disulfide	AC	< LL but > 10%

AC Acceptable

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of MS/MSD deviations, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
Parent sample concentration > 4x the MS/MSD spiking solution concentration.	Detect	No Action
	Non-detect	

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The spiked compounds used in the LCS analysis must exhibit recoveries within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

9. Field Duplicate Sample Analysis

The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. A control limit of 50% for water matrices and 100% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the reporting limit (RL), a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results (in µg/L) for the field duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
OF-1 / DUP-SW-01-06202012	Carbon disulfide	33000	30000	9.5 %
	Chloroform	2200 U	460 J	AC

AC Acceptable
J Estimated (result is < RL)
U Not detected

The field duplicate sample results are acceptable.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW-846 8260B	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment/Field blanks					X
C. Trip blanks		X	X		
Laboratory Control Sample (LCS) Accuracy (%R)		X		X	
Laboratory Control Sample Duplicate (LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X	X		
Matrix Spike Duplicate (MSD) %R		X	X		
MS/MSD Precision RPD		X		X	
Field/Laboratory Duplicate Sample RPD		X		X	
Surrogate Spike %R		X		X	
Dilution Factor		X		X	
Moisture Content					
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X		X	
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X	X		
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X		X	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Quantitation transcriptions/calculations		X		X	
E. Reporting limits adjusted for sample dilutions		X		X	

%R Percent recovery
RPD Relative percent difference
%RSD Relative standard deviation
%D Percent difference

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8270C	Water	7 days from collection to extraction and 40 days from extraction to analysis	Cool to 4±2 °C
	Soil	14 days from collection to extraction and 40 days from extraction to analysis	Cool to 4±2 °C

All samples were extracted and analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e. laboratory method blanks and equipment rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Target compounds were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution are acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration Verification (ICV)

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration Verification (CCV)

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

Sample Location	Initial/ Continuing	Compound	Criteria
DUP-SW-01-06202012	Continuing %D	4-Nitrophenol	-23.8 % (decrease in sensitivity)

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Initial/Continuing	Criteria	Sample Result	Qualification
Initial and Continuing Calibration	RRF < 0.05	Non-detect	R
		Detect	J
	RRF < 0.01[1]	Non-detect	R
		Detect	J
	RRF > 0.05 or RRF > 0.01[1]	Non-detect	No Action
		Detect	
Initial Calibration	%RSD > 15% or a correlation coefficient < 0.99	Non-detect	UJ
		Detect	J
Continuing Calibration	%D > 20% (increase in sensitivity)	Non-detect	No Action
		Detect	J
	%D > 20% (decrease in sensitivity)	Non-detect	UJ
		Detect	J

[1] RRF of 0.01 only applies to typically poor responding compounds (e.g. ketones, 1,4-dioxane, etc.)

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. SVOC analysis requires that two of the three SVOC surrogate compounds within each fraction exhibit recoveries within the laboratory-established acceptance limits, and that all SVOC surrogate recoveries be greater than ten percent.

Sample locations associated with surrogates exhibiting recoveries outside of the control limits presented in the following table.

Sample Location	Surrogate	Recovery
I-120 I-111 I-112	2,4,6-Tribromophenol 2-Fluorophenol Phenol-d_5 Nitrobenzene-d_5 2-Fluorobiphenyl Terphenyl-d_{14}	D
OF-1	2-Fluorophenol 2-Fluorobiphenyl	> UL
	2,4,6-Tribromophenol Phenol-d_5 Nitrobenzene-d_5 Terphenyl-d_{14}	AC

AC Acceptable

The criteria used to evaluate the surrogate recoveries are presented in the following table. In the case of surrogate deviations, the sample results associated with the deviant fraction are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
Surrogates diluted below the calibration range (D)	Non-detect	J[1]
	Detect	

[1] A more concentrated analysis was not performed with surrogate compounds within the calibration range; therefore, no determination of extraction efficiency could be made.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the SVOC analysis exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within the control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit recoveries within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS and MSD results must be within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. Sample results associated with MS/MSD exceedances where the parent samples are not site-specific are not qualified.

Sample location I-120 was used in the MS/MSD analyses. Sample locations associated with the MS/MSD exhibiting recoveries outside of the control limits are presented in the following table.

Sample Location	Compound	MS Recovery	MSD Recovery
I-120	All compounds	D	D

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of MS/MSD deviations, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
Compounds diluted below the calibration range (D)	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
Parent sample concentration > 4x the MS/MSD spiking solution concentration.	Detect	No Action
	Non-detect	

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The spiked compounds used in the LCS analysis must exhibit recoveries within the laboratory-established acceptance limits.

Sample locations associated with LCS analyses exhibiting recoveries outside of the control limits are presented in the following table.

Sample Locations	Compound	LCS Recovery
OF-1 I-120 I-111 I-112 DUP-SW-01-06202012	Benzoic acid	< 10 %

The criteria used to evaluate the LCS recoveries are presented in the following table. In the case of any LCS deviations, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J

9. Field Duplicate Sample Analysis

The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. A control limit of 50% for water matrices and 100% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the reporting limit (RL), a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results (in µg/L) for the field duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
OF-1 / DUP-SW-01-06202012	2,4-Dimethylphenol	24 J	56 U	AC
	2-Methylnaphthalene	43 J	31 J	AC
	2-Methylphenol	16 J	13 J	AC
	3 & 4 Methylphenol	50 U	43 J	AC
	Dibenzofuran	22 J	16 J	AC
	Fluorene	33 J	24 J	AC
	Naphthalene	660	510	25.6 %
	Phenanthrene	18 J	56 U	AC
	Phenol	14 J	16 J	AC

AC Acceptable
J Estimated (result is < RL)
U Not detected

The field duplicate sample results are acceptable.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR SVOCs

SVOCs: SW-846 8270C	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding Times		X		X	
Reporting Limits (units)		X		X	
Blanks					
A. Method Blanks		X		X	
B. Equipment/Field Blanks					X
Laboratory Control Sample (LCS) Accuracy (%R)		X	X		
Laboratory Control Sample Duplicate (LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X	X		
Matrix Spike Duplicate (MSD) %R		X	X		
MS/MSD RPD		X	X		
Field/Laboratory Duplicate Sample RPD		X		X	
Surrogate Spike %R		X	X		
Dilution Factor		X		X	
Moisture Content					X
Tier III Validation					
System Performance and Column Resolution		X		X	
Initial Calibration %RSDs		X		X	
Continuing Calibration RRFs		X		X	
Continuing Calibration %Ds		X	X		
Instrument Tune and Performance Check		X		X	
Ion Abundance Criteria for Each Instrument Used		X		X	
Internal Standards		X		X	
Compound Identification and Quantitation					
A. Reconstructed Ion Chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of Sample Compounds Within the Established RT Windows		X		X	
D. Quantitation transcriptions/calculations		X		X	
E. Reporting Limits Adjusted for Sample Dilutions		X		X	

%R Percent Recovery
RPD Relative Percent Difference
%RSD Relative Standard Deviation
%D Percent Difference

DIESEL RANGE ORGANICS (DRO) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
DRO SW-846 8015B	Soil	14 days from collection to extraction and 40 days from extraction to analysis	Cool to 4±2 °C
	Water	7 days from collection to extraction and 40 days from extraction to analysis	Cool to 4±2 °C

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e. laboratory method blanks and equipment rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected analyte in an associated blank is calculated for QA blanks containing concentrations greater than the reporting limit (RL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

DRO was detected in the associated QA blanks; however, the associated sample results were greater than the BAL. Therefore, qualification of the sample results was not required.

3. System Performance

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration (ICV)

A maximum RSD of 20% or a correlation coefficient of greater than 0.99 is allowed.

4.2 Continuing Calibration (CCV)

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (15%).

All calibration criteria were within the control limits.

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. The analysis requires surrogate compounds exhibit recoveries within the laboratory-established acceptance limits.

Sample locations associated with surrogates exhibiting recoveries outside of the control limits presented in the following table.

Sample Location	Surrogate	Recovery
OF-1 I-120 I-111 I-112 DUP-SW-01-06202012	o-Terphenyl	D

Diluted (D)

The criteria used to evaluate the surrogate recoveries are presented in the following table. In the case of a surrogate deviation, the sample results associated with the deviant fraction are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> UL	Non-detect	No Action
	Detect	J
< LL but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
D – Surrogates diluted below the calibration curve	Non-detect	J[1]
	Detect	

Note: [1] - A more concentrated analysis was not performed with surrogate compounds within the calibration range therefore no determination of extraction efficiency could be made.

6. Matrix Spike/Matrix Spike Duplicate Sample (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The spiked analytes used in the MS/MSD analysis must exhibit recoveries within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS and MSD results must be within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSDs performed on sample locations where the analyte concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. Sample results associated with MS/MSD exceedances where the parent samples are not site-specific are not qualified.

Sample location I-120 was used in the MS/MSD analysis. Sample locations associated with the MS/MSD exhibiting recoveries outside of the control limits are presented in the following table.

Sample Location	Analyte	MS Recovery	MSD Recovery
I-120	Diesel Range Organics [C10-C28]	< 10%	AC

AC Acceptable

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of MS/MSD deviations, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
Parent sample concentration > 4x the MS/MSD spiking solution concentration.	Detect	No Action
	Non-detect	

Sample locations associated with MS/MSDs exhibiting RPDs greater than of the control limit are presented in the following table.

Sample Location	Analyte
I-120	Diesel Range Organics [C10-C28]

The criteria used to evaluate the RPD between the MS and MSD are presented in the following table. In the case of RPD deviations, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> UL	Non-detect	UJ
	Detect	J

7. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The spiked analytes used in the LCS analysis must exhibit recoveries within the laboratory-established acceptance limits.

All analytes associated with the LCS analysis exhibited recoveries within the control limits.

8. Field Duplicate Sample Analysis

The field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures

and analytical method. A control limit of 50% for water matrices and 100% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the reporting limit (RL), a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results (in mg/L) for the field duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
OF-1 / DUP-SW-01-06202012	Diesel Range Organics [C10-C28]	4.4	4.3	2.3 %

The field duplicate sample results are acceptable.

9. Analyte Identification

The retention times of all quantitated peaks must fall within the calculated retention time windows.

All identified analytes met the specified criteria.

10. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR DRO

DRO: SW-846 8015B	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY (GC/FID)					
Tier II Validation					
Holding Times		X		X	
Reporting Limits (Units)		X		X	
Blanks					
A. Method Blanks		X	X		
B. Equipment Blanks					X
Laboratory Control Sample (LCS) Accuracy (%R)		X		X	
Laboratory Control Sample Duplicate (LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X	X		
Matrix Spike Duplicate (MSD) %R		X	X		
MS/MSD RPD		X		X	
Field/Laboratory Duplicate Sample RPD		X		X	
Surrogate Spike %R		X	X		
Dilution Factor		X		X	
Moisture Content		X		X	
Tier III Validation					
Initial Calibration %RSDs		X		X	
Continuing Calibration %Ds		X		X	
System Performance and Column Resolution		X		X	
Compound Identification and Quantitation					
A. Quantitation Reports		X		X	
B. RT of Sample Compounds Within Established RT Windows		X		X	
C. Pattern Identification		X		X	
D. Transcription/Calculation Errors Present		X		X	
E. Reporting Limits adjusted for Sample Dilutions		X		X	

%R Percent Recovery
RPD Relative Percent Difference
%RSD Relative Standard Deviation
%D Percent Difference

POLYCHLORINATED BIPHENYLS (PCBs) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8082A	Water	7 days from collection to extraction and 40 days from extraction to analysis	Cool to 4±2 °C
	Soil	14 days from collection to extraction and 40 days from extraction to analysis	Cool to 4±2 °C

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e. laboratory method blanks and equipment rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Target analytes were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. System Performance

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

All target analytes associated with the initial calibration standards must exhibit a relative standard deviation (RSD) less than the method-specified control limit of 20% or a correlation coefficient greater than 0.99. Multiple-point calibrations were performed for Aroclor 1016 and 1260 only. Single-point calibrations were performed for the remaining Aroclors.

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (15%).

All Aroclors associated with the calibrations were within the specified control limits.

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. PCB analysis requires that at least one of the two PCB surrogate compounds exhibit recoveries within the laboratory-established acceptance limits.

Sample locations associated with surrogates exhibiting recoveries outside of the control limits presented in the following table.

Sample Location	Surrogate	Recovery
I-120	Tetrachloro-m-xylene Decachlorobiphenyl	< LL but > 10%

LL Lower control limit

The criteria used to evaluate the surrogate recoveries are presented in the following table. In the case of a surrogate deviation, the sample results associated with the deviant fraction are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
One surrogate exhibiting recovery outside the control limits but > 10%	Non-detect	No Action
	Detect	
Surrogates diluted below the calibration curve	Non-detect	J[1]
	Detect	

[1] A more concentrated analysis was not performed with surrogate compounds within the calibration range; therefore, no determination of extraction efficiency could be made.

6. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit recoveries within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS and MSD must be within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. Sample results associated with MS/MSD exceedances where the parent samples are not site-specific are not qualified.

Sample location I-120 was used in the MS/MSD analysis. Sample locations associated with the MS/MSD exhibiting recoveries outside of the control limits are presented in the following table.

Sample Location	Analyte	MS Recovery	MSD Recovery
I-120	Aroclor 1260	< LL but > 10%	< LL but > 10%

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of an MS/MSD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
Parent sample concentration > 4x the MS/MSD spiking solution concentration (D).	Detect	No Action
	Non-detect	

Sample locations associated with MS/MSD recoveries exhibiting an RPD greater than of the control limit presented in the following table.

Sample Location	Analyte
I-120	Aroclor 1260

The criteria used to evaluate the RPD between the MS/MSD recoveries are presented in the following table. In the case of an RPD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> UL	Non-detect	UJ
	Detect	J

7. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The spiked analytes used in the LCS analysis must exhibit recoveries within the laboratory-established acceptance limits.

All analytes associated with the LCS analysis exhibited recoveries within the control limits.

8. Field Duplicate Sample Analysis

Field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. A control limit of 50% for water matrices and 100% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the reporting limit (RL), a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results (in µg/L) for the field duplicate samples are summarized in the following table.

Sample ID / Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
OF-1 / DUP-SW-01-06202012	All Aroclors	U	U	AC

AC Acceptable
U Not detected

The field duplicate sample results are acceptable.

9. Analyte Identification

The retention times of all quantitated peaks must fall within the calculated retention time windows for both the primary and confirmation columns. When dual column analysis is performed the relative percent difference (RPD) between the detected analyte results calculated on each column must be less than 40%.

All sample results exhibited acceptable RPDs between the primary and confirmation columns.

10. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR PCBs

PCBs: SW-846 8082A	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY (GC/ECD)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment/Field blanks					X
Laboratory Control Sample (LCS) Accuracy %R		X		X	
Laboratory Control Sample Duplicate (LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X	X		
Matrix Spike Duplicate (MSD) %R		X	X		
MS/MSD RPD		X	X		
Field/Laboratory Duplicate Sample RPD		X		X	
Surrogate Spike %R		X	X		
Column (%D) (If dual column is performed-not confirmation purposes only)		X		X	
Dilution Factor		X		X	
Moisture Content					X
Tier III Validation					
Initial calibration %RSDs		X		X	
Continuing calibration %Ds		X	X		
System performance and column resolution		X		X	
Compound identification and quantitation					
A. Quantitation Reports		X		X	
B. RT of sample compounds within the established RT windows		X		X	
C. Identification/Confirmation		X		X	
D. Quantitation transcriptions/calculations		X		X	
E. Reporting limits adjusted for sample dilutions		X		X	

%R Percent recovery
RPD Relative percent difference
%RSD Relative standard deviation
%D Percent difference

INORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to (United States Environmental Protection Agency) SW-846 Methods 6010C, 7470A, 9012A, 9016, 9034, 9056, and 9045C, and Standard Methods (SM) 2320B, 4500-NH3-H, and 4500-P-E. Data were reviewed in accordance with USEPA National Functional Guidelines of July 2002.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and that it was already subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

    U The analyte was analyzed for but not detected. The associated value is the analyte instrument detection limit.

    B The reported value was obtained from a reading less than the contract-required detection limit (CRDL), but greater than or equal to the instrument detection limit (IDL).

- Quantitation (Q) Qualifiers

    E The reported value is estimated due to the presence of interference.

    N Spiked sample recovery is not within the control limits.

    * Duplicate analysis is not within the control limits.

- Validation Qualifiers

    J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.

    UJ The analyte was not detected above the reported sample detection limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.

    UB Analyte considered non-detect at the listed value due to associated blank contamination.

    R The sample results are rejected as unusable. The analyte may or may not be present in the sample.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

METALS ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 6010C	Water	180 days from collection to analysis	Cool to 4±2 °C; pH < 2 with HNO_3
	Soil	180 days from collection to analysis	Cool to 4±2 °C
SW-846 7470A	Water	28 days from collection to analysis	Cool to 4±2 °C; pH < 2 with HNO_3
SW-846 7471B	Soil	28 days from collection to analysis	Cool to 4±2 °C.

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e. laboratory method blanks and equipment rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks also measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected analyte in an associated blank (common laboratory contaminant analytes are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were detected in the associated QA blanks; however, the associated sample results were greater than the BAL. Therefore, sample results greater than the BAL resulted in the removal of the laboratory qualifier (B). No other qualification of the sample results was required.

3. Calibration

Satisfactory instrument calibration is established to provide that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument's continuing performance is satisfactory.

3.1 Initial Calibration

The initial calibration must exhibit a correlation coefficient greater than 0.995. A technical review of the data applies limits to all analytes with no exceptions.

3.2 Continuing Calibration

All target analytes associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (10%).

The correct number and type of standards were analyzed. The correlation coefficient of the initial calibration was greater than 0.995 for all non-ICP analytes and all initial calibration verification standard recoveries were within the control limits.

All initial and continuing calibration verification standard recoveries were within the control limits.

3.3 Reporting limit (RL) Check Standard

The RL check standard serves to verify the linearity of calibration of the analysis at the RL. The RL standard is not required for the analysis of aluminum (Al), barium (Ba), calcium (Ca), iron (Fe), magnesium (Mg), sodium (Na), and potassium (K). The criteria used to evaluate the RL standard analysis are presented below in the RL standards evaluation table.

All RL standard recoveries were within the control limits.

3.4 ICP Interference Check Standard (ICS)

The ICS verifies the laboratories inter-element and background correction factors.

All ICS exhibited recoveries within the control limits.

4. Matrix Spike (MS) and Laboratory Duplicate Sample Analysis

MS and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

4.1 MS Analysis

All metal analytes must exhibit recoveries within the established acceptance limits of 75% to 125%. The MS control limits do not apply for MSs performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS spiking concentration by a factor of four or greater. In instance where this is true, the data will not be qualified and the laboratory qualifier "N" will be removed. Sample results associated with MS exceedances where the parent samples are not site-specific are not qualified.

Sample location I-120 was used in the MS analyses. All analytes associated with MS recoveries were within the control limits with the exception of the following analytes present in the table below.

Sample Location	Analyte	MS Recovery
I-120	Selenium	33 %
	Silver	25 %

The criteria used to evaluate MS recoveries are presented in the following table. In the case of MS deviations, the sample results are qualified. The qualifications are applied to all sample results associated with this analytical batch.

Control limit	Sample Result	Qualification
MS percent recovery 30% to 74%	Non-detect	UJ
	Detect	J
MS percent recovery < 30%	Non-detect	R
	Detect	J

Control limit	Sample Result	Qualification
MS percent recovery > 125%	Non-detect	No Action
	Detect	J

4.2 Laboratory Duplicate Sample Analysis

The laboratory duplicate sample relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to five times the RL. A control limit of 20% for water matrices and 35% for soil matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the RL, a control limit of one times the RL is applied for water matrices and two times the RL for soil matrices.

Sample location I-120 was used in the laboratory duplicate sample analyses. The laboratory duplicate sample results exhibited RPDs within the control limit.

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit recoveries between the control limits of 80% and 120%.

The LCS analyses exhibited recoveries within the control limits.

6. Field Duplicate Sample Analysis

The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. A control limit of 50% for water matrices and 100% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

The field duplicate sample results (in µg/L) are summarized in the following table.

Sample ID / Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
OF-1 / DUP-SW-01-06202012	Aluminum	71900	72400	0.7 %
	Antimony	26.1 J	24.2 J	AC
	Arsenic	13.1 J	20.1	AC
	Barium	16.3 J	13.6 J	AC
	Beryllium	6.9 J	7.0 J	AC
	Calcium	335000	336000	0.3 %
	Chromium	2190	2220	1.4 %
	Cobalt	14.4 J	13.5 J	AC
	Copper	9.4 J	8.9 J	AC
	Iron	1410000	1430000	1.4 %
	Lead	64	61	4.8 %

Sample ID / Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
OF-1 / DUP-SW-01-06202012	Magnesium	28700	28500	0.7 %
	Manganese	5070	5130	1.2 %
	Nickel	119	120	0.8 %
	Potassium	18600	18900	1.6 %
	Sodium	46300	46300	0.0 %
	Thallium	18.3 J	19.7 J	AC
	Vanadium	28.1 J	28.3 J	AC
	Zinc	2630	2650	0.8 %
	Mercury	0.075 J	0.20 U	AC

AC Acceptable
J Estimated (result is < RL)
U Not detected

The field duplicate sample results are acceptable.

7. Serial Dilution

The serial dilution analysis is used to assess if a significant physical or chemical interference exists due to sample matrix. Analytes exhibiting concentrations greater than 50 times the MDL in the undiluted sample are evaluated to determine if matrix interference exists. These analytes are required to have less than a 10% difference (%D) between sample results from the undiluted (parent) sample and results associated with the same sample analyzed with a five-fold dilution.

Sample location I-120 was used in the serial dilution analysis. All analytes associated with the serial dilution analyses exhibited percent differences within the control limits.

8. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR METALS

METALS: SW-846 6010C and 7470A	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Inductively Coupled Plasma – Atomic Emission Spectrometry (ICP) Atomic Absorption – Manual Cold Vapor (CV)					
Tier II Validation					
Holding Times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Instrument Blanks		X	X		
B. Method Blanks		X	X		
C. Equipment/Field Blanks					X
Laboratory Control Sample (LCS)		X		X	
Matrix Spike (MS) Accuracy (%R)		X	X		
Matrix Spike Duplicate (MSD) %R					X
MS/MSD Precision (RPD)					X
Field/Laboratory Duplicate Sample RPD		X		X	
ICP Serial Dilution		X		X	
Dilution Factor		X		X	
Moisture Content					X
Tier III Validation					
Initial Calibration Verification		X		X	
Continuing Calibration Verification		X		X	
RL Standard		X		X	
ICP Interference Check		X		X	
Quantitation transcriptions/calculations		X		X	
Reporting limits adjusted to reflect sample dilutions		X		X	

%R – Percent recovery
RPD – Relative percent difference

GENERAL CHEMISTRY ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
Alkalinity by SM 2320B	Water Soil	14 days from collection to analysis	Cool to 4±2 °C
Ammonia-N by SM 4500-NH3-H	Water	28 days from collection to analysis	Cool to 4±2 °C; pH of < 2
	Soil	28 days from collection to analysis	Cool to 4±2 °C;
Cyanide by SW-846 9012, 9016	Water	14 days from collection to analysis	Cool to 4±2 °C; pH of > 12.
	Soil	14 days from collection to analysis	Cool to 4±2 °C
Corrosivity by SW-846 9045	Soil	7 days from collection to analysis	Cool to 4°C+2°C
pH by SW-846 9045	Soil	Immediately upon sample receipt	Cool to 4±2 °C
Total Phosphorus by SM 4500-P-E	Water	28 days from collection to analysis	Cool to 4±2 °C; pH of < 2
	Soil	28 days from collection to analysis	Cool to 4±2 °C;
Reactive Sulfide by SW-846 9034	Soil	7 days from collection to analysis	Cool to 4°C+2°C
Chloride, Fluoride, Sulfate by SW-846 9056	Soil	28 days from collection to analysis	Cool to 4±2 °C
Nitrate-N by SW-846 9056	Water	28 days from collection to analysis	Cool to 4±2 °C; pH of < 2
	Soil	28 days from collection to analysis	Cool to 4±2 °C;
Nitrite-N by SW-846 9056	Water Soil	48 hours from collection to analysis	Cool to 4±2 °C

The analyses that exceeded the holding time are presented in the following table.

Sample Locations	Analyte	Analysis Completed	HT Criteria
OF-1 I-120 I-111 I-112 DUP-SW-01-06202012	pH	15 Days	ASAP
OF-1 DUP-SW-01-06202012	Nitrate Nitrite	> 48 Hours but < 96 Hours	48 Hours

Sample results were qualified as specified in the table below. All other holding times were met.

Criteria	Qualification	
	Detected Analytes	Non-detect Analytes
Analysis completed < 2x holding time	J	UJ
Analysis completed > 2x holding time	J	R

Note: Due to the ready conversion of nitrite into nitrate, nitrate results for samples analyzed greater than 48 hours after collection should be considered as nitrate+nitrite. All nitrate (and nitrite) results were non-detects. Therefore, no nitrate or nitrite results required qualification.

2. Blank Contamination

Quality assurance (QA) blanks (i.e. laboratory method blanks and equipment rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected analyte in an associated blank is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were detected in the associated QA blanks; however, the associated sample results were non-detect. Therefore, no qualification of the sample results was required.

3. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

3.1 Initial Calibration

The initial calibration must exhibit a correlation coefficient greater than 0.995. A technical review of the data applies limits to all analytes with no exceptions.

3.2 Continuing Calibration

All target analytes associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (15%).

All analytes associated with the initial and continuing calibrations were within the specified control limits. The correct frequency and type of standards were analyzed.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) / Laboratory Duplicate Analyses

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

4.1 MS/MSD Analysis

All analytes must exhibit recoveries within the established acceptance limits of 75% to 125%. When a MSD analysis is performed, the relative percent difference (RPD) between the MS/MSD results must be within the established acceptance limits of 20% for water matrices and 35% for soil matrices.

Note: The MS/MSD control limits do not apply for MS/MSD analyses performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. Sample results associated with MS/MSD exceedances where the parent samples are not site-specific are not qualified.

All analytes associated with MS/MSD recoveries were within the control limits with the exception of the following analyte present in the table below.

Sample Location	Analyte	MS Recovery	MSD Recovery
I-120	Sulfide	< 10 %	< 10 %
	Nitrite	< 10 %	< 10 %

The criteria used to evaluate MS/MSD recoveries are presented in the following table. In the case of MS/MSD deviations, the sample results are qualified. The qualifications are applied to all sample results associated with this analytical batch.

Control limit	Sample Result	Qualification
MS/MSD percent recovery 30% to 74%	Non-detect	UJ
	Detect	J
MS/MSD percent recovery < 30%	Non-detect	R
	Detect	J
MS/MSD percent recovery > 125%	Non-detect	No Action
	Detect	J

4.2 Laboratory Duplicate Sample Analysis

The laboratory duplicate sample relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to five times the reporting limit (RL). A control limit of 20% for water matrices and 35% for soil matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the RL, a control limit of one times the RL is applied for water matrices and two times the RL for soil matrices.

MS/MSD analysis was performed in lieu of the laboratory duplicate analysis; the results are acceptable.

5. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS/LCSD analysis must exhibit recoveries between the control limits of 80% and 120%. The relative percent difference (RPD) between the LCS and LCSD results must be no greater than the established acceptance limit of 20%.

All analytes associated with the LCS/LCSD analyses exhibited recoveries and RPDs within the control limits.

6. Field Duplicate Sample Analysis

The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. A control limit of 50% for water matrices and 100% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the reporting limit (RL), a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results for the field duplicate samples are summarized in the following table.

Sample ID / Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
OF-1 / DUP-SW-01-06202012	Chloride	69.9	70.6	1.0 %
	Sulfate	7540	7510	0.4 %
	Ammonia (as N)	93.3	82.6	12.2 %
	pH	1.38	1.38	0.0 %
	Phosphorus as P	16.8	16.6	1.2 %
	Phosphorus as PO4	51.7	51	1.4 %
	Sulfide	0.71	1.5	AC
	Total Cyanide	0.77	0.67	13.9 %
	Free Cyanide	961	810	17.1 %

The field duplicate sample results are acceptable.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR GENERAL CHEMISTRY

General Chemistry: EPA 9012A, 9016, 9034, 9056, and 9045C, and SM 2320B, 4500-NH3-H, and 4500-P-E	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Miscellaneous Instrumentation					
Tier II Validation					
Holding times		X	X		
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks					X
Laboratory Control Sample (LCS) Accuracy (%R)		X		X	
Laboratory Control Sample Duplicate (LCSD) %R		X		X	
LCS/LCSD Precision (RPD)		X		X	
Matrix Spike (MS) %R		X	X		
Matrix Spike Duplicate (MSD) %R		X	X		
MS/MSD RPD		X		X	
Field/Laboratory Duplicate Sample RPD		X		X	
Dilution Factor		X		X	
Moisture Content					X
Tier III Validation					
Initial calibration %RSD or correlation coefficient		X		X	
Continuing calibration %R		X		X	
Raw Data		X		X	
Quantitation transcriptions/calculations		X		X	
Reporting limits adjusted for sample dilutions		X		X	

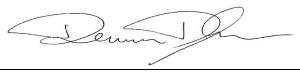
%RSD – relative standard deviation
%R – percent recovery
RPD – relative percent difference
%D – difference

SAMPLE COMPLIANCE REPORT

Sample Delivery Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	Compliancy[1]						Noncompliance
					VOC	SVOC	PCB	DRO	MET	MISC	
200-11392	6/20/2012	SW846	OF-1	Soil	No	No	Yes	No	No	No	VOC: Calibration exceedance SVOC: LCS %R Metals: MS %R Misc: pH hold time exceedance; Nitrite MS %R
	6/20/2012	SW846	I-120	Soil	No	No	No	No	No	No	VOC: Calibration exceedance; MS/MSD %R SVOC: LCS %R; Surrogate %R; MS/MSD %R PCB: Surrogate %R; MS/MSD %R; MS/MSD RPD Metals: MS %R Misc: pH hold time exceedance; Nitrite MS %R; Sulfide %R
	6/20/2012	SW846	I-111	Soil	No	No	Yes	No	No	No	VOC: Blank contamination; Calibration exceedance SVOC: LCS %R; Surrogate %R Metals: MS %R Misc: pH hold time exceedance; Nitrite MS %R; Sulfide %R
	6/20/2012	SW846	I-112	Soil	No	No	No	No	No	No	VOC: Blank contamination; Calibration exceedance SVOC: LCS %R; Surrogate %R Metals: MS %R Misc: pH hold time exceedance; Nitrite MS %R; Sulfide %R
	6/20/2012	SW846	TB-SW-06202012	Water	No	---	---	---	---	---	VOC: Calibration exceedance
	6/20/2012	SW846	DUP-SW-01-06202012	Soil	No	No	Yes	No	No	No	VOC: Calibration exceedance SVOC: LCS %R; Calibration exceedance Metals: MS %R Misc: pH hold time exceedance; Nitrite MS %R; Sulfide %R

1 Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant or which have added qualifiers are listed as "no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable

Validation Performed By: Dennis Dyke

Signature: 

Date: August 31, 2012

Peer Review: Dennis Capria

Date: September 11, 2012

CHAIN OF CUSTODY /
CORRECTED SAMPLE ANALYSIS DATA SHEETS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TA PM: Jim Madison

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

CHAIN OF CUSTODY / ANALYSIS REQUEST

Page 1 of 1

Name (for report and invoice): Meredith Mayes	Samplers Name (Printed): Matthew Bell	Site/Project Identification: Con Ed - Kingsbridge
Company: ARCADIS	P. O. #: B00430 27.0002.080000	State (Location of site): NJ: ☐ NY: ☒ Other:
Address: 655 Third Ave	Analysis Turnaround Time: Standard ☒	Regulatory Program:
City: NY State: NY	Rush Chrages Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	
Phone: 212-682-9271 Fax:		

Sample Identification	Date	Time	Matrix	No. of Cont.	VOCs	Metals, Hg	PCBs	TPH-DRO	MS/MSD	SVOCs	LAB USE ONLY Project No: / Job No: / Sample Numbers
OF-1	6/20/12	900	Aq	6	X	X	X	X		X	
I-120	6/20/12	1200	Aq	18	X	X	X	X	X	X	
I-111	6/20/12	1400	Aq	6	X	X	X	X		X	
I-112	6/20/12	1500	Aq	6	X	X	X	X		X	
TB-SW-06202012											
DUP-SW-01-06202012	6/20/12	—	Aq	6	X	X	X	X		X	

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH; 6 = Other _____, 7 = Other _____

	VOCs	Metals, Hg	PCBs	TPH-DRO	MS/MSD	SVOCs
Soil:						
Water:	2	4	1	1		

Special Instructions

Water Metals Filtered (Yes/No)? _____

	Company	Date / Time		Company
Relinquished by: Matthew Bell	ARCADIS	6/20/12 1600	Received by 1): [signature]	TANYC
Relinquished by 2): [signature]	TA NYC	6/21/12 17:15	Received by 2): [signature] 6/21/12 1045	TA Buff
Relinquished by 3):	Company	Date / Time	Received by 3):	Company
Relinquished by 4):	Company	Date / Time	Received by 4):	Company

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132), Massachusetts (M-NJ312), North Carolina (No. 578)

TAL - 0016 (0408)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TA PM: Jim Madison

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice): Meredith Hayes	Samplers Name (Printed): Matthew Bell	Site/Project Identification: Con Ed - Knickerbocker
Company: ARCADIS	P. O. #: B0043027.0002.08000	State (Location of site): NJ: ☐ NY: ☒ Other:
Address: 655 Third Ave	Analysis Turnaround Time: Standard ☒	Regulatory Program:
City: NY State: NY	Rush Chrages Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	
Phone: 212-682-9771 Fax:		

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

Sample Identification	Date	Time	Matrix	No. of Cont.	Cyanide (total, amenable)	Cyanide (Free)	Ammonia	Phosphate	Sulfide	Carbonate/Bicarbonate Alkalinity	pH	MS/MSD				LAB USE ONLY Sample Numbers
OF-1	6/20/2012	900	Aq	5	X	X	X	X	X	X	X					
I-120	6/20/12	1200	Aq	15	X	X	X	X	X	X	X	X				
I-111	6/20/12	1400	Aq	5	X	X	X	X	X	X	X					
I-112	6/20/12	1500	Aq	5	X	X	X	X	X	X	X					
DUP-SW-01-06202012	6/20/12	—	Aq	5	X	X	X	X	X	X	X					
Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH — Soil:																
6 = Other ascorbic acid & NaOH, 7 = Other NaOH/ZnAc — Water:					5	6	3	3	7	1	1					

Page 1434 of 1440

Special Instructions

Water Metals Filtered (Yes/No)?

Relinquished by	Company	Date / Time	Received by	Company
1) Matthew Bell	ARCADIS	6/20/12 1600	1)	TANYC
2)	TANYC	6/20/12 17:15	2) 6/21/12 1040	TA Bud
3)			3)	
4)			4)	

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). Massachusetts (M-NJ312), North Carolina (No. 578)

TAL - 0016 (0408)

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TA PM: Jim Madison

CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice) Meredith Hayes	Samplers Name (Printed) Matthew Bell	Site/Project Identification Con Ed - Kraslak
Company ARCADIS	P. O. # B00130723903.0800	State (Location of site): NJ: ☐ NY: ☒ Other:
		Regulatory Program:
Address 855 Third Ave	Analysis Turnaround Time: Standard ☒	
City NY State NY	Rush Chrages Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	
Phone 212-682-9271 Fax		

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

Sample Identification	Date	Time	Matrix	No. of Cont.	Anions	M5/M5D									LAB USE ONLY Sample Numbers
OF-1	6/20/12	900	Aq	1	X										
I-120	6/20/12	1200	Aq	3	X	X									
I-111	6/20/12	1400	Aq	1	X										200-
I-112	6/20/12	1500	Aq	1	X										11392
DUP-SW-01-05202012	6/20/12	—	Aq	1	X										
Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH				Soil:											
6 = Other _____, 7 = Other _____				Water:	1										

Project No:

Job No:

Special Instructions Anions include Nitrate, Nitrite, Chloride, sulfate, fluoride Water Metals Filtered (Yes/No)? _____

Relinquished by	Company	Date / Time	Received by	Company
1) ARCADIS Matthew Bell	ARCADIS	6/21/12 1600	1) Mary Kloman	TA SV
Relinquished by 2)	Company	Date / Time	Received by 2)	Company
Relinquished by 3)	Company	Date / Time	Received by 3)	Company
Relinquished by 4)	Company	Date / Time	Received by 4)	Company

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). TAL - 0016 (0408)

Massachusetts (M-NJ312), North Carolina (No. 578)

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: **OF-1**

Lab Sample ID: 200-11392-1
Client Matrix: Water

Date Sampled: 06/20/2012 0900
Date Received: 06/21/2012 1020

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41091	Instrument ID:	L.i
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lhbae07.d
Dilution:	2200			Initial Weight/Volume:	5 mL
Analysis Date:	06/27/2012 1241			Final Weight/Volume:	5 mL
Prep Date:	06/27/2012 1241				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	2200	U J	200	2200
Chloromethane	2200	U J	260	2200
Vinyl chloride	2200	U	200	2200
Bromomethane	2200	U J	950	2200
Chloroethane	2200	U	260	2200
Trichlorofluoromethane	2200	U	200	2200
1,1-Dichloroethene	2200	U	400	2200
1,1,2-Trichloro-1,2,2-trichfluoroethane	2200	U	400	2200
Acetone	11000	U	2000	11000
Carbon disulfide	33000		330	2200
Methyl acetate	2200	U	510	2200
Methylene Chloride	2200	U	460	2200
trans-1,2-Dichloroethene	2200	U	370	2200
Methyl t-butyl ether	2200	U	370	2200
1,2-Dichloroethene, Total	2200	U	700	2200
1,1-Dichloroethane	2200	U	350	2200
cis-1,2-Dichloroethene	2200	U	350	2200
2-Butanone	11000	U	2400	11000
Chloroform	2200	U	350	2200
1,1,1-Trichloroethane	2200	U	350	2200
Cyclohexane	2200	U	510	2200
Carbon tetrachloride	2200	U	370	2200
Benzene	2200	U	370	2200
1,2-Dichloroethane	2200	U	330	2200
Trichloroethene	2200	U	310	2200
Methylcyclohexane	2200	U	550	2200
1,2-Dichloropropane	2200	U	370	2200
Bromodichloromethane	2200	U	350	2200
cis-1,3-Dichloropropene	2200	U	350	2200
4-Methyl-2-pentanone	11000	U	2000	11000
Toluene	2200	U	370	2200
trans-1,3-Dichloropropene	2200	U	400	2200
1,1,2-Trichloroethane	2200	U	400	2200
Tetrachloroethene	2200	U	400	2200
2-Hexanone	11000	U	2400	11000
Dibromochloromethane	2200	U	370	2200
1,2-Dibromoethane	2200	U	400	2200
Chlorobenzene	2200	U	420	2200
Ethylbenzene	2200	U	400	2200
Xylenes, Total	2200	U	370	2200
Styrene	2200	U	370	2200
Bromoform	2200	U	370	2200
Isopropylbenzene	2200	U	370	2200
1,1,2,2-Tetrachloroethane	2200	U	370	2200
1,3-Dichlorobenzene	2200	U	400	2200
1,4-Dichlorobenzene	2200	U	330	2200

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: **OF-1**

Lab Sample ID: 200-11392-1
Client Matrix: Water

Date Sampled: 06/20/2012 0900
Date Received: 06/21/2012 1020

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41091	Instrument ID:	L.i
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lhbae07.d
Dilution:	2200			Initial Weight/Volume:	5 mL
Analysis Date:	06/27/2012 1241			Final Weight/Volume:	5 mL
Prep Date:	06/27/2012 1241				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,2-Dichlorobenzene	2200	U	330	2200
1,2-Dibromo-3-Chloropropane	2200	U	480	2200
1,2,4-Trichlorobenzene	2200	U	400	2200

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	99		80 - 115
Toluene-d8	100		80 - 115
Bromofluorobenzene	103		85 - 120
1,2-Dichlorobenzene-d4	102		80 - 115

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: I-120

Lab Sample ID: 200-11392-2
Client Matrix: Water

Date Sampled: 06/20/2012 1200
Date Received: 06/21/2012 1020

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41091	Instrument ID:	L.i
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lhbae08.d
Dilution:	2200			Initial Weight/Volume:	5 mL
Analysis Date:	06/27/2012 1313			Final Weight/Volume:	5 mL
Prep Date:	06/27/2012 1313				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	2200	U J	200	2200
Chloromethane	2200	U J	260	2200
Vinyl chloride	2200	U J	200	2200
Bromomethane	2200	U J	950	2200
Chloroethane	2200	U	260	2200
Trichlorofluoromethane	2200	U	200	2200
1,1-Dichloroethene	2200	U	400	2200
1,1,2-Trichloro-1,2,2-trichfluoroethane	2200	U	400	2200
Acetone	11000	U	2000	11000
Carbon disulfide	33000	J	330	2200
Methyl acetate	2200	U	510	2200
Methylene Chloride	2200	U	460	2200
trans-1,2-Dichloroethene	2200	U	370	2200
Methyl t-butyl ether	2200	U	370	2200
1,2-Dichloroethene, Total	2200	U	700	2200
1,1-Dichloroethane	2200	U	350	2200
cis-1,2-Dichloroethene	2200	U	350	2200
2-Butanone	11000	U	2400	11000
Chloroform	2200	U	350	2200
1,1,1-Trichloroethane	2200	U	350	2200
Cyclohexane	2200	U	510	2200
Carbon tetrachloride	2200	U	370	2200
Benzene	2200	U	370	2200
1,2-Dichloroethane	2200	U	330	2200
Trichloroethene	2200	U	310	2200
Methylcyclohexane	2200	U	550	2200
1,2-Dichloropropane	2200	U	370	2200
Bromodichloromethane	2200	U	350	2200
cis-1,3-Dichloropropene	2200	U	350	2200
4-Methyl-2-pentanone	11000	U	2000	11000
Toluene	2200	U	370	2200
trans-1,3-Dichloropropene	2200	U	400	2200
1,1,2-Trichloroethane	2200	U	400	2200
Tetrachloroethene	2200	U	400	2200
2-Hexanone	11000	U	2400	11000
Dibromochloromethane	2200	U	370	2200
1,2-Dibromoethane	2200	U	400	2200
Chlorobenzene	2200	U	420	2200
Ethylbenzene	2200	U	400	2200
Xylenes, Total	2200	U	370	2200
Styrene	2200	U	370	2200
Bromoform	2200	U	370	2200
Isopropylbenzene	2200	U	370	2200
1,1,2,2-Tetrachloroethane	2200	U	370	2200
1,3-Dichlorobenzene	2200	U	400	2200
1,4-Dichlorobenzene	2200	U	330	2200

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: I-120

Lab Sample ID: 200-11392-2
Client Matrix: Water

Date Sampled: 06/20/2012 1200
Date Received: 06/21/2012 1020

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41091	Instrument ID:	L.i
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lhbae08.d
Dilution:	2200			Initial Weight/Volume:	5 mL
Analysis Date:	06/27/2012 1313			Final Weight/Volume:	5 mL
Prep Date:	06/27/2012 1313				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,2-Dichlorobenzene	2200	U	330	2200
1,2-Dibromo-3-Chloropropane	2200	U	480	2200
1,2,4-Trichlorobenzene	2200	U	400	2200

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	100		80 - 115
Toluene-d8	101		80 - 115
Bromofluorobenzene	103		85 - 120
1,2-Dichlorobenzene-d4	102		80 - 115

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: I-111

Lab Sample ID: 200-11392-3
Client Matrix: Water

Date Sampled: 06/20/2012 1400
Date Received: 06/21/2012 1020

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41091	Instrument ID:	L.i
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lhbae11.d
Dilution:	2200			Initial Weight/Volume:	5 mL
Analysis Date:	06/27/2012 1450			Final Weight/Volume:	5 mL
Prep Date:	06/27/2012 1450				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	2200	U J	200	2200
Chloromethane	2200	U J	260	2200
Vinyl chloride	2200	U	200	2200
Bromomethane	2200	U J	950	2200
Chloroethane	2200	U	260	2200
Trichlorofluoromethane	2200	U	200	2200
1,1-Dichloroethene	2200	U	400	2200
1,1,2-Trichloro-1,2,2-trichfluoroethane	2200	U	400	2200
Acetone	11000 ~~3300~~	J UB	2000	11000
Carbon disulfide	43000		330	2200
Methyl acetate	2200	U	510	2200
Methylene Chloride	2200	U	460	2200
trans-1,2-Dichloroethene	2200	U	370	2200
Methyl t-butyl ether	2200	U	370	2200
1,2-Dichloroethene, Total	2200	U	700	2200
1,1-Dichloroethane	2200	U	350	2200
cis-1,2-Dichloroethene	2200	U	350	2200
2-Butanone	11000	U	2400	11000
Chloroform	2200	U	350	2200
1,1,1-Trichloroethane	2200	U	350	2200
Cyclohexane	2200	U	510	2200
Carbon tetrachloride	2200	U	370	2200
Benzene	2200	U	370	2200
1,2-Dichloroethane	2200	U	330	2200
Trichloroethene	2200	U	310	2200
Methylcyclohexane	2200	U	550	2200
1,2-Dichloropropane	2200	U	370	2200
Bromodichloromethane	2200	U	350	2200
cis-1,3-Dichloropropene	2200	U	350	2200
4-Methyl-2-pentanone	11000	U	2000	11000
Toluene	2200	U	370	2200
trans-1,3-Dichloropropene	2200	U	400	2200
1,1,2-Trichloroethane	2200	U	400	2200
Tetrachloroethene	2200	U	400	2200
2-Hexanone	11000	U	2400	11000
Dibromochloromethane	2200	U	370	2200
1,2-Dibromoethane	2200	U	400	2200
Chlorobenzene	2200	U	420	2200
Ethylbenzene	2200	U	400	2200
Xylenes, Total	2200	U	370	2200
Styrene	2200	U	370	2200
Bromoform	2200	U	370	2200
Isopropylbenzene	2200	U	370	2200
1,1,2,2-Tetrachloroethane	2200	U	370	2200
1,3-Dichlorobenzene	2200	U	400	2200
1,4-Dichlorobenzene	2200	U	330	2200

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: I-111

Lab Sample ID: 200-11392-3
Client Matrix: Water

Date Sampled: 06/20/2012 1400
Date Received: 06/21/2012 1020

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41091	Instrument ID:	L.i
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lhbae11.d
Dilution:	2200			Initial Weight/Volume:	5 mL
Analysis Date:	06/27/2012 1450			Final Weight/Volume:	5 mL
Prep Date:	06/27/2012 1450				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,2-Dichlorobenzene	2200	U	330	2200
1,2-Dibromo-3-Chloropropane	1300	J	480	2200
1,2,4-Trichlorobenzene	1200	J	400	2200

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	87		80 - 115
Toluene-d8	101		80 - 115
Bromofluorobenzene	102		85 - 120
1,2-Dichlorobenzene-d4	101		80 - 115

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: I-112

Lab Sample ID: 200-11392-4
Client Matrix: Water

Date Sampled: 06/20/2012 1500
Date Received: 06/21/2012 1020

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41091	Instrument ID:	L.i
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lhbae12.d
Dilution:	628.6			Initial Weight/Volume:	5 mL
Analysis Date:	06/27/2012 1522			Final Weight/Volume:	5 mL
Prep Date:	06/27/2012 1522				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	630	U J	57	630
Chloromethane	630	U J	75	630
Vinyl chloride	630	U	57	630
Bromomethane	630	U J	270	630
Chloroethane	630	U	75	630
Trichlorofluoromethane	630	U	58	630
1,1-Dichloroethene	630	U	110	630
1,1,2-Trichloro-1,2,2-trichfluoroethane	630	U	110	630
Acetone	3100 ~~760~~	+ UB	580	3100
Carbon disulfide	43000		94	630
Methyl acetate	630	U	140	630
Methylene Chloride	630	U	130	630
trans-1,2-Dichloroethene	630	U	110	630
Methyl t-butyl ether	630	U	110	630
1,2-Dichloroethene, Total	630	U	200	630
1,1-Dichloroethane	630	U	100	630
cis-1,2-Dichloroethene	630	U	100	630
2-Butanone	3100	U	690	3100
Chloroform	630	U	100	630
1,1,1-Trichloroethane	630	U	100	630
Cyclohexane	630	U	140	630
Carbon tetrachloride	630	U	110	630
Benzene	130	J	110	630
1,2-Dichloroethane	630	U	94	630
Trichloroethene	630	U	88	630
Methylcyclohexane	630	U	160	630
1,2-Dichloropropane	630	U	110	630
Bromodichloromethane	630	U	100	630
cis-1,3-Dichloropropene	630	U	100	630
4-Methyl-2-pentanone	3100	U	570	3100
Toluene	630	U	110	630
trans-1,3-Dichloropropene	630	U	110	630
1,1,2-Trichloroethane	630	U	110	630
Tetrachloroethene	630	U	110	630
2-Hexanone	3100	U	690	3100
Dibromochloromethane	630	U	110	630
1,2-Dibromoethane	630	U	110	630
Chlorobenzene	630	U	120	630
Ethylbenzene	630	U	110	630
Xylenes, Total	630	U	110	630
Styrene	630	U	110	630
Bromoform	630	U	110	630
Isopropylbenzene	630	U	110	630
1,1,2,2-Tetrachloroethane	630	U	110	630
1,3-Dichlorobenzene	630	U	110	630
1,4-Dichlorobenzene	630	U	94	630

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: **I-112**

Lab Sample ID: 200-11392-4
Client Matrix: Water

Date Sampled: 06/20/2012 1500
Date Received: 06/21/2012 1020

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41091	Instrument ID:	L.i
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lhbae12.d
Dilution:	628.6			Initial Weight/Volume:	5 mL
Analysis Date:	06/27/2012 1522			Final Weight/Volume:	5 mL
Prep Date:	06/27/2012 1522				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,2-Dichlorobenzene	630	U	94	630
1,2-Dibromo-3-Chloropropane	630	U	140	630
1,2,4-Trichlorobenzene	630	U	110	630

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	94		80 - 115
Toluene-d8	102		80 - 115
Bromofluorobenzene	105		85 - 120
1,2-Dichlorobenzene-d4	104		80 - 115

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: **TB-SW-06202012**

Lab Sample ID: 200-11392-5
Client Matrix: Water

Date Sampled: 06/20/2012 0000
Date Received: 06/21/2012 1020

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41091	Instrument ID:	L.i
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lhbae13.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/27/2012 1554			Final Weight/Volume:	5 mL
Prep Date:	06/27/2012 1554				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	1.0	UJ	0.090	1.0
Chloromethane	1.0	UJ	0.12	1.0
Vinyl chloride	1.0	U	0.090	1.0
Bromomethane	1.0	UJ	0.43	1.0
Chloroethane	1.0	U	0.12	1.0
Trichlorofluoromethane	1.0	U	0.092	1.0
1,1-Dichloroethene	1.0	U	0.18	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.18	1.0
Acetone	1.3	J	0.92	5.0
Carbon disulfide	0.85	J	0.15	1.0
Methyl acetate	1.0	U	0.23	1.0
Methylene Chloride	0.30	J	0.21	1.0
trans-1,2-Dichloroethene	1.0	U	0.17	1.0
Methyl t-butyl ether	1.0	U	0.17	1.0
1,2-Dichloroethene, Total	1.0	U	0.32	1.0
1,1-Dichloroethane	1.0	U	0.16	1.0
cis-1,2-Dichloroethene	1.0	U	0.16	1.0
2-Butanone	5.0	U	1.1	5.0
Chloroform	1.0	U	0.16	1.0
1,1,1-Trichloroethane	1.0	U	0.16	1.0
Cyclohexane	1.0	U	0.23	1.0
Carbon tetrachloride	1.0	U	0.17	1.0
Benzene	1.0	U	0.17	1.0
1,2-Dichloroethane	1.0	U	0.15	1.0
Trichloroethene	1.0	U	0.14	1.0
Methylcyclohexane	1.0	U	0.25	1.0
1,2-Dichloropropane	1.0	U	0.17	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.16	1.0
4-Methyl-2-pentanone	5.0	U	0.90	5.0
Toluene	1.0	U	0.17	1.0
trans-1,3-Dichloropropene	1.0	U	0.18	1.0
1,1,2-Trichloroethane	1.0	U	0.18	1.0
Tetrachloroethene	1.0	U	0.18	1.0
2-Hexanone	5.0	U	1.1	5.0
Dibromochloromethane	1.0	U	0.17	1.0
1,2-Dibromoethane	1.0	U	0.18	1.0
Chlorobenzene	1.0	U	0.19	1.0
Ethylbenzene	1.0	U	0.18	1.0
Xylenes, Total	1.0	U	0.17	1.0
Styrene	1.0	U	0.17	1.0
Bromoform	1.0	U	0.17	1.0
Isopropylbenzene	1.0	U	0.17	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.17	1.0
1,3-Dichlorobenzene	1.0	U	0.18	1.0
1,4-Dichlorobenzene	1.0	U	0.15	1.0

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: **TB-SW-06202012**

Lab Sample ID: 200-11392-5
Client Matrix: Water

Date Sampled: 06/20/2012 0000
Date Received: 06/21/2012 1020

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41091	Instrument ID:	L.i
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lhbae13.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/27/2012 1554			Final Weight/Volume:	5 mL
Prep Date:	06/27/2012 1554				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,2-Dichlorobenzene	1.0	U	0.15	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	0.22	1.0
1,2,4-Trichlorobenzene	1.0	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	96		80 - 115
Toluene-d8	102		80 - 115
Bromofluorobenzene	100		85 - 120
1,2-Dichlorobenzene-d4	102		80 - 115

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: DUP-SW-01-06202012

Lab Sample ID: 200-11392-6
Client Matrix: Water

Date Sampled: 06/20/2012 0000
Date Received: 06/21/2012 1020

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41091	Instrument ID:	L.i
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lhbae14.d
Dilution:	2200			Initial Weight/Volume:	5 mL
Analysis Date:	06/27/2012 1626			Final Weight/Volume:	5 mL
Prep Date:	06/27/2012 1626				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	2200	U 5	200	2200
Chloromethane	2200	U 5	260	2200
Vinyl chloride	2200	U	200	2200
Bromomethane	2200	U 5	950	2200
Chloroethane	2200	U	260	2200
Trichlorofluoromethane	2200	U	200	2200
1,1-Dichloroethene	2200	U	400	2200
1,1,2-Trichloro-1,2,2-trichfluoroethane	2200	U	400	2200
Acetone	11000	U	2000	11000
Carbon disulfide	30000		330	2200
Methyl acetate	2200	U	510	2200
Methylene Chloride	2200	U	460	2200
trans-1,2-Dichloroethene	2200	U	370	2200
Methyl t-butyl ether	2200	U	370	2200
1,2-Dichloroethene, Total	2200	U	700	2200
1,1-Dichloroethane	2200	U	350	2200
cis-1,2-Dichloroethene	2200	U	350	2200
2-Butanone	11000	U	2400	11000
Chloroform	460	J	350	2200
1,1,1-Trichloroethane	2200	U	350	2200
Cyclohexane	2200	U	510	2200
Carbon tetrachloride	2200	U	370	2200
Benzene	2200	U	370	2200
1,2-Dichloroethane	2200	U	330	2200
Trichloroethene	2200	U	310	2200
Methylcyclohexane	2200	U	550	2200
1,2-Dichloropropane	2200	U	370	2200
Bromodichloromethane	2200	U	350	2200
cis-1,3-Dichloropropene	2200	U	350	2200
4-Methyl-2-pentanone	11000	U	2000	11000
Toluene	2200	U	370	2200
trans-1,3-Dichloropropene	2200	U	400	2200
1,1,2-Trichloroethane	2200	U	400	2200
Tetrachloroethene	2200	U	400	2200
2-Hexanone	11000	U	2400	11000
Dibromochloromethane	2200	U	370	2200
1,2-Dibromoethane	2200	U	400	2200
Chlorobenzene	2200	U	420	2200
Ethylbenzene	2200	U	400	2200
Xylenes, Total	2200	U	370	2200
Styrene	2200	U	370	2200
Bromoform	2200	U	370	2200
Isopropylbenzene	2200	U	370	2200
1,1,2,2-Tetrachloroethane	2200	U	370	2200
1,3-Dichlorobenzene	2200	U	400	2200
1,4-Dichlorobenzene	2200	U	330	2200

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: **DUP-SW-01-06202012**

Lab Sample ID: 200-11392-6
Client Matrix: Water

Date Sampled: 06/20/2012 0000
Date Received: 06/21/2012 1020

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41091	Instrument ID:	L.i
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lhbae14.d
Dilution:	2200			Initial Weight/Volume:	5 mL
Analysis Date:	06/27/2012 1626			Final Weight/Volume:	5 mL
Prep Date:	06/27/2012 1626				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,2-Dichlorobenzene	2200	U	330	2200
1,2-Dibromo-3-Chloropropane	2200	U	480	2200
1,2,4-Trichlorobenzene	2200	U	400	2200

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	98		80 - 115
Toluene-d8	100		80 - 115
Bromofluorobenzene	100		85 - 120
1,2-Dichlorobenzene-d4	99		80 - 115

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: **OF-1**

Lab Sample ID: 200-11392-1
Client Matrix: Water

Date Sampled: 06/20/2012 0900
Date Received: 06/21/2012 1020

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-117383	Instrument ID:	BNAMS5
Prep Method:	3510C	Prep Batch:	460-117190	Lab File ID:	x27456.d
Dilution:	5.0			Initial Weight/Volume:	1000 mL
Analysis Date:	06/25/2012 1329	Run Type:	DL	Final Weight/Volume:	2 mL
Prep Date:	06/22/2012 1520			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Phenol	14	J D	4.1	50
2-Chlorophenol	50	U	11	50
2-Methylphenol	16	J D	9.0	50
3 & 4 Methylphenol	50	U	8.0	50
2-Nitrophenol	50	U	12	50
2,4-Dimethylphenol	24	J D	17	50
2,4-Dichlorophenol	50	U	13	50
4-Chloro-3-methylphenol	50	U	13	50
2,4,6-Trichlorophenol	50	U	12	50
2,4,5-Trichlorophenol	50	U	13	50
2,4-Dinitrophenol	150	U	27	150
4-Nitrophenol	150	U	34	150
4,6-Dinitro-2-methylphenol	150	U	24	150
Pentachlorophenol	150	U	27	150
Benzoic acid	~~250~~	~~U*~~ R	~~250~~	250
Bis(2-chloroethyl)ether	5.0	U	1.4	5.0
1,3-Dichlorobenzene	50	U	12	50
1,4-Dichlorobenzene	50	U	13	50
1,2-Dichlorobenzene	50	U	13	50
N-Nitrosodi-n-propylamine	5.0	U	1.3	5.0
Hexachloroethane	5.0	U	1.3	5.0
Nitrobenzene	5.0	U	1.5	5.0
Isophorone	50	U	14	50
Bis(2-chloroethoxy)methane	50	U	13	50
1,2,4-Trichlorobenzene	5.0	U	1.3	5.0
Naphthalene	660	D	14	50
4-Chloroaniline	50	U	10	50
Hexachlorobutadiene	10	U	2.9	10
2-Methylnaphthalene	43	J D	15	50
Hexachlorocyclopentadiene	50	U	8.5	50
2-Chloronaphthalene	50	U	14	50
2-Nitroaniline	100	U	25	100
Dimethyl phthalate	50	U	14	50
Acenaphthylene	50	U	14	50
2,6-Dinitrotoluene	10	U	3.1	10
3-Nitroaniline	100	U	25	100
Acenaphthene	50	U	14	50
Dibenzofuran	22	J D	14	50
2,4-Dinitrotoluene	10	U	2.4	10
Diethyl phthalate	50	U	15	50
4-Chlorophenyl phenyl ether	50	U	13	50
Fluorene	33	J D	14	50
4-Nitroaniline	100	U	29	100
N-Nitrosodiphenylamine	50	U	15	50
4-Bromophenyl phenyl ether	50	U	13	50
Hexachlorobenzene	5.0	U	1.5	5.0

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: **OF-1**

Lab Sample ID: 200-11392-1
Client Matrix: Water

Date Sampled: 06/20/2012 0900
Date Received: 06/21/2012 1020

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-117383	Instrument ID:	BNAMS5
Prep Method:	3510C	Prep Batch:	460-117190	Lab File ID:	x27456.d
Dilution:	5.0			Initial Weight/Volume:	1000 mL
Analysis Date:	06/25/2012 1329	Run Type:	DL	Final Weight/Volume:	2 mL
Prep Date:	06/22/2012 1520			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Phenanthrene	18	J D	16	50
Anthracene	50	U	14	50
Carbazole	50	U	16	50
Di-n-butyl phthalate	50	U	15	50
Fluoranthene	50	U	16	50
Pyrene	50	U	15	50
Butyl benzyl phthalate	50	U	13	50
3,3'-Dichlorobenzidine	100	U	25	100
Benzo[a]anthracene	5.0	U	1.4	5.0
Chrysene	50	U	16	50
Bis(2-ethylhexyl) phthalate	50	U	10	50
Di-n-octyl phthalate	50	U	7.5	50
Benzo[b]fluoranthene	5.0	U	1.3	5.0
Benzo[k]fluoranthene	5.0	U	1.3	5.0
Benzo[a]pyrene	5.0	U	0.70	5.0
Indeno[1,2,3-cd]pyrene	5.0	U	0.75	5.0
Dibenz(a,h)anthracene	5.0	U	0.45	5.0
Benzo[g,h,i]perylene	50	U	10	50
2,2'-oxybis[1-chloropropane]	50	U	10	50

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	104	D	56 - 112
Phenol-d5	48	D	10 - 48
Terphenyl-d14	108	D	50 - 122
2,4,6-Tribromophenol	90	D	46 - 122
2-Fluorophenol	74	D X	10 - 65
2-Fluorobiphenyl	122	D X	53 - 108

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: I-120

Lab Sample ID: 200-11392-2
Client Matrix: Water

Date Sampled: 06/20/2012 1200
Date Received: 06/21/2012 1020

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-117383	Instrument ID:	BNAMS5
Prep Method:	3510C	Prep Batch:	460-117190	Lab File ID:	x27457.d
Dilution:	10			Initial Weight/Volume:	1000 mL
Analysis Date:	06/25/2012 1354	Run Type:	DL	Final Weight/Volume:	2 mL
Prep Date:	06/22/2012 1520			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Phenol	18	J D	8.1	100
2-Chlorophenol	100	U J	22	100
2-Methylphenol	24	J D	18	100
3 & 4 Methylphenol	100	U J	16	100
2-Nitrophenol	100	U J	24	100
2,4-Dimethylphenol	38	J D	34	100
2,4-Dichlorophenol	100	U J	26	100
4-Chloro-3-methylphenol	100	U	25	100
2,4,6-Trichlorophenol	100	U	24	100
2,4,5-Trichlorophenol	100	U	26	100
2,4-Dinitrophenol	300	U	54	300
4-Nitrophenol	300	U	67	300
4,6-Dinitro-2-methylphenol	300	U	47	300
Pentachlorophenol	300	U	53	300
Benzoic acid	~~500~~	~~U~~ R	~~500~~	500
Bis(2-chloroethyl)ether	10	U J	2.8	10
1,3-Dichlorobenzene	100	U	24	100
1,4-Dichlorobenzene	100	U	25	100
1,2-Dichlorobenzene	100	U	25	100
N-Nitrosodi-n-propylamine	10	U	2.5	10
Hexachloroethane	10	U	2.5	10
Nitrobenzene	10	U	3.0	10
Isophorone	100	U	27	100
Bis(2-chloroethoxy)methane	100	U	26	100
1,2,4-Trichlorobenzene	10	U	2.6	10
Naphthalene	1100	D J	27	100
4-Chloroaniline	100	U J	20	100
Hexachlorobutadiene	20	U J	5.7	20
2-Methylnaphthalene	67	J D	30	100
Hexachlorocyclopentadiene	100	U J	17	100
2-Chloronaphthalene	100	U	27	100
2-Nitroaniline	200	U	49	200
Dimethyl phthalate	100	U	28	100
Acenaphthylene	100	U	27	100
2,6-Dinitrotoluene	20	U	6.1	20
3-Nitroaniline	200	U	50	200
Acenaphthene	100	U	27	100
Dibenzofuran	32	J D	28	100
2,4-Dinitrotoluene	20	U J	4.7	20
Diethyl phthalate	100	U J	29	100
4-Chlorophenyl phenyl ether	100	U J	25	100
Fluorene	45	J D	28	100
4-Nitroaniline	200	U J	58	200
N-Nitrosodiphenylamine	100	U	29	100
4-Bromophenyl phenyl ether	100	U	25	100
Hexachlorobenzene	10	U	2.9	10

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: I-120

Lab Sample ID: 200-11392-2
Client Matrix: Water

Date Sampled: 06/20/2012 1200
Date Received: 06/21/2012 1020

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-117383	Instrument ID:	BNAMS5
Prep Method:	3510C	Prep Batch:	460-117190	Lab File ID:	x27457.d
Dilution:	10			Initial Weight/Volume:	1000 mL
Analysis Date:	06/25/2012 1354	Run Type:	DL	Final Weight/Volume:	2 mL
Prep Date:	06/22/2012 1520			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Phenanthrene	100	U J	31	100
Anthracene	100	U	28	100
Carbazole	100	U	32	100
Di-n-butyl phthalate	100	U	29	100
Fluoranthene	100	U	32	100
Pyrene	100	U	29	100
Butyl benzyl phthalate	100	U	25	100
3,3'-Dichlorobenzidine	200	U	49	200
Benzo[a]anthracene	10	U	2.7	10
Chrysene	100	U	31	100
Bis(2-ethylhexyl) phthalate	100	U	20	100
Di-n-octyl phthalate	100	U	15	100
Benzo[b]fluoranthene	10	U	2.6	10
Benzo[k]fluoranthene	10	U	2.6	10
Benzo[a]pyrene	10	U	1.4	10
Indeno[1,2,3-cd]pyrene	10	U	1.5	10
Dibenz(a,h)anthracene	10	U	0.90	10
Benzo[g,h,i]perylene	100	U	20	100
2,2'-oxybis[1-chloropropane]	100	U	20	100

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	0	D	56 - 112
Phenol-d5	0	D	10 - 48
Terphenyl-d14	0	D	50 - 122
2,4,6-Tribromophenol	0	D	46 - 122
2-Fluorophenol	0	D	10 - 65
2-Fluorobiphenyl	0	D	53 - 108

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: I-111

Lab Sample ID: 200-11392-3
Client Matrix: Water

Date Sampled: 06/20/2012 1400
Date Received: 06/21/2012 1020

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-117383	Instrument ID:	BNAMS5
Prep Method:	3510C	Prep Batch:	460-117190	Lab File ID:	x27462.d
Dilution:	10			Initial Weight/Volume:	1000 mL
Analysis Date:	06/25/2012 1601	Run Type:	DL	Final Weight/Volume:	2 mL
Prep Date:	06/22/2012 1520			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Phenol	18	J D	8.1	100
2-Chlorophenol	100	U J	22	100
2-Methylphenol	25	J D	18	100
3 & 4 Methylphenol	100	U J	16	100
2-Nitrophenol	100	U J	24	100
2,4-Dimethylphenol	43	J D	34	100
2,4-Dichlorophenol	100	U J	26	100
4-Chloro-3-methylphenol	100	U	25	100
2,4,6-Trichlorophenol	100	U	24	100
2,4,5-Trichlorophenol	100	U	26	100
2,4-Dinitrophenol	300	U	54	300
4-Nitrophenol	300	U	67	300
4,6-Dinitro-2-methylphenol	300	U	47	300
Pentachlorophenol	300	U	53	300
Benzoic acid	~~500~~	~~U~~ R	~~500~~	500
Bis(2-chloroethyl)ether	10	U J	2.8	10
1,3-Dichlorobenzene	100	U	24	100
1,4-Dichlorobenzene	100	U	25	100
1,2-Dichlorobenzene	100	U	25	100
N-Nitrosodi-n-propylamine	10	U	2.5	10
Hexachloroethane	10	U	2.5	10
Nitrobenzene	10	U	3.0	10
Isophorone	100	U	27	100
Bis(2-chloroethoxy)methane	100	U	26	100
1,2,4-Trichlorobenzene	10	U	2.6	10
Naphthalene	1200	D J	27	100
4-Chloroaniline	100	U J	20	100
Hexachlorobutadiene	20	U J	5.7	20
2-Methylnaphthalene	72	J D	30	100
Hexachlorocyclopentadiene	100	U J	17	100
2-Chloronaphthalene	100	U	27	100
2-Nitroaniline	200	U	49	200
Dimethyl phthalate	100	U	28	100
Acenaphthylene	100	U	27	100
2,6-Dinitrotoluene	20	U	6.1	20
3-Nitroaniline	200	U	50	200
Acenaphthene	100	U	27	100
Dibenzofuran	32	J D	28	100
2,4-Dinitrotoluene	20	U J	4.7	20
Diethyl phthalate	100	U J	29	100
4-Chlorophenyl phenyl ether	100	U J	25	100
Fluorene	48	J D	28	100
4-Nitroaniline	200	U J	58	200
N-Nitrosodiphenylamine	100	U	29	100
4-Bromophenyl phenyl ether	100	U	25	100
Hexachlorobenzene	10	U	2.9	10

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: I-111

Lab Sample ID: 200-11392-3
Client Matrix: Water

Date Sampled: 06/20/2012 1400
Date Received: 06/21/2012 1020

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-117383	Instrument ID:	BNAMS5
Prep Method:	3510C	Prep Batch:	460-117190	Lab File ID:	x27462.d
Dilution:	10			Initial Weight/Volume:	1000 mL
Analysis Date:	06/25/2012 1601	Run Type:	DL	Final Weight/Volume:	2 mL
Prep Date:	06/22/2012 1520			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Phenanthrene	100	U	31	100
Anthracene	100	U	28	100
Carbazole	100	U	32	100
Di-n-butyl phthalate	100	U	29	100
Fluoranthene	100	U	32	100
Pyrene	100	U	29	100
Butyl benzyl phthalate	100	U	25	100
3,3'-Dichlorobenzidine	200	U	49	200
Benzo[a]anthracene	10	U	2.7	10
Chrysene	100	U	31	100
Bis(2-ethylhexyl) phthalate	100	U	20	100
Di-n-octyl phthalate	100	U	15	100
Benzo[b]fluoranthene	10	U	2.6	10
Benzo[k]fluoranthene	10	U	2.6	10
Benzo[a]pyrene	10	U	1.4	10
Indeno[1,2,3-cd]pyrene	10	U	1.5	10
Dibenz(a,h)anthracene	10	U	0.90	10
Benzo[g,h,i]perylene	100	U	20	100
2,2'-oxybis[1-chloropropane]	100	U	20	100

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	0	D	56 - 112
Phenol-d5	0	D	10 - 48
Terphenyl-d14	0	D	50 - 122
2,4,6-Tribromophenol	0	D	46 - 122
2-Fluorophenol	0	D	10 - 65
2-Fluorobiphenyl	0	D	53 - 108

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: I-112

Lab Sample ID: 200-11392-4
Client Matrix: Water

Date Sampled: 06/20/2012 1500
Date Received: 06/21/2012 1020

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-117383	Instrument ID:	BNAMS5
Prep Method:	3510C	Prep Batch:	460-117190	Lab File ID:	x27464.d
Dilution:	20			Initial Weight/Volume:	1000 mL
Analysis Date:	06/25/2012 1650	Run Type:	DL	Final Weight/Volume:	2 mL
Prep Date:	06/22/2012 1520			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Phenol	17	J D	16	200
2-Chlorophenol	200	U J	44	200
2-Methylphenol	200	U	36	200
3 & 4 Methylphenol	200	U	32	200
2-Nitrophenol	200	U	48	200
2,4-Dimethylphenol	200	U	68	200
2,4-Dichlorophenol	200	U	52	200
4-Chloro-3-methylphenol	200	U	50	200
2,4,6-Trichlorophenol	200	U	48	200
2,4,5-Trichlorophenol	200	U	52	200
2,4-Dinitrophenol	600	U	110	600
4-Nitrophenol	600	U	130	600
4,6-Dinitro-2-methylphenol	600	U	94	600
Pentachlorophenol	600	U	110	600
Benzoic acid	~~1000~~	~~U~~ R	~~1000~~	1000
Bis(2-chloroethyl)ether	20	U J	5.6	20
1,3-Dichlorobenzene	200	U	48	200
1,4-Dichlorobenzene	200	U	50	200
1,2-Dichlorobenzene	200	U	50	200
N-Nitrosodi-n-propylamine	20	U	5.0	20
Hexachloroethane	20	U	5.0	20
Nitrobenzene	20	U	6.0	20
Isophorone	200	U	54	200
Bis(2-chloroethoxy)methane	200	U	52	200
1,2,4-Trichlorobenzene	20	U	5.2	20
Naphthalene	1700	D J	54	200
4-Chloroaniline	200	U J	40	200
Hexachlorobutadiene	40	U J	11	40
2-Methylnaphthalene	86	J D	60	200
Hexachlorocyclopentadiene	200	U J	34	200
2-Chloronaphthalene	200	U	54	200
2-Nitroaniline	400	U	98	400
Dimethyl phthalate	200	U	56	200
Acenaphthylene	200	U	54	200
2,6-Dinitrotoluene	40	U	12	40
3-Nitroaniline	400	U	100	400
Acenaphthene	200	U	54	200
Dibenzofuran	200	U	56	200
2,4-Dinitrotoluene	40	U	9.4	40
Diethyl phthalate	200	U	58	200
4-Chlorophenyl phenyl ether	200	U	50	200
Fluorene	70	J D	56	200
4-Nitroaniline	400	U J	120	400
N-Nitrosodiphenylamine	200	U	58	200
4-Bromophenyl phenyl ether	200	U	50	200
Hexachlorobenzene	20	U	5.8	20

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: I-112

Lab Sample ID: 200-11392-4
Client Matrix: Water

Date Sampled: 06/20/2012 1500
Date Received: 06/21/2012 1020

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-117383	Instrument ID:	BNAMS5
Prep Method:	3510C	Prep Batch:	460-117190	Lab File ID:	x27464.d
Dilution:	20			Initial Weight/Volume:	1000 mL
Analysis Date:	06/25/2012 1650	Run Type:	DL	Final Weight/Volume:	2 mL
Prep Date:	06/22/2012 1520			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Phenanthrene	200	U 3	62	200
Anthracene	200	U	56	200
Carbazole	200	U	64	200
Di-n-butyl phthalate	200	U	58	200
Fluoranthene	200	U	64	200
Pyrene	200	U	58	200
Butyl benzyl phthalate	200	U	50	200
3,3'-Dichlorobenzidine	400	U	98	400
Benzo[a]anthracene	20	U	5.4	20
Chrysene	200	U	62	200
Bis(2-ethylhexyl) phthalate	200	U	40	200
Di-n-octyl phthalate	200	U	30	200
Benzo[b]fluoranthene	20	U	5.2	20
Benzo[k]fluoranthene	20	U	5.2	20
Benzo[a]pyrene	20	U	2.8	20
Indeno[1,2,3-cd]pyrene	20	U	3.0	20
Dibenz(a,h)anthracene	20	U	1.8	20
Benzo[g,h,i]perylene	200	U	40	200
2,2'-oxybis[1-chloropropane]	200	U	40	200

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	0	D	56 - 112
Phenol-d5	0	D	10 - 48
Terphenyl-d14	0	D	50 - 122
2,4,6-Tribromophenol	0	D	46 - 122
2-Fluorophenol	0	D	10 - 65
2-Fluorobiphenyl	0	D	53 - 108

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: **DUP-SW-01-06202012**

Lab Sample ID: 200-11392-6
Client Matrix: Water

Date Sampled: 06/20/2012 0000
Date Received: 06/21/2012 1020

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-117497	Instrument ID:	BNAMS5
Prep Method:	3510C	Prep Batch:	460-117190	Lab File ID:	x27482.d
Dilution:	5.0			Initial Weight/Volume:	450 mL
Analysis Date:	06/26/2012 1103			Final Weight/Volume:	1 mL
Prep Date:	06/22/2012 1520			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Phenol	16	J	4.5	56
2-Chlorophenol	56	U	12	56
2-Methylphenol	13	J	10	56
3 & 4 Methylphenol	43	J	8.9	56
2-Nitrophenol	56	U	13	56
2,4-Dimethylphenol	56	U	19	56
2,4-Dichlorophenol	56	U	14	56
4-Chloro-3-methylphenol	56	U	14	56
2,4,6-Trichlorophenol	56	U	13	56
2,4,5-Trichlorophenol	56	U	14	56
2,4-Dinitrophenol	170	U	30	170
4-Nitrophenol	170	U J	37	170
4,6-Dinitro-2-methylphenol	170	U	26	170
Pentachlorophenol	170	U	29	170
Benzoic acid	~~280~~	~~U~~ * R	~~280~~	280
Bis(2-chloroethyl)ether	5.6	U	1.6	5.6
1,3-Dichlorobenzene	56	U	13	56
1,4-Dichlorobenzene	56	U	14	56
1,2-Dichlorobenzene	56	U	14	56
N-Nitrosodi-n-propylamine	5.6	U	1.4	5.6
Hexachloroethane	5.6	U	1.4	5.6
Nitrobenzene	5.6	U	1.7	5.6
Isophorone	56	U	15	56
Bis(2-chloroethoxy)methane	56	U	14	56
1,2,4-Trichlorobenzene	5.6	U	1.4	5.6
Naphthalene	510		15	56
4-Chloroaniline	56	U	11	56
Hexachlorobutadiene	11	U	3.2	11
2-Methylnaphthalene	31	J	17	56
Hexachlorocyclopentadiene	56	U	9.4	56
2-Chloronaphthalene	56	U	15	56
2-Nitroaniline	110	U	27	110
Dimethyl phthalate	56	U	16	56
Acenaphthylene	56	U	15	56
2,6-Dinitrotoluene	11	U	3.4	11
3-Nitroaniline	110	U	28	110
Acenaphthene	56	U	15	56
Dibenzofuran	16	J	16	56
2,4-Dinitrotoluene	11	U	2.6	11
Diethyl phthalate	56	U	16	56
4-Chlorophenyl phenyl ether	56	U	14	56
Fluorene	24	J	16	56
4-Nitroaniline	110	U	32	110
N-Nitrosodiphenylamine	56	U	16	56
4-Bromophenyl phenyl ether	56	U	14	56
Hexachlorobenzene	5.6	U	1.6	5.6

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: **DUP-SW-01-06202012**

Lab Sample ID: 200-11392-6
Client Matrix: Water

Date Sampled: 06/20/2012 0000
Date Received: 06/21/2012 1020

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-117497	Instrument ID:	BNAMS5
Prep Method:	3510C	Prep Batch:	460-117190	Lab File ID:	x27482.d
Dilution:	5.0			Initial Weight/Volume:	450 mL
Analysis Date:	06/26/2012 1103			Final Weight/Volume:	1 mL
Prep Date:	06/22/2012 1520			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Phenanthrene	56	U	17	56
Anthracene	56	U	16	56
Carbazole	56	U	18	56
Di-n-butyl phthalate	56	U	16	56
Fluoranthene	56	U	18	56
Pyrene	56	U	16	56
Butyl benzyl phthalate	56	U	14	56
3,3'-Dichlorobenzidine	110	U	27	110
Benzo[a]anthracene	5.6	U	1.5	5.6
Chrysene	56	U	17	56
Bis(2-ethylhexyl) phthalate	56	U	11	56
Di-n-octyl phthalate	56	U	8.3	56
Benzo[b]fluoranthene	5.6	U	1.4	5.6
Benzo[k]fluoranthene	5.6	U	1.4	5.6
Benzo[a]pyrene	5.6	U	0.78	5.6
Indeno[1,2,3-cd]pyrene	5.6	U	0.83	5.6
Dibenz(a,h)anthracene	5.6	U	0.50	5.6
Benzo[g,h,i]perylene	56	U	11	56
2,2'-oxybis[1-chloropropane]	56	U	11	56

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	69		56 - 112
Phenol-d5	48		10 - 48
Terphenyl-d14	61		50 - 122
2,4,6-Tribromophenol	62		46 - 122
2-Fluorophenol	59		10 - 65
2-Fluorobiphenyl	78		53 - 108

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: **OF-1**

Lab Sample ID: 200-11392-1
Client Matrix: Water

Date Sampled: 06/20/2012 0900
Date Received: 06/21/2012 1020

8015B Diesel Range Organics (DRO) (GC)

Analysis Method:	8015B	Analysis Batch:	200-41066	Instrument ID:	3012.i
Prep Method:	3510C	Prep Batch:	200-40738	Initial Weight/Volume:	675 mL
Dilution:	10			Final Weight/Volume:	1000 uL
Analysis Date:	06/28/2012 0515			Injection Volume:	2 uL
Prep Date:	06/21/2012 2103			Result Type:	PRIMARY

Analyte	Result (mg/L)	Qualifier	MDL	RL
Diesel Range Organics [C10-C28]	4.4	B J	0.44	1.5

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	0	X	15 - 150

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: **I-120**

Lab Sample ID: 200-11392-2
Client Matrix: Water

Date Sampled: 06/20/2012 1200
Date Received: 06/21/2012 1020

8015B Diesel Range Organics (DRO) (GC)

Analysis Method:	8015B	Analysis Batch:	200-41066	Instrument ID:	3012.i
Prep Method:	3510C	Prep Batch:	200-40738	Initial Weight/Volume:	1060 mL
Dilution:	10			Final Weight/Volume:	1000 uL
Analysis Date:	06/28/2012 0552			Injection Volume:	2 uL
Prep Date:	06/21/2012 2103			Result Type:	PRIMARY

Analyte	Result (mg/L)	Qualifier	MDL	RL
Diesel Range Organics [C10-C28]	4.3	~~B~~ J	0.28	0.94

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	0	X	15 - 150

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: **I-111**

Lab Sample ID: 200-11392-3
Client Matrix: Water

Date Sampled: 06/20/2012 1400
Date Received: 06/21/2012 1020

8015B Diesel Range Organics (DRO) (GC)

Analysis Method:	8015B	Analysis Batch:	200-41066	Instrument ID:	3012.i
Prep Method:	3510C	Prep Batch:	200-40738	Initial Weight/Volume:	1060 mL
Dilution:	10			Final Weight/Volume:	1000 uL
Analysis Date:	06/28/2012 0819			Injection Volume:	2 uL
Prep Date:	06/21/2012 2103			Result Type:	PRIMARY

Analyte	Result (mg/L)	Qualifier	MDL	RL
Diesel Range Organics [C10-C28]	4.0	~~B~~ J	0.28	0.94

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	0	X	15 - 150

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: I-112

Lab Sample ID: 200-11392-4
Client Matrix: Water

Date Sampled: 06/20/2012 1500
Date Received: 06/21/2012 1020

8015B Diesel Range Organics (DRO) (GC)

Analysis Method:	8015B	Analysis Batch:	200-41066	Instrument ID:	3012.i
Prep Method:	3510C	Prep Batch:	200-40738	Initial Weight/Volume:	1060 mL
Dilution:	10			Final Weight/Volume:	1000 uL
Analysis Date:	06/28/2012 0856			Injection Volume:	2 uL
Prep Date:	06/21/2012 2103			Result Type:	PRIMARY

Analyte	Result (mg/L)	Qualifier	MDL	RL
Diesel Range Organics [C10-C28]	4.1	~~B~~ J	0.28	0.94

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	0	X	15 - 150

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: **DUP-SW-01-06202012**

Lab Sample ID: 200-11392-6
Client Matrix: Water

Date Sampled: 06/20/2012 0000
Date Received: 06/21/2012 1020

8015B Diesel Range Organics (DRO) (GC)

Analysis Method:	8015B	Analysis Batch:	200-41066	Instrument ID:	3012.i
Prep Method:	3510C	Prep Batch:	200-40738	Initial Weight/Volume:	305 mL
Dilution:	5.0			Final Weight/Volume:	1000 uL
Analysis Date:	06/28/2012 0932			Injection Volume:	2 uL
Prep Date:	06/21/2012 2103			Result Type:	PRIMARY

Analyte	Result (mg/L)	Qualifier	MDL	RL
Diesel Range Organics [C10-C28]	4.3	~~B~~ J	0.49	1.6

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	72		15 - 150

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: **OF-1**

Lab Sample ID: 200-11392-1
Client Matrix: Water

Date Sampled: 06/20/2012 0900
Date Received: 06/21/2012 1020

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40875	Instrument ID:	7227.i
Prep Method:	3510C	Prep Batch:	200-40739	Initial Weight/Volume:	510 mL
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	06/22/2012 1757			Injection Volume:	1 uL
Prep Date:	06/21/2012 2110			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.98	U	0.051	0.98
PCB-1221	0.98	U	0.084	0.98
PCB-1232	0.98	U	0.11	0.98
PCB-1242	0.98	U	0.092	0.98
PCB-1248	0.98	U	0.11	0.98
PCB-1254	0.98	U	0.039	0.98
PCB-1260	0.98	U	0.065	0.98
PCB-1262	0.98	U	0.088	0.98
PCB-1268	0.98	U	0.041	0.98

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	86		55 - 120
DCB Decachlorobiphenyl	36		30 - 150

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: **OF-1**

Lab Sample ID: 200-11392-1
Client Matrix: Water

Date Sampled: 06/20/2012 0900
Date Received: 06/21/2012 1020

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40875	Instrument ID:	7227.i
Prep Method:	3510C	Prep Batch:	200-40739	Initial Weight/Volume:	510 mL
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	06/22/2012 1757			Injection Volume:	1 uL
Prep Date:	06/21/2012 2110			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	103		55 - 120
DCB Decachlorobiphenyl	39		30 - 150

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: **I-120**

Lab Sample ID: 200-11392-2
Client Matrix: Water

Date Sampled: 06/20/2012 1200
Date Received: 06/21/2012 1020

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40875	Instrument ID:	7227.i
Prep Method:	3510C	Prep Batch:	200-40739	Initial Weight/Volume:	1060 mL
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	06/22/2012 1824			Injection Volume:	1 uL
Prep Date:	06/21/2012 2110			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.47	U J	0.025	0.47
PCB-1221	0.47	U	0.041	0.47
PCB-1232	0.47	U	0.052	0.47
PCB-1242	0.47	U	0.044	0.47
PCB-1248	0.47	U J	0.055	0.47
PCB-1254	0.47	U	0.019	0.47
PCB-1260	0.47	U	0.031	0.47
PCB-1262	0.47	U	0.042	0.47
PCB-1268	0.47	U	0.020	0.47

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	48	X	55 - 120
DCB Decachlorobiphenyl	29	X	30 - 150

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: I-120

Lab Sample ID: 200-11392-2
Client Matrix: Water

Date Sampled: 06/20/2012 1200
Date Received: 06/21/2012 1020

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40875	Instrument ID:	7227.i
Prep Method:	3510C	Prep Batch:	200-40739	Initial Weight/Volume:	1060 mL
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	06/22/2012 1824			Injection Volume:	1 uL
Prep Date:	06/21/2012 2110			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	55		55 - 120
DCB Decachlorobiphenyl	30		30 - 150

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: I-111

Lab Sample ID: 200-11392-3
Client Matrix: Water

Date Sampled: 06/20/2012 1400
Date Received: 06/21/2012 1020

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40875	Instrument ID:	7227.i
Prep Method:	3510C	Prep Batch:	200-40739	Initial Weight/Volume:	1060 mL
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	06/22/2012 1946			Injection Volume:	1 uL
Prep Date:	06/21/2012 2110			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.47	U	0.025	0.47
PCB-1221	0.47	U	0.041	0.47
PCB-1232	0.47	U	0.052	0.47
PCB-1242	0.47	U	0.044	0.47
PCB-1248	0.47	U	0.055	0.47
PCB-1254	0.47	U	0.019	0.47
PCB-1260	0.47	U	0.031	0.47
PCB-1262	0.47	U	0.042	0.47
PCB-1268	0.47	U	0.020	0.47

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	74		55 - 120
DCB Decachlorobiphenyl	25	X	30 - 150

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: I-111

Lab Sample ID: 200-11392-3
Client Matrix: Water

Date Sampled: 06/20/2012 1400
Date Received: 06/21/2012 1020

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40875	Instrument ID:	7227.i
Prep Method:	3510C	Prep Batch:	200-40739	Initial Weight/Volume:	1060 mL
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	06/22/2012 1946			Injection Volume:	1 uL
Prep Date:	06/21/2012 2110			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	93		55 - 120
DCB Decachlorobiphenyl	27	X	30 - 150

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: I-112

Lab Sample ID: 200-11392-4
Client Matrix: Water

Date Sampled: 06/20/2012 1500
Date Received: 06/21/2012 1020

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40875	Instrument ID:	7227.i
Prep Method:	3510C	Prep Batch:	200-40739	Initial Weight/Volume:	1060 mL
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	06/22/2012 2013			Injection Volume:	1 uL
Prep Date:	06/21/2012 2110			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.47	U	0.025	0.47
PCB-1221	0.47	U	0.041	0.47
PCB-1232	0.47	U	0.052	0.47
PCB-1242	0.47	U	0.044	0.47
PCB-1248	0.47	U	0.055	0.47
PCB-1254	0.47	U	0.019	0.47
PCB-1260	0.47	U	0.031	0.47
PCB-1262	0.47	U	0.042	0.47
PCB-1268	0.47	U	0.020	0.47

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	73		55 - 120
DCB Decachlorobiphenyl	26	X	30 - 150

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: **I-112**

Lab Sample ID: 200-11392-4
Client Matrix: Water

Date Sampled: 06/20/2012 1500
Date Received: 06/21/2012 1020

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40875	Instrument ID:	7227.i
Prep Method:	3510C	Prep Batch:	200-40739	Initial Weight/Volume:	1060 mL
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	06/22/2012 2013			Injection Volume:	1 uL
Prep Date:	06/21/2012 2110			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	95		55 - 120
DCB Decachlorobiphenyl	27	X	30 - 150

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: **DUP-SW-01-06202012**

Lab Sample ID: 200-11392-6
Client Matrix: Water

Date Sampled: 06/20/2012 0000
Date Received: 06/21/2012 1020

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40875	Instrument ID:	7227.i
Prep Method:	3510C	Prep Batch:	200-40739	Initial Weight/Volume:	330 mL
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	06/22/2012 2040			Injection Volume:	1 uL
Prep Date:	06/21/2012 2110			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	1.5	U	0.079	1.5
PCB-1221	1.5	U	0.13	1.5
PCB-1232	1.5	U	0.17	1.5
PCB-1242	1.5	U	0.14	1.5
PCB-1248	1.5	U	0.18	1.5
PCB-1254	1.5	U	0.061	1.5
PCB-1260	1.5	U	0.10	1.5
PCB-1262	1.5	U	0.14	1.5
PCB-1268	1.5	U	0.064	1.5

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	84		55 - 120
DCB Decachlorobiphenyl	33		30 - 150

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: **DUP-SW-01-06202012**

Lab Sample ID: 200-11392-6
Client Matrix: Water

Date Sampled: 06/20/2012 0000
Date Received: 06/21/2012 1020

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-40875	Instrument ID:	7227.i
Prep Method:	3510C	Prep Batch:	200-40739	Initial Weight/Volume:	330 mL
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	06/22/2012 2040			Injection Volume:	1 uL
Prep Date:	06/21/2012 2110			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	100		55 - 120
DCB Decachlorobiphenyl	35		30 - 150

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: **OF-1**

Lab Sample ID: 200-11392-1
Client Matrix: Water

Date Sampled: 06/20/2012 0900
Date Received: 06/21/2012 1020

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41285	Instrument ID:	METICP7
Prep Method:	3010A	Prep Batch:	200-40904	Lab File ID:	070212-01.ttx
Dilution:	2.0			Initial Weight/Volume:	100 mL
Analysis Date:	07/02/2012 1455			Final Weight/Volume:	100 mL
Prep Date:	06/25/2012 1434				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Aluminum	71900		78.0	400
Antimony	26.1	J	8.2	120
Arsenic	13.1	J	8.8	20.0
Barium	16.3	J	10.4	400
Beryllium	6.9	J	0.58	10.0
Cadmium	10.0	U	0.90	10.0
Calcium	335000		240	10000
Chromium	2190		1.1	20.0
Cobalt	14.4	J	1.8	100
Copper	9.4	J	3.2	50.0
Iron	1410000		78.0	400
Lead	64.0		10.8	20.0
Magnesium	28700		128	10000
Manganese	5070		3.8	30.0
Nickel	119		3.6	80.0
Potassium	18600		360	10000
Selenium	70.0	UJ	12.2	70.0
Silver	~~20.0~~	~~UL~~ R	~~4.2~~	~~20.0~~
Sodium	46300	~~B~~	102	10000
Thallium	18.3	J	5.2	50.0
Vanadium	28.1	J	3.2	100
Zinc	2630		1.5	40.0

7470A Mercury (CVAA)

Analysis Method:	7470A	Analysis Batch:	200-41178	Instrument ID:	MEPCV3 II
Prep Method:	7470A	Prep Batch:	200-41166	Lab File ID:	062912EE.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	06/29/2012 1533			Final Weight/Volume:	50 mL
Prep Date:	06/28/2012 1200				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.075	J	0.060	0.20

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: I-120

Lab Sample ID: 200-11392-2
Client Matrix: Water

Date Sampled: 06/20/2012 1200
Date Received: 06/21/2012 1020

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41285	Instrument ID:	METICP7
Prep Method:	3010A	Prep Batch:	200-40904	Lab File ID:	070212-01.ttx
Dilution:	2.0			Initial Weight/Volume:	100 mL
Analysis Date:	07/02/2012 1500			Final Weight/Volume:	100 mL
Prep Date:	06/25/2012 1434				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Aluminum	73100		78.0	400
Antimony	22.6	J	8.2	120
Arsenic	13.8	J	8.8	20.0
Barium	21.2	J	10.4	400
Beryllium	7.0	J	0.58	10.0
Cadmium	10.0	U	0.90	10.0
Calcium	341000		240	10000
Chromium	2220		1.1	20.0
Cobalt	14.0	J	1.8	100
Copper	9.6	J	3.2	50.0
Iron	1440000		78.0	400
Lead	65.2		10.8	20.0
Magnesium	29100		128	10000
Manganese	5140		3.8	30.0
Nickel	121		3.6	80.0
Potassium	19200		360	10000
Selenium	70.0	UJ	12.2	70.0
Silver	~~20.0~~	~~U~~ R	~~4.2~~	~~20.0~~
Sodium	47200	~~B~~	102	10000
Thallium	22.4	J	5.2	50.0
Vanadium	28.6	J	3.2	100
Zinc	2690		1.5	40.0

7470A Mercury (CVAA)

Analysis Method:	7470A	Analysis Batch:	200-41178	Instrument ID:	MEPCV3 II
Prep Method:	7470A	Prep Batch:	200-41166	Lab File ID:	062912EE.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	06/29/2012 1535			Final Weight/Volume:	50 mL
Prep Date:	06/28/2012 1200				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.060	0.20

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: I-111

Lab Sample ID: 200-11392-3
Client Matrix: Water

Date Sampled: 06/20/2012 1400
Date Received: 06/21/2012 1020

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41285	Instrument ID:	METICP7
Prep Method:	3010A	Prep Batch:	200-40904	Lab File ID:	070212-01.ttx
Dilution:	2.0			Initial Weight/Volume:	100 mL
Analysis Date:	07/02/2012 1525			Final Weight/Volume:	100 mL
Prep Date:	06/25/2012 1434				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Aluminum	74200		78.0	400
Antimony	25.1	J	8.2	120
Arsenic	14.9	J	8.8	20.0
Barium	14.4	J	10.4	400
Beryllium	7.1	J	0.58	10.0
Cadmium	10.0	U	0.90	10.0
Calcium	343000		240	10000
Chromium	2280		1.1	20.0
Cobalt	14.6	J	1.8	100
Copper	8.8	J	3.2	50.0
Iron	1450000		78.0	400
Lead	63.6		10.8	20.0
Magnesium	29100		128	10000
Manganese	5270		3.8	30.0
Nickel	120		3.6	80.0
Potassium	19200		360	10000
Selenium	70.0	UJ	12.2	70.0
Silver	~~20.0~~	~~UL~~ R	~~4.2~~	~~20.0~~
Sodium	47300	~~B~~	102	10000
Thallium	14.4	J	5.2	50.0
Vanadium	29.6	J	3.2	100
Zinc	2750		1.5	40.0

7470A Mercury (CVAA)

Analysis Method:	7470A	Analysis Batch:	200-41178	Instrument ID:	MEPCV3 II
Prep Method:	7470A	Prep Batch:	200-41166	Lab File ID:	062912EE.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	06/29/2012 1542			Final Weight/Volume:	50 mL
Prep Date:	06/28/2012 1200				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.060	0.20

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: I-112

Lab Sample ID: 200-11392-4
Client Matrix: Water

Date Sampled: 06/20/2012 1500
Date Received: 06/21/2012 1020

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41285	Instrument ID:	METICP7
Prep Method:	3010A	Prep Batch:	200-40904	Lab File ID:	070212-01.ttx
Dilution:	2.0			Initial Weight/Volume:	100 mL
Analysis Date:	07/02/2012 1530			Final Weight/Volume:	100 mL
Prep Date:	06/25/2012 1434				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Aluminum	76300		78.0	400
Antimony	21.7	J	8.2	120
Arsenic	8.9	J	8.8	20.0
Barium	20.0	J	10.4	400
Beryllium	7.0	J	0.58	10.0
Cadmium	10.0	U	0.90	10.0
Calcium	342000		240	10000
Chromium	2390		1.1	20.0
Cobalt	12.8	J	1.8	100
Copper	8.3	J	3.2	50.0
Iron	1430000		78.0	400
Lead	26.8		10.8	20.0
Magnesium	28200		128	10000
Manganese	5260		3.8	30.0
Nickel	102		3.6	80.0
Potassium	18000		360	10000
Selenium	70.0	U J	12.2	70.0
Silver	~~20.0~~	~~UL~~ R	~~4.2~~	~~20.0~~
Sodium	49800	~~B~~	102	10000
Thallium	16.0	J	5.2	50.0
Vanadium	16.8	J	3.2	100
Zinc	2430		1.5	40.0

7470A Mercury (CVAA)

Analysis Method:	7470A	Analysis Batch:	200-41178	Instrument ID:	MEPCV3 II
Prep Method:	7470A	Prep Batch:	200-41166	Lab File ID:	062912EE.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	06/29/2012 1544			Final Weight/Volume:	50 mL
Prep Date:	06/28/2012 1200				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.060	0.20

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

Client Sample ID: **DUP-SW-01-06202012**

Lab Sample ID: 200-11392-6
Client Matrix: Water

Date Sampled: 06/20/2012 0000
Date Received: 06/21/2012 1020

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41285	Instrument ID:	METICP7
Prep Method:	3010A	Prep Batch:	200-40904	Lab File ID:	070212-01.ttx
Dilution:	2.0			Initial Weight/Volume:	100 mL
Analysis Date:	07/02/2012 1551			Final Weight/Volume:	100 mL
Prep Date:	06/25/2012 1434				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Aluminum	72400		78.0	400
Antimony	24.2	J	8.2	120
Arsenic	20.1		8.8	20.0
Barium	13.6	J	10.4	400
Beryllium	7.0	J	0.58	10.0
Cadmium	10.0	U	0.90	10.0
Calcium	336000		240	10000
Chromium	2220		1.1	20.0
Cobalt	13.5	J	1.8	100
Copper	8.9	J	3.2	50.0
Iron	1430000		78.0	400
Lead	61.0		10.8	20.0
Magnesium	28500		128	10000
Manganese	5130		3.8	30.0
Nickel	120		3.6	80.0
Potassium	18900		360	10000
Selenium	70.0	U J	12.2	70.0
Silver	~~20.0~~	~~UL~~ R	~~4.2~~	~~20.0~~
Sodium	46300	~~B~~	102	10000
Thallium	19.7	J	5.2	50.0
Vanadium	28.3	J	3.2	100
Zinc	2650		1.5	40.0

7470A Mercury (CVAA)

Analysis Method:	7470A	Analysis Batch:	200-41178	Instrument ID:	MEPCV3 II
Prep Method:	7470A	Prep Batch:	200-41166	Lab File ID:	062912EE.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	06/29/2012 1546			Final Weight/Volume:	50 mL
Prep Date:	06/28/2012 1200				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.060	0.20

General Chemistry

Client Sample ID: **OF-1**

Lab Sample ID: 200-11392-1
Client Matrix: Water

Date Sampled: 06/20/2012 0900
Date Received: 06/21/2012 1020

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia (as N)	93.3		mg/L	0.65	5.0	5.0	4500 NH3 H
Analysis Batch: 460-120359	Analysis Date: 07/18/2012 1418						
Prep Batch: 460-120294	Prep Date: 07/18/2012 0630						
pH	1.38	HF J	SU			1.0	9040B
Analysis Batch: 460-118714	Analysis Date: 07/05/2012 1625						
Chloride	69.9		mg/L	4.0	20.0	20	9056
Analysis Batch: 680-241660	Analysis Date: 06/26/2012 1240						
Nitrate as N	0.25	U H	mg/L	0.075	0.25	5.0	9056
Analysis Batch: 680-241426	Analysis Date: 06/22/2012 1225						
Nitrite as N	~~0.25~~	R U H	mg/L	~~0.075~~	~~0.25~~	5.0	9056
Analysis Batch: 680-241426	Analysis Date: 06/22/2012 1225						
Sulfate	7540		mg/L	104	200	200	9056
Analysis Batch: 680-241660	Analysis Date: 06/26/2012 1252						
Fluoride	4.0	U	mg/L	0.80	4.0	20	9056
Analysis Batch: 680-241660	Analysis Date: 06/26/2012 1240						
Bicarbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	5.0	1.0	SM 2320B
Analysis Batch: 460-118497	Analysis Date: 07/03/2012 1457						
Carbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	5.0	1.0	SM 2320B
Analysis Batch: 460-118497	Analysis Date: 07/03/2012 1457						
Alkalinity	5.0	U	mg/L	5.0	5.0	1.0	SM 2320B
Analysis Batch: 460-118497	Analysis Date: 07/03/2012 1457						
Phosphorus as PO4	51.7		mg/L	0.25	1.5	50	SM 4500 P E
Analysis Batch: 460-120487	Analysis Date: 07/18/2012 1730						
Prep Batch: 460-120484	Prep Date: 07/18/2012 1130						
Phosphorus as P	16.8		mg/L	0.25	1.5	50	SM 4500 P E
Analysis Batch: 460-120487	Analysis Date: 07/18/2012 1730						
Prep Batch: 460-120484	Prep Date: 07/18/2012 1130						
Sulfide	0.71	J	mg/L	0.63	1.0	1.0	SM 4500 S2 E
Analysis Batch: 460-118363	Analysis Date: 06/27/2012 2000						

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

General Chemistry

Client Sample ID: I-120

Lab Sample ID: 200-11392-2
Client Matrix: Water

Date Sampled: 06/20/2012 1200
Date Received: 06/21/2012 1020

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia (as N)	83.1		mg/L	0.65	5.0	5.0	4500 NH3 H
Analysis Batch: 460-120359	Analysis Date: 07/18/2012 1421						
Prep Batch: 460-120294	Prep Date: 07/18/2012 0630						
pH	1.39	HF J	SU			1.0	9040B
Analysis Batch: 460-118714	Analysis Date: 07/05/2012 1623						
Chloride	71.9		mg/L	4.0	20.0	20	9056
Analysis Batch: 680-241660	Analysis Date: 06/26/2012 1304						
Nitrate as N	0.25	U	mg/L	0.075	0.25	5.0	9056
Analysis Batch: 680-241426	Analysis Date: 06/22/2012 1006						
Nitrite as N	~~0.25~~	~~U~~ R	mg/L	~~0.075~~	~~0.25~~	5.0	9056
Analysis Batch: 680-241426	Analysis Date: 06/22/2012 1006						
Sulfate	7620		mg/L	104	200	200	9056
Analysis Batch: 680-241660	Analysis Date: 06/26/2012 1317						
Fluoride	4.0	U	mg/L	0.80	4.0	20	9056
Analysis Batch: 680-241660	Analysis Date: 06/26/2012 1304						
Bicarbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	5.0	1.0	SM 2320B
Analysis Batch: 460-117871	Analysis Date: 06/27/2012 2111						
Carbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	5.0	1.0	SM 2320B
Analysis Batch: 460-117871	Analysis Date: 06/27/2012 2111						
Alkalinity	5.0	U	mg/L	5.0	5.0	1.0	SM 2320B
Analysis Batch: 460-117871	Analysis Date: 06/27/2012 2111						
Phosphorus as PO4	50.8		mg/L	0.25	1.5	50	SM 4500 P E
Analysis Batch: 460-120487	Analysis Date: 07/18/2012 1730						
Prep Batch: 460-120484	Prep Date: 07/18/2012 1130						
Phosphorus as P	16.6		mg/L	0.25	1.5	50	SM 4500 P E
Analysis Batch: 460-120487	Analysis Date: 07/18/2012 1730						
Prep Batch: 460-120484	Prep Date: 07/18/2012 1130						
Sulfide	9.6	J	mg/L	0.63	1.0	1.0	SM 4500 S2 E
Analysis Batch: 460-118363	Analysis Date: 06/27/2012 2000						

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1
Sdg Number: 11392

General Chemistry

Client Sample ID: I-111

Lab Sample ID: 200-11392-3
Client Matrix: Water

Date Sampled: 06/20/2012 1400
Date Received: 06/21/2012 1020

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia (as N)	87.8		mg/L	0.65	5.0	5.0	4500 NH3 H
Analysis Batch: 460-120359	Analysis Date: 07/18/2012 1433						
Prep Batch: 460-120294	Prep Date: 07/18/2012 0630						
pH	1.38	HF J	SU			1.0	9040B
Analysis Batch: 460-118714	Analysis Date: 07/05/2012 1626						
Chloride	71.5		mg/L	4.0	20.0	20	9056
Analysis Batch: 680-241660	Analysis Date: 06/26/2012 1821						
Nitrate as N	0.25	U	mg/L	0.075	0.25	5.0	9056
Analysis Batch: 680-241426	Analysis Date: 06/22/2012 1052						
Nitrite as N	~~0.25~~	U R	mg/L	~~0.075~~	~~0.25~~	5.0	9056
Analysis Batch: 680-241426	Analysis Date: 06/22/2012 1052						
Sulfate	7600		mg/L	104	200	200	9056
Analysis Batch: 680-241660	Analysis Date: 06/26/2012 1834						
Fluoride	4.0	U	mg/L	0.80	4.0	20	9056
Analysis Batch: 680-241660	Analysis Date: 06/26/2012 1821						
Bicarbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	5.0	1.0	SM 2320B
Analysis Batch: 460-117871	Analysis Date: 06/27/2012 2118						
Carbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	5.0	1.0	SM 2320B
Analysis Batch: 460-117871	Analysis Date: 06/27/2012 2118						
Alkalinity	5.0	U	mg/L	5.0	5.0	1.0	SM 2320B
Analysis Batch: 460-117871	Analysis Date: 06/27/2012 2118						
Phosphorus as PO4	51.4		mg/L	0.25	1.5	50	SM 4500 P E
Analysis Batch: 460-120487	Analysis Date: 07/18/2012 1730						
Prep Batch: 460-120484	Prep Date: 07/18/2012 1130						
Phosphorus as P	16.8		mg/L	0.25	1.5	50	SM 4500 P E
Analysis Batch: 460-120487	Analysis Date: 07/18/2012 1730						
Prep Batch: 460-120484	Prep Date: 07/18/2012 1130						
Sulfide	1.5	J	mg/L	0.63	1.0	1.0	SM 4500 S2 E
Analysis Batch: 460-118363	Analysis Date: 06/27/2012 2000						

General Chemistry

Client Sample ID: I-112

Lab Sample ID: 200-11392-4
Client Matrix: Water

Date Sampled: 06/20/2012 1500
Date Received: 06/21/2012 1020

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia (as N)	86.7		mg/L	0.65	5.0	5.0	4500 NH3 H
Analysis Batch: 460-120359	Analysis Date: 07/18/2012 1436						
Prep Batch: 460-120294	Prep Date: 07/18/2012 0630						
pH	1.44	HF J	SU			1.0	9040B
Analysis Batch: 460-118714	Analysis Date: 07/05/2012 1627						
Chloride	76.6		mg/L	4.0	20.0	20	9056
Analysis Batch: 680-241660	Analysis Date: 06/26/2012 1858						
Nitrate as N	0.25	U	mg/L	0.075	0.25	5.0	9056
Analysis Batch: 680-241426	Analysis Date: 06/22/2012 1108						
Nitrite as N	~~0.25~~	U R	mg/L	~~0.075~~	~~0.25~~	5.0	9056
Analysis Batch: 680-241426	Analysis Date: 06/22/2012 1108						
Sulfate	7080		mg/L	104	200	200	9056
Analysis Batch: 680-241660	Analysis Date: 06/26/2012 1911						
Fluoride	4.0	U	mg/L	0.80	4.0	20	9056
Analysis Batch: 680-241660	Analysis Date: 06/26/2012 1858						
Bicarbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	5.0	1.0	SM 2320B
Analysis Batch: 460-117871	Analysis Date: 06/27/2012 2122						
Carbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	5.0	1.0	SM 2320B
Analysis Batch: 460-117871	Analysis Date: 06/27/2012 2122						
Alkalinity	5.0	U	mg/L	5.0	5.0	1.0	SM 2320B
Analysis Batch: 460-117871	Analysis Date: 06/27/2012 2122						
Phosphorus as PO4	71.3		mg/L	0.50	3.0	100	SM 4500 P E
Analysis Batch: 460-120487	Analysis Date: 07/18/2012 1730						
Prep Batch: 460-120484	Prep Date: 07/18/2012 1130						
Phosphorus as P	23.3		mg/L	0.50	3.0	100	SM 4500 P E
Analysis Batch: 460-120487	Analysis Date: 07/18/2012 1730						
Prep Batch: 460-120484	Prep Date: 07/18/2012 1130						
Sulfide	3.3	J	mg/L	0.63	1.0	1.0	SM 4500 S2 E
Analysis Batch: 460-118363	Analysis Date: 06/27/2012 2000						

General Chemistry

Client Sample ID: **DUP-SW-01-06202012**

Lab Sample ID: 200-11392-6
Client Matrix: Water

Date Sampled: 06/20/2012 0000
Date Received: 06/21/2012 1020

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia (as N)	82.6		mg/L	0.65	5.0	5.0	4500 NH3 H
Analysis Batch: 460-120359	Analysis Date: 07/18/2012 1439						
Prep Batch: 460-120294	Prep Date: 07/18/2012 0630						
pH	1.38	HF J	SU			1.0	9040B
Analysis Batch: 460-118714	Analysis Date: 07/05/2012 1628						
Chloride	70.6		mg/L	4.0	20.0	20	9056
Analysis Batch: 680-241660	Analysis Date: 06/26/2012 1923						
Nitrate as N	0.25	U H	mg/L	0.075	0.25	5.0	9056
Analysis Batch: 680-241426	Analysis Date: 06/22/2012 1210						
Nitrite as N	~~0.25~~	R U H	mg/L	~~0.075~~	~~0.25~~	5.0	9056
Analysis Batch: 680-241426	Analysis Date: 06/22/2012 1210						
Sulfate	7510		mg/L	104	200	200	9056
Analysis Batch: 680-241660	Analysis Date: 06/26/2012 1936						
Fluoride	4.0	U	mg/L	0.80	4.0	20	9056
Analysis Batch: 680-241660	Analysis Date: 06/26/2012 1923						
Bicarbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	5.0	1.0	SM 2320B
Analysis Batch: 460-117871	Analysis Date: 06/27/2012 2125						
Carbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	5.0	1.0	SM 2320B
Analysis Batch: 460-117871	Analysis Date: 06/27/2012 2125						
Alkalinity	5.0	U	mg/L	5.0	5.0	1.0	SM 2320B
Analysis Batch: 460-117871	Analysis Date: 06/27/2012 2125						
Phosphorus as PO4	51.0		mg/L	0.25	1.5	50	SM 4500 P E
Analysis Batch: 460-120487	Analysis Date: 07/18/2012 1730						
Prep Batch: 460-120484	Prep Date: 07/18/2012 1130						
Phosphorus as P	16.6		mg/L	0.25	1.5	50	SM 4500 P E
Analysis Batch: 460-120487	Analysis Date: 07/18/2012 1730						
Prep Batch: 460-120484	Prep Date: 07/18/2012 1130						
Sulfide	1.5	J	mg/L	0.63	1.0	1.0	SM 4500 S2 E
Analysis Batch: 460-118363	Analysis Date: 06/27/2012 2000						

General Chemistry

Client Sample ID: **OF-1**

Lab Sample ID: 200-11392-1
Client Matrix: Water

Date Sampled: 06/20/2012 0900
Date Received: 06/21/2012 1020

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.77		mg/L	0.0028	0.020	1.0	9012A
Analysis Batch: 460-118452	Analysis Date: 07/03/2012 1144						
Prep Batch: 460-118406	Prep Date: 07/03/2012 0630						
Cyanide, Free	961		ug/L	10.8	40.0	20	9016
Analysis Batch: 460-118307	Analysis Date: 06/29/2012 1200						
Prep Batch: 460-118292	Prep Date: 06/29/2012 0600						

General Chemistry

Client Sample ID: **I-120**

Lab Sample ID: 200-11392-2
Client Matrix: Water

Date Sampled: 06/20/2012 1200
Date Received: 06/21/2012 1020

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.76		mg/L	0.0028	0.020	1.0	9012A
Analysis Batch: 460-118452	Analysis Date: 07/03/2012 1143						
Prep Batch: 460-118406	Prep Date: 07/03/2012 0630						
Cyanide, Free	640		ug/L	10.8	40.0	20	9016
Analysis Batch: 460-118307	Analysis Date: 06/29/2012 1200						
Prep Batch: 460-118292	Prep Date: 06/29/2012 0600						

General Chemistry

Client Sample ID: **I-111**

Lab Sample ID: 200-11392-3
Client Matrix: Water

Date Sampled: 06/20/2012 1400
Date Received: 06/21/2012 1020

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.76		mg/L	0.0028	0.020	1.0	9012A
Analysis Batch: 460-118452	Analysis Date: 07/03/2012 1147						
Prep Batch: 460-118406	Prep Date: 07/03/2012 0630						
Cyanide, Free	642		ug/L	10.8	40.0	20	9016
Analysis Batch: 460-118307	Analysis Date: 06/29/2012 1200						
Prep Batch: 460-118292	Prep Date: 06/29/2012 0600						

General Chemistry

Client Sample ID: **I-112**

Lab Sample ID: 200-11392-4
Client Matrix: Water

Date Sampled: 06/20/2012 1500
Date Received: 06/21/2012 1020

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.59		mg/L	0.0028	0.020	1.0	9012A
Analysis Batch: 460-118452	Analysis Date: 07/03/2012 1149						
Prep Batch: 460-118406	Prep Date: 07/03/2012 0630						
Cyanide, Free	480		ug/L	10.8	40.0	20	9016
Analysis Batch: 460-118307	Analysis Date: 06/29/2012 1200						
Prep Batch: 460-118292	Prep Date: 06/29/2012 0600						

General Chemistry

Client Sample ID: **DUP-SW-01-06202012**

Lab Sample ID: 200-11392-6
Client Matrix: Water

Date Sampled: 06/20/2012 0000
Date Received: 06/21/2012 1020

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.67		mg/L	0.0028	0.020	1.0	9012A
Analysis Batch: 460-118452	Analysis Date: 07/03/2012 1150						
Prep Batch: 460-118406	Prep Date: 07/03/2012 0630						
Cyanide, Free	810		ug/L	10.8	40.0	20	9016
Analysis Batch: 460-118307	Analysis Date: 06/29/2012 1200						
Prep Batch: 460-118292	Prep Date: 06/29/2012 0600						

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Consolidated Edison Company of New York, Inc. - Krasdale

Data Usability Summary Report (DUSR)

HUNTS POINT, BRONX, NEW YORK

Volatile Organic Compounds (VOCs), Semivolatile Organic Compounds (SVOCs), Polychlorinated Biphenyls (PCBs), Metals, and Miscellaneous Analyses

SDG #: 200-11441

Analyses Performed By:
TestAmerica Laboratories
Burlington, Vermont

Report #: 17013R
Review Level: Tier III
Project: B0043027.0002.08000

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) # 200-11441 for samples collected in association with the Consolidated Edison Krasdale site. The review was conducted as a Tier III evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis					
					VOC	SVOC	PCB	DRO	MET	MISC
SB-18 (3-3.5)	200-11441-1	Soil	6/22/2012		X	X	X		X	X
SB-17 (4-5)	200-11441-2	Soil	6/22/2012		X	X	X		X	X
SB-28A (8.7-9.7)	200-11441-3	Soil	6/22/2012		X	X	X		X	X
SB-15 (5.5-6.5)	200-11441-4	Soil	6/22/2012		X	X	X		X	X
SB-10 (5-6)	200-11441-5	Soil	6/22/2012		X	X	X		X	X
SB-10 (7.4-8.4)	200-11441-6	Soil	6/22/2012		X	X	X		X	X
SB-16 (7.9-8.9)	200-11441-7	Soil	6/22/2012		X	X	X		X	X
SB-09 (8-8.9)	200-11441-8	Soil	6/22/2012		X	X	X		X	X
SB-08 (13.9-14.5)	200-11441-9	Soil	6/19/2012		X	X	X		X	X
SB-08 (12.8-13.9)	200-11441-10	Soil	6/19/2012		X	X	X		X	X
TB-06212012	200-11441-11	Water	6/22/2012		X					
SB-22 (5.7-6.7)	200-11460-1	Soil	6/23/2012		X	X	X		X	X
SB-23 (5-6)	200-11460-2	Soil	6/23/2012		X	X	X		X	X
SB-24 (5.5-6.5)	200-11460-3	Soil	6/23/2012		X	X	X		X	X
SB-17 (10-10.7)	200-11460-4	Soil	6/25/2012		X	X	X		X	X
SB-17 (11.2-12.2)	200-11460-5	Soil	6/25/2012		X	X	X		X	X
SB-18 (11.1-11.7)	200-11460-6	Soil	6/25/2012		X	X	X		X	X
TB-06252012	200-11460-7	Water	6/25/2012		X					
DUP-04-06252012	200-11460-8	Soil	6/25/2012	SB-17 (10-10.7)	X	X	X		X	X

Note: Soil sample results were reported on a dry weight basis except for pH, corrosivity, and ammonia, which were reported on an as-received (wet weight) basis.

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

QA - Quality Assurance

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Methods 8260B, 8270C, and 8082A as referenced in NYSDEC-ASP. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999 and USEPA Region II SOPs associated with USEPA SW-846 Validating Volatile Organic Compounds by GC/MS SW-846 Method 8260B (SOP HW-24 Revision 2, October 2006), Validating Semivolatile Organic Compounds by GC/MS SW-846 Method 8270D (SOP HW-22 Revision 3, October 2006), and Validating PCB Compounds by GC SW-846 Method 8082A (SOP HW-45 Revision 1, October 2006).

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected as unusable. The compound may or may not be present in the sample.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260B	Soil	48 hours from collection to extraction and 14 days from collection to analysis	Cool to 4±2 °C
	Water	14 days from collection to analysis	Cool to 4±2 °C; pH < 2 with HCl

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e. laboratory method blanks, trip blanks, and equipment rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure sample storage contamination. Rinse blanks also measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All compounds associated with the QA blanks exhibited a concentration less than the MDL, with the exception of the compounds listed in the following table. Sample results associated with QA blank contamination that were greater than the BAL resulted in the removal of the laboratory qualifier (B) of data. Sample results less than the BAL associated with the following sample locations were qualified as listed in the following table.

Sample Location	Analytes	Sample Result	Qualification
SB-18 (3-3.5) SB-18 (3-3.5)RE SB-17 (4-5) SB-28A (8.7-9.7) SB-15 (5.5-6.5) SB-10 (7.4-8.4) SB-16 (7.9-8.9) SB-09 (8-8.9) SB-08 (13.9-14.5) SB-08 (12.8-13.9) SB-22 (5.7-6.7) SB-22 (5.7-6.7)RE SB-23 (5-6) SB-23 (5-6)RE SB-24 (5.5-6.5) SB-24 (5.5-6.5)RE SB-18 (11.1-11.7)	Methylene chloride	Detected sample results < RL and < BAL	"UB" at the RL

Sample Location	Analytes	Sample Result	Qualification
SB-23 (5-6)RE SB-24 (5.5-6.5)RE	Ethylbenzene	Detected sample results < RL and < BAL	"UB" at the RL
SB-28A (8.7-9.7) SB-28A (8.7-9.7)RE SB-10 (7.4-8.4) SB-08 (13.9-14.5) SB-22 (5.7-6.7) SB-22 (5.7-6.7)RE SB-23 (5-6) SB-24 (5.5-6.5) SB-24 (5.5-6.5)RE SB-18 (11.1-11.7)	Toluene		
SB-18 (3-3.5) SB-18 (3-3.5)RE SB-17 (4-5) SB-17 (4-5)RE SB-22 (5.7-6.7) SB-22 (5.7-6.7)RE	1,2,4-Trichlorobenzene		

RL Reporting limit

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration (ICV)

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) or a correlation coefficient greater than 0.99, and a RRF value greater than control limit (0.05).

4.2 Continuing Calibration (CCV)

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

Sample Locations	Initial / Continuing	Compound	Criteria
SB-17 (10-10.7) TB-06252012 DUP-04-06252012	Initial %RSD	Bromomethane	24.9 %
		2-Butanone	18.0 %
SB-18 (3-3.5) SB-18 (3-3.5)RE SB-17 (4-5) SB-17 (4-5)RE SB-28A (8.7-9.7) SB-28A (8.7-9.7)RE SB-15 (5.5-6.5) SB-10 (7.4-8.4) SB-16 (7.9-8.9) SB-09 (8-8.9) SB-08 (13.9-14.5) SB-08 (12.8-13.9) SB-22 (5.7-6.7) SB-22 (5.7-6.7)RE SB-23 (5-6) SB-23 (5-6)RE SB-24 (5.5-6.5) SB-24 (5.5-6.5)RE SB-17 (11.2-12.2) SB-18 (11.1-11.7)	Initial %RSD	Chloroethane	16.2 %
		Acetone	19.6 %
		2-Butanone	20.4 %
TB-06212012	Continuing %D	Dichlorodifluoromethane	-35.2 % (decrease in sensitivity)
		Chloromethane	-31.1 % (decrease in sensitivity)
		Bromomethane	-57.7 % (decrease in sensitivity)
SB-10 (5-6)	Continuing %D	Dichlorodifluoromethane	-24.5 % (decrease in sensitivity)
		Chloromethane	-21.6 % (decrease in sensitivity)
		Bromomethane	-37.8 % (decrease in sensitivity)
		Acetone	+20.5 % (increase in sensitivity)
SB-17 (10-10.7) TB-06252012 DUP-04-06252012	Continuing %D	Dichlorodifluoromethane	+38.3 % (increase in sensitivity)
		Vinyl chloride	+26.0 % (increase in sensitivity)
SB-22 (5.7-6.7) SB-22 (5.7-6.7)RE	Continuing %D	Dichlorodifluoromethane	-26.7 % (decrease in sensitivity)
		Methyl acetate	+23.9 % (increase in sensitivity)
		1,1-Dichloroethane	+20.1 % (increase in sensitivity)
		1,2-Dichloropropane	+21.3 % (increase in sensitivity)

Sample Locations	Initial / Continuing	Compound	Criteria
SB-18 (3-3.5) SB-17 (4-5) SB-28A (8.7-9.7) SB-15 (5.5-6.5) SB-10 (7.4-8.4) SB-16 (7.9-8.9) SB-09 (8-8.9) SB-08 (12.8-13.9) SB-23 (5-6) SB-24 (5.5-6.5) SB-17 (11.2-12.2) SB-18 (11.1-11.7)	Continuing %D	Dichlorodifluoromethane	-34.3 % (decrease in sensitivity)
		2-Butanone	-21.8 % (decrease in sensitivity)
SB-18 (3-3.5)RE SB-17 (4-5)RE SB-28A (8.7-9.7)RE SB-08 (13.9-14.5) SB-23 (5-6)RE SB-24 (5.5-6.5)RE	Continuing %D	Dichlorodifluoromethane	-37.6 % (decrease in sensitivity)

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Initial/Continuing	Criteria	Sample Result	Qualification
Initial and Continuing Calibration	RRF < 0.05	Non-detect	R
		Detect	J
	RRF < 0.01[1]	Non-detect	R
		Detect	J
	RRF > 0.05 or RRF > 0.01[1]	Non-detect	No Action
		Detect	
Initial Calibration	%RSD > 15% or a correlation coefficient < 0.99	Non-detect	UJ
		Detect	J
Continuing Calibration	%D > 20% (increase in sensitivity)	Non-detect	No Action
		Detect	J
	%D > 20% (decrease in sensitivity)	Non-detect	UJ
		Detect	J

[1] RRF of 0.01 only applies to typically poor responding compounds (e.g. ketones, 1,4-dioxane, etc.)

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

Sample locations associated with surrogates exhibiting recoveries outside of the control limits are presented in the following table. Reanalysis of the samples exhibited similar results.

Sample Locations	Surrogate	Recovery
SB-23 (5-6)	1,2-Dichloroethane-d_4	AC
	1,2-Dichlorobenzene-d_4 Toluene-d_8 4-Bromofluorobenzene	> UL
SB-22 (5.7-6.7)	1,2-Dichloroethane-d_4 1,2-Dichlorobenzene-d_4	AC
	Toluene-d_8 4-Bromofluorobenzene	> UL
SB-18 (3-3.5) SB-17 (4-5) SB-28A (8.7-9.7) SB-24 (5.5-6.5) SB-17 (11.2-12.2)	1,2-Dichloroethane-d_4 Toluene-d_8 1,2-Dichlorobenzene-d_4	AC
	4-Bromofluorobenzene	> UL

UL Upper control limit
AC Acceptable

The criteria used to evaluate the surrogate recoveries are presented in the following table. In the case of a surrogate deviation, the sample results associated with the deviant fraction are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> UL	Non-detect	No Action
	Detect	J
< LL but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
Surrogates diluted below the calibration curve	Non-detect	UJ[1]
	Detect	J[1]

[1] A more concentrated analysis was not performed with surrogate compounds within the calibration range; therefore, no determination of extraction efficiency could be made.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC analysis exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

Sample locations associated with internal standards exhibiting responses outside of the control limits are presented in the following table.

Sample Location	Internal Standard	Response
SB-18 (3-3.5) SB-17 (4-5) SB-28A (8.7-9.7) SB-18 (11.1-11.7)	Fluorobenzene Chlorobenzene-d_5	AC
	1,4-Dichlorobenzene-d_4	< LL but > 25%
SB-22 (5.7-6.7)	Fluorobenzene	AC
	Chlorobenzene-d_5 1,4-Dichlorobenzene-d_4	< LL but > 25%
SB-23 (5-6)	Fluorobenzene Chlorobenzene-d_5 1,4-Dichlorobenzene-d_4	< LL but > 25%

AC Acceptable

The criteria used to evaluate the internal standard responses are presented in the following table. In the case of an internal standard deviation, the compounds quantitated under the deviant internal standard are qualified as documented in the table below.

Control limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No action
	Detect	J
< the lower control limit (LL) but > 25%	Non-detect	UJ
	Detect	J
< 25%	Non-detect	R
	Detect	J

Reanalysis of sample locations SB-18 (3-3.5) and SB-28A (8.7-9.7) exhibited internal standard areas within the control limits. The reanalysis of SB-22 (5.7-6.7) exhibited only one internal standard (1,4-dichlorobenzene-d_4) with response area less than the lower control limit. Therefore, the results from the reanalyses of SB-18 (3-3.5), SB-28A (8.7-9.7), and SB-22 (5.7-6.7) were retained in preference to the initial results. Reanalysis of the remaining samples exhibited internal standard responses similar to the initial analyses. Therefore, the results from the initial analyses were reported in preference to the reanalyses.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The spiked compounds used in the MS/MSD analysis must exhibit recoveries within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS and MSD results must be within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSDs performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD spiking concentration by a factor of four or greater. Sample results associated with MS/MSD exceedances where the parent samples are not site-specific are not qualified.

Sample location SB-17 (11.2-12.2) was used in the MS/MSD analysis. Sample locations associated with the MS/MSD exhibiting recoveries outside of the control limits are presented in the following table.

Sample Location	Compound	MS Recovery	MSD Recovery
SB-17 (11.2-12.2)	Bromomethane trans-1,2-Dichloroethene 1,1-Dichloroethane Chloroform 1,1,1-Trichloroethane Carbon tetrachloride Trichloroethene 1,2-Dichloropropane Bromodichloromethane cis-1,3-Dichloropropene Styrene 1,2,4-Trichlorobenzene	< LL but > 10%	< LL but > 10%
	Methylene Chloride Methyl t-butyl ether cis-1,2-Dichloroethene trans-1,3-Dichloropropene	< LL but > 10%	AC
	1,1,2-Trichloro-1,2,2-trichfluoroethane Carbon disulfide Methylcyclohexane Tetrachloroethene	AC	< LL but > 10%
	Benzene 2-Hexanone Isopropylbenzene 1,1,2,2-Tetrachloroethane 1,2-Dibromo-3-Chloropropane	> UL	> UL
	Acetone 2-Butanone	> UL	AC

AC Acceptable

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of MS/MSD deviations, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
Parent sample concentration > 4x the MS/MSD spiking solution concentration.	Detect	No Action
	Non-detect	

Sample locations associated with MS/MSDs exhibiting RPDs greater than of the control limit are presented in the following table.

Sample Location	Compounds
SB-17 (11.2-12.2)	Acetone Benzene Methylcyclohexane trans-1,3-Dichloropropene 1,1,2-Trichloroethane 1,2-Dibromoethane Styrene 1,1,2,2-Tetrachloroethane

The criteria used to evaluate the RPD between the MS and MSD are presented in the following table. In the case of RPD deviations, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> UL	Non-detect	UJ
	Detect	J

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The spiked compounds used in the LCS analysis must exhibit recoveries within the laboratory-established acceptance limits.

Sample locations associated with LCS analyses exhibiting recoveries outside of the control limits are presented in the following table.

Sample Locations	Compounds	LCS Recovery
TB-06212012	Bromomethane Vinyl chloride	< LL but > 10%
SB-17 (10-10.7) TB-06252012 DUP-04-06252012	Vinyl chloride	< LL but > 10%

LL Lower control limit

The criteria used to evaluate the LCS recoveries are presented in the following table. In the case of any LCS deviations, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J

9. Field Duplicate Sample Analysis

The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. A control limit of 50% for water matrices and 100% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the reporting limit (RL), a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results (in µg/kg) for the field duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
SB-17 (10-10.7) / DUP-04-06252012	Benzene	14000	13000	7.4 %
	Carbon disulfide	11000	10000	9.5 %
	Ethylbenzene	73000	54000	29.9 %
	Isopropylbenzene	2700 J	3200 J	AC
	Toluene	4100 J	2600 J	AC
	Total Xylenes	62000	11000	139.7 %

AC Acceptable
J Estimated (result is < RL)

The total xylenes results for field duplicate samples SB-17 (10-10.7) and DUP-04-06252012 exhibited a RPD greater than the control limit. The total xylenes results for SB-17 (10-10.7) and DUP-04-06252012 were qualified as estimated.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW-846 8260B	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X	X		
B. Equipment/Field blanks					X
C. Trip blanks		X	X		
Laboratory Control Sample (LCS) Accuracy (%R)		X	X		
Laboratory Control Sample Duplicate (LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X	X		
Matrix Spike Duplicate (MSD) %R		X	X		
MS/MSD Precision RPD		X	X		
Field/Laboratory Duplicate Sample RPD		X	X		
Surrogate Spike %R		X	X		
Dilution Factor		X		X	
Moisture Content		X		X	
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X	X		
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X	X		
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X	X		
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Quantitation transcriptions/calculations		X		X	
E. Reporting limits adjusted for sample dilutions		X		X	

%R Percent recovery
RPD Relative percent difference
%RSD Relative standard deviation
%D Percent difference

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8270C	Water	7 days from collection to extraction and 40 days from extraction to analysis	Cool to 4±2 °C
	Soil	14 days from collection to extraction and 40 days from extraction to analysis	Cool to 4±2 °C

All samples were extracted and analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e. laboratory method blanks and equipment rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Target compounds were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution are acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration Verification (ICV)

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration Verification (CCV)

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

Sample Location	Initial/ Continuing	Compound	Criteria
SB-08 (13.9-14.5) SB-08 (12.8-13.9)	Continuing %D	Benzoic acid	-34.2 % (decrease in sensitivity)
SB-16 (7.9-8.9) SB-09 (8-8.9)	Continuing %D	Benzoic acid	-26.7 % (decrease in sensitivity)
SB-10 (5-6)	Continuing %D	Benzoic acid	-24.6 % (decrease in sensitivity)
DUP-04-06252012	Continuing %D	Benzoic acid	+22.6 % (increase in sensitivity)

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Initial/Continuing	Criteria	Sample Result	Qualification
Initial and Continuing Calibration	RRF < 0.05	Non-detect	R
		Detect	J
	RRF < 0.01[1]	Non-detect	R
		Detect	J
	RRF > 0.05 or RRF > 0.01[1]	Non-detect	No Action
		Detect	
Initial Calibration	%RSD > 15% or a correlation coefficient < 0.99	Non-detect	UJ
		Detect	J
Continuing Calibration	%D > 20% (increase in sensitivity)	Non-detect	No Action
		Detect	J
	%D > 20% (decrease in sensitivity)	Non-detect	UJ
		Detect	J

[1] RRF of 0.01 only applies to typically poor responding compounds (e.g. ketones, 1,4-dioxane, etc.)

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. SVOC analysis requires that two of the three SVOC surrogate compounds within each fraction exhibit recoveries

within the laboratory-established acceptance limits, and that all SVOC surrogate recoveries be greater than ten percent.

Sample locations associated with surrogates exhibiting recoveries outside of the control limits presented in the following table.

Sample Locations	Surrogate	Recovery
SB-10 (5-6) SB-17 (10-10.7)	2,4,6-Tribromophenol 2-Fluorophenol Phenol-d_5 Nitrobenzene-d_5 2-Fluorobiphenyl Terphenyl-d_{14}	D

The criteria used to evaluate the surrogate recoveries are presented in the following table. In the case of surrogate deviations, the sample results associated with the deviant fraction are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
Surrogates diluted below the calibration range	Non-detect	J[1]
	Detect	

[1] A more concentrated analysis was not performed with surrogate compounds within the calibration range; therefore, no determination of extraction efficiency could be made.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the SVOC analysis exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within the control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit recoveries within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS and MSD results must be within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. Sample results associated with MS/MSD exceedances where the parent samples are not site-specific are not qualified.

Sample location SB-17 (11.2-12.2) was used in the MS/MSD analyses. Sample locations associated with the MS/MSD exhibiting recoveries outside of the control limits are presented in the following table.

Sample Location	Compound	MS Recovery	MSD Recovery
SB-17 (11.2-12.2)	4-Chloroaniline 3,3'-Dichlorobenzidine	< 10%	< 10%
	4-Nitrophenol	AC	< 10%
	Hexachlorocyclopentadiene 3-Nitroaniline 4-Nitroaniline n-Nitrosodiphenylamine	< LL but > 10%	< LL but > 10%
	4-Bromophenyl phenyl ether Benzo[g,h,i]perylene Dibenz(a,h)anthracene Indeno[1,2,3-cd]pyrene	> UL	> UL
	Benzo[b]fluoranthene	AC	> UL

AC Acceptable

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of MS/MSD deviations, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
Parent sample concentration > 4x the MS/MSD spiking solution concentration.	Detect	No Action
	Non-detect	

Sample locations associated with MS/MSDs exhibiting RPDs greater than of the control limit are presented in the following table.

Sample Location	Compound
SB-17 (11.2-12.2)	Pentachlorophenol

The criteria used to evaluate the RPD between the MS and MSD are presented in the following table. In the case of RPD deviations, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> UL	Non-detect	UJ
	Detect	J

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The spiked compounds used in the LCS analysis must exhibit recoveries within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

9. Field Duplicate Sample Analysis

The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. A control limit of 50% for water matrices and 100% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the reporting limit (RL), a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results (in µg/kg) for the field duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
SB-17 (10-10.7) / DUP-04-06252012	2-Methylnaphthalene	6200	3400	58.3 %
	Anthracene	2300 J	570 J	AC
	Benzo[a]anthracene	2500	1200	70.3 %
	Benzo[a]pyrene	1500	840	56.4 %
	Benzo[b]fluoranthene	1700	700	83.3 %
	Benzo[g,h,i]perylene	1500 J	890 J	AC
	Benzo[k]fluoranthene	670	330	68.0 %
	Chrysene	2700 J	1300 J	AC
	Dibenz(a,h)anthracene	340 J	190 J	AC
	Dibenzofuran	2100 J	3000 U	AC
	Fluoranthene	4300 J	1300 J	AC
	Fluorene	3400 J	460 J	AC
	Indeno[1,2,3-cd]pyrene	1400	660	71.8 %
	Naphthalene	63000	27000	80.0 %
	Phenanthrene	10000	2500 J	AC
	Pyrene	3700 J	2400 J	AC

AC Acceptable
J Estimated (result is < RL)
U Not detected

The field duplicate sample results are acceptable.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR SVOCs

SVOCs: SW-846 8270C	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding Times		X		X	
Reporting Limits (units)		X		X	
Blanks					
A. Method Blanks		X		X	
B. Equipment/Field Blanks					X
Laboratory Control Sample (LCS) Accuracy (%R)		X		X	
Laboratory Control Sample Duplicate (LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X	X		
Matrix Spike Duplicate (MSD) %R		X	X		
MS/MSD RPD		X	X		
Field/Laboratory Duplicate Sample RPD		X		X	
Surrogate Spike %R		X	X		
Dilution Factor		X		X	
Moisture Content		X		X	
Tier III Validation					
System Performance and Column Resolution		X		X	
Initial Calibration %RSDs		X		X	
Continuing Calibration RRFs		X		X	
Continuing Calibration %Ds		X	X		
Instrument Tune and Performance Check		X		X	
Ion Abundance Criteria for Each Instrument Used		X		X	
Internal Standards		X		X	
Compound Identification and Quantitation					
A. Reconstructed Ion Chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of Sample Compounds Within the Established RT Windows		X		X	
D. Quantitation transcriptions/calculations		X		X	
E. Reporting Limits Adjusted for Sample Dilutions		X		X	

%R Percent Recovery
RPD Relative Percent Difference
%RSD Relative Standard Deviation
%D Percent Difference

POLYCHLORINATED BIPHENYLS (PCBs) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8082A	Water	7 days from collection to extraction and 40 days from extraction to analysis	Cool to 4±2 °C
	Soil	14 days from collection to extraction and 40 days from extraction to analysis	Cool to 4±2 °C

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e. laboratory method blanks and equipment rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Target analytes were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. System Performance

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

All target analytes associated with the initial calibration standards must exhibit a relative standard deviation (RSD) less than the method-specified control limit of 20% or a correlation coefficient greater than 0.99. Multiple-point calibrations were performed for Aroclor 1016 and 1260 only. Single-point calibrations were performed for the remaining Aroclors.

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (15%).

All Aroclors associated with calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

Sample Location	Initial / Continuing	Compound	Criteria
SB-18 (3-3.5)	Continuing %D	Aroclor 1260	- 22.8 % (decrease in sensitivity)

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Initial/Continuing	Criteria	Sample Result	Qualification
Initial Calibration	%RSD > 20% or a correlation coefficient <0.99	Non-detect	UJ
		Detect	J
Continuing Calibration	%D > 15% (increase in sensitivity)	Non-detect	No Action
		Detect	J
	%D > 15% (decrease in sensitivity)	Non-detect	UJ
		Detect	J

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. PCB analysis requires that at least one of the two PCB surrogate compounds exhibit recoveries within the laboratory-established acceptance limits.

Sample locations associated with surrogates exhibiting recoveries outside of the control limits presented in the following table.

Sample Location	Surrogate	Recovery
SB-17 (10-10.7) DUP-04-06252012	Tetrachloro-m-xylene Decachlorobiphenyl	D

D Diluted

The criteria used to evaluate the surrogate recoveries are presented in the following table. In the case of a surrogate deviation, the sample results associated with the deviant fraction are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J

Control Limit	Sample Result	Qualification
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
One surrogate exhibiting recovery outside the control limits but > 10%	Non-detect	No Action
	Detect	
Surrogates diluted below the calibration curve	Non-detect	J[1]
	Detect	

[1] A more concentrated analysis was not performed with surrogate compounds within the calibration range; therefore, no determination of extraction efficiency could be made.

6. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit recoveries within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS and MSD must be within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. Sample results associated with MS/MSD exceedances where the parent samples are not site-specific are not qualified.

Sample location SB-17 (11.2-12.2) was used in the MS/MSD analysis. The MS/MSD exhibited acceptable recoveries and RPDs between the MS and MSD results.

7. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The spiked analytes used in the LCS analysis must exhibit recoveries within the laboratory-established acceptance limits.

All analytes associated with the LCS analysis exhibited recoveries within the control limits.

8. Field Duplicate Sample Analysis

Field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. A control limit of 50% for water matrices and 100% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the reporting limit (RL), a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results (in µg/kg) for the field duplicate samples are summarized in the following table.

Sample ID / Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
SB-17 (10-10.7) / DUP-04-06252012	All Aroclors	U	U	AC

AC Acceptable
U Not detected

The field duplicate sample results are acceptable.

9. Analyte Identification

The retention times of all quantitated peaks must fall within the calculated retention time windows for both the primary and confirmation columns. When dual column analysis is performed the relative percent difference (RPD) between the detected analyte results calculated on each column must be less than 40%.

All sample results exhibited acceptable RPDs between the primary and confirmation columns.

10. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR PCBs

PCBs: SW-846 8082A	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY (GC/ECD)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment/Field blanks					X
Laboratory Control Sample (LCS) Accuracy %R		X		X	
Laboratory Control Sample Duplicate (LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD RPD		X		X	
Field/Laboratory Duplicate Sample RPD		X		X	
Surrogate Spike %R		X	X		
Column (%D) (If dual column is performed-not confirmation purposes only)		X		X	
Dilution Factor		X		X	
Moisture Content		X		X	
Tier III Validation					
Initial calibration %RSDs		X		X	
Continuing calibration %Ds		X	X		
System performance and column resolution		X		X	
Compound identification and quantitation					
A. Quantitation Reports		X		X	
B. RT of sample compounds within the established RT windows		X		X	
C. Identification/Confirmation		X		X	
D. Quantitation transcriptions/calculations		X		X	
E. Reporting limits adjusted for sample dilutions		X		X	

%R Percent recovery
RPD Relative percent difference
%RSD Relative standard deviation
%D Percent difference

INORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to (United States Environmental Protection Agency) SW-846 Methods 6010C, 7471B, 9012A, 9016, 9034, 9056, and 9045C, and Standard Methods (SM) 2320B, 4500-NH3-H, and 4500-P-E. Data were reviewed in accordance with USEPA National Functional Guidelines of July 2002.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and that it was already subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

    U The analyte was analyzed for but not detected. The associated value is the analyte instrument detection limit.

    B The reported value was obtained from a reading less than the contract-required detection limit (CRDL), but greater than or equal to the instrument detection limit (IDL).

- Quantitation (Q) Qualifiers

    E The reported value is estimated due to the presence of interference.

    N Spiked sample recovery is not within the control limits.

    * Duplicate analysis is not within the control limits.

- Validation Qualifiers

    J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.

    UJ The analyte was not detected above the reported sample detection limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.

    UB Analyte considered non-detect at the listed value due to associated blank contamination.

    R The sample results are rejected as unusable. The analyte may or may not be present in the sample.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

METALS ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 6010C	Water	180 days from collection to analysis	Cool to 4±2 °C; pH < 2 with HNO_3
	Soil	180 days from collection to analysis	Cool to 4±2 °C
SW-846 7470A	Water	28 days from collection to analysis	Cool to 4±2 °C; pH < 2 with HNO_3
SW-846 7471B	Soil	28 days from collection to analysis	Cool to 4±2 °C.

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e. laboratory method blanks and equipment rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks also measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected analyte in an associated blank (common laboratory contaminant analytes are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All analytes associated with the QA blanks exhibited a concentration less than the MDL with the exception of the analytes listed in the following table. Sample results associated with QA blank contamination that were greater than the BAL resulted in the removal of the laboratory qualifier ("B") of data. Sample results less than the BAL associated with the following sample locations were qualified as listed in the following table.

Sample Locations	Analyte	Sample Result	Qualification
SB-17 (11.2-12.2)	Mercury	Detected sample results < RL and < BAL	"UB" at the RL
SB-22 (5.7-6.7) SB-24 (5.5-6.5) SB-18 (11.1-11.7) DUP-04-06252012	Mercury	Detected sample results > RL and < BAL	"UB" at detected sample concentration

RL = reporting limit

3. Calibration

Satisfactory instrument calibration is established to provide that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration

verifies that the instrument's continuing performance is satisfactory.

3.1 Initial Calibration

The initial calibration must exhibit a correlation coefficient greater than 0.995. A technical review of the data applies limits to all analytes with no exceptions.

3.2 Continuing Calibration

All target analytes associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (10%).

The correct number and type of standards were analyzed. The correlation coefficient of the initial calibration was greater than 0.995 for all non-ICP analytes and all initial calibration verification standard recoveries were within the control limits.

All initial and continuing calibration verification standard recoveries were within the control limits.

3.3 Reporting limit (RL) Check Standard

The RL check standard serves to verify the linearity of calibration of the analysis at the RL. The RL standard is not required for the analysis of aluminum (Al), barium (Ba), calcium (Ca), iron (Fe), magnesium (Mg), sodium (Na), and potassium (K). The criteria used to evaluate the RL standard analysis are presented below in the RL standards evaluation table.

All RL standard recoveries were within the control limits.

3.4 ICP Interference Check Standard (ICS)

The ICS verifies the laboratories inter-element and background correction factors.

All ICS exhibited recoveries within the control limits.

4. Matrix Spike (MS) and Laboratory Duplicate Sample Analysis

MS and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

4.1 MS Analysis

All metal analytes must exhibit recoveries within the established acceptance limits of 75% to 125%. The MS control limits do not apply for MSs performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS spiking concentration by a factor of four or greater. In instance where this is true, the data will not be qualified and the laboratory qualifier "N" will be removed. Sample results associated with MS exceedances where the parent samples are not site-specific are not qualified.

Sample locations SB-18 (3-3.5) and SB-17 (11.2-12.2) were used in the MS analyses. All analytes associated with MS recoveries were within the control limits with the exception of the following analytes present in the table below.

Sample Location	Analyte	MS Recovery
SB-17 (11.2-12.2)	Antimony	17 %
	Arsenic	52 %

Sample Location	Analyte	MS Recovery
SB-17 (11.2-12.2)	Barium	74 %
	Beryllium	74 %
	Cadmium	71 %
	Chromium	73 %
	Cobalt	71 %
	Copper	74 %
	Nickel	68 %
	Selenium	63 %
	Silver	71 %
	Vanadium	73 %
	Zinc	66 %

The criteria used to evaluate MS recoveries are presented in the following table. In the case of MS deviations, the sample results are qualified. The qualifications are applied to all sample results associated with this analytical batch.

Control limit	Sample Result	Qualification
MS percent recovery 30% to 74%	Non-detect	UJ
	Detect	J
MS percent recovery < 30%	Non-detect	R
	Detect	J
MS percent recovery > 125%	Non-detect	No Action
	Detect	J

4.2 Laboratory Duplicate Sample Analysis

The laboratory duplicate sample relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to five times the RL. A control limit of 20% for water matrices and 35% for soil matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the RL, a control limit of one times the RL is applied for water matrices and two times the RL for soil matrices.

Sample location SB-17 (11.2-12.2) was used in the laboratory duplicate sample analyses. All analytes associated with laboratory duplicate sample RPDs were within the control limit, with the exception of the analytes presented in the following table.

Sample Location	Analytes	Laboratory RPD
SB-17 (11.2-12.2)	Calcium	63 %

The criteria used to evaluate laboratory duplicate RPD are presented in the following table. In the case of a laboratory duplicate sample RPD deviation, the sample results are qualified. The qualifications are applied to all sample results associated with this analytical batch.

Sample Concentration	Control Limit	Sample Result	Qualification
Parent sample and laboratory sample concentration > 5x RL	Water: 20% Soil: 35%	Non-detect	UJ
		Detect	J
Parent sample and/or laboratory duplicate sample result • 5x the RL and difference between samples > RL	Water: 1x RL Soil: 2x RL	Non-detect	UJ
		Detect	J

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit recoveries between the control limits of 80% and 120%.

The LCS analyses exhibited recoveries within the control limits.

6. Field Duplicate Sample Analysis

The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. A control limit of 50% for water matrices and 100% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

The field duplicate sample results (in mg/kg) are summarized in the following table.

Sample ID / Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
SB-17 (10-10.7) / DUP-04-06252012	Aluminum	1400	662	71.6 %
	Antimony	11.4	5.6 J	AC
	Arsenic	29.2	18.5	44.9 %
	Barium	56.8	16.7 J	AC
	Beryllium	0.87	0.21 J	AC
	Cadmium	11.7	0.12 J	NC
	Calcium	2780	2970	6.6 %
	Chromium	124	43.6	95.9 %
	Cobalt	10.1	6.1 J	AC
	Copper	110	68.2	46.9 %
	Iron	227000	59600	116.8 %
	Lead	568	41.6	172.7 %
	Magnesium	178 J	980	AC
	Manganese	351	55.2	145.6 %
	Nickel	33.7	43.6	25.6 %
	Potassium	197 J	67.5 J	AC

Sample ID / Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
SB-17 (10-10.7) / DUP-04-06252012	Silver	0.3 J	1.3 U	AC
	Sodium	270 J	80.2 J	AC
	Thallium	2.1 J	3.3 U	AC
	Vanadium	46	28	48.6 %
	Zinc	1110	44.8	184.5 %
	Mercury	0.76	0.1 U	NC

AC Acceptable
J Estimated (result is < RL)
U Not detected
NC Not compliant

The cadmium, iron, lead, manganese, mercury and zinc results for field duplicate samples SB-17 (10-10.7) and DUP-04-06252012 exhibited RPDs or differences greater than the control limits. The cadmium, iron, lead, manganese, mercury and zinc results for SB-17 (10-10.7) and DUP-04-06252012 were qualified as estimated.

7. Serial Dilution

The serial dilution analysis is used to assess if a significant physical or chemical interference exists due to sample matrix. Analytes exhibiting concentrations greater than 50 times the MDL in the undiluted sample are evaluated to determine if matrix interference exists. These analytes are required to have less than a 10% difference (%D) between sample results from the undiluted (parent) sample and results associated with the same sample analyzed with a five-fold dilution.

Sample locations SB-18 (3-3.5) and SB-17 (11.2-12.2) were used in the serial dilution analyses. All serial dilutions were within the control limits, with the exception of the analytes presented in the following table. The sample locations associated with the deviant %D are also presented in the following table.

Sample Location	Analyte	Serial Dilution (%D)
SB-18 (3-3.5)	Iron	11 %
SB-17 (11.2-12.2)	Aluminum	22 %
	Calcium	25 %
	Chromium	22 %
	Cobalt	24 %
	Iron	25 %
	Magnesium	24 %
	Manganese	27 %
	Potassium	21 %
	Sodium	22 %
	Vanadium	23 %
	Zinc	23 %

The criteria used to evaluate the serial dilution are presented in the following table. In the case of a serial dilution deviation, the sample results are qualified as documented in the table below. The qualifications

are applied to all sample results associated with this analytical batch.

Control Limit	Sample Result	Qualification
> UL	Non-detect	UJ
	Detect	J

8. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR METALS

METALS: SW-846 6010B and 7471B	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Inductively Coupled Plasma – Atomic Emission Spectrometry (ICP) Atomic Absorption – Manual Cold Vapor (CV)					
Tier II Validation					
Holding Times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Instrument Blanks		X	X		
B. Method Blanks		X	X		
C. Equipment/Field Blanks					X
Laboratory Control Sample (LCS)		X		X	
Matrix Spike (MS) Accuracy (%R)		X	X		
Matrix Spike Duplicate (MSD) %R					X
MS/MSD Precision (RPD)					X
Field/Laboratory Duplicate Sample RPD		X	X		
ICP Serial Dilution		X	X		
Dilution Factor		X		X	
Moisture Content		X		X	
Tier III Validation					
Initial Calibration Verification		X		X	
Continuing Calibration Verification		X		X	
RL Standard		X		X	
ICP Interference Check		X		X	
Quantitation transcriptions/calculations		X		X	
Reporting limits adjusted to reflect sample dilutions		X		X	

%R – Percent recovery
RPD – Relative percent difference

GENERAL CHEMISTRY ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
Alkalinity by SM 2320B	Water Soil	14 days from collection to analysis	Cool to 4±2 °C
Ammonia-N by SM 4500-NH3-H	Water	28 days from collection to analysis	Cool to 4±2 °C; pH of < 2
	Soil	28 days from collection to analysis	Cool to 4±2 °C;
Cyanide by SW-846 9012, 9016	Water	14 days from collection to analysis	Cool to 4±2 °C; pH of > 12.
	Soil	14 days from collection to analysis	Cool to 4±2 °C
Corrosivity by SW-846 9045	Soil	7 days from collection to analysis	Cool to 4°C+2°C
pH by SW-846 9045	Soil	Immediately upon sample receipt	Cool to 4±2 °C
Total Phosphorus by SM 4500-P-E	Water	28 days from collection to analysis	Cool to 4±2 °C; pH of < 2
	Soil	28 days from collection to analysis	Cool to 4±2 °C;
Reactive Sulfide by SW-846 9034	Soil	7 days from collection to analysis	Cool to 4°C+2°C
Chloride, Fluoride, Sulfate by SW-846 9056	Soil	28 days from collection to analysis	Cool to 4±2 °C
Nitrate-N by SW-846 9056	Water	28 days from collection to analysis	Cool to 4±2 °C; pH of < 2
	Soil	28 days from collection to analysis	Cool to 4±2 °C;
Nitrite-N by SW-846 9056	Water Soil	48 hours from collection to analysis	Cool to 4±2 °C

The analyses that exceeded the holding time are presented in the following table.

Sample Locations	Analyte	Analysis Completed	HT Criteria
SB-18 (3-3.5) SB-17 (4-5) SB-28A (8.7-9.7) SB-15 (5.5-6.5) SB-10 (5-6)	Corrosivity	> 14 Days	7 Days
SB-10 (7.4-8.4) SB-16 (7.9-8.9) SB-09 (8-8.9) SB-08 (13.9-14.5) SB-08 (12.8-13.9)	pH	> 14 Days	ASAP

Sample Locations	Analyte	Analysis Completed	HT Criteria
SB-22 (5.7-6.7) SB-24 (5.5-6.5)	Corrosivity	> 14 Days	7 Days
	pH	> 14 Days	ASAP
SB-24 (5.5-6.5)	Ammonia	18 Days	14 Days
SB-22 (5.7-6.7) SB-24 (5.5-6.5)	Nitrate Nitrite	> 96 Hours	48 Hours

Sample results were qualified as specified in the table below. All other holding times were met.

Criteria	Qualification	
	Detected Analytes	Non-detect Analytes
Analysis completed < 2x holding time	J	UJ
Analysis completed > 2x holding time	J	R

Note: Due to the ready conversion of nitrite into nitrate, nitrate results for samples analyzed greater than 48 hours after collection should be considered as nitrate+nitrite. The nitrate and nitrite results for sample location SB-24 (5.5-6.5) were non-detects and therefore do not require qualification.

2. Blank Contamination

Quality assurance (QA) blanks (i.e. laboratory method blanks and equipment rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected analyte in an associated blank is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were detected in the associated QA blanks; however, the associated sample results were non-detect. Therefore, no qualification of the sample results was required.

3. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

3.1 Initial Calibration

The initial calibration must exhibit a correlation coefficient greater than 0.995. A technical review of the data applies limits to all analytes with no exceptions.

3.2 Continuing Calibration

All target analytes associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (15%).

All analytes associated with the initial and continuing calibrations were within the specified control limits. The correct frequency and type of standards were analyzed.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) / Laboratory Duplicate Analyses

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

4.1 MS/MSD Analysis

All analytes must exhibit recoveries within the established acceptance limits of 75% to 125%. When a MSD analysis is performed, the relative percent difference (RPD) between the MS/MSD results must be within the established acceptance limits of 20% for water matrices and 35% for soil matrices.

Note: The MS/MSD control limits do not apply for MS/MSD analyses performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. Sample results associated with MS/MSD exceedances where the parent samples are not site-specific are not qualified.

All analytes associated with MS/MSD recoveries were within the control limits with the exception of the following analyte present in the table below.

Sample Location	Analyte	MS Recovery	MSD Recovery
SB-24 (5.5-6.5)	Sulfide	56 %	54 %
SB-17 (11.2-12.2)	Total Cyanide	126 %	124 %

The criteria used to evaluate MS/MSD recoveries are presented in the following table. In the case of MS/MSD deviations, the sample results are qualified. The qualifications are applied to all sample results associated with this analytical batch.

Control limit	Sample Result	Qualification
MS/MSD percent recovery 30% to 74%	Non-detect	UJ
	Detect	J
MS/MSD percent recovery < 30%	Non-detect	R
	Detect	J
MS/MSD percent recovery > 125%	Non-detect	No Action
	Detect	J

4.2 Laboratory Duplicate Sample Analysis

The laboratory duplicate sample relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to five times the reporting limit (RL). A control limit of 20% for water matrices and 35% for soil matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the RL, a control limit of one times the RL is applied for water matrices and two times the RL for soil matrices.

MS/MSD analysis was performed in lieu of the laboratory duplicate analysis; the results are acceptable.

5. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS/LCSD analysis must exhibit recoveries between the control limits of 80% and 120%. The relative percent difference (RPD) between the LCS and LCSD results must be no greater than the established acceptance limit of 20%.

Sample locations associated with LCS/LCSD analyses exhibiting recoveries outside of the control limits are presented in the following table.

Sample Location	Analyte	LCS Recovery	LCSD Recovery
SB-24 (5.5-6.5)	Sulfide	75 %	---

The criteria used to evaluate the LCS/LCSD recoveries are presented in the following table. In the case of any LCS/LCSD deviations, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J

6. Field Duplicate Sample Analysis

The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. A control limit of 50% for water matrices and 100% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the reporting limit (RL), a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results for the field duplicate samples are summarized in the following table.

Sample ID / Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
SB-17 (10-10.7) / DUP-04-06252012	Total Cyanide	583	240	83.4 %
	Free Cyanide	74.2	16.2	128.3 %

The total cyanide results for field duplicate samples SB-17 (10-10.7) and DUP-04-06252012 exhibited a RPD greater than the control limit. The total cyanide results for SB-17 (10-10.7) and DUP-04-06252012 were qualified as estimated.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR GENERAL CHEMISTRY

General Chemistry: EPA 9012A, 9016, 9034, 9056, and 9045C, and SM 2320B, 4500-NH3-H, and 4500-P-E	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Miscellaneous Instrumentation					
Tier II Validation					
Holding times		X	X		
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks					X
Laboratory Control Sample (LCS) Accuracy (%R)		X	X		
Laboratory Control Sample Duplicate (LCSD) %R		X		X	
LCS/LCSD Precision (RPD)		X		X	
Matrix Spike (MS) %R		X	X		
Matrix Spike Duplicate (MSD) %R		X	X		
MS/MSD RPD		X		X	
Field/Laboratory Duplicate Sample RPD		X	X		
Dilution Factor		X		X	
Moisture Content		X		X	
Tier III Validation					
Initial calibration %RSD or correlation coefficient		X		X	
Continuing calibration %R		X		X	
Raw Data		X		X	
Quantitation transcriptions/calculations		X		X	
Reporting limits adjusted for sample dilutions		X		X	

%RSD – relative standard deviation
%R – percent recovery
RPD – relative percent difference
%D – difference

SAMPLE COMPLIANCE REPORT

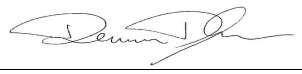
Sample Delivery Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	Compliancy[1]						Noncompliance
					VOC	SVOC	PCB	DRO	MET	MISC	
200-11441	6/22/2012	SW846	SB-18 (3-3.5)	Soil	No	Yes	No	---	No	No	VOC: Blank contamination; Calibration exceedance; Surrogate %R PCB: Calibration exceedance Metals: Serial dilution %D Misc: pH & corrosivity hold time exceedance
	6/22/2012	SW846	SB-17 (4-5)	Soil	No	Yes	Yes	---	No	No	VOC: Blank contamination; Calibration exceedance; Surrogate %R; Internal standard area Metals: Serial dilution %D Misc: pH & corrosivity hold time exceedance
	6/22/2012	SW846	SB-28A (8.7-9.7)	Soil	No	Yes	Yes	---	No	No	VOC: Blank contamination; Calibration exceedance; Surrogate %R Metals: Serial dilution %D Misc: pH & corrosivity hold time exceedance
	6/22/2012	SW846	SB-15 (5.5-6.5)	Soil	No	Yes	Yes	---	No	No	VOC: Blank contamination; Calibration exceedance Metals: Serial dilution %D Misc: pH & corrosivity hold time exceedance
	6/22/2012	SW846	SB-10 (5-6)	Soil	No	No	Yes	---	No	No	VOC: Calibration exceedance SVOC: Surrogate %R; Calibration exceedance Metals: Serial dilution %D Misc: pH & corrosivity hold time exceedance
	6/22/2012	SW846	SB-10 (7.4-8.4)	Soil	No	Yes	Yes	---	No	No	VOC: Blank contamination; Calibration exceedance Metals: Serial dilution %D Misc: pH & corrosivity hold time exceedance
	6/22/2012	SW846	SB-16 (7.9-8.9)	Soil	No	No	Yes	---	No	No	VOC: Blank contamination; Calibration exceedance SVOC: Calibration exceedance Metals: Serial dilution %D Misc: pH & corrosivity hold time exceedance

Sample Delivery Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	Compliancy[1]						Noncompliance
					VOC	SVOC	PCB	DRO	MET	MISC	
200-11441	6/22/2012	SW846	SB-09 (8-8.9)	Soil	No	No	Yes	---	No	No	VOC: Blank contamination; Calibration exceedance SVOC: Calibration exceedance Metals: Serial dilution %D Misc: pH & corrosivity hold time exceedance
	6/19/2012	SW846	SB-08 (13.9-14.5)	Soil	No	No	Yes	---	No	No	VOC: Blank contamination; Calibration exceedance SVOC: Calibration exceedance Metals: Serial dilution %D Misc: pH & corrosivity hold time exceedance
	6/19/2012	SW846	SB-08 (12.8-13.9)	Soil	No	No	Yes	---	No	No	VOC: Blank contamination; Calibration exceedance SVOC: Calibration exceedance Metals: Serial dilution %D Misc: pH & corrosivity hold time exceedance
	6/22/2012	SW846	TB-06212012	Water	No	---	---	---	---	---	VOC: Calibration exceedance; LCS %R
	6/23/2012	SW846	SB-22 (5.7-6.7)	Soil	No	Yes	Yes	---	No	No	VOC: Blank contamination; Calibration exceedance; Surrogate %R; Internal standard area Metals: Serial dilution %D; MS %R; Lab duplicate RPD; Blank contamination Misc: Nitrite, pH, & corrosivity hold time exceedance
	6/23/2012	SW846	SB-23 (5-6)	Soil	No	Yes	Yes	---	No	Yes	VOC: Blank contamination; Calibration exceedance; Internal standard area Metals: Serial dilution %D; MS %R; Lab duplicate RPD
	6/23/2012	SW846	SB-24 (5.5-6.5)	Soil	No	Yes	Yes	---	No	No	VOC: Blank contamination; Calibration exceedance; Surrogate %R Metals: Serial dilution %D; MS %R; Lab duplicate RPD; Blank contamination Misc: Alkalinity, pH, & corrosivity hold time exceedance

Sample Delivery Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	Compliancy[1]						Noncompliance
					VOC	SVOC	PCB	DRO	MET	MISC	
200-11441	6/25/2012	SW846	SB-17 (10-10.7)	Soil	No	No	No	---	No	No	VOC: Calibration exceedance; LCS %R; Field duplicate RPD SVOC: Surrogate %R PCB: Surrogate %R Metals: Serial dilution %D; MS %R; Lab duplicate RPD; Field duplicate RPD Misc: Cyanide MS/MSD %R; Field dup RPD
	6/25/2012	SW846	SB-17 (11.2-12.2)	Soil	No	No	Yes	---	No	No	VOC: Calibration exceedance; Surrogate %R; Internal standard area; MS/MSD %R; MS/MSD RPD SVOC: MS/MSD %R; MS/MSD RPD Metals: Serial dilution %D; MS %R; Lab duplicate RPD; Blank contamination Misc: Cyanide MS/MSD %R
	6/25/2012	SW846	SB-18 (11.1-11.7)	Soil	No	Yes	Yes	---	No	Yes	VOC: Blank contamination; Calibration exceedance Metals: Serial dilution %D; MS %R; Lab duplicate RPD; Blank contamination
	6/25/2012	SW846	TB-06252012	Water	No	---	---	---	---	---	VOC: Calibration exceedance; LCS %R
	6/25/2012	SW846	DUP-04-06252012	Soil	No	Yes	No	---	No	No	VOC: Calibration exceedance; LCS %R; Field duplicate RPD PCB: Surrogate %R Metals: Serial dilution %D; MS %R; Lab duplicate RPD; Blank contamination; Field duplicate RPD Misc: Cyanide MS/MSD %R; Field dup RPD

1 Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant or which have added qualifiers are listed as "no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable

Validation Performed By: Dennis Dyke

Signature: 

Date: August 31, 2012

Peer Review: Dennis Capria

Date: September 11, 2012

CHAIN OF CUSTODY /
CORRECTED SAMPLE ANALYSIS DATA SHEETS

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

Page 1 of 1

Name (for report and invoice) Meredith Hayes	Samplers Name (Printed) McBell	Site/Project Identification B0043029
Company ARCADIS	P. O. #	State (Location of site): NJ: ☐ NY: ☒ Other:
Address 655 3rd Ave 12 Floor	Analysis Turnaround Time: Standard ☒	Regulatory Program:
City NYC State NY	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	
Phone 631-682-0632 Fax		

Sample Identification	Date	Time	Matrix	No. of Cont.	TCL VOC	TCL SVOC	PCB	Cyanide	TAL Metals	pH						LAB USE ONLY Sample Numbers
SB-18 (3-2.5)	6/22/12	950	Soil	3	X	X	X	X	X	X						☆ 2-VOAs Trip blanks in cooler For VOCs
SB-17 (4-5)		1120		3	X	X	X	X	X	X						
SB-28A (8.7-9.7)		1310			X	X	X	X	X	X						
SB-15 (5.5-6.5)		1200			X	X	X	X	X	X						
SB-10 (5-6)		1030			X	X	X	X	X	X						
SB-10 (7.4-8.4)		1035			X	X	X	X	X	X						
SB-16 (7.9-8.9)		0945			X	X	X	X	X	X						
SB-09 (8-8.9)		0920			X	X	X	X	X	X						
SB-08 (13.9-14.5)	6/19/12	1610	Soil	3	X	X	X	X	X	X						
SB-08 (12.8-13.9)	6/19/12	1600	Soil	3	X	X	X	X	X	X						
Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH			Soil:		—	—	—	—	—	—						
6 = Other ____, 7 = Other NONE			Water:													

Special Instructions ☆ Metals include Mercury #3 SPG

Water Metals Filtered (Yes/No)? —

Relinquished by	Company	Date / Time	Received by	Company
1)	ARCADIS	6/22/12 1430	1)	TA NYC
2)	TA NYC	6/22/12 1615	2) 6/23/12 1010	FedEx
3)			3)	
4)			4)	

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). TAL - 0016 (0408)

Massachusetts (M-NJ312), North Carolina (No. 578)

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Madison, James W	Carrier Tracking No(s):	COC No: 200-8726.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jim.madison@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Analysis Requested		Job #: 200-11441-1
Address: 777 New Durham Road, ,	Due Date Requested: 7/9/2012			Preservation Codes:
City: Edison	TAT Requested (days):			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
State, Zip: NJ, 08817				
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:			Other:
Email:	WO #:			
Project Name: Krasdale, Hunts Point Bronx, NY	Project #: 20003974			
Site:	SSOW#:			

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9012A_Calc/ (MOD) Copy Analytes	9045C	9012A/9012A_Prep	8270C/3541 (MOD) Target Compound List for BNAs	9016/9016_ExtPrep								Total Number of containers	Special Instructions/Note:
			Preservation Code:																	
SB-18 (3-3.5) (200-11441-1)	6/22/12	09:50 Eastern		Solid			X	X	X	X	X								1	
SB-17 (4-5) (200-11441-2)	6/22/12	14:20 Eastern		Solid			X	X	X	X	X								1	
SB-28A (8.7-9.7) (200-11441-3)	6/22/12	13:10 Eastern		Solid			X	X	X	X	X								1	
SB-15 (5.5-6.5) (200-11441-4)	6/22/12	12:00 Eastern		Solid			X	X	X	X	X								1	
SB-10 (5-6) (200-11441-5)	6/22/12	10:30 Eastern		Solid			X	X	X	X	X								1	
SB-10 (7.4-8.4) (200-11441-6)	6/22/12	10:35 Eastern		Solid			X	X	X	X	X								1	
SB-16 (7.9-8.9) (200-11441-7)	6/22/12	09:45 Eastern		Solid			X	X	X	X	X								1	
SB-09 (8-8.9) (200-11441-8)	6/22/12	09:20 Eastern		Solid			X	X	X	X	X								1	
SB-08 (13.9-14.5) (200-11441-9)	6/19/12	16:10 Eastern		Solid			X	X	X	X	X								1	
SB-08 (12.8-13.9) (200-11441-10)	6/19/12	16:00 Eastern		Solid			X	X	X	X	X								1	

Possible Hazard Identification

Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	6/26/12 1700	TA-BAR	FEDEX		
Relinquished by: FEDEX	Date/Time:	Company	Received by: [signature]	Date/Time: 6/27/12 1010	Company Test 2
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.: 698445	Cooler Temperature(s) °C and Other Remarks: 3.1 IR#50

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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TA PM: Jim Madison

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

CHAIN OF CUSTODY / ANALYSIS REQUEST

Page 1 of ___

Name (for report and invoice) Meredith Mayer	Samplers Name (Printed) Matthew Bolt / D. Olivo	Site/Project Identification Con Ed - Kras Dale
Company ARCADIS	P. O. # 1300 43027. 0002. 68000	State (Location of site): NJ: ☐ NY: ☒ Other:
Address 655 Third Ave	Analysis Turnaround Time: Standard ☒	Regulatory Program:
City NY State NY	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	
Phone 212-682-9271 Fax		

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

Sample Identification	Date	Time	Matrix	No. of Cont.	VOCs	SVOCs	Metals *	PCBs	Cyanide	pH	Inorganics *	Anions *	MS/MSD			LAB USE ONLY Sample Numbers
SB-22 (5.7-6.7)	6/23/12	1200	Soil	4	X	X	X	X	X	X	X	X				
SB-23 (5-6)	6/23/12	1245	Soil	3	X	X	X	X	X	X						
SB-24 (5.5-6.5)	6/23/12	1330	Soil	4	X	X	X	X	X	X	X	X				
SB-17 (10-10.7)	6/25/12	1200	Soil	3	X	X	X	X	X	X						
SB-17 (11.2-12.2)	6/25/12	1205	Soil	3	X	X	X	X	X	X			X			
SB-18 (11.1-11.7)	6/25/12	1330	Soil	3	X	X	X	X	X	X						
TB-062512012	6/25/12	—	Soil	2												
DUP-01-062512012	6/25/12	—	Soil	3	X	X	X	X	X	X						
Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH			Soil:		1	1	1	1	1	1	1	1	1			
6 = Other _____, 7 = Other _____			Water:													

Special Instructions: * Metals includes Mg. Inorganics includes ammonia, [redacted], [redacted], sulfide, [redacted], phosphate, [redacted]

Water Metals Filtered (Yes/No)? _____

Relinquished by	Company	Date / Time	Received by	Company
1) [signature]	ARCADIS	6/25/12 1430	1) [signature]	TA NYC
Relinquished by 2) [signature]	Company TA NYC	Date / Time 6/25/12 16:00	Received by 2) [signature] 6/26/12 1050	Company TABER
Relinquished by 3)	Company	Date / Time	Received by 3)	Company
Relinquished by 4)	Company	Date / Time	Received by 4)	Company

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).
Massachusetts (M-NJ312), North Carolina (No. 578)

TAL - 0016 (0408)

@nvb/nica @Alkalinity

Anions include Nitrate, Nitrite, chloride, Sulfate, Fluoride

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Madison, James W	Carrier Tracking No(s):	COC No: 200-8727.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jim.madison@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Analysis Requested		Job #: 200-11441-1
Address: 777 New Durham Road, ,	Due Date Requested: 7/9/2012			Preservation Codes:
City: Edison	TAT Requested (days):			A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2SO3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - ph 4-5 L - EDA Z - other (specify) Other:
State, Zip: NJ, 08817				
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:			
Email:	WO #:			
Project Name: Krasdale, Hunts Point Bronx, NY	Project #: 20003974			
Site:	SSOW#:			

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9045C	9012A_Calc/ (MOD) Copy Analytes	SM4500_NH3_H/SM4500NH3_B	9016/9016_ExtPrep	2320B/DI_LEACH (MOD) Local Method	4500_P_E/SM4500_P_B	9034/9030B	8270C/3541 (MOD) Target Compound List for BNAs	9012A/9012A_Prep					Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
SB-22 (5.7-6.7) (200-11460-1)	6/23/12	12:00 Eastern		Solid			X	X	X	X	X	X	X	X	X					1	
SB-23 (5-6) (200-11460-2)	6/23/12	12:45 Eastern		Solid				X		X				X	X					1	
SB-24 (5.5-6.5) (200-11460-3)	6/23/12	13:30 Eastern		Solid			X	X	X	X	X	X	X	X	X					1	
SB-17 (10-10.7) (200-11460-4)	6/25/12	12:00 Eastern		Solid				X		X				X	X					1	
SB-17 (11.2-12.2) (200-11460-5)	6/25/12	12:05 Eastern		Solid				X		X				X	X					1	
SB-17 (11.2-12.2) (200-11460-5DU)	6/25/12	12:05 Eastern	DU	Solid				X		X					X					1	
SB-17 (11.2-12.2) (200-11460-5MS)	6/25/12	12:05 Eastern	MS	Solid				X		X				X	X					1	
SB-17 (11.2-12.2) (200-11460-5MSD)	6/25/12	12:05 Eastern	MSD	Solid										X						1	
SB-18 (11.1-11.7) (200-11460-6)	6/25/12	13:30 Eastern		Solid				X		X				X	X					1	
DUP-04-06252012 (200-11460-8)	6/25/12	Eastern		Solid				X		X				X	X					1	

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Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	6/26/12 1700	TA Buk	FED EX		
Relinquished by: FED EX	Date/Time:	Company	Received by:	Date/Time: 6/27/10/1010	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.: 698445	Cooler Temperature(s) °C and Other Remarks: 3.1° IR #50

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-18 (3-3.5)**

Lab Sample ID: 200-11441-1
Client Matrix: Solid

% Moisture: 40.7

Date Sampled: 06/22/2012 0950
Date Received: 06/23/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41307	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40882	Lab File ID:	ngap08.d
Dilution:	1.0			Initial Weight/Volume:	6.09 g
Analysis Date:	07/02/2012 1240			Final Weight/Volume:	5 mL
Prep Date:	06/25/2012 1044				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		6.9	U	0.32	6.9
Chloromethane		6.9	U	0.36	6.9
Vinyl chloride		6.9	U	0.42	6.9
Bromomethane		6.9	U	1.0	6.9
Chloroethane		6.9	U	0.53	6.9
Trichlorofluoromethane		6.9	U	0.46	6.9
1,1-Dichloroethene		6.9	U	0.51	6.9
1,1,2-Trichloro-1,2,2-trichfluoroethane		6.9	U	0.46	6.9
Acetone		42		1.4	6.9
Carbon disulfide		29		0.43	6.9
Methyl acetate		6.9	U	0.87	6.9
Methylene Chloride		1.3	J	0.76	6.9
trans-1,2-Dichloroethene		6.9	U	0.51	6.9
Methyl t-butyl ether		6.9	U	0.42	6.9
1,2-Dichloroethene, Total		6.9	U	1.1	6.9
1,1-Dichloroethane		6.9	U	0.57	6.9
cis-1,2-Dichloroethene		6.9	U	0.58	6.9
2-Butanone		6.6	J	2.1	6.9
Chloroform		6.9	U	0.44	6.9
1,1,1-Trichloroethane		6.9	U	0.97	6.9
Cyclohexane		6.9	U	1.2	6.9
Carbon tetrachloride		6.9	U	1.1	6.9
Benzene		11		0.98	6.9
1,2-Dichloroethane		6.9	U	0.86	6.9
Trichloroethene		6.9	U	0.66	6.9
Methylcyclohexane		6.9	U	0.24	6.9
1,2-Dichloropropane		6.9	U	0.40	6.9
Bromodichloromethane		6.9	U	0.29	6.9
cis-1,3-Dichloropropene		6.9	U	0.48	6.9
4-Methyl-2-pentanone		6.9	U	0.83	6.9
Toluene		3.0	J B	0.14	6.9
trans-1,3-Dichloropropene		6.9	U	0.18	6.9
1,1,2-Trichloroethane		6.9	U	0.47	6.9
Tetrachloroethene		6.9	U	0.15	6.9
2-Hexanone		6.9	U	0.68	6.9
Dibromochloromethane		6.9	U	0.15	6.9
1,2-Dibromoethane		6.9	U	0.21	6.9
Chlorobenzene		6.9	U	0.11	6.9
Ethylbenzene		7.4		0.078	6.9
Xylenes, Total		11		1.0	6.9
Styrene		1.4	J	0.14	6.9
Bromoform		6.9	U	0.28	6.9
Isopropylbenzene		0.66	J	0.11	6.9
1,1,2,2-Tetrachloroethane		6.9	U	0.36	6.9
1,3-Dichlorobenzene		6.9	U	0.21	6.9
1,4-Dichlorobenzene		6.9	U	0.32	6.9

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-18 (3-3.5)**

Lab Sample ID: 200-11441-1
Client Matrix: Solid

% Moisture: 40.7

Date Sampled: 06/22/2012 0950
Date Received: 06/23/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41307	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40882	Lab File ID:	ngap08.d
Dilution:	1.0			Initial Weight/Volume:	6.09 g
Analysis Date:	07/02/2012 1240			Final Weight/Volume:	5 mL
Prep Date:	06/25/2012 1044				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		6.9	U	0.30	6.9
1,2-Dibromo-3-Chloropropane		6.9	U	1.3	6.9
1,2,4-Trichlorobenzene		0.40	J B	0.28	6.9

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	87		65 - 155
Toluene-d8	115		80 - 115
Bromofluorobenzene	157	X	80 - 115
1,2-Dichlorobenzene-d4	117		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-18 (3-3.5)**

Lab Sample ID: 200-11441-1
Client Matrix: Solid
% Moisture: 40.7

Date Sampled: 06/22/2012 0950
Date Received: 06/23/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41377	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40882	Lab File ID:	ngaq06.d
Dilution:	1.0			Initial Weight/Volume:	5.62 g
Analysis Date:	07/03/2012 1026	Run Type:	RE	Final Weight/Volume:	5 mL
Prep Date:	06/25/2012 1044				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		7.5	U J	0.35	7.5
Chloromethane		7.5	U	0.39	7.5
Vinyl chloride		7.5	U	0.45	7.5
Bromomethane		7.5	U	1.1	7.5
Chloroethane		7.5	U J	0.57	7.5
Trichlorofluoromethane		7.5	U	0.50	7.5
1,1-Dichloroethene		7.5	U	0.56	7.5
1,1,2-Trichloro-1,2,2-trichfluoroethane		7.5	U	0.50	7.5
Acetone		44	J	1.5	7.5
Carbon disulfide		53	J	0.47	7.5
Methyl acetate		7.5	U	0.95	7.5
Methylene Chloride		~~7.5~~ ~~1.2~~	~~J~~ UB	0.83	7.5
trans-1,2-Dichloroethene		7.5	U	0.56	7.5
Methyl t-butyl ether		7.5	U	0.45	7.5
1,2-Dichloroethene, Total		7.5	U	1.2	7.5
1,1-Dichloroethane		7.5	U	0.62	7.5
cis-1,2-Dichloroethene		7.5	U	0.63	7.5
2-Butanone		7.5	U J	2.3	7.5
Chloroform		7.5	U	0.48	7.5
1,1,1-Trichloroethane		7.5	U	1.1	7.5
Cyclohexane		7.5	U	1.3	7.5
Carbon tetrachloride		7.5	U	1.1	7.5
Benzene		14	J	1.1	7.5
1,2-Dichloroethane		7.5	U	0.93	7.5
Trichloroethene		7.5	U	0.72	7.5
Methylcyclohexane		7.5	U	0.26	7.5
1,2-Dichloropropane		7.5	U	0.44	7.5
Bromodichloromethane		7.5	U	0.32	7.5
cis-1,3-Dichloropropene		7.5	U	0.53	7.5
4-Methyl-2-pentanone		7.5	U	0.90	7.5
Toluene		3.1	J B	0.15	7.5
trans-1,3-Dichloropropene		7.5	U	0.20	7.5
1,1,2-Trichloroethane		7.5	U	0.51	7.5
Tetrachloroethene		7.5	U	0.17	7.5
2-Hexanone		7.5	U	0.74	7.5
Dibromochloromethane		7.5	U	0.17	7.5
1,2-Dibromoethane		7.5	U	0.23	7.5
Chlorobenzene		7.5	U	0.11	7.5
Ethylbenzene		7.3	J B	0.084	7.5
Xylenes, Total		9.2	J	1.1	7.5
Styrene		7.5	U	0.15	7.5
Bromoform		7.5	U	0.30	7.5
Isopropylbenzene		0.63	J	0.12	7.5
1,1,2,2-Tetrachloroethane		7.5	U	0.39	7.5
1,3-Dichlorobenzene		7.5	U	0.23	7.5
1,4-Dichlorobenzene		7.5	U	0.35	7.5

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-18 (3-3.5)**

Lab Sample ID: 200-11441-1
Client Matrix: Solid
% Moisture: 40.7

Date Sampled: 06/22/2012 0950
Date Received: 06/23/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41377	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40882	Lab File ID:	ngaq06.d
Dilution:	1.0			Initial Weight/Volume:	5.62 g
Analysis Date:	07/03/2012 1026	Run Type:	RE	Final Weight/Volume:	5 mL
Prep Date:	06/25/2012 1044				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		7.5	U	0.33	7.5
1,2-Dibromo-3-Chloropropane		7.5	U	1.4	7.5
1,2,4-Trichlorobenzene		7.5 ~~0.53~~	~~JB~~ UB	0.30	7.5

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	82		65 - 155
Toluene-d8	109		80 - 115
Bromofluorobenzene	123	X	80 - 115
1,2-Dichlorobenzene-d4	104		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-17 (4-5)**

Lab Sample ID: 200-11441-2
Client Matrix: Solid
% Moisture: 32.4

Date Sampled: 06/22/2012 1420
Date Received: 06/23/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41307	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40882	Lab File ID:	ngap09.d
Dilution:	1.0			Initial Weight/Volume:	5.64 g
Analysis Date:	07/02/2012 1310			Final Weight/Volume:	5 mL
Prep Date:	06/25/2012 1044				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		6.6	U	0.30	6.6
Chloromethane		6.6	U	0.34	6.6
Vinyl chloride		6.6	U	0.39	6.6
Bromomethane		6.6	U	0.97	6.6
Chloroethane		6.6	U J	0.50	6.6
Trichlorofluoromethane		6.6	U	0.43	6.6
1,1-Dichloroethene		6.6	U	0.49	6.6
1,1,2-Trichloro-1,2,2-trichfluoroethane		6.6	U	0.43	6.6
Acetone		26	J	1.3	6.6
Carbon disulfide		39	J	0.41	6.6
Methyl acetate		6.6	U	0.83	6.6
Methylene Chloride		6.6 ~~0.85~~	~~J~~ UB	0.72	6.6
trans-1,2-Dichloroethene		6.6	U	0.49	6.6
Methyl t-butyl ether		6.6	U	0.39	6.6
1,2-Dichloroethene, Total		6.6	U	1.0	6.6
1,1-Dichloroethane		6.6	U	0.54	6.6
cis-1,2-Dichloroethene		6.6	U	0.55	6.6
2-Butanone		5.0	J	2.0	6.6
Chloroform		6.6	U	0.42	6.6
1,1,1-Trichloroethane		6.6	U	0.92	6.6
Cyclohexane		6.6	U	1.1	6.6
Carbon tetrachloride		6.6	U	1.0	6.6
Benzene		45	J	0.93	6.6
1,2-Dichloroethane		6.6	U	0.81	6.6
Trichloroethene		6.6	U	0.63	6.6
Methylcyclohexane		0.95	J	0.22	6.6
1,2-Dichloropropane		6.6	U	0.38	6.6
Bromodichloromethane		6.6	U	0.28	6.6
cis-1,3-Dichloropropene		6.6	U	0.46	6.6
4-Methyl-2-pentanone		6.6	U	0.79	6.6
Toluene		7.5	~~B~~ J	0.13	6.6
trans-1,3-Dichloropropene		6.6	U	0.17	6.6
1,1,2-Trichloroethane		6.6	U	0.45	6.6
Tetrachloroethene		6.6	U	0.14	6.6
2-Hexanone		6.6	U	0.64	6.6
Dibromochloromethane		6.6	U	0.14	6.6
1,2-Dibromoethane		6.6	U	0.20	6.6
Chlorobenzene		6.6	U	0.10	6.6
Ethylbenzene		28	J	0.073	6.6
Xylenes, Total		24	J	0.96	6.6
Styrene		6.6	U	0.13	6.6
Bromoform		6.6	U	0.26	6.6
Isopropylbenzene		3.3	J	0.10	6.6
1,1,2,2-Tetrachloroethane		6.6	U J	0.34	6.6
1,3-Dichlorobenzene		6.6	U J	0.20	6.6
1,4-Dichlorobenzene		6.6	U J	0.30	6.6

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-17 (4-5)**

Lab Sample ID: 200-11441-2
Client Matrix: Solid
% Moisture: 32.4

Date Sampled: 06/22/2012 1420
Date Received: 06/23/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41307	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40882	Lab File ID:	ngap09.d
Dilution:	1.0			Initial Weight/Volume:	5.64 g
Analysis Date:	07/02/2012 1310			Final Weight/Volume:	5 mL
Prep Date:	06/25/2012 1044				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		6.6	U J	0.29	6.6
1,2-Dibromo-3-Chloropropane		6.6	U J	1.2	6.6
1,2,4-Trichlorobenzene		6.6 ~~0.35~~	~~JB~~ UB	0.26	6.6

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	80		65 - 155
Toluene-d8	104		80 - 115
Bromofluorobenzene	123	X	80 - 115
1,2-Dichlorobenzene-d4	105		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-17 (4-5)**

Lab Sample ID: 200-11441-2
Client Matrix: Solid
% Moisture: 32.4

Date Sampled: 06/22/2012 1420
Date Received: 06/23/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41377	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40882	Lab File ID:	ngaq07.d
Dilution:	1.0			Initial Weight/Volume:	5.2 g
Analysis Date:	07/03/2012 1056	Run Type:	RE	Final Weight/Volume:	5 mL
Prep Date:	06/25/2012 1044				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		7.1	U	0.33	7.1
Chloromethane		7.1	U	0.37	7.1
Vinyl chloride		7.1	U	0.43	7.1
Bromomethane		7.1	U	1.1	7.1
Chloroethane		7.1	U	0.54	7.1
Trichlorofluoromethane		7.1	U	0.47	7.1
1,1-Dichloroethene		7.1	U	0.53	7.1
1,1,2-Trichloro-1,2,2-trichfluoroethane		7.1	U	0.47	7.1
Acetone		46		1.4	7.1
Carbon disulfide		54		0.44	7.1
Methyl acetate		7.1	U	0.90	7.1
Methylene Chloride		7.1	U	0.78	7.1
trans-1,2-Dichloroethene		7.1	U	0.53	7.1
Methyl t-butyl ether		7.1	U	0.43	7.1
1,2-Dichloroethene, Total		7.1	U	1.1	7.1
1,1-Dichloroethane		7.1	U	0.58	7.1
cis-1,2-Dichloroethene		7.1	U	0.60	7.1
2-Butanone		7.1	U	2.1	7.1
Chloroform		7.1	U	0.46	7.1
1,1,1-Trichloroethane		7.1	U	1.0	7.1
Cyclohexane		7.1	U	1.2	7.1
Carbon tetrachloride		7.1	U	1.1	7.1
Benzene		73		1.0	7.1
1,2-Dichloroethane		7.1	U	0.88	7.1
Trichloroethene		7.1	U	0.68	7.1
Methylcyclohexane		1.3	J	0.24	7.1
1,2-Dichloropropane		7.1	U	0.41	7.1
Bromodichloromethane		7.1	U	0.30	7.1
cis-1,3-Dichloropropene		7.1	U	0.50	7.1
4-Methyl-2-pentanone		7.1	U	0.85	7.1
Toluene		11	B	0.14	7.1
trans-1,3-Dichloropropene		7.1	U	0.18	7.1
1,1,2-Trichloroethane		7.1	U	0.48	7.1
Tetrachloroethene		7.1	U	0.16	7.1
2-Hexanone		7.1	U	0.70	7.1
Dibromochloromethane		7.1	U	0.16	7.1
1,2-Dibromoethane		7.1	U	0.21	7.1
Chlorobenzene		7.1	U	0.11	7.1
Ethylbenzene		38	B	0.080	7.1
Xylenes, Total		29		1.0	7.1
Styrene		7.1	U	0.14	7.1
Bromoform		7.1	U	0.28	7.1
Isopropylbenzene		3.4	J	0.11	7.1
1,1,2,2-Tetrachloroethane		7.1	U	0.37	7.1
1,3-Dichlorobenzene		7.1	U	0.21	7.1
1,4-Dichlorobenzene		7.1	U	0.33	7.1

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: SB-17 (4-5)

Lab Sample ID: 200-11441-2
Client Matrix: Solid % Moisture: 32.4

Date Sampled: 06/22/2012 1420
Date Received: 06/23/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41377	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40882	Lab File ID:	ngaq07.d
Dilution:	1.0			Initial Weight/Volume:	5.2 g
Analysis Date:	07/03/2012 1056	Run Type:	RE	Final Weight/Volume:	5 mL
Prep Date:	06/25/2012 1044				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		7.1	U	0.31	7.1
1,2-Dibromo-3-Chloropropane		7.1	U	1.3	7.1
1,2,4-Trichlorobenzene		0.49	J B	0.28	7.1

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	92		65 - 155
Toluene-d8	122	X	80 - 115
Bromofluorobenzene	142	X	80 - 115
1,2-Dichlorobenzene-d4	122		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-28A (8.7-9.7)**

Lab Sample ID: 200-11441-3
Client Matrix: Solid
% Moisture: 37.8

Date Sampled: 06/22/2012 1310
Date Received: 06/23/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41307	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40882	Lab File ID:	ngap10.d
Dilution:	1.0			Initial Weight/Volume:	5.89 g
Analysis Date:	07/02/2012 1341			Final Weight/Volume:	5 mL
Prep Date:	06/25/2012 1044				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		6.8	U	0.31	6.8
Chloromethane		6.8	U	0.35	6.8
Vinyl chloride		6.8	U	0.41	6.8
Bromomethane		6.8	U	1.0	6.8
Chloroethane		6.8	U	0.52	6.8
Trichlorofluoromethane		6.8	U	0.45	6.8
1,1-Dichloroethene		6.8	U	0.51	6.8
1,1,2-Trichloro-1,2,2-trichfluoroethane		6.8	U	0.45	6.8
Acetone		260		1.4	6.8
Carbon disulfide		2.5	J	0.42	6.8
Methyl acetate		2.1	J	0.86	6.8
Methylene Chloride		1.3	J	0.75	6.8
trans-1,2-Dichloroethene		6.8	U	0.51	6.8
Methyl t-butyl ether		6.8	U	0.41	6.8
1,2-Dichloroethene, Total		6.8	U	1.1	6.8
1,1-Dichloroethane		6.8	U	0.56	6.8
cis-1,2-Dichloroethene		6.8	U	0.57	6.8
2-Butanone		49		2.0	6.8
Chloroform		6.8	U	0.44	6.8
1,1,1-Trichloroethane		6.8	U	0.96	6.8
Cyclohexane		6.8	U	1.2	6.8
Carbon tetrachloride		6.8	U	1.0	6.8
Benzene		6.8	U	0.97	6.8
1,2-Dichloroethane		6.8	U	0.85	6.8
Trichloroethene		6.8	U	0.66	6.8
Methylcyclohexane		6.8	U	0.23	6.8
1,2-Dichloropropane		6.8	U	0.40	6.8
Bromodichloromethane		6.8	U	0.29	6.8
cis-1,3-Dichloropropene		6.8	U	0.48	6.8
4-Methyl-2-pentanone		6.8	U	0.82	6.8
Toluene		0.44	J B	0.14	6.8
trans-1,3-Dichloropropene		6.8	U	0.18	6.8
1,1,2-Trichloroethane		6.8	U	0.46	6.8
Tetrachloroethene		6.8	U	0.15	6.8
2-Hexanone		6.8	U	0.67	6.8
Dibromochloromethane		6.8	U	0.15	6.8
1,2-Dibromoethane		6.8	U	0.20	6.8
Chlorobenzene		6.8	U	0.10	6.8
Ethylbenzene		0.15	J	0.076	6.8
Xylenes, Total		6.8	U	1.0	6.8
Styrene		6.8	U	0.14	6.8
Bromoform		6.8	U	0.27	6.8
Isopropylbenzene		6.8	U	0.11	6.8
1,1,2,2-Tetrachloroethane		6.8	U	0.35	6.8
1,3-Dichlorobenzene		6.8	U	0.20	6.8
1,4-Dichlorobenzene		6.8	U	0.31	6.8

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-28A (8.7-9.7)**

Lab Sample ID: 200-11441-3
Client Matrix: Solid

% Moisture: 37.8

Date Sampled: 06/22/2012 1310
Date Received: 06/23/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41307	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40882	Lab File ID:	ngap10.d
Dilution:	1.0			Initial Weight/Volume:	5.89 g
Analysis Date:	07/02/2012 1341			Final Weight/Volume:	5 mL
Prep Date:	06/25/2012 1044				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		6.8	U	0.30	6.8
1,2-Dibromo-3-Chloropropane		6.8	U	1.2	6.8
1,2,4-Trichlorobenzene		6.8	U	0.27	6.8

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	76		65 - 155
Toluene-d8	108		80 - 115
Bromofluorobenzene	130	X	80 - 115
1,2-Dichlorobenzene-d4	106		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-28A (8.7-9.7)**

Lab Sample ID: 200-11441-3
Client Matrix: Solid

% Moisture: 37.8

Date Sampled: 06/22/2012 1310
Date Received: 06/23/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41377	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40882	Lab File ID:	ngaq08.d
Dilution:	1.0			Initial Weight/Volume:	5.33 g
Analysis Date:	07/03/2012 1127	Run Type:	RE	Final Weight/Volume:	5 mL
Prep Date:	06/25/2012 1044				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		7.5	UJ	0.35	7.5
Chloromethane		7.5	U	0.39	7.5
Vinyl chloride		7.5	U	0.45	7.5
Bromomethane		7.5	U	1.1	7.5
Chloroethane		7.5	UJ	0.57	7.5
Trichlorofluoromethane		7.5	U	0.50	7.5
1,1-Dichloroethene		7.5	U	0.56	7.5
1,1,2-Trichloro-1,2,2-trichfluoroethane		7.5	U	0.50	7.5
Acetone		140	J	1.5	7.5
Carbon disulfide		2.4	J	0.47	7.5
Methyl acetate		7.5	U	0.95	7.5
Methylene Chloride		7.5	U	0.83	7.5
trans-1,2-Dichloroethene		7.5	U	0.56	7.5
Methyl t-butyl ether		7.5	U	0.45	7.5
1,2-Dichloroethene, Total		7.5	U	1.2	7.5
1,1-Dichloroethane		7.5	U	0.62	7.5
cis-1,2-Dichloroethene		7.5	U	0.63	7.5
2-Butanone		27	J	2.3	7.5
Chloroform		7.5	U	0.48	7.5
1,1,1-Trichloroethane		7.5	U	1.1	7.5
Cyclohexane		7.5	U	1.3	7.5
Carbon tetrachloride		7.5	U	1.1	7.5
Benzene		7.5	U	1.1	7.5
1,2-Dichloroethane		7.5	U	0.94	7.5
Trichloroethene		7.5	U	0.72	7.5
Methylcyclohexane		7.5	U	0.26	7.5
1,2-Dichloropropane		7.5	U	0.44	7.5
Bromodichloromethane		7.5	U	0.32	7.5
cis-1,3-Dichloropropene		7.5	U	0.53	7.5
4-Methyl-2-pentanone		7.5	U	0.91	7.5
Toluene		7.5 ~~0.39~~	~~JB~~ UB	0.15	7.5
trans-1,3-Dichloropropene		7.5	U	0.20	7.5
1,1,2-Trichloroethane		7.5	U	0.51	7.5
Tetrachloroethene		7.5	U	0.17	7.5
2-Hexanone		7.5	U	0.74	7.5
Dibromochloromethane		7.5	U	0.17	7.5
1,2-Dibromoethane		7.5	U	0.23	7.5
Chlorobenzene		7.5	U	0.11	7.5
Ethylbenzene		7.5	U	0.084	7.5
Xylenes, Total		7.5	U	1.1	7.5
Styrene		7.5	U	0.15	7.5
Bromoform		7.5	U	0.30	7.5
Isopropylbenzene		7.5	U	0.12	7.5
1,1,2,2-Tetrachloroethane		7.5	U	0.39	7.5
1,3-Dichlorobenzene		7.5	U	0.23	7.5
1,4-Dichlorobenzene		7.5	U	0.35	7.5

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-28A (8.7-9.7)**

Lab Sample ID: 200-11441-3
Client Matrix: Solid % Moisture: 37.8

Date Sampled: 06/22/2012 1310
Date Received: 06/23/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41377	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40882	Lab File ID:	ngaq08.d
Dilution:	1.0			Initial Weight/Volume:	5.33 g
Analysis Date:	07/03/2012 1127	Run Type:	RE	Final Weight/Volume:	5 mL
Prep Date:	06/25/2012 1044				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		7.5	U	0.33	7.5
1,2-Dibromo-3-Chloropropane		7.5	U	1.4	7.5
1,2,4-Trichlorobenzene		7.5	U	0.30	7.5

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	85		65 - 155
Toluene-d8	108		80 - 115
Bromofluorobenzene	119	X	80 - 115
1,2-Dichlorobenzene-d4	111		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-15 (5.5-6.5)**

Lab Sample ID: 200-11441-4
Client Matrix: Solid % Moisture: 23.3

Date Sampled: 06/22/2012 1200
Date Received: 06/23/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41307	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40882	Lab File ID:	ngap11.d
Dilution:	1.0			Initial Weight/Volume:	5.84 g
Analysis Date:	07/02/2012 1411			Final Weight/Volume:	5 mL
Prep Date:	06/25/2012 1044				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		5.6	U	0.26	5.6
Chloromethane		5.6	U	0.29	5.6
Vinyl chloride		5.6	U	0.34	5.6
Bromomethane		5.6	U	0.83	5.6
Chloroethane		5.6	UJ	0.42	5.6
Trichlorofluoromethane		5.6	U	0.37	5.6
1,1-Dichloroethene		5.6	U	0.41	5.6
1,1,2-Trichloro-1,2,2-trichfluoroethane		5.6	U	0.37	5.6
Acetone		9.5	J	1.1	5.6
Carbon disulfide		5.6	U	0.35	5.6
Methyl acetate		5.6	U	0.70	5.6
Methylene Chloride		5.6 ~~13~~	J UB	0.61	5.6
trans-1,2-Dichloroethene		5.6	U	0.41	5.6
Methyl t-butyl ether		5.6	U	0.34	5.6
1,2-Dichloroethene, Total		5.6	U	0.86	5.6
1,1-Dichloroethane		5.6	U	0.46	5.6
cis-1,2-Dichloroethene		5.6	U	0.47	5.6
2-Butanone		5.6	UJ	1.7	5.6
Chloroform		5.6	U	0.36	5.6
1,1,1-Trichloroethane		5.6	U	0.78	5.6
Cyclohexane		5.6	U	0.95	5.6
Carbon tetrachloride		5.6	U	0.85	5.6
Benzene		5.6	U	0.79	5.6
1,2-Dichloroethane		5.6	U	0.69	5.6
Trichloroethene		5.6	U	0.54	5.6
Methylcyclohexane		5.6	U	0.19	5.6
1,2-Dichloropropane		5.6	U	0.32	5.6
Bromodichloromethane		5.6	U	0.23	5.6
cis-1,3-Dichloropropene		5.6	U	0.39	5.6
4-Methyl-2-pentanone		5.6	U	0.67	5.6
Toluene		5.6	U	0.11	5.6
trans-1,3-Dichloropropene		5.6	U	0.15	5.6
1,1,2-Trichloroethane		5.6	U	0.38	5.6
Tetrachloroethene		5.6	U	0.12	5.6
2-Hexanone		5.6	U	0.55	5.6
Dibromochloromethane		5.6	U	0.12	5.6
1,2-Dibromoethane		5.6	U	0.17	5.6
Chlorobenzene		5.6	U	0.085	5.6
Ethylbenzene		5.6	U	0.063	5.6
Xylenes, Total		5.6	U	0.82	5.6
Styrene		5.6	U	0.11	5.6
Bromoform		5.6	U	0.22	5.6
Isopropylbenzene		5.6	U	0.086	5.6
1,1,2,2-Tetrachloroethane		5.6	U	0.29	5.6
1,3-Dichlorobenzene		5.6	U	0.17	5.6
1,4-Dichlorobenzene		5.6	U	0.26	5.6

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-15 (5.5-6.5)**

Lab Sample ID: 200-11441-4
Client Matrix: Solid

% Moisture: 23.3

Date Sampled: 06/22/2012 1200
Date Received: 06/23/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41307	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40882	Lab File ID:	ngap11.d
Dilution:	1.0			Initial Weight/Volume:	5.84 g
Analysis Date:	07/02/2012 1411			Final Weight/Volume:	5 mL
Prep Date:	06/25/2012 1044				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		5.6	U	0.25	5.6
1,2-Dibromo-3-Chloropropane		5.6	U	1.0	5.6
1,2,4-Trichlorobenzene		5.6	U	0.22	5.6

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	76		65 - 155
Toluene-d8	94		80 - 115
Bromofluorobenzene	112		80 - 115
1,2-Dichlorobenzene-d4	94		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-10 (5-6)**

Lab Sample ID: 200-11441-5
Client Matrix: Solid
% Moisture: 9.1

Date Sampled: 06/22/2012 1030
Date Received: 06/23/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41116	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40878	Lab File ID:	lhbaf15.d
Dilution:	440			Initial Weight/Volume:	5.54 g
Analysis Date:	06/28/2012 1545			Final Weight/Volume:	10 mL
Prep Date:	06/25/2012 1025				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		46000	U J	9600	46000
Chloromethane		46000	U J	12000	46000
Vinyl chloride		46000	U	9200	46000
Bromomethane		46000	U J	11000	46000
Chloroethane		46000	U	6900	46000
Trichlorofluoromethane		46000	U	6000	46000
1,1-Dichloroethene		46000	U	10000	46000
1,1,2-Trichloro-1,2,2-trichfluoroethane		46000	U	8300	46000
Acetone		230000	U	41000	230000
Carbon disulfide		45000	J	7300	46000
Methyl acetate		46000	U	9600	46000
Methylene Chloride		46000	U	12000	46000
trans-1,2-Dichloroethene		46000	U	9200	46000
Methyl t-butyl ether		46000	U	8300	46000
1,2-Dichloroethene, Total		46000	U	8300	46000
1,1-Dichloroethane		46000	U	9200	46000
cis-1,2-Dichloroethene		46000	U	8300	46000
2-Butanone		230000	U	39000	230000
Chloroform		46000	U	8700	46000
1,1,1-Trichloroethane		46000	U	9200	46000
Cyclohexane		46000	U	9200	46000
Carbon tetrachloride		46000	U	6900	46000
Benzene		65000		9600	46000
1,2-Dichloroethane		46000	U	7800	46000
Trichloroethene		46000	U	7800	46000
Methylcyclohexane		46000	U	8300	46000
1,2-Dichloropropane		46000	U	8700	46000
Bromodichloromethane		46000	U	8700	46000
cis-1,3-Dichloropropene		46000	U	8300	46000
4-Methyl-2-pentanone		230000	U	50000	230000
Toluene		76000		9200	46000
trans-1,3-Dichloropropene		46000	U	7800	46000
1,1,2-Trichloroethane		46000	U	8700	46000
Tetrachloroethene		46000	U	9200	46000
2-Hexanone		230000	U	35000	230000
Dibromochloromethane		46000	U	7300	46000
1,2-Dibromoethane		46000	U	8700	46000
Chlorobenzene		46000	U	9200	46000
Ethylbenzene		27000	J	9200	46000
Xylenes, Total		82000		9600	46000
Styrene		19000	J	7800	46000
Bromoform		46000	U	7800	46000
Isopropylbenzene		46000	U	8700	46000
1,1,2,2-Tetrachloroethane		46000	U	8300	46000
1,3-Dichlorobenzene		46000	U	8700	46000
1,4-Dichlorobenzene		46000	U	8700	46000

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-10 (5-6)**

Lab Sample ID: 200-11441-5
Client Matrix: Solid
% Moisture: 9.1

Date Sampled: 06/22/2012 1030
Date Received: 06/23/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41116	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-40878	Lab File ID:	lhbaf15.d
Dilution:	440			Initial Weight/Volume:	5.54 g
Analysis Date:	06/28/2012 1545			Final Weight/Volume:	10 mL
Prep Date:	06/25/2012 1025				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		46000	U	9200	46000
1,2-Dibromo-3-Chloropropane		46000	U	7800	46000
1,2,4-Trichlorobenzene		46000	U	9200	46000

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	102		65 - 155
Toluene-d8	102		80 - 115
Bromofluorobenzene	102		80 - 115
1,2-Dichlorobenzene-d4	103		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-10 (7.4-8.4)**

Lab Sample ID: 200-11441-6
Client Matrix: Solid % Moisture: 11.7

Date Sampled: 06/22/2012 1035
Date Received: 06/23/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41307	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40882	Lab File ID:	ngap12.d
Dilution:	1.0			Initial Weight/Volume:	5.84 g
Analysis Date:	07/02/2012 1441			Final Weight/Volume:	5 mL
Prep Date:	06/25/2012 1044				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		4.8	U	0.22	4.8
Chloromethane		4.8	U	0.25	4.8
Vinyl chloride		4.8	U	0.29	4.8
Bromomethane		4.8	U	0.72	4.8
Chloroethane		4.8	U J	0.37	4.8
Trichlorofluoromethane		4.8	U	0.32	4.8
1,1-Dichloroethene		4.8	U	0.36	4.8
1,1,2-Trichloro-1,2,2-trichfluoroethane		4.8	U	0.32	4.8
Acetone		54	J	0.97	4.8
Carbon disulfide		4.8	U	0.30	4.8
Methyl acetate		4.8	U	0.61	4.8
Methylene Chloride		4.8 ~~1.2~~	J UB	0.53	4.8
trans-1,2-Dichloroethene		4.8	U	0.36	4.8
Methyl t-butyl ether		4.8	U	0.29	4.8
1,2-Dichloroethene, Total		4.8	U	0.75	4.8
1,1-Dichloroethane		4.8	U	0.40	4.8
cis-1,2-Dichloroethene		4.8	U	0.41	4.8
2-Butanone		3.6	J	1.5	4.8
Chloroform		4.8	U	0.31	4.8
1,1,1-Trichloroethane		4.8	U	0.68	4.8
Cyclohexane		4.8	U	0.82	4.8
Carbon tetrachloride		4.8	U	0.74	4.8
Benzene		4.8	U	0.69	4.8
1,2-Dichloroethane		4.8	U	0.60	4.8
Trichloroethene		4.8	U	0.47	4.8
Methylcyclohexane		4.8	U	0.16	4.8
1,2-Dichloropropane		4.8	U	0.28	4.8
Bromodichloromethane		4.8	U	0.20	4.8
cis-1,3-Dichloropropene		4.8	U	0.34	4.8
4-Methyl-2-pentanone		4.8	U	0.58	4.8
Toluene		4.8 ~~0.10~~	~~JB~~ UB	0.097	4.8
trans-1,3-Dichloropropene		4.8	U	0.13	4.8
1,1,2-Trichloroethane		4.8	U	0.33	4.8
Tetrachloroethene		4.8	U	0.11	4.8
2-Hexanone		4.8	U	0.48	4.8
Dibromochloromethane		4.8	U	0.11	4.8
1,2-Dibromoethane		4.8	U	0.15	4.8
Chlorobenzene		4.8	U	0.074	4.8
Ethylbenzene		0.070	J	0.054	4.8
Xylenes, Total		4.8	U	0.71	4.8
Styrene		4.8	U	0.097	4.8
Bromoform		4.8	U	0.19	4.8
Isopropylbenzene		4.8	U	0.075	4.8
1,1,2,2-Tetrachloroethane		4.8	U	0.25	4.8
1,3-Dichlorobenzene		4.8	U	0.15	4.8
1,4-Dichlorobenzene		4.8	U	0.22	4.8

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-10 (7.4-8.4)**

Lab Sample ID: 200-11441-6
Client Matrix: Solid

% Moisture: 11.7

Date Sampled: 06/22/2012 1035
Date Received: 06/23/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41307	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40882	Lab File ID:	ngap12.d
Dilution:	1.0			Initial Weight/Volume:	5.84 g
Analysis Date:	07/02/2012 1441			Final Weight/Volume:	5 mL
Prep Date:	06/25/2012 1044				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		4.8	U	0.21	4.8
1,2-Dibromo-3-Chloropropane		4.8	U	0.88	4.8
1,2,4-Trichlorobenzene		4.8	U	0.19	4.8

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	69		65 - 155
Toluene-d8	81		80 - 115
Bromofluorobenzene	88		80 - 115
1,2-Dichlorobenzene-d4	85		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-16 (7.9-8.9)**

Lab Sample ID: 200-11441-7
Client Matrix: Solid % Moisture: 10.4

Date Sampled: 06/22/2012 0945
Date Received: 06/23/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41307	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40882	Lab File ID:	ngap13.d
Dilution:	1.0			Initial Weight/Volume:	5.48 g
Analysis Date:	07/02/2012 1512			Final Weight/Volume:	5 mL
Prep Date:	06/25/2012 1044				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		5.1	U	0.23	5.1
Chloromethane		5.1	U	0.26	5.1
Vinyl chloride		5.1	U	0.31	5.1
Bromomethane		5.1	U	0.75	5.1
Chloroethane		5.1	U J	0.39	5.1
Trichlorofluoromethane		5.1	U	0.34	5.1
1,1-Dichloroethene		5.1	U	0.38	5.1
1,1,2-Trichloro-1,2,2-trichfluoroethane		5.1	U	0.34	5.1
Acetone		32	J	1.0	5.1
Carbon disulfide		5.1	U	0.32	5.1
Methyl acetate		5.1	U	0.64	5.1
Methylene Chloride		5.1 ~~1.4~~	~~J~~ UB	0.56	5.1
trans-1,2-Dichloroethene		5.1	U	0.38	5.1
Methyl t-butyl ether		5.1	U	0.31	5.1
1,2-Dichloroethene, Total		5.1	U	0.78	5.1
1,1-Dichloroethane		5.1	U	0.42	5.1
cis-1,2-Dichloroethene		5.1	U	0.43	5.1
2-Butanone		3.4	J	1.5	5.1
Chloroform		5.1	U	0.33	5.1
1,1,1-Trichloroethane		5.1	U	0.71	5.1
Cyclohexane		5.1	U	0.87	5.1
Carbon tetrachloride		5.1	U	0.77	5.1
Benzene		5.1	U	0.72	5.1
1,2-Dichloroethane		5.1	U	0.63	5.1
Trichloroethene		5.1	U	0.49	5.1
Methylcyclohexane		5.1	U	0.17	5.1
1,2-Dichloropropane		5.1	U	0.30	5.1
Bromodichloromethane		5.1	U	0.21	5.1
cis-1,3-Dichloropropene		5.1	U	0.36	5.1
4-Methyl-2-pentanone		5.1	U	0.61	5.1
Toluene		5.1	U	0.10	5.1
trans-1,3-Dichloropropene		5.1	U	0.13	5.1
1,1,2-Trichloroethane		5.1	U	0.35	5.1
Tetrachloroethene		5.1	U	0.11	5.1
2-Hexanone		5.1	U	0.50	5.1
Dibromochloromethane		5.1	U	0.11	5.1
1,2-Dibromoethane		5.1	U	0.15	5.1
Chlorobenzene		5.1	U	0.077	5.1
Ethylbenzene		5.1	U	0.057	5.1
Xylenes, Total		5.1	U	0.74	5.1
Styrene		5.1	U	0.10	5.1
Bromoform		5.1	U	0.20	5.1
Isopropylbenzene		5.1	U	0.078	5.1
1,1,2,2-Tetrachloroethane		5.1	U	0.26	5.1
1,3-Dichlorobenzene		5.1	U	0.15	5.1
1,4-Dichlorobenzene		5.1	U	0.23	5.1

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-16 (7.9-8.9)**

Lab Sample ID: 200-11441-7
Client Matrix: Solid % Moisture: 10.4

Date Sampled: 06/22/2012 0945
Date Received: 06/23/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41307	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40882	Lab File ID:	ngap13.d
Dilution:	1.0			Initial Weight/Volume:	5.48 g
Analysis Date:	07/02/2012 1512			Final Weight/Volume:	5 mL
Prep Date:	06/25/2012 1044				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		5.1	U	0.22	5.1
1,2-Dibromo-3-Chloropropane		5.1	U	0.93	5.1
1,2,4-Trichlorobenzene		5.1	U	0.20	5.1

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	75		65 - 155
Toluene-d8	93		80 - 115
Bromofluorobenzene	95		80 - 115
1,2-Dichlorobenzene-d4	95		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-09 (8-8.9)**

Lab Sample ID: 200-11441-8
Client Matrix: Solid

% Moisture: 9.7

Date Sampled: 06/22/2012 0920
Date Received: 06/23/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41307	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40882	Lab File ID:	ngap14.d
Dilution:	1.0			Initial Weight/Volume:	6.01 g
Analysis Date:	07/02/2012 1542			Final Weight/Volume:	5 mL
Prep Date:	06/25/2012 1044				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		4.6	U	0.21	4.6
Chloromethane		4.6	U	0.24	4.6
Vinyl chloride		4.6	U	0.28	4.6
Bromomethane		4.6	U	0.68	4.6
Chloroethane		4.6	UJ	0.35	4.6
Trichlorofluoromethane		4.6	U	0.30	4.6
1,1-Dichloroethene		4.6	U	0.34	4.6
1,1,2-Trichloro-1,2,2-trichfluoroethane		4.6	U	0.30	4.6
Acetone		12	J	0.92	4.6
Carbon disulfide		1.4	J	0.29	4.6
Methyl acetate		4.6	U	0.58	4.6
Methylene Chloride		4.6 ~~14~~	~~J~~ UB	0.51	4.6
trans-1,2-Dichloroethene		4.6	U	0.34	4.6
Methyl t-butyl ether		4.6	U	0.28	4.6
1,2-Dichloroethene, Total		4.6	U	0.71	4.6
1,1-Dichloroethane		4.6	U	0.38	4.6
cis-1,2-Dichloroethene		4.6	U	0.39	4.6
2-Butanone		4.6	UJ	1.4	4.6
Chloroform		4.6	U	0.29	4.6
1,1,1-Trichloroethane		4.6	U	0.64	4.6
Cyclohexane		4.6	U	0.78	4.6
Carbon tetrachloride		4.6	U	0.70	4.6
Benzene		0.69	J	0.65	4.6
1,2-Dichloroethane		4.6	U	0.57	4.6
Trichloroethene		4.6	U	0.44	4.6
Methylcyclohexane		4.6	U	0.16	4.6
1,2-Dichloropropane		4.6	U	0.27	4.6
Bromodichloromethane		4.6	U	0.19	4.6
cis-1,3-Dichloropropene		4.6	U	0.32	4.6
4-Methyl-2-pentanone		4.6	U	0.55	4.6
Toluene		1.9	J B	0.092	4.6
trans-1,3-Dichloropropene		4.6	U	0.12	4.6
1,1,2-Trichloroethane		4.6	U	0.31	4.6
Tetrachloroethene		4.6	U	0.10	4.6
2-Hexanone		4.6	U	0.45	4.6
Dibromochloromethane		4.6	U	0.10	4.6
1,2-Dibromoethane		4.6	U	0.14	4.6
Chlorobenzene		4.6	U	0.070	4.6
Ethylbenzene		2.5	J	0.052	4.6
Xylenes, Total		3.8	J	0.67	4.6
Styrene		4.6	U	0.092	4.6
Bromoform		4.6	U	0.18	4.6
Isopropylbenzene		0.33	J	0.071	4.6
1,1,2,2-Tetrachloroethane		4.6	U	0.24	4.6
1,3-Dichlorobenzene		4.6	U	0.14	4.6
1,4-Dichlorobenzene		4.6	U	0.21	4.6

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-09 (8-8.9)**

Lab Sample ID: 200-11441-8
Client Matrix: Solid

% Moisture: 9.7

Date Sampled: 06/22/2012 0920
Date Received: 06/23/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41307	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40882	Lab File ID:	ngap14.d
Dilution:	1.0			Initial Weight/Volume:	6.01 g
Analysis Date:	07/02/2012 1542			Final Weight/Volume:	5 mL
Prep Date:	06/25/2012 1044				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		4.6	U	0.20	4.6
1,2-Dibromo-3-Chloropropane		4.6	U	0.84	4.6
1,2,4-Trichlorobenzene		4.6	U	0.18	4.6

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	68		65 - 155
Toluene-d8	81		80 - 115
Bromofluorobenzene	85		80 - 115
1,2-Dichlorobenzene-d4	84		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-08 (13.9-14.5)**

Lab Sample ID: 200-11441-9
Client Matrix: Solid % Moisture: 18.6

Date Sampled: 06/19/2012 1610
Date Received: 06/23/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41377	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40882	Lab File ID:	ngaq09.d
Dilution:	1.0			Initial Weight/Volume:	6.22 g
Analysis Date:	07/03/2012 1157			Final Weight/Volume:	5 mL
Prep Date:	06/25/2012 1044				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		4.9	U J	0.23	4.9
Chloromethane		4.9	U	0.26	4.9
Vinyl chloride		4.9	U	0.30	4.9
Bromomethane		4.9	U	0.73	4.9
Chloroethane		4.9	U J	0.38	4.9
Trichlorofluoromethane		4.9	U	0.33	4.9
1,1-Dichloroethene		4.9	U	0.37	4.9
1,1,2-Trichloro-1,2,2-trichfluoroethane		4.9	U	0.33	4.9
Acetone		59	J	0.99	4.9
Carbon disulfide		5.5		0.31	4.9
Methyl acetate		4.9	U	0.62	4.9
Methylene Chloride		4.9 ~~1.3~~	~~J~~ UB	0.54	4.9
trans-1,2-Dichloroethene		4.9	U	0.37	4.9
Methyl t-butyl ether		4.9	U	0.30	4.9
1,2-Dichloroethene, Total		4.9	U	0.76	4.9
1,1-Dichloroethane		4.9	U	0.40	4.9
cis-1,2-Dichloroethene		4.9	U	0.41	4.9
2-Butanone		9.7	J	1.5	4.9
Chloroform		4.9	U	0.32	4.9
1,1,1-Trichloroethane		4.9	U	0.69	4.9
Cyclohexane		4.9	U	0.84	4.9
Carbon tetrachloride		4.9	U	0.75	4.9
Benzene		4.9	U	0.70	4.9
1,2-Dichloroethane		4.9	U	0.61	4.9
Trichloroethene		4.9	U	0.47	4.9
Methylcyclohexane		4.9	U	0.17	4.9
1,2-Dichloropropane		4.9	U	0.29	4.9
Bromodichloromethane		4.9	U	0.21	4.9
cis-1,3-Dichloropropene		4.9	U	0.35	4.9
4-Methyl-2-pentanone		4.9	U	0.59	4.9
Toluene		4.9 ~~0.19~~	~~JB~~ UB	0.099	4.9
trans-1,3-Dichloropropene		4.9	U	0.13	4.9
1,1,2-Trichloroethane		4.9	U	0.34	4.9
Tetrachloroethene		4.9	U	0.11	4.9
2-Hexanone		4.9	U	0.48	4.9
Dibromochloromethane		4.9	U	0.11	4.9
1,2-Dibromoethane		4.9	U	0.15	4.9
Chlorobenzene		4.9	U	0.075	4.9
Ethylbenzene		4.9	U	0.055	4.9
Xylenes, Total		4.9	U	0.72	4.9
Styrene		4.9	U	0.099	4.9
Bromoform		4.9	U	0.20	4.9
Isopropylbenzene		4.9	U	0.076	4.9
1,1,2,2-Tetrachloroethane		4.9	U	0.26	4.9
1,3-Dichlorobenzene		4.9	U	0.15	4.9
1,4-Dichlorobenzene		4.9	U	0.23	4.9

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-08 (13.9-14.5)**

Lab Sample ID: 200-11441-9
Client Matrix: Solid % Moisture: 18.6

Date Sampled: 06/19/2012 1610
Date Received: 06/23/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41377	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40882	Lab File ID:	ngaq09.d
Dilution:	1.0			Initial Weight/Volume:	6.22 g
Analysis Date:	07/03/2012 1157			Final Weight/Volume:	5 mL
Prep Date:	06/25/2012 1044				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		4.9	U	0.22	4.9
1,2-Dibromo-3-Chloropropane		4.9	U	0.90	4.9
1,2,4-Trichlorobenzene		4.9	U	0.20	4.9

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	81		65 - 155
Toluene-d8	99		80 - 115
Bromofluorobenzene	106		80 - 115
1,2-Dichlorobenzene-d4	103		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-08 (12.8-13.9)**

Lab Sample ID: 200-11441-10
Client Matrix: Solid % Moisture: 15.1

Date Sampled: 06/19/2012 1600
Date Received: 06/23/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41307	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40882	Lab File ID:	ngap16.d
Dilution:	1.0			Initial Weight/Volume:	5.58 g
Analysis Date:	07/02/2012 1643			Final Weight/Volume:	5 mL
Prep Date:	06/25/2012 1044				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		5.3	U	0.24	5.3
Chloromethane		5.3	U	0.27	5.3
Vinyl chloride		5.3	U	0.32	5.3
Bromomethane		5.3	U	0.78	5.3
Chloroethane		5.3	U J	0.40	5.3
Trichlorofluoromethane		5.3	U	0.35	5.3
1,1-Dichloroethene		5.3	U	0.39	5.3
1,1,2-Trichloro-1,2,2-trichfluoroethane		5.3	U	0.35	5.3
Acetone		87	J	1.1	5.3
Carbon disulfide		50		0.33	5.3
Methyl acetate		5.3	U	0.67	5.3
Methylene Chloride		5.3 ~~12~~	~~J~~ UB	0.58	5.3
trans-1,2-Dichloroethene		5.3	U	0.39	5.3
Methyl t-butyl ether		5.3	U	0.32	5.3
1,2-Dichloroethene, Total		5.3	U	0.81	5.3
1,1-Dichloroethane		5.3	U	0.43	5.3
cis-1,2-Dichloroethene		5.3	U	0.44	5.3
2-Butanone		12	J	1.6	5.3
Chloroform		5.3	U	0.34	5.3
1,1,1-Trichloroethane		5.3	U	0.74	5.3
Cyclohexane		5.3	U	0.90	5.3
Carbon tetrachloride		5.3	U	0.80	5.3
Benzene		5.3	U	0.75	5.3
1,2-Dichloroethane		5.3	U	0.65	5.3
Trichloroethene		5.3	U	0.51	5.3
Methylcyclohexane		5.3	U	0.18	5.3
1,2-Dichloropropane		5.3	U	0.31	5.3
Bromodichloromethane		5.3	U	0.22	5.3
cis-1,3-Dichloropropene		5.3	U	0.37	5.3
4-Methyl-2-pentanone		5.3	U	0.63	5.3
Toluene		5.3	U	0.11	5.3
trans-1,3-Dichloropropene		5.3	U	0.14	5.3
1,1,2-Trichloroethane		5.3	U	0.36	5.3
Tetrachloroethene		5.3	U	0.12	5.3
2-Hexanone		5.3	U	0.52	5.3
Dibromochloromethane		5.3	U	0.12	5.3
1,2-Dibromoethane		5.3	U	0.16	5.3
Chlorobenzene		5.3	U	0.080	5.3
Ethylbenzene		5.3	U	0.059	5.3
Xylenes, Total		5.3	U	0.77	5.3
Styrene		5.3	U	0.11	5.3
Bromoform		5.3	U	0.21	5.3
Isopropylbenzene		5.3	U	0.081	5.3
1,1,2,2-Tetrachloroethane		5.3	U	0.27	5.3
1,3-Dichlorobenzene		5.3	U	0.16	5.3
1,4-Dichlorobenzene		5.3	U	0.24	5.3

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-08 (12.8-13.9)**

Lab Sample ID: 200-11441-10
Client Matrix: Solid

% Moisture: 15.1

Date Sampled: 06/19/2012 1600
Date Received: 06/23/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41307	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-40882	Lab File ID:	ngap16.d
Dilution:	1.0			Initial Weight/Volume:	5.58 g
Analysis Date:	07/02/2012 1643			Final Weight/Volume:	5 mL
Prep Date:	06/25/2012 1044				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		5.3	U	0.23	5.3
1,2-Dibromo-3-Chloropropane		5.3	U	0.96	5.3
1,2,4-Trichlorobenzene		5.3	U	0.21	5.3

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	74		65 - 155
Toluene-d8	88		80 - 115
Bromofluorobenzene	96		80 - 115
1,2-Dichlorobenzene-d4	94		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **TB-06212012**

Lab Sample ID: 200-11441-11TB
Client Matrix: Water

Date Sampled: 06/22/2012 0000
Date Received: 06/23/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41005	Instrument ID:	L.i
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lhbad11.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/27/2012 0143			Final Weight/Volume:	5 mL
Prep Date:	06/27/2012 0143				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	1.0	UJ	0.090	1.0
Chloromethane	1.0	UJ	0.12	1.0
Vinyl chloride	1.0	UJ	0.090	1.0
Bromomethane	1.0	UJ	0.43	1.0
Chloroethane	1.0	U	0.12	1.0
Trichlorofluoromethane	1.0	U	0.092	1.0
1,1-Dichloroethene	1.0	U	0.18	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.18	1.0
Acetone	5.0	U	0.92	5.0
Carbon disulfide	1.0	U	0.15	1.0
Methyl acetate	1.0	U	0.23	1.0
Methylene Chloride	0.24	J	0.21	1.0
trans-1,2-Dichloroethene	1.0	U	0.17	1.0
Methyl t-butyl ether	1.0	U	0.17	1.0
1,2-Dichloroethene, Total	1.0	U	0.32	1.0
1,1-Dichloroethane	1.0	U	0.16	1.0
cis-1,2-Dichloroethene	1.0	U	0.16	1.0
2-Butanone	5.0	U	1.1	5.0
Chloroform	1.0	U	0.16	1.0
1,1,1-Trichloroethane	1.0	U	0.16	1.0
Cyclohexane	1.0	U	0.23	1.0
Carbon tetrachloride	1.0	U	0.17	1.0
Benzene	1.0	U	0.17	1.0
1,2-Dichloroethane	1.0	U	0.15	1.0
Trichloroethene	1.0	U	0.14	1.0
Methylcyclohexane	1.0	U	0.25	1.0
1,2-Dichloropropane	1.0	U	0.17	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.16	1.0
4-Methyl-2-pentanone	5.0	U	0.90	5.0
Toluene	1.0	U	0.17	1.0
trans-1,3-Dichloropropene	1.0	U	0.18	1.0
1,1,2-Trichloroethane	1.0	U	0.18	1.0
Tetrachloroethene	1.0	U	0.18	1.0
2-Hexanone	5.0	U	1.1	5.0
Dibromochloromethane	1.0	U	0.17	1.0
1,2-Dibromoethane	1.0	U	0.18	1.0
Chlorobenzene	1.0	U	0.19	1.0
Ethylbenzene	1.0	U	0.18	1.0
Xylenes, Total	1.0	U	0.17	1.0
Styrene	1.0	U	0.17	1.0
Bromoform	1.0	U	0.17	1.0
Isopropylbenzene	1.0	U	0.17	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.17	1.0
1,3-Dichlorobenzene	1.0	U	0.18	1.0
1,4-Dichlorobenzene	1.0	U	0.15	1.0

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **TB-06212012**

Lab Sample ID: 200-11441-11TB
Client Matrix: Water

Date Sampled: 06/22/2012 0000
Date Received: 06/23/2012 1010

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41005	Instrument ID:	L.i
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lhbad11.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/27/2012 0143			Final Weight/Volume:	5 mL
Prep Date:	06/27/2012 0143				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,2-Dichlorobenzene	1.0	U	0.15	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	0.22	1.0
1,2,4-Trichlorobenzene	1.0	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	88		80 - 115
Toluene-d8	104		80 - 115
Bromofluorobenzene	103		85 - 120
1,2-Dichlorobenzene-d4	104		80 - 115

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-22 (5.7-6.7)**

Lab Sample ID: 200-11460-1
Client Matrix: Solid

% Moisture: 17.8

Date Sampled: 06/23/2012 1200
Date Received: 06/26/2012 1050

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41487	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-41085	Lab File ID:	ngar07.d
Dilution:	1.0			Initial Weight/Volume:	5.07 g
Analysis Date:	07/07/2012 1122			Final Weight/Volume:	5 mL
Prep Date:	06/28/2012 1318				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		6.0	U	0.28	6.0
Chloromethane		6.0	U	0.31	6.0
Vinyl chloride		6.0	U	0.36	6.0
Bromomethane		6.0	U	0.89	6.0
Chloroethane		6.0	U	0.46	6.0
Trichlorofluoromethane		6.0	U	0.40	6.0
1,1-Dichloroethene		6.0	U	0.44	6.0
1,1,2-Trichloro-1,2,2-trichfluoroethane		6.0	U	0.40	6.0
Acetone		30		1.2	6.0
Carbon disulfide		3.3	J	0.37	6.0
Methyl acetate		6.0	U	0.76	6.0
Methylene Chloride		1.2	J	0.66	6.0
trans-1,2-Dichloroethene		6.0	U	0.44	6.0
Methyl t-butyl ether		6.0	U	0.36	6.0
1,2-Dichloroethene, Total		6.0	U	0.92	6.0
1,1-Dichloroethane		6.0	U	0.49	6.0
cis-1,2-Dichloroethene		6.0	U	0.50	6.0
2-Butanone		6.0	U	1.8	6.0
Chloroform		6.0	U	0.38	6.0
1,1,1-Trichloroethane		6.0	U	0.84	6.0
Cyclohexane		6.0	U	1.0	6.0
Carbon tetrachloride		6.0	U	0.91	6.0
Benzene		6.0	U	0.85	6.0
1,2-Dichloroethane		6.0	U	0.74	6.0
Trichloroethene		6.0	U	0.58	6.0
Methylcyclohexane		0.51	J	0.20	6.0
1,2-Dichloropropane		6.0	U	0.35	6.0
Bromodichloromethane		6.0	U	0.25	6.0
cis-1,3-Dichloropropene		6.0	U	0.42	6.0
4-Methyl-2-pentanone		6.0	U	0.72	6.0
Toluene		0.43	J B	0.12	6.0
trans-1,3-Dichloropropene		6.0	U	0.16	6.0
1,1,2-Trichloroethane		6.0	U	0.41	6.0
Tetrachloroethene		6.0	U	0.13	6.0
2-Hexanone		6.0	U	0.59	6.0
Dibromochloromethane		6.0	U	0.13	6.0
1,2-Dibromoethane		6.0	U	0.18	6.0
Chlorobenzene		6.0	U	0.091	6.0
Ethylbenzene		0.87	J	0.067	6.0
Xylenes, Total		6.0	U	0.88	6.0
Styrene		0.95	J	0.12	6.0
Bromoform		6.0	U	0.24	6.0
Isopropylbenzene		6.0	U	0.092	6.0
1,1,2,2-Tetrachloroethane		6.0	U	0.31	6.0
1,3-Dichlorobenzene		6.0	U	0.18	6.0
1,4-Dichlorobenzene		6.0	U	0.28	6.0

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-22 (5.7-6.7)**

Lab Sample ID: 200-11460-1
Client Matrix: Solid

% Moisture: 17.8

Date Sampled: 06/23/2012 1200
Date Received: 06/26/2012 1050

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41487	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-41085	Lab File ID:	ngar07.d
Dilution:	1.0			Initial Weight/Volume:	5.07 g
Analysis Date:	07/07/2012 1122			Final Weight/Volume:	5 mL
Prep Date:	06/28/2012 1318				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		6.0	U	0.26	6.0
1,2-Dibromo-3-Chloropropane		6.0	U	1.1	6.0
1,2,4-Trichlorobenzene		1.1	J B	0.24	6.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	105		65 - 155
Toluene-d8	123	X	80 - 115
Bromofluorobenzene	145	X	80 - 115
1,2-Dichlorobenzene-d4	114		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-22 (5.7-6.7)**

Lab Sample ID: 200-11460-1
Client Matrix: Solid

% Moisture: 17.8

Date Sampled: 06/23/2012 1200
Date Received: 06/26/2012 1050

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41487	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-41085	Lab File ID:	ngar08.d
Dilution:	1.0			Initial Weight/Volume:	5.5 g
Analysis Date:	07/07/2012 1153	Run Type:	RE	Final Weight/Volume:	5 mL
Prep Date:	06/28/2012 1318				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		5.5	U J	0.25	5.5
Chloromethane		5.5	U	0.29	5.5
Vinyl chloride		5.5	U	0.33	5.5
Bromomethane		5.5	U	0.82	5.5
Chloroethane		5.5	U J	0.42	5.5
Trichlorofluoromethane		5.5	U	0.36	5.5
1,1-Dichloroethene		5.5	U	0.41	5.5
1,1,2-Trichloro-1,2,2-trichfluoroethane		5.5	U	0.36	5.5
Acetone		28	J	1.1	5.5
Carbon disulfide		4.9	J	0.34	5.5
Methyl acetate		5.5	U	0.70	5.5
Methylene Chloride		5.5 ~~1.5~~	~~J~~ UB	0.61	5.5
trans-1,2-Dichloroethene		5.5	U	0.41	5.5
Methyl t-butyl ether		5.5	U	0.33	5.5
1,2-Dichloroethene, Total		5.5	U	0.85	5.5
1,1-Dichloroethane		5.5	U	0.45	5.5
cis-1,2-Dichloroethene		5.5	U	0.46	5.5
2-Butanone		5.5	U J	1.7	5.5
Chloroform		5.5	U	0.35	5.5
1,1,1-Trichloroethane		5.5	U	0.77	5.5
Cyclohexane		5.5	U	0.94	5.5
Carbon tetrachloride		5.5	U	0.84	5.5
Benzene		4.8	J	0.78	5.5
1,2-Dichloroethane		5.5	U	0.69	5.5
Trichloroethene		5.5	U	0.53	5.5
Methylcyclohexane		5.5	U	0.19	5.5
1,2-Dichloropropane		5.5	U	0.32	5.5
Bromodichloromethane		5.5	U	0.23	5.5
cis-1,3-Dichloropropene		5.5	U	0.39	5.5
4-Methyl-2-pentanone		5.5	U	0.66	5.5
Toluene		5.5 ~~0.80~~	~~J~~ UB	0.11	5.5
trans-1,3-Dichloropropene		5.5	U	0.14	5.5
1,1,2-Trichloroethane		5.5	U	0.38	5.5
Tetrachloroethene		5.5	U	0.12	5.5
2-Hexanone		5.5	U	0.54	5.5
Dibromochloromethane		5.5	U	0.12	5.5
1,2-Dibromoethane		5.5	U	0.17	5.5
Chlorobenzene		5.5	U	0.084	5.5
Ethylbenzene		5.8	J	0.062	5.5
Xylenes, Total		4.5	J	0.81	5.5
Styrene		0.34	J	0.11	5.5
Bromoform		5.5	U	0.22	5.5
Isopropylbenzene		0.58	J	0.085	5.5
1,1,2,2-Tetrachloroethane		5.5	U J	0.29	5.5
1,3-Dichlorobenzene		5.5	U J	0.17	5.5
1,4-Dichlorobenzene		5.5	U J	0.25	5.5

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-22 (5.7-6.7)**

Lab Sample ID: 200-11460-1
Client Matrix: Solid % Moisture: 17.8

Date Sampled: 06/23/2012 1200
Date Received: 06/26/2012 1050

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41487	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-41085	Lab File ID:	ngar08.d
Dilution:	1.0			Initial Weight/Volume:	5.5 g
Analysis Date:	07/07/2012 1153	Run Type:	RE	Final Weight/Volume:	5 mL
Prep Date:	06/28/2012 1318				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		5.5	U J	0.24	5.5
1,2-Dibromo-3-Chloropropane		5.5	U J	1.0	5.5
1,2,4-Trichlorobenzene		5.5 ~~0.63~~	~~JB~~ UB	0.22	5.5

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	104		65 - 155
Toluene-d8	125	X	80 - 115
Bromofluorobenzene	156	X	80 - 115
1,2-Dichlorobenzene-d4	130		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-23 (5-6)**

Lab Sample ID: 200-11460-2
Client Matrix: Solid % Moisture: 10.1

Date Sampled: 06/23/2012 1245
Date Received: 06/26/2012 1050

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41307	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-41085	Lab File ID:	ngap17.d
Dilution:	1.0			Initial Weight/Volume:	5.62 g
Analysis Date:	07/02/2012 1714			Final Weight/Volume:	5 mL
Prep Date:	06/28/2012 1318				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		4.9	U J	0.23	4.9
Chloromethane		4.9	U	0.26	4.9
Vinyl chloride		4.9	U	0.30	4.9
Bromomethane		4.9	U	0.73	4.9
Chloroethane		4.9	U J	0.38	4.9
Trichlorofluoromethane		4.9	U	0.33	4.9
1,1-Dichloroethene		4.9	U	0.37	4.9
1,1,2-Trichloro-1,2,2-trichfluoroethane		4.9	U	0.33	4.9
Acetone		4.7	J	0.99	4.9
Carbon disulfide		4.9	U J	0.31	4.9
Methyl acetate		4.9	U J	0.62	4.9
Methylene Chloride		4.9 ~~0.82~~	~~J~~ UB	0.54	4.9
trans-1,2-Dichloroethene		4.9	U J	0.37	4.9
Methyl t-butyl ether		4.9	U	0.30	4.9
1,2-Dichloroethene, Total		4.9	U	0.76	4.9
1,1-Dichloroethane		4.9	U	0.41	4.9
cis-1,2-Dichloroethene		4.9	U	0.42	4.9
2-Butanone		4.9	U J	1.5	4.9
Chloroform		4.9	U	0.32	4.9
1,1,1-Trichloroethane		4.9	U	0.69	4.9
Cyclohexane		4.9	U	0.84	4.9
Carbon tetrachloride		4.9	U	0.75	4.9
Benzene		4.9	U	0.70	4.9
1,2-Dichloroethane		4.9	U	0.61	4.9
Trichloroethene		4.9	U	0.48	4.9
Methylcyclohexane		0.23	J	0.17	4.9
1,2-Dichloropropane		4.9	U J	0.29	4.9
Bromodichloromethane		4.9	U	0.21	4.9
cis-1,3-Dichloropropene		4.9	U	0.35	4.9
4-Methyl-2-pentanone		4.9	U	0.59	4.9
Toluene		4.9 ~~0.17~~	~~JB~~ UB	0.099	4.9
trans-1,3-Dichloropropene		4.9	U J	0.13	4.9
1,1,2-Trichloroethane		4.9	U	0.34	4.9
Tetrachloroethene		4.9	U	0.11	4.9
2-Hexanone		4.9	U	0.48	4.9
Dibromochloromethane		4.9	U	0.11	4.9
1,2-Dibromoethane		4.9	U	0.15	4.9
Chlorobenzene		4.9	U	0.075	4.9
Ethylbenzene		1.0	J	0.055	4.9
Xylenes, Total		4.9	U J	0.72	4.9
Styrene		4.9	U	0.099	4.9
Bromoform		4.9	U	0.20	4.9
Isopropylbenzene		4.9	U	0.076	4.9
1,1,2,2-Tetrachloroethane		4.9	U	0.26	4.9
1,3-Dichlorobenzene		4.9	U	0.15	4.9
1,4-Dichlorobenzene		4.9	U	0.23	4.9

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-23 (5-6)**

Lab Sample ID: 200-11460-2
Client Matrix: Solid % Moisture: 10.1

Date Sampled: 06/23/2012 1245
Date Received: 06/26/2012 1050

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41307	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-41085	Lab File ID:	ngap17.d
Dilution:	1.0			Initial Weight/Volume:	5.62 g
Analysis Date:	07/02/2012 1714			Final Weight/Volume:	5 mL
Prep Date:	06/28/2012 1318				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		4.9	U J	0.22	4.9
1,2-Dibromo-3-Chloropropane		4.9	U J	0.90	4.9
1,2,4-Trichlorobenzene		4.9	U J	0.20	4.9

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	143		65 - 155
Toluene-d8	226	X	80 - 115
Bromofluorobenzene	302	X	80 - 115
1,2-Dichlorobenzene-d4	265	X	45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-23 (5-6)**

Lab Sample ID: 200-11460-2
Client Matrix: Solid

% Moisture: 10.1

Date Sampled: 06/23/2012 1245
Date Received: 06/26/2012 1050

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41377	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-41085	Lab File ID:	ngaq10.d
Dilution:	1.0			Initial Weight/Volume:	6.28 g
Analysis Date:	07/03/2012 1228	Run Type:	RE	Final Weight/Volume:	5 mL
Prep Date:	06/28/2012 1318				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		4.4	U	0.20	4.4
Chloromethane		4.4	U	0.23	4.4
Vinyl chloride		4.4	U	0.27	4.4
Bromomethane		4.4	U	0.66	4.4
Chloroethane		4.4	U	0.34	4.4
Trichlorofluoromethane		4.4	U	0.29	4.4
1,1-Dichloroethene		4.4	U	0.33	4.4
1,1,2-Trichloro-1,2,2-trichfluoroethane		4.4	U	0.29	4.4
Acetone		9.9		0.89	4.4
Carbon disulfide		0.56	J	0.27	4.4
Methyl acetate		4.4	U	0.56	4.4
Methylene Chloride		0.79	J	0.49	4.4
trans-1,2-Dichloroethene		4.4	U	0.33	4.4
Methyl t-butyl ether		4.4	U	0.27	4.4
1,2-Dichloroethene, Total		4.4	U	0.68	4.4
1,1-Dichloroethane		4.4	U	0.36	4.4
cis-1,2-Dichloroethene		4.4	U	0.37	4.4
2-Butanone		4.4	U	1.3	4.4
Chloroform		4.4	U	0.28	4.4
1,1,1-Trichloroethane		4.4	U	0.62	4.4
Cyclohexane		4.4	U	0.75	4.4
Carbon tetrachloride		4.4	U	0.67	4.4
Benzene		1.9	J	0.63	4.4
1,2-Dichloroethane		4.4	U	0.55	4.4
Trichloroethene		4.4	U	0.43	4.4
Methylcyclohexane		0.39	J	0.15	4.4
1,2-Dichloropropane		4.4	U	0.26	4.4
Bromodichloromethane		4.4	U	0.19	4.4
cis-1,3-Dichloropropene		4.4	U	0.31	4.4
4-Methyl-2-pentanone		4.4	U	0.53	4.4
Toluene		4.4	U	0.089	4.4
trans-1,3-Dichloropropene		4.4	U	0.12	4.4
1,1,2-Trichloroethane		4.4	U	0.30	4.4
Tetrachloroethene		4.4	U	0.097	4.4
2-Hexanone		4.4	U	0.43	4.4
Dibromochloromethane		4.4	U	0.097	4.4
1,2-Dibromoethane		4.4	U	0.13	4.4
Chlorobenzene		4.4	U	0.067	4.4
Ethylbenzene		0.65	J B	0.050	4.4
Xylenes, Total		4.4	U	0.65	4.4
Styrene		4.4	U	0.089	4.4
Bromoform		4.4	U	0.18	4.4
Isopropylbenzene		4.4	U	0.068	4.4
1,1,2,2-Tetrachloroethane		4.4	U	0.23	4.4
1,3-Dichlorobenzene		4.4	U	0.13	4.4
1,4-Dichlorobenzene		4.4	U	0.20	4.4

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-23 (5-6)**

Lab Sample ID: 200-11460-2
Client Matrix: Solid

% Moisture: 10.1

Date Sampled: 06/23/2012 1245
Date Received: 06/26/2012 1050

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41377	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-41085	Lab File ID:	ngaq10.d
Dilution:	1.0			Initial Weight/Volume:	6.28 g
Analysis Date:	07/03/2012 1228	Run Type:	RE	Final Weight/Volume:	5 mL
Prep Date:	06/28/2012 1318				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		4.4	U	0.19	4.4
1,2-Dibromo-3-Chloropropane		4.4	U	0.81	4.4
1,2,4-Trichlorobenzene		4.4	U	0.18	4.4

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	86		65 - 155
Toluene-d8	185	X	80 - 115
Bromofluorobenzene	219	X	80 - 115
1,2-Dichlorobenzene-d4	176	X	45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-24 (5.5-6.5)**

Lab Sample ID: 200-11460-3
Client Matrix: Solid

% Moisture: 2.9

Date Sampled: 06/23/2012 1330
Date Received: 06/26/2012 1050

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41307	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-41085	Lab File ID:	ngap18.d
Dilution:	1.0			Initial Weight/Volume:	8.47 g
Analysis Date:	07/02/2012 1744			Final Weight/Volume:	5 mL
Prep Date:	06/28/2012 1318				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		3.0	U	0.14	3.0
Chloromethane		3.0	U	0.16	3.0
Vinyl chloride		3.0	U	0.18	3.0
Bromomethane		3.0	U	0.45	3.0
Chloroethane		3.0	U J	0.23	3.0
Trichlorofluoromethane		3.0	U	0.20	3.0
1,1-Dichloroethene		3.0	U	0.22	3.0
1,1,2-Trichloro-1,2,2-trichfluoroethane		3.0	U	0.20	3.0
Acetone		7.3	J	0.61	3.0
Carbon disulfide		0.42	J	0.19	3.0
Methyl acetate		3.0	U	0.38	3.0
Methylene Chloride		3.0 ~~0.85~~	~~J~~ UB	0.33	3.0
trans-1,2-Dichloroethene		3.0	U	0.22	3.0
Methyl t-butyl ether		3.0	U	0.18	3.0
1,2-Dichloroethene, Total		3.0	U	0.47	3.0
1,1-Dichloroethane		3.0	U	0.25	3.0
cis-1,2-Dichloroethene		3.0	U	0.26	3.0
2-Butanone		2.8	J	0.91	3.0
Chloroform		3.0	U	0.19	3.0
1,1,1-Trichloroethane		3.0	U	0.43	3.0
Cyclohexane		3.0	U	0.52	3.0
Carbon tetrachloride		3.0	U	0.46	3.0
Benzene		3.0	U	0.43	3.0
1,2-Dichloroethane		3.0	U	0.38	3.0
Trichloroethene		3.0	U	0.29	3.0
Methylcyclohexane		3.0	U	0.10	3.0
1,2-Dichloropropane		3.0	U	0.18	3.0
Bromodichloromethane		3.0	U	0.13	3.0
cis-1,3-Dichloropropene		3.0	U	0.21	3.0
4-Methyl-2-pentanone		3.0	U	0.36	3.0
Toluene		3.0 ~~0.085~~	~~J B~~ UB	0.061	3.0
trans-1,3-Dichloropropene		3.0	U	0.079	3.0
1,1,2-Trichloroethane		3.0	U	0.21	3.0
Tetrachloroethene		3.0	U	0.067	3.0
2-Hexanone		3.0	U	0.30	3.0
Dibromochloromethane		3.0	U	0.067	3.0
1,2-Dibromoethane		3.0	U	0.091	3.0
Chlorobenzene		3.0	U	0.046	3.0
Ethylbenzene		3.0	U	0.034	3.0
Xylenes, Total		3.0	U	0.44	3.0
Styrene		3.0	U	0.061	3.0
Bromoform		3.0	U	0.12	3.0
Isopropylbenzene		3.0	U	0.047	3.0
1,1,2,2-Tetrachloroethane		3.0	U	0.16	3.0
1,3-Dichlorobenzene		3.0	U	0.091	3.0
1,4-Dichlorobenzene		3.0	U	0.14	3.0

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-24 (5.5-6.5)**

Lab Sample ID: 200-11460-3
Client Matrix: Solid % Moisture: 2.9

Date Sampled: 06/23/2012 1330
Date Received: 06/26/2012 1050

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41307	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-41085	Lab File ID:	ngap18.d
Dilution:	1.0			Initial Weight/Volume:	8.47 g
Analysis Date:	07/02/2012 1744			Final Weight/Volume:	5 mL
Prep Date:	06/28/2012 1318				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		3.0	U	0.13	3.0
1,2-Dibromo-3-Chloropropane		3.0	U	0.55	3.0
1,2,4-Trichlorobenzene		3.0	U	0.12	3.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	80		65 - 155
Toluene-d8	101		80 - 115
Bromofluorobenzene	116	X	80 - 115
1,2-Dichlorobenzene-d4	105		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-24 (5.5-6.5)**

Lab Sample ID: 200-11460-3
Client Matrix: Solid

% Moisture: 2.9

Date Sampled: 06/23/2012 1330
Date Received: 06/26/2012 1050

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41377	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-41085	Lab File ID:	ngaq11.d
Dilution:	1.0			Initial Weight/Volume:	5.45 g
Analysis Date:	07/03/2012 1258	Run Type:	RE	Final Weight/Volume:	5 mL
Prep Date:	06/28/2012 1318				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		4.7	U	0.22	4.7
Chloromethane		4.7	U	0.25	4.7
Vinyl chloride		4.7	U	0.28	4.7
Bromomethane		4.7	U	0.70	4.7
Chloroethane		4.7	U	0.36	4.7
Trichlorofluoromethane		4.7	U	0.31	4.7
1,1-Dichloroethene		4.7	U	0.35	4.7
1,1,2-Trichloro-1,2,2-trichfluoroethane		4.7	U	0.31	4.7
Acetone		13		0.94	4.7
Carbon disulfide		1.3	J	0.29	4.7
Methyl acetate		4.7	U	0.60	4.7
Methylene Chloride		0.72	J	0.52	4.7
trans-1,2-Dichloroethene		4.7	U	0.35	4.7
Methyl t-butyl ether		4.7	U	0.28	4.7
1,2-Dichloroethene, Total		4.7	U	0.73	4.7
1,1-Dichloroethane		4.7	U	0.39	4.7
cis-1,2-Dichloroethene		4.7	U	0.40	4.7
2-Butanone		4.7	U	1.4	4.7
Chloroform		4.7	U	0.30	4.7
1,1,1-Trichloroethane		4.7	U	0.66	4.7
Cyclohexane		4.7	U	0.80	4.7
Carbon tetrachloride		4.7	U	0.72	4.7
Benzene		4.7	U	0.67	4.7
1,2-Dichloroethane		4.7	U	0.59	4.7
Trichloroethene		4.7	U	0.45	4.7
Methylcyclohexane		4.7	U	0.16	4.7
1,2-Dichloropropane		4.7	U	0.27	4.7
Bromodichloromethane		4.7	U	0.20	4.7
cis-1,3-Dichloropropene		4.7	U	0.33	4.7
4-Methyl-2-pentanone		4.7	U	0.57	4.7
Toluene		0.25	J B	0.094	4.7
trans-1,3-Dichloropropene		4.7	U	0.12	4.7
1,1,2-Trichloroethane		4.7	U	0.32	4.7
Tetrachloroethene		4.7	U	0.10	4.7
2-Hexanone		4.7	U	0.46	4.7
Dibromochloromethane		4.7	U	0.10	4.7
1,2-Dibromoethane		4.7	U	0.14	4.7
Chlorobenzene		4.7	U	0.072	4.7
Ethylbenzene		0.50	J B	0.053	4.7
Xylenes, Total		4.7	U	0.69	4.7
Styrene		4.7	U	0.094	4.7
Bromoform		4.7	U	0.19	4.7
Isopropylbenzene		4.7	U	0.073	4.7
1,1,2,2-Tetrachloroethane		4.7	U	0.25	4.7
1,3-Dichlorobenzene		4.7	U	0.14	4.7
1,4-Dichlorobenzene		4.7	U	0.22	4.7

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-24 (5.5-6.5)**

Lab Sample ID: 200-11460-3
Client Matrix: Solid

% Moisture: 2.9

Date Sampled: 06/23/2012 1330
Date Received: 06/26/2012 1050

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41377	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-41085	Lab File ID:	ngaq11.d
Dilution:	1.0			Initial Weight/Volume:	5.45 g
Analysis Date:	07/03/2012 1258	Run Type:	RE	Final Weight/Volume:	5 mL
Prep Date:	06/28/2012 1318				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		4.7	U	0.21	4.7
1,2-Dibromo-3-Chloropropane		4.7	U	0.86	4.7
1,2,4-Trichlorobenzene		4.7	U	0.19	4.7

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	83		65 - 155
Toluene-d8	107		80 - 115
Bromofluorobenzene	124	X	80 - 115
1,2-Dichlorobenzene-d4	118		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-17 (10-10.7)**

Lab Sample ID: 200-11460-4
Client Matrix: Solid % Moisture: 36.8

Date Sampled: 06/25/2012 1200
Date Received: 06/26/2012 1050

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41500	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-41083	Lab File ID:	lhj22.d
Dilution:	35.2			Initial Weight/Volume:	5.64 g
Analysis Date:	07/06/2012 2159			Final Weight/Volume:	10 mL
Prep Date:	06/28/2012 1314				

Analyte (DryWt Corrected: Y)	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane	6000	U	1300	6000
Chloromethane	6000	U	1500	6000
Vinyl chloride	6000	U J	1200	6000
Bromomethane	6000	U J	1500	6000
Chloroethane	6000	U	890	6000
Trichlorofluoromethane	6000	U	770	6000
1,1-Dichloroethene	6000	U	1300	6000
1,1,2-Trichloro-1,2,2-trichfluoroethane	6000	U	1100	6000
Acetone	30000	U	5300	30000
Carbon disulfide	11000		950	6000
Methyl acetate	6000	U	1300	6000
Methylene Chloride	6000	U	1600	6000
trans-1,2-Dichloroethene	6000	U	1200	6000
Methyl t-butyl ether	6000	U	1100	6000
1,2-Dichloroethene, Total	6000	U	1100	6000
1,1-Dichloroethane	6000	U	1200	6000
cis-1,2-Dichloroethene	6000	U	1100	6000
2-Butanone	30000	U J	5100	30000
Chloroform	6000	U	1100	6000
1,1,1-Trichloroethane	6000	U	1200	6000
Cyclohexane	6000	U	1200	6000
Carbon tetrachloride	6000	U	890	6000
Benzene	14000		1300	6000
1,2-Dichloroethane	6000	U	1000	6000
Trichloroethene	6000	U	1000	6000
Methylcyclohexane	6000	U	1100	6000
1,2-Dichloropropane	6000	U	1100	6000
Bromodichloromethane	6000	U	1100	6000
cis-1,3-Dichloropropene	6000	U	1100	6000
4-Methyl-2-pentanone	30000	U	6400	30000
Toluene	4100	J	1200	6000
trans-1,3-Dichloropropene	6000	U	1000	6000
1,1,2-Trichloroethane	6000	U	1100	6000
Tetrachloroethene	6000	U	1200	6000
2-Hexanone	30000	U	4600	30000
Dibromochloromethane	6000	U	950	6000
1,2-Dibromoethane	6000	U	1100	6000
Chlorobenzene	6000	U	1200	6000
Ethylbenzene	73000		1200	6000
Xylenes, Total	62000	J	1300	6000
Styrene	6000	U	1000	6000
Bromoform	6000	U	1000	6000
Isopropylbenzene	2700	J	1100	6000
1,1,2,2-Tetrachloroethane	6000	U	1100	6000
1,3-Dichlorobenzene	6000	U	1100	6000
1,4-Dichlorobenzene	6000	U	1100	6000

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-17 (10-10.7)**

Lab Sample ID: 200-11460-4
Client Matrix: Solid

% Moisture: 36.8

Date Sampled: 06/25/2012 1200
Date Received: 06/26/2012 1050

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41500	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-41083	Lab File ID:	lhj22.d
Dilution:	35.2			Initial Weight/Volume:	5.64 g
Analysis Date:	07/06/2012 2159			Final Weight/Volume:	10 mL
Prep Date:	06/28/2012 1314				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		6000	U	1200	6000
1,2-Dibromo-3-Chloropropane		6000	U	1000	6000
1,2,4-Trichlorobenzene		6000	U	1200	6000

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	104		65 - 155
Toluene-d8	114		80 - 115
Bromofluorobenzene	103		80 - 115
1,2-Dichlorobenzene-d4	96		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-17 (11.2-12.2)**

Lab Sample ID: 200-11460-5
Client Matrix: Solid % Moisture: 36.4

Date Sampled: 06/25/2012 1205
Date Received: 06/26/2012 1050

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41307	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-41085	Lab File ID:	ngap19.d
Dilution:	1.0			Initial Weight/Volume:	5.17 g
Analysis Date:	07/02/2012 1815			Final Weight/Volume:	5 mL
Prep Date:	06/28/2012 1318				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		7.6	U	0.35	7.6
Chloromethane		7.6	U	0.40	7.6
Vinyl chloride		7.6	U	0.46	7.6
Bromomethane		7.6	U J	1.1	7.6
Chloroethane		7.6	U J	0.58	7.6
Trichlorofluoromethane		7.6	U	0.50	7.6
1,1-Dichloroethene		7.6	U	0.56	7.6
1,1,2-Trichloro-1,2,2-trichfluoroethane		7.6	U J	0.50	7.6
Acetone		100	J	1.5	7.6
Carbon disulfide		28	J	0.47	7.6
Methyl acetate		7.6	U	0.96	7.6
Methylene Chloride		7.6	U J	0.84	7.6
trans-1,2-Dichloroethene		7.6	U J	0.56	7.6
Methyl t-butyl ether		7.6	U J	0.46	7.6
1,2-Dichloroethene, Total		7.6	U J	1.2	7.6
1,1-Dichloroethane		7.6	U J	0.62	7.6
cis-1,2-Dichloroethene		7.6	U J	0.64	7.6
2-Butanone		25	J	2.3	7.6
Chloroform		7.6	U J	0.49	7.6
1,1,1-Trichloroethane		7.6	U J	1.1	7.6
Cyclohexane		7.6	U	1.3	7.6
Carbon tetrachloride		7.6	U J	1.2	7.6
Benzene		29	J	1.1	7.6
1,2-Dichloroethane		7.6	U	0.94	7.6
Trichloroethene		7.6	U J	0.73	7.6
Methylcyclohexane		7.6	U J	0.26	7.6
1,2-Dichloropropane		7.6	U J	0.44	7.6
Bromodichloromethane		7.6	U J	0.32	7.6
cis-1,3-Dichloropropene		7.6	U J	0.53	7.6
4-Methyl-2-pentanone		7.6	U	0.91	7.6
Toluene		1.9	J B	0.15	7.6
trans-1,3-Dichloropropene		7.6	U J	0.20	7.6
1,1,2-Trichloroethane		7.6	U J	0.52	7.6
Tetrachloroethene		7.6	U J	0.17	7.6
2-Hexanone		7.6	U	0.74	7.6
Dibromochloromethane		7.6	U	0.17	7.6
1,2-Dibromoethane		7.6	U J	0.23	7.6
Chlorobenzene		7.6	U	0.12	7.6
Ethylbenzene		4.6	J	0.085	7.6
Xylenes, Total		5.0	J	1.1	7.6
Styrene		7.6	U J	0.15	7.6
Bromoform		7.6	U	0.30	7.6
Isopropylbenzene		0.41	J	0.12	7.6
1,1,2,2-Tetrachloroethane		7.6	U J	0.40	7.6
1,3-Dichlorobenzene		7.6	U J	0.23	7.6
1,4-Dichlorobenzene		7.6	U J	0.35	7.6

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-17 (11.2-12.2)**

Lab Sample ID: 200-11460-5
Client Matrix: Solid % Moisture: 36.4

Date Sampled: 06/25/2012 1205
Date Received: 06/26/2012 1050

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41307	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-41085	Lab File ID:	ngap19.d
Dilution:	1.0			Initial Weight/Volume:	5.17 g
Analysis Date:	07/02/2012 1815			Final Weight/Volume:	5 mL
Prep Date:	06/28/2012 1318				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		7.6	U J	0.33	7.6
1,2-Dibromo-3-Chloropropane		7.6	U J	1.4	7.6
1,2,4-Trichlorobenzene		7.6	U J	0.30	7.6

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	80		65 - 155
Toluene-d8	111		80 - 115
Bromofluorobenzene	127	X	80 - 115
1,2-Dichlorobenzene-d4	110		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-18 (11.1-11.7)**

Lab Sample ID: 200-11460-6
Client Matrix: Solid % Moisture: 21.9

Date Sampled: 06/25/2012 1330
Date Received: 06/26/2012 1050

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41307	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-41085	Lab File ID:	ngap20.d
Dilution:	1.0			Initial Weight/Volume:	5.96 g
Analysis Date:	07/02/2012 1845			Final Weight/Volume:	5 mL
Prep Date:	06/28/2012 1318				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		5.4	U	0.25	5.4
Chloromethane		5.4	U	0.28	5.4
Vinyl chloride		5.4	U	0.32	5.4
Bromomethane		5.4	U	0.80	5.4
Chloroethane		5.4	U J	0.41	5.4
Trichlorofluoromethane		5.4	U	0.35	5.4
1,1-Dichloroethene		5.4	U	0.40	5.4
1,1,2-Trichloro-1,2,2-trichfluoroethane		5.4	U	0.35	5.4
Acetone		34	J	1.1	5.4
Carbon disulfide		0.95	J	0.33	5.4
Methyl acetate		5.4	U	0.68	5.4
Methylene Chloride		5.4 ~~0.80~~	~~J~~ UB	0.59	5.4
trans-1,2-Dichloroethene		5.4	U	0.40	5.4
Methyl t-butyl ether		5.4	U	0.32	5.4
1,2-Dichloroethene, Total		5.4	U	0.83	5.4
1,1-Dichloroethane		5.4	U	0.44	5.4
cis-1,2-Dichloroethene		5.4	U	0.45	5.4
2-Butanone		7.7	J	1.6	5.4
Chloroform		5.4	U	0.34	5.4
1,1,1-Trichloroethane		5.4	U	0.75	5.4
Cyclohexane		5.4	U	0.91	5.4
Carbon tetrachloride		5.4	U	0.82	5.4
Benzene		5.4	U	0.76	5.4
1,2-Dichloroethane		5.4	U	0.67	5.4
Trichloroethene		5.4	U	0.52	5.4
Methylcyclohexane		5.4	U	0.18	5.4
1,2-Dichloropropane		5.4	U	0.31	5.4
Bromodichloromethane		5.4	U	0.23	5.4
cis-1,3-Dichloropropene		5.4	U	0.38	5.4
4-Methyl-2-pentanone		5.4	U	0.64	5.4
Toluene		5.4 ~~0.26~~	~~J B~~ UB	0.11	5.4
trans-1,3-Dichloropropene		5.4	U	0.14	5.4
1,1,2-Trichloroethane		5.4	U	0.37	5.4
Tetrachloroethene		5.4	U	0.12	5.4
2-Hexanone		5.4	U	0.53	5.4
Dibromochloromethane		5.4	U	0.12	5.4
1,2-Dibromoethane		5.4	U	0.16	5.4
Chlorobenzene		5.4	U	0.082	5.4
Ethylbenzene		0.66	J	0.060	5.4
Xylenes, Total		5.4	U	0.78	5.4
Styrene		5.4	U	0.11	5.4
Bromoform		5.4	U	0.21	5.4
Isopropylbenzene		5.4	U	0.083	5.4
1,1,2,2-Tetrachloroethane		5.4	U	0.28	5.4
1,3-Dichlorobenzene		5.4	U	0.16	5.4
1,4-Dichlorobenzene		5.4	U	0.25	5.4

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-18 (11.1-11.7)**

Lab Sample ID: 200-11460-6
Client Matrix: Solid

% Moisture: 21.9

Date Sampled: 06/25/2012 1330
Date Received: 06/26/2012 1050

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41307	Instrument ID:	N.i
Prep Method:	5035	Prep Batch:	200-41085	Lab File ID:	ngap20.d
Dilution:	1.0			Initial Weight/Volume:	5.96 g
Analysis Date:	07/02/2012 1845			Final Weight/Volume:	5 mL
Prep Date:	06/28/2012 1318				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		5.4	U	0.24	5.4
1,2-Dibromo-3-Chloropropane		5.4	U	0.98	5.4
1,2,4-Trichlorobenzene		5.4	U	0.21	5.4

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	79		65 - 155
Toluene-d8	95		80 - 115
Bromofluorobenzene	108		80 - 115
1,2-Dichlorobenzene-d4	98		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **TB-06252012**

Lab Sample ID: 200-11460-7
Client Matrix: Water

Date Sampled: 06/25/2012 0000
Date Received: 06/26/2012 1050

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41500	Instrument ID:	L.i
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lhj16.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	07/06/2012 1846			Final Weight/Volume:	5 mL
Prep Date:	07/06/2012 1846				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	1.0	U	0.090	1.0
Chloromethane	1.0	U	0.12	1.0
Vinyl chloride	1.0	U J	0.090	1.0
Bromomethane	1.0	U J	0.43	1.0
Chloroethane	1.0	U	0.12	1.0
Trichlorofluoromethane	1.0	U	0.092	1.0
1,1-Dichloroethene	1.0	U	0.18	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.18	1.0
Acetone	5.0	U	0.92	5.0
Carbon disulfide	1.0	U	0.15	1.0
Methyl acetate	1.0	U	0.23	1.0
Methylene Chloride	0.29	J	0.21	1.0
trans-1,2-Dichloroethene	1.0	U	0.17	1.0
Methyl t-butyl ether	1.0	U	0.17	1.0
1,2-Dichloroethene, Total	1.0	U	0.32	1.0
1,1-Dichloroethane	1.0	U	0.16	1.0
cis-1,2-Dichloroethene	1.0	U	0.16	1.0
2-Butanone	5.0	U J	1.1	5.0
Chloroform	1.0	U	0.16	1.0
1,1,1-Trichloroethane	1.0	U	0.16	1.0
Cyclohexane	1.0	U	0.23	1.0
Carbon tetrachloride	1.0	U	0.17	1.0
Benzene	1.0	U	0.17	1.0
1,2-Dichloroethane	1.0	U	0.15	1.0
Trichloroethene	1.0	U	0.14	1.0
Methylcyclohexane	1.0	U	0.25	1.0
1,2-Dichloropropane	1.0	U	0.17	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.16	1.0
4-Methyl-2-pentanone	5.0	U	0.90	5.0
Toluene	1.0	U	0.17	1.0
trans-1,3-Dichloropropene	1.0	U	0.18	1.0
1,1,2-Trichloroethane	1.0	U	0.18	1.0
Tetrachloroethene	1.0	U	0.18	1.0
2-Hexanone	5.0	U	1.1	5.0
Dibromochloromethane	1.0	U	0.17	1.0
1,2-Dibromoethane	1.0	U	0.18	1.0
Chlorobenzene	1.0	U	0.19	1.0
Ethylbenzene	1.0	U	0.18	1.0
Xylenes, Total	1.0	U	0.17	1.0
Styrene	1.0	U	0.17	1.0
Bromoform	1.0	U	0.17	1.0
Isopropylbenzene	1.0	U	0.17	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.17	1.0
1,3-Dichlorobenzene	1.0	U	0.18	1.0
1,4-Dichlorobenzene	1.0	U	0.15	1.0

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **TB-06252012**

Lab Sample ID: 200-11460-7
Client Matrix: Water

Date Sampled: 06/25/2012 0000
Date Received: 06/26/2012 1050

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41500	Instrument ID:	L.i
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lhj16.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	07/06/2012 1846			Final Weight/Volume:	5 mL
Prep Date:	07/06/2012 1846				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,2-Dichlorobenzene	1.0	U	0.15	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	0.22	1.0
1,2,4-Trichlorobenzene	1.0	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	106		80 - 115
Toluene-d8	115		80 - 115
Bromofluorobenzene	104		85 - 120
1,2-Dichlorobenzene-d4	95		80 - 115

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: DUP-04-06252012

Lab Sample ID: 200-11460-8
Client Matrix: Solid
% Moisture: 44.2

Date Sampled: 06/25/2012 0000
Date Received: 06/26/2012 1050

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41500	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-41083	Lab File ID:	lhj23.d
Dilution:	17.6			Initial Weight/Volume:	5.13 g
Analysis Date:	07/06/2012 2231			Final Weight/Volume:	10 mL
Prep Date:	06/28/2012 1314				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		3800	U	790	3800
Chloromethane		3800	U	980	3800
Vinyl chloride		3800	U J	750	3800
Bromomethane		3800	U J	940	3800
Chloroethane		3800	U	570	3800
Trichlorofluoromethane		3800	U	490	3800
1,1-Dichloroethene		3800	U	830	3800
1,1,2-Trichloro-1,2,2-trichfluoroethane		3800	U	680	3800
Acetone		19000	U	3400	19000
Carbon disulfide		10000		600	3800
Methyl acetate		3800	U	790	3800
Methylene Chloride		3800	U	1000	3800
trans-1,2-Dichloroethene		3800	U	750	3800
Methyl t-butyl ether		3800	U	680	3800
1,2-Dichloroethene, Total		3800	U	680	3800
1,1-Dichloroethane		3800	U	750	3800
cis-1,2-Dichloroethene		3800	U	680	3800
2-Butanone		19000	U J	3200	19000
Chloroform		3800	U	720	3800
1,1,1-Trichloroethane		3800	U	750	3800
Cyclohexane		3800	U	750	3800
Carbon tetrachloride		3800	U	570	3800
Benzene		13000		790	3800
1,2-Dichloroethane		3800	U	640	3800
Trichloroethene		3800	U	640	3800
Methylcyclohexane		3800	U	680	3800
1,2-Dichloropropane		3800	U	720	3800
Bromodichloromethane		3800	U	720	3800
cis-1,3-Dichloropropene		3800	U	680	3800
4-Methyl-2-pentanone		19000	U	4100	19000
Toluene		2600	J	750	3800
trans-1,3-Dichloropropene		3800	U	640	3800
1,1,2-Trichloroethane		3800	U	720	3800
Tetrachloroethene		3800	U	750	3800
2-Hexanone		19000	U	2900	19000
Dibromochloromethane		3800	U	600	3800
1,2-Dibromoethane		3800	U	720	3800
Chlorobenzene		3800	U	750	3800
Ethylbenzene		54000		750	3800
Xylenes, Total		11000	J	790	3800
Styrene		3800	U	640	3800
Bromoform		3800	U	640	3800
Isopropylbenzene		3200	J	720	3800
1,1,2,2-Tetrachloroethane		3800	U	680	3800
1,3-Dichlorobenzene		3800	U	720	3800
1,4-Dichlorobenzene		3800	U	720	3800

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: DUP-04-06252012

Lab Sample ID: 200-11460-8
Client Matrix: Solid % Moisture: 44.2

Date Sampled: 06/25/2012 0000
Date Received: 06/26/2012 1050

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-41500	Instrument ID:	L.i
Prep Method:	5035	Prep Batch:	200-41083	Lab File ID:	lhj23.d
Dilution:	17.6			Initial Weight/Volume:	5.13 g
Analysis Date:	07/06/2012 2231			Final Weight/Volume:	10 mL
Prep Date:	06/28/2012 1314				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		3800	U	750	3800
1,2-Dibromo-3-Chloropropane		3800	U	640	3800
1,2,4-Trichlorobenzene		3800	U	750	3800

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	104		65 - 155
Toluene-d8	112		80 - 115
Bromofluorobenzene	101		80 - 115
1,2-Dichlorobenzene-d4	94		45 - 145

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-18 (3-3.5)**

Lab Sample ID: 200-11441-1
Client Matrix: Solid

% Moisture: 40.7

Date Sampled: 06/22/2012 0950
Date Received: 06/23/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-119065	Instrument ID:	BNAMS10
Prep Method:	3541	Prep Batch:	460-118530	Lab File ID:	p31687.d
Dilution:	5.0			Initial Weight/Volume:	15.05 g
Analysis Date:	07/08/2012 1839			Final Weight/Volume:	1 mL
Prep Date:	07/03/2012 1953			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		2800	U	370	2800
2-Chlorophenol		2800	U	370	2800
2-Methylphenol		2800	U	470	2800
2-Nitrophenol		2800	U	310	2800
3 & 4 Methylphenol		2800	U	470	2800
2,4-Dimethylphenol		2800	U	690	2800
2,4-Dichlorophenol		2800	U	410	2800
4-Chloro-3-methylphenol		2800	U	420	2800
2,4,6-Trichlorophenol		2800	U	330	2800
2,4,5-Trichlorophenol		2800	U	360	2800
2,4-Dinitrophenol		8400	U	1600	8400
4-Nitrophenol		8400	U	1800	8400
4,6-Dinitro-2-methylphenol		8400	U	760	8400
Pentachlorophenol		8400	U	830	8400
Bis(2-chloroethyl)ether		280	U	38	280
1,3-Dichlorobenzene		2800	U	250	2800
Benzoic acid		2800	U	2800	2800
1,4-Dichlorobenzene		2800	U	310	2800
1,2-Dichlorobenzene		2800	U	320	2800
N-Nitrosodi-n-propylamine		280	U	46	280
Hexachloroethane		280	U	31	280
Nitrobenzene		280	U	40	280
Isophorone		2800	U	340	2800
Bis(2-chloroethoxy)methane		2800	U	360	2800
1,2,4-Trichlorobenzene		280	U	32	280
Naphthalene		1400	J	320	2800
4-Chloroaniline		2800	U	740	2800
Hexachlorobutadiene		560	U	68	560
2-Methylnaphthalene		2800	U	360	2800
Hexachlorocyclopentadiene		2800	U	330	2800
2-Chloronaphthalene		2800	U	310	2800
2-Nitroaniline		5600	U	1200	5600
Dimethyl phthalate		2800	U	330	2800
Acenaphthylene		1200	J	330	2800
2,6-Dinitrotoluene		560	U	84	560
3-Nitroaniline		5600	U	980	5600
Acenaphthene		2800	U	410	2800
Dibenzofuran		5500		330	2800
2,4-Dinitrotoluene		560	U	92	560
Diethyl phthalate		2800	U	330	2800
4-Chlorophenyl phenyl ether		2800	U	330	2800
Fluorene		4100		360	2800
4-Nitroaniline		5600	U	870	5600
N-Nitrosodiphenylamine		2800	U	270	2800
4-Bromophenyl phenyl ether		2800	U	280	2800
Hexachlorobenzene		280	U	38	280

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-18 (3-3.5)**

Lab Sample ID: 200-11441-1
Client Matrix: Solid
% Moisture: 40.7

Date Sampled: 06/22/2012 0950
Date Received: 06/23/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-119065	Instrument ID:	BNAMS10
Prep Method:	3541	Prep Batch:	460-118530	Lab File ID:	p31687.d
Dilution:	5.0			Initial Weight/Volume:	15.05 g
Analysis Date:	07/08/2012 1839			Final Weight/Volume:	1 mL
Prep Date:	07/03/2012 1953			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		40000		350	2800
Anthracene		5200		340	2800
Carbazole		560	J	330	2800
Di-n-butyl phthalate		2800	U	340	2800
Fluoranthene		26000		370	2800
Pyrene		21000		230	2800
Butyl benzyl phthalate		2800	U	250	2800
3,3'-Dichlorobenzidine		5600	U	980	5600
Benzo[a]anthracene		10000		19	280
Chrysene		10000		320	2800
Bis(2-ethylhexyl) phthalate		2800	U	920	2800
Di-n-octyl phthalate		2800	U	180	2800
Benzo[b]fluoranthene		11000		18	280
Benzo[k]fluoranthene		3900		21	280
Benzo[a]pyrene		6600		20	280
Indeno[1,2,3-cd]pyrene		5700		52	280
Dibenz(a,h)anthracene		1800		35	280
Benzo[g,h,i]perylene		5200		210	2800
2,2'-oxybis[1-chloropropane]		2800	U	310	2800

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	54		38 - 105
Phenol-d5	57		41 - 118
Terphenyl-d14	77		16 - 151
2,4,6-Tribromophenol	57		10 - 120
2-Fluorophenol	47		37 - 125
2-Fluorobiphenyl	69		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-17 (4-5)**

Lab Sample ID: 200-11441-2
Client Matrix: Solid % Moisture: 32.4

Date Sampled: 06/22/2012 1420
Date Received: 06/23/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-119065	Instrument ID:	BNAMS10
Prep Method:	3541	Prep Batch:	460-118530	Lab File ID:	p31688.d
Dilution:	2.0			Initial Weight/Volume:	15.00 g
Analysis Date:	07/08/2012 1903			Final Weight/Volume:	1 mL
Prep Date:	07/03/2012 1953			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		980	U	130	980
2-Chlorophenol		980	U	130	980
2-Methylphenol		980	U	170	980
2-Nitrophenol		980	U	110	980
3 & 4 Methylphenol		980	U	170	980
2,4-Dimethylphenol		980	U	240	980
2,4-Dichlorophenol		980	U	140	980
4-Chloro-3-methylphenol		980	U	150	980
2,4,6-Trichlorophenol		980	U	110	980
2,4,5-Trichlorophenol		980	U	130	980
2,4-Dinitrophenol		3000	U	560	3000
4-Nitrophenol		3000	U	630	3000
4,6-Dinitro-2-methylphenol		3000	U	270	3000
Pentachlorophenol		3000	U	290	3000
Bis(2-chloroethyl)ether		98	U	13	98
1,3-Dichlorobenzene		980	U	89	980
Benzoic acid		980	U	980	980
1,4-Dichlorobenzene		980	U	110	980
1,2-Dichlorobenzene		980	U	110	980
N-Nitrosodi-n-propylamine		98	U	16	98
Hexachloroethane		98	U	11	98
Nitrobenzene		98	U	14	98
Isophorone		980	U	120	980
Bis(2-chloroethoxy)methane		980	U	130	980
1,2,4-Trichlorobenzene		98	U	11	98
Naphthalene		1200		110	980
4-Chloroaniline		980	U	260	980
Hexachlorobutadiene		200	U	24	200
2-Methylnaphthalene		390	J	130	980
Hexachlorocyclopentadiene		980	U	120	980
2-Chloronaphthalene		980	U	110	980
2-Nitroaniline		2000	U	410	2000
Dimethyl phthalate		980	U	120	980
Acenaphthylene		520	J	120	980
2,6-Dinitrotoluene		200	U	29	200
3-Nitroaniline		2000	U	350	2000
Acenaphthene		980	U	140	980
Dibenzofuran		940	J	110	980
2,4-Dinitrotoluene		200	U	32	200
Diethyl phthalate		980	U	120	980
4-Chlorophenyl phenyl ether		980	U	110	980
Fluorene		1900		130	980
4-Nitroaniline		2000	U	300	2000
N-Nitrosodiphenylamine		980	U	96	980
4-Bromophenyl phenyl ether		980	U	97	980
Hexachlorobenzene		98	U	13	98

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-17 (4-5)**

Lab Sample ID: 200-11441-2
Client Matrix: Solid % Moisture: 32.4

Date Sampled: 06/22/2012 1420
Date Received: 06/23/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-119065	Instrument ID:	BNAMS10
Prep Method:	3541	Prep Batch:	460-118530	Lab File ID:	p31688.d
Dilution:	2.0			Initial Weight/Volume:	15.00 g
Analysis Date:	07/08/2012 1903			Final Weight/Volume:	1 mL
Prep Date:	07/03/2012 1953			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		13000		120	980
Anthracene		3500		120	980
Carbazole		360	J	120	980
Di-n-butyl phthalate		980	U	120	980
Fluoranthene		8900		130	980
Pyrene		8400		82	980
Butyl benzyl phthalate		980	U	90	980
3,3'-Dichlorobenzidine		2000	U	340	2000
Benzo[a]anthracene		4800		6.8	98
Chrysene		4800		110	980
Bis(2-ethylhexyl) phthalate		980	U	330	980
Di-n-octyl phthalate		980	U	62	980
Benzo[b]fluoranthene		4200		6.2	98
Benzo[k]fluoranthene		2000		7.4	98
Benzo[a]pyrene		3500		6.9	98
Indeno[1,2,3-cd]pyrene		2800		18	98
Dibenz(a,h)anthracene		810		12	98
Benzo[g,h,i]perylene		2700		72	980
2,2'-oxybis[1-chloropropane]		980	U	110	980

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	51		38 - 105
Phenol-d5	58		41 - 118
Terphenyl-d14	76		16 - 151
2,4,6-Tribromophenol	60		10 - 120
2-Fluorophenol	49		37 - 125
2-Fluorobiphenyl	68		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-28A (8.7-9.7)**

Lab Sample ID: 200-11441-3
Client Matrix: Solid
% Moisture: 37.8

Date Sampled: 06/22/2012 1310
Date Received: 06/23/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-119065	Instrument ID:	BNAMS10
Prep Method:	3541	Prep Batch:	460-118530	Lab File ID:	p31678.d
Dilution:	1.0			Initial Weight/Volume:	15.00 g
Analysis Date:	07/08/2012 1507			Final Weight/Volume:	1 mL
Prep Date:	07/03/2012 1953			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		530	U	71	530
2-Chlorophenol		530	U	70	530
2-Methylphenol		530	U	91	530
2-Nitrophenol		530	U	59	530
3 & 4 Methylphenol		530	U	91	530
2,4-Dimethylphenol		530	U	130	530
2,4-Dichlorophenol		530	U	78	530
4-Chloro-3-methylphenol		530	U	80	530
2,4,6-Trichlorophenol		530	U	62	530
2,4,5-Trichlorophenol		530	U	69	530
2,4-Dinitrophenol		1600	U	300	1600
4-Nitrophenol		1600	U	340	1600
4,6-Dinitro-2-methylphenol		1600	U	140	1600
Pentachlorophenol		1600	U	160	1600
Bis(2-chloroethyl)ether		53	U	7.3	53
1,3-Dichlorobenzene		530	U	48	530
Benzoic acid		530	U	530	530
1,4-Dichlorobenzene		530	U	60	530
1,2-Dichlorobenzene		530	U	62	530
N-Nitrosodi-n-propylamine		53	U	8.9	53
Hexachloroethane		53	U	5.9	53
Nitrobenzene		53	U	7.6	53
Isophorone		530	U	64	530
Bis(2-chloroethoxy)methane		530	U	69	530
1,2,4-Trichlorobenzene		53	U	6.0	53
Naphthalene		63	J	62	530
4-Chloroaniline		530	U	140	530
Hexachlorobutadiene		110	U	13	110
2-Methylnaphthalene		530	U	68	530
Hexachlorocyclopentadiene		530	U	63	530
2-Chloronaphthalene		530	U	59	530
2-Nitroaniline		1100	U	220	1100
Dimethyl phthalate		530	U	63	530
Acenaphthylene		530	U	63	530
2,6-Dinitrotoluene		110	U	16	110
3-Nitroaniline		1100	U	190	1100
Acenaphthene		530	U	78	530
Dibenzofuran		530	U	62	530
2,4-Dinitrotoluene		110	U	18	110
Diethyl phthalate		530	U	63	530
4-Chlorophenyl phenyl ether		530	U	62	530
Fluorene		530	U	68	530
4-Nitroaniline		1100	U	170	1100
N-Nitrosodiphenylamine		530	U	52	530
4-Bromophenyl phenyl ether		530	U	53	530
Hexachlorobenzene		53	U	7.3	53

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-28A (8.7-9.7)**

Lab Sample ID: 200-11441-3
Client Matrix: Solid
% Moisture: 37.8

Date Sampled: 06/22/2012 1310
Date Received: 06/23/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-119065	Instrument ID:	BNAMS10
Prep Method:	3541	Prep Batch:	460-118530	Lab File ID:	p31678.d
Dilution:	1.0			Initial Weight/Volume:	15.00 g
Analysis Date:	07/08/2012 1507			Final Weight/Volume:	1 mL
Prep Date:	07/03/2012 1953			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		68	J	68	530
Anthracene		530	U	65	530
Carbazole		530	U	63	530
Di-n-butyl phthalate		530	U	66	530
Fluoranthene		78	J	71	530
Pyrene		140	J	45	530
Butyl benzyl phthalate		530	U	49	530
3,3'-Dichlorobenzidine		1100	U	190	1100
Benzo[a]anthracene		94		3.7	53
Chrysene		95	J	62	530
Bis(2-ethylhexyl) phthalate		530	U	180	530
Di-n-octyl phthalate		530	U	34	530
Benzo[b]fluoranthene		75		3.4	53
Benzo[k]fluoranthene		35	J	4.0	53
Benzo[a]pyrene		92		3.8	53
Indeno[1,2,3-cd]pyrene		39	J	9.9	53
Dibenz(a,h)anthracene		53	U	6.7	53
Benzo[g,h,i]perylene		48	J	39	530
2,2'-oxybis[1-chloropropane]		530	U	59	530

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	71		38 - 105
Phenol-d5	71		41 - 118
Terphenyl-d14	87		16 - 151
2,4,6-Tribromophenol	68		10 - 120
2-Fluorophenol	70		37 - 125
2-Fluorobiphenyl	72		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-15 (5.5-6.5)**

Lab Sample ID: 200-11441-4
Client Matrix: Solid % Moisture: 23.3

Date Sampled: 06/22/2012 1200
Date Received: 06/23/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-119065	Instrument ID:	BNAMS10
Prep Method:	3541	Prep Batch:	460-118530	Lab File ID:	p31679.d
Dilution:	1.0			Initial Weight/Volume:	15.04 g
Analysis Date:	07/08/2012 1531			Final Weight/Volume:	1 mL
Prep Date:	07/03/2012 1953			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		430	U	58	430
2-Chlorophenol		430	U	57	430
2-Methylphenol		430	U	73	430
2-Nitrophenol		430	U	48	430
3 & 4 Methylphenol		430	U	73	430
2,4-Dimethylphenol		430	U	110	430
2,4-Dichlorophenol		430	U	63	430
4-Chloro-3-methylphenol		430	U	65	430
2,4,6-Trichlorophenol		430	U	50	430
2,4,5-Trichlorophenol		430	U	56	430
2,4-Dinitrophenol		1300	U	240	1300
4-Nitrophenol		1300	U	280	1300
4,6-Dinitro-2-methylphenol		1300	U	120	1300
Pentachlorophenol		1300	U	130	1300
Bis(2-chloroethyl)ether		43	U	5.9	43
1,3-Dichlorobenzene		430	U	39	430
Benzoic acid		430	U	430	430
1,4-Dichlorobenzene		430	U	49	430
1,2-Dichlorobenzene		430	U	50	430
N-Nitrosodi-n-propylamine		43	U	7.2	43
Hexachloroethane		43	U	4.8	43
Nitrobenzene		43	U	6.1	43
Isophorone		430	U	52	430
Bis(2-chloroethoxy)methane		430	U	56	430
1,2,4-Trichlorobenzene		43	U	4.9	43
Naphthalene		430	U	50	430
4-Chloroaniline		430	U	110	430
Hexachlorobutadiene		87	U	11	87
2-Methylnaphthalene		430	U	55	430
Hexachlorocyclopentadiene		430	U	51	430
2-Chloronaphthalene		430	U	48	430
2-Nitroaniline		870	U	180	870
Dimethyl phthalate		430	U	51	430
Acenaphthylene		430	U	51	430
2,6-Dinitrotoluene		87	U	13	87
3-Nitroaniline		870	U	150	870
Acenaphthene		430	U	63	430
Dibenzofuran		430	U	50	430
2,4-Dinitrotoluene		87	U	14	87
Diethyl phthalate		430	U	51	430
4-Chlorophenyl phenyl ether		430	U	50	430
Fluorene		430	U	55	430
4-Nitroaniline		870	U	130	870
N-Nitrosodiphenylamine		430	U	42	430
4-Bromophenyl phenyl ether		430	U	43	430
Hexachlorobenzene		43	U	5.9	43

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-15 (5.5-6.5)**

Lab Sample ID: 200-11441-4
Client Matrix: Solid % Moisture: 23.3

Date Sampled: 06/22/2012 1200
Date Received: 06/23/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-119065	Instrument ID:	BNAMS10
Prep Method:	3541	Prep Batch:	460-118530	Lab File ID:	p31679.d
Dilution:	1.0			Initial Weight/Volume:	15.04 g
Analysis Date:	07/08/2012 1531			Final Weight/Volume:	1 mL
Prep Date:	07/03/2012 1953			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		430	U	55	430
Anthracene		430	U	52	430
Carbazole		430	U	51	430
Di-n-butyl phthalate		430	U	53	430
Fluoranthene		430	U	57	430
Pyrene		36	J	36	430
Butyl benzyl phthalate		430	U	39	430
3,3'-Dichlorobenzidine		870	U	150	870
Benzo[a]anthracene		24	J	3.0	43
Chrysene		430	U	50	430
Bis(2-ethylhexyl) phthalate		290	J	140	430
Di-n-octyl phthalate		430	U	27	430
Benzo[b]fluoranthene		24	J	2.7	43
Benzo[k]fluoranthene		9.3	J	3.3	43
Benzo[a]pyrene		18	J	3.0	43
Indeno[1,2,3-cd]pyrene		43	U	8.0	43
Dibenz(a,h)anthracene		43	U	5.4	43
Benzo[g,h,i]perylene		430	U	32	430
2,2'-oxybis[1-chloropropane]		430	U	48	430

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	65		38 - 105
Phenol-d5	68		41 - 118
Terphenyl-d14	89		16 - 151
2,4,6-Tribromophenol	51		10 - 120
2-Fluorophenol	60		37 - 125
2-Fluorobiphenyl	67		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-10 (5-6)**

Lab Sample ID: 200-11441-5
Client Matrix: Solid

% Moisture: 9.1

Date Sampled: 06/22/2012 1030
Date Received: 06/23/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-119216	Instrument ID:	BNAMS10
Prep Method:	3541	Prep Batch:	460-118530	Lab File ID:	p31722.d
Dilution:	100			Initial Weight/Volume:	2.00 g
Analysis Date:	07/09/2012 1907	Run Type:	DL	Final Weight/Volume:	1 mL
Prep Date:	07/03/2012 1953			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		270000	U J	37000	270000
2-Chlorophenol		270000	U	36000	270000
2-Methylphenol		270000	U	47000	270000
2-Nitrophenol		270000	U	30000	270000
3 & 4 Methylphenol		270000	U	47000	270000
2,4-Dimethylphenol		270000	U	67000	270000
2,4-Dichlorophenol		270000	U	40000	270000
4-Chloro-3-methylphenol		270000	U	41000	270000
2,4,6-Trichlorophenol		270000	U	32000	270000
2,4,5-Trichlorophenol		270000	U	35000	270000
2,4-Dinitrophenol		830000	U	160000	830000
4-Nitrophenol		830000	U	180000	830000
4,6-Dinitro-2-methylphenol		830000	U	74000	830000
Pentachlorophenol		830000	U	81000	830000
Bis(2-chloroethyl)ether		27000	U	3700	27000
1,3-Dichlorobenzene		270000	U	25000	270000
Benzoic acid		270000	U	270000	270000
1,4-Dichlorobenzene		270000	U	31000	270000
1,2-Dichlorobenzene		270000	U	32000	270000
N-Nitrosodi-n-propylamine		27000	U	4600	27000
Hexachloroethane		27000	U	3000	27000
Nitrobenzene		27000	U	3900	27000
Isophorone		270000	U	33000	270000
Bis(2-chloroethoxy)methane		270000	U	35000	270000
1,2,4-Trichlorobenzene		27000	U	3100	27000
Naphthalene		2500000	D J	32000	270000
4-Chloroaniline		270000	U J	72000	270000
Hexachlorobutadiene		55000	U J	6700	55000
2-Methylnaphthalene		1100000	D J	35000	270000
Hexachlorocyclopentadiene		270000	U J	32000	270000
2-Chloronaphthalene		270000	U	30000	270000
2-Nitroaniline		550000	U	110000	550000
Dimethyl phthalate		270000	U	32000	270000
Acenaphthylene		780000	D J	32000	270000
2,6-Dinitrotoluene		55000	U J	8200	55000
3-Nitroaniline		550000	U J	97000	550000
Acenaphthene		100000	J D	40000	270000
Dibenzofuran		270000	D J	32000	270000
2,4-Dinitrotoluene		55000	U J	9000	55000
Diethyl phthalate		270000	U J	33000	270000
4-Chlorophenyl phenyl ether		270000	U J	32000	270000
Fluorene		830000	D J	35000	270000
4-Nitroaniline		550000	U J	85000	550000
N-Nitrosodiphenylamine		270000	U	27000	270000
4-Bromophenyl phenyl ether		270000	U	27000	270000
Hexachlorobenzene		27000	U	3700	27000

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-10 (5-6)**

Lab Sample ID: 200-11441-5
Client Matrix: Solid

% Moisture: 9.1

Date Sampled: 06/22/2012 1030
Date Received: 06/23/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-119216	Instrument ID:	BNAMS10
Prep Method:	3541	Prep Batch:	460-118530	Lab File ID:	p31722.d
Dilution:	100			Initial Weight/Volume:	2.00 g
Analysis Date:	07/09/2012 1907	Run Type:	DL	Final Weight/Volume:	1 mL
Prep Date:	07/03/2012 1953			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		3300000	D J	35000	270000
Anthracene		820000	D J	33000	270000
Carbazole		170000	J D	32000	270000
Di-n-butyl phthalate		270000	U J	34000	270000
Fluoranthene		1200000	D J	36000	270000
Pyrene		1500000	D J	23000	270000
Butyl benzyl phthalate		270000	U J	25000	270000
3,3'-Dichlorobenzidine		550000	U J	96000	550000
Benzo[a]anthracene		680000	D J	1900	27000
Chrysene		710000	D J	32000	270000
Bis(2-ethylhexyl) phthalate		270000	U J	91000	270000
Di-n-octyl phthalate		270000	U J	17000	270000
Benzo[b]fluoranthene		470000	D J	1700	27000
Benzo[k]fluoranthene		150000	D	2100	27000
Benzo[a]pyrene		630000	D	1900	27000
Indeno[1,2,3-cd]pyrene		280000	D	5100	27000
Dibenz(a,h)anthracene		70000	D	3400	27000
Benzo[g,h,i]perylene		280000	D	20000	270000
2,2'-oxybis[1-chloropropane]		270000	U J	30000	270000

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	0	D	38 - 105
Phenol-d5	0	D	41 - 118
Terphenyl-d14	0	D	16 - 151
2,4,6-Tribromophenol	0	D	10 - 120
2-Fluorophenol	0	D	37 - 125
2-Fluorobiphenyl	0	D	40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-10 (7.4-8.4)**

Lab Sample ID: 200-11441-6
Client Matrix: Solid % Moisture: 11.7

Date Sampled: 06/22/2012 1035
Date Received: 06/23/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-119065	Instrument ID:	BNAMS10
Prep Method:	3541	Prep Batch:	460-118530	Lab File ID:	p31677.d
Dilution:	1.0			Initial Weight/Volume:	15.00 g
Analysis Date:	07/08/2012 1443			Final Weight/Volume:	1 mL
Prep Date:	07/03/2012 1953			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		370	U	50	370
2-Chlorophenol		370	U	49	370
2-Methylphenol		370	U	64	370
2-Nitrophenol		370	U	42	370
3 & 4 Methylphenol		370	U	64	370
2,4-Dimethylphenol		370	U	92	370
2,4-Dichlorophenol		370	U	55	370
4-Chloro-3-methylphenol		370	U	57	370
2,4,6-Trichlorophenol		370	U	44	370
2,4,5-Trichlorophenol		370	U	48	370
2,4-Dinitrophenol		1100	U	210	1100
4-Nitrophenol		1100	U	240	1100
4,6-Dinitro-2-methylphenol		1100	U	100	1100
Pentachlorophenol		1100	U	110	1100
Bis(2-chloroethyl)ether		37	U	5.1	37
1,3-Dichlorobenzene		370	U	34	370
Benzoic acid		370	U	370	370
1,4-Dichlorobenzene		370	U	42	370
1,2-Dichlorobenzene		370	U	44	370
N-Nitrosodi-n-propylamine		37	U	6.3	37
Hexachloroethane		37	U	4.2	37
Nitrobenzene		37	U	5.3	37
Isophorone		370	U	45	370
Bis(2-chloroethoxy)methane		370	U	48	370
1,2,4-Trichlorobenzene		37	U	4.2	37
Naphthalene		370	U	43	370
4-Chloroaniline		370	U	99	370
Hexachlorobutadiene		76	U	9.1	76
2-Methylnaphthalene		370	U	48	370
Hexachlorocyclopentadiene		370	U	44	370
2-Chloronaphthalene		370	U	42	370
2-Nitroaniline		760	U	160	760
Dimethyl phthalate		370	U	44	370
Acenaphthylene		370	U	44	370
2,6-Dinitrotoluene		76	U	11	76
3-Nitroaniline		760	U	130	760
Acenaphthene		370	U	55	370
Dibenzofuran		370	U	44	370
2,4-Dinitrotoluene		76	U	12	76
Diethyl phthalate		370	U	45	370
4-Chlorophenyl phenyl ether		370	U	44	370
Fluorene		370	U	48	370
4-Nitroaniline		760	U	120	760
N-Nitrosodiphenylamine		370	U	37	370
4-Bromophenyl phenyl ether		370	U	37	370
Hexachlorobenzene		37	U	5.1	37

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-10 (7.4-8.4)**

Lab Sample ID: 200-11441-6
Client Matrix: Solid
% Moisture: 11.7

Date Sampled: 06/22/2012 1035
Date Received: 06/23/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-119065	Instrument ID:	BNAMS10
Prep Method:	3541	Prep Batch:	460-118530	Lab File ID:	p31677.d
Dilution:	1.0			Initial Weight/Volume:	15.00 g
Analysis Date:	07/08/2012 1443			Final Weight/Volume:	1 mL
Prep Date:	07/03/2012 1953			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		140	J	48	370
Anthracene		370	U	46	370
Carbazole		370	U	44	370
Di-n-butyl phthalate		370	U	46	370
Fluoranthene		71	J	50	370
Pyrene		87	J	31	370
Butyl benzyl phthalate		370	U	34	370
3,3'-Dichlorobenzidine		760	U	130	760
Benzo[a]anthracene		40		2.6	37
Chrysene		370	U	44	370
Bis(2-ethylhexyl) phthalate		120	J	120	370
Di-n-octyl phthalate		370	U	24	370
Benzo[b]fluoranthene		29	J	2.4	37
Benzo[k]fluoranthene		11	J	2.8	37
Benzo[a]pyrene		31	J	2.7	37
Indeno[1,2,3-cd]pyrene		12	J	7.0	37
Dibenz(a,h)anthracene		37	U	4.7	37
Benzo[g,h,i]perylene		370	U	28	370
2,2'-oxybis[1-chloropropane]		370	U	41	370

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	68		38 - 105
Phenol-d5	67		41 - 118
Terphenyl-d14	77		16 - 151
2,4,6-Tribromophenol	51		10 - 120
2-Fluorophenol	65		37 - 125
2-Fluorobiphenyl	67		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-16 (7.9-8.9)**

Lab Sample ID: 200-11441-7
Client Matrix: Solid

% Moisture: 10.4

Date Sampled: 06/22/2012 0945
Date Received: 06/23/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118849	Instrument ID:	BNAMS10
Prep Method:	3541	Prep Batch:	460-118530	Lab File ID:	p31655.d
Dilution:	1.0			Initial Weight/Volume:	15.03 g
Analysis Date:	07/06/2012 1438			Final Weight/Volume:	1 mL
Prep Date:	07/03/2012 1953			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		370	U	49	370
2-Chlorophenol		370	U	48	370
2-Methylphenol		370	U	63	370
2-Nitrophenol		370	U	41	370
3 & 4 Methylphenol		370	U	63	370
2,4-Dimethylphenol		370	U	91	370
2,4-Dichlorophenol		370	U	54	370
4-Chloro-3-methylphenol		370	U	56	370
2,4,6-Trichlorophenol		370	U	43	370
2,4,5-Trichlorophenol		370	U	48	370
2,4-Dinitrophenol		1100	U	210	1100
4-Nitrophenol		1100	U	240	1100
4,6-Dinitro-2-methylphenol		1100	U	100	1100
Pentachlorophenol		1100	U	110	1100
Bis(2-chloroethyl)ether		37	U	5.0	37
1,3-Dichlorobenzene		370	U	33	370
Benzoic acid		370	UJ	370	370
1,4-Dichlorobenzene		370	U	42	370
1,2-Dichlorobenzene		370	U	43	370
N-Nitrosodi-n-propylamine		37	U	6.1	37
Hexachloroethane		37	U	4.1	37
Nitrobenzene		37	U	5.2	37
Isophorone		370	U	45	370
Bis(2-chloroethoxy)methane		370	U	48	370
1,2,4-Trichlorobenzene		37	U	4.2	37
Naphthalene		370	U	43	370
4-Chloroaniline		370	U	98	370
Hexachlorobutadiene		75	U	9.0	75
2-Methylnaphthalene		370	U	47	370
Hexachlorocyclopentadiene		370	U	43	370
2-Chloronaphthalene		370	U	41	370
2-Nitroaniline		750	U	150	750
Dimethyl phthalate		370	U	44	370
Acenaphthylene		370	U	44	370
2,6-Dinitrotoluene		75	U	11	75
3-Nitroaniline		750	U	130	750
Acenaphthene		370	U	54	370
Dibenzofuran		370	U	43	370
2,4-Dinitrotoluene		75	U	12	75
Diethyl phthalate		370	U	44	370
4-Chlorophenyl phenyl ether		370	U	43	370
Fluorene		370	U	47	370
4-Nitroaniline		750	U	110	750
N-Nitrosodiphenylamine		370	U	36	370
4-Bromophenyl phenyl ether		370	U	37	370
Hexachlorobenzene		37	U	5.0	37

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-16 (7.9-8.9)**

Lab Sample ID: 200-11441-7
Client Matrix: Solid
% Moisture: 10.4

Date Sampled: 06/22/2012 0945
Date Received: 06/23/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118849	Instrument ID:	BNAMS10
Prep Method:	3541	Prep Batch:	460-118530	Lab File ID:	p31655.d
Dilution:	1.0			Initial Weight/Volume:	15.03 g
Analysis Date:	07/06/2012 1438			Final Weight/Volume:	1 mL
Prep Date:	07/03/2012 1953			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		370	U	47	370
Anthracene		370	U	45	370
Carbazole		370	U	44	370
Di-n-butyl phthalate		370	U	45	370
Fluoranthene		370	U	49	370
Pyrene		31	J	31	370
Butyl benzyl phthalate		370	U	34	370
3,3'-Dichlorobenzidine		750	U	130	750
Benzo[a]anthracene		37	U	2.6	37
Chrysene		370	U	43	370
Bis(2-ethylhexyl) phthalate		370	U	120	370
Di-n-octyl phthalate		370	U	23	370
Benzo[b]fluoranthene		37	U	2.3	37
Benzo[k]fluoranthene		37	U	2.8	37
Benzo[a]pyrene		37	U	2.6	37
Indeno[1,2,3-cd]pyrene		37	U	6.8	37
Dibenz(a,h)anthracene		37	U	4.6	37
Benzo[g,h,i]perylene		370	U	27	370
2,2'-oxybis[1-chloropropane]		370	U	41	370

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	70		38 - 105
Phenol-d5	67		41 - 118
Terphenyl-d14	84		16 - 151
2,4,6-Tribromophenol	58		10 - 120
2-Fluorophenol	65		37 - 125
2-Fluorobiphenyl	74		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-09 (8-8.9)**

Lab Sample ID: 200-11441-8
Client Matrix: Solid
% Moisture: 9.7

Date Sampled: 06/22/2012 0920
Date Received: 06/23/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118849	Instrument ID:	BNAMS10
Prep Method:	3541	Prep Batch:	460-118530	Lab File ID:	p31656.d
Dilution:	1.0			Initial Weight/Volume:	15.02 g
Analysis Date:	07/06/2012 1502			Final Weight/Volume:	1 mL
Prep Date:	07/03/2012 1953			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		360	U	49	360
2-Chlorophenol		360	U	48	360
2-Methylphenol		360	U	62	360
2-Nitrophenol		360	U	41	360
3 & 4 Methylphenol		360	U	62	360
2,4-Dimethylphenol		360	U	90	360
2,4-Dichlorophenol		360	U	54	360
4-Chloro-3-methylphenol		360	U	55	360
2,4,6-Trichlorophenol		360	U	43	360
2,4,5-Trichlorophenol		360	U	47	360
2,4-Dinitrophenol		1100	U	210	1100
4-Nitrophenol		1100	U	240	1100
4,6-Dinitro-2-methylphenol		1100	U	100	1100
Pentachlorophenol		1100	U	110	1100
Bis(2-chloroethyl)ether		36	U	5.0	36
1,3-Dichlorobenzene		360	U	33	360
Benzoic acid		360	U J	360	360
1,4-Dichlorobenzene		360	U	41	360
1,2-Dichlorobenzene		360	U	42	360
N-Nitrosodi-n-propylamine		36	U	6.1	36
Hexachloroethane		36	U	4.1	36
Nitrobenzene		36	U	5.2	36
Isophorone		360	U	44	360
Bis(2-chloroethoxy)methane		360	U	47	360
1,2,4-Trichlorobenzene		36	U	4.1	36
Naphthalene		360	U	42	360
4-Chloroaniline		360	U	97	360
Hexachlorobutadiene		74	U	8.9	74
2-Methylnaphthalene		360	U	47	360
Hexachlorocyclopentadiene		360	U	43	360
2-Chloronaphthalene		360	U	41	360
2-Nitroaniline		740	U	150	740
Dimethyl phthalate		360	U	43	360
Acenaphthylene		360	U	43	360
2,6-Dinitrotoluene		74	U	11	74
3-Nitroaniline		740	U	130	740
Acenaphthene		360	U	53	360
Dibenzofuran		360	U	43	360
2,4-Dinitrotoluene		74	U	12	74
Diethyl phthalate		360	U	44	360
4-Chlorophenyl phenyl ether		360	U	43	360
Fluorene		360	U	47	360
4-Nitroaniline		740	U	110	740
N-Nitrosodiphenylamine		360	U	36	360
4-Bromophenyl phenyl ether		360	U	36	360
Hexachlorobenzene		36	U	5.0	36

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-09 (8-8.9)**

Lab Sample ID: 200-11441-8
Client Matrix: Solid

% Moisture: 9.7

Date Sampled: 06/22/2012 0920
Date Received: 06/23/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118849	Instrument ID:	BNAMS10
Prep Method:	3541	Prep Batch:	460-118530	Lab File ID:	p31656.d
Dilution:	1.0			Initial Weight/Volume:	15.02 g
Analysis Date:	07/06/2012 1502			Final Weight/Volume:	1 mL
Prep Date:	07/03/2012 1953			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		360	U	47	360
Anthracene		360	U	44	360
Carbazole		360	U	43	360
Di-n-butyl phthalate		360	U	45	360
Fluoranthene		360	U	49	360
Pyrene		360	U	31	360
Butyl benzyl phthalate		360	U	33	360
3,3'-Dichlorobenzidine		740	U	130	740
Benzo[a]anthracene		36	U	2.6	36
Chrysene		360	U	43	360
Bis(2-ethylhexyl) phthalate		360	U	120	360
Di-n-octyl phthalate		360	U	23	360
Benzo[b]fluoranthene		36	U	2.3	36
Benzo[k]fluoranthene		36	U	2.8	36
Benzo[a]pyrene		36	U	2.6	36
Indeno[1,2,3-cd]pyrene		36	U	6.8	36
Dibenz(a,h)anthracene		36	U	4.6	36
Benzo[g,h,i]perylene		360	U	27	360
2,2'-oxybis[1-chloropropane]		360	U	40	360

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	71		38 - 105
Phenol-d5	73		41 - 118
Terphenyl-d14	86		16 - 151
2,4,6-Tribromophenol	58		10 - 120
2-Fluorophenol	70		37 - 125
2-Fluorobiphenyl	76		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-08 (13.9-14.5)**

Lab Sample ID: 200-11441-9
Client Matrix: Solid

% Moisture: 18.6

Date Sampled: 06/19/2012 1610
Date Received: 06/23/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118458	Instrument ID:	BNAMS10
Prep Method:	3541	Prep Batch:	460-118324	Lab File ID:	p31586.d
Dilution:	1.0			Initial Weight/Volume:	15.01 g
Analysis Date:	07/03/2012 0751			Final Weight/Volume:	1 mL
Prep Date:	07/02/2012 1327			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		410	U	55	410
2-Chlorophenol		410	U	53	410
2-Methylphenol		410	U	69	410
2-Nitrophenol		410	U	45	410
3 & 4 Methylphenol		410	U	69	410
2,4-Dimethylphenol		410	U	100	410
2,4-Dichlorophenol		410	U	59	410
4-Chloro-3-methylphenol		410	U	61	410
2,4,6-Trichlorophenol		410	U	48	410
2,4,5-Trichlorophenol		410	U	52	410
2,4-Dinitrophenol		1200	U	230	1200
4-Nitrophenol		1200	U	260	1200
4,6-Dinitro-2-methylphenol		1200	U	110	1200
Pentachlorophenol		1200	U	120	1200
Bis(2-chloroethyl)ether		41	U	5.5	41
1,3-Dichlorobenzene		410	U	37	410
Benzoic acid		410	UJ	410	410
1,4-Dichlorobenzene		410	U	46	410
1,2-Dichlorobenzene		410	U	47	410
N-Nitrosodi-n-propylamine		41	U	6.8	41
Hexachloroethane		41	U	4.5	41
Nitrobenzene		41	U	5.8	41
Isophorone		410	U	49	410
Bis(2-chloroethoxy)methane		410	U	52	410
1,2,4-Trichlorobenzene		41	U	4.6	41
Naphthalene		410	U	47	410
4-Chloroaniline		410	U	110	410
Hexachlorobutadiene		82	U	9.9	82
2-Methylnaphthalene		410	U	52	410
Hexachlorocyclopentadiene		410	U	48	410
2-Chloronaphthalene		410	U	45	410
2-Nitroaniline		820	U	170	820
Dimethyl phthalate		410	U	48	410
Acenaphthylene		410	U	48	410
2,6-Dinitrotoluene		82	U	12	82
3-Nitroaniline		820	U	140	820
Acenaphthene		410	U	59	410
Dibenzofuran		410	U	48	410
2,4-Dinitrotoluene		82	U	13	82
Diethyl phthalate		410	U	48	410
4-Chlorophenyl phenyl ether		410	U	48	410
Fluorene		410	U	52	410
4-Nitroaniline		820	U	130	820
N-Nitrosodiphenylamine		410	U	40	410
4-Bromophenyl phenyl ether		410	U	40	410
Hexachlorobenzene		41	U	5.6	41

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-08 (13.9-14.5)**

Lab Sample ID: 200-11441-9
Client Matrix: Solid

% Moisture: 18.6

Date Sampled: 06/19/2012 1610
Date Received: 06/23/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118458	Instrument ID:	BNAMS10
Prep Method:	3541	Prep Batch:	460-118324	Lab File ID:	p31586.d
Dilution:	1.0			Initial Weight/Volume:	15.01 g
Analysis Date:	07/03/2012 0751			Final Weight/Volume:	1 mL
Prep Date:	07/02/2012 1327			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		52	J	52	410
Anthracene		410	U	49	410
Carbazole		410	U	48	410
Di-n-butyl phthalate		410	U	50	410
Fluoranthene		410	U	54	410
Pyrene		410	U	34	410
Butyl benzyl phthalate		410	U	37	410
3,3'-Dichlorobenzidine		820	U	140	820
Benzo[a]anthracene		41	U	2.8	41
Chrysene		410	U	47	410
Bis(2-ethylhexyl) phthalate		410	U	140	410
Di-n-octyl phthalate		410	U	26	410
Benzo[b]fluoranthene		41	U	2.6	41
Benzo[k]fluoranthene		41	U	3.1	41
Benzo[a]pyrene		41	U	2.9	41
Indeno[1,2,3-cd]pyrene		41	U	7.6	41
Dibenz(a,h)anthracene		41	U	5.1	41
Benzo[g,h,i]perylene		410	U	30	410
2,2'-oxybis[1-chloropropane]		410	U	45	410

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	87		38 - 105
Phenol-d5	83		41 - 118
Terphenyl-d14	109		16 - 151
2,4,6-Tribromophenol	70		10 - 120
2-Fluorophenol	84		37 - 125
2-Fluorobiphenyl	86		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-08 (12.8-13.9)**

Lab Sample ID: 200-11441-10
Client Matrix: Solid

% Moisture: 15.1

Date Sampled: 06/19/2012 1600
Date Received: 06/23/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118458	Instrument ID:	BNAMS10
Prep Method:	3541	Prep Batch:	460-118324	Lab File ID:	p31587.d
Dilution:	1.0			Initial Weight/Volume:	15.00 g
Analysis Date:	07/03/2012 0815			Final Weight/Volume:	1 mL
Prep Date:	07/02/2012 1327			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		390	U	52	390
2-Chlorophenol		390	U	51	390
2-Methylphenol		390	U	66	390
2-Nitrophenol		390	U	43	390
3 & 4 Methylphenol		390	U	66	390
2,4-Dimethylphenol		390	U	96	390
2,4-Dichlorophenol		390	U	57	390
4-Chloro-3-methylphenol		390	U	59	390
2,4,6-Trichlorophenol		390	U	46	390
2,4,5-Trichlorophenol		390	U	50	390
2,4-Dinitrophenol		1200	U	220	1200
4-Nitrophenol		1200	U	250	1200
4,6-Dinitro-2-methylphenol		1200	U	110	1200
Pentachlorophenol		1200	U	120	1200
Bis(2-chloroethyl)ether		39	U	5.3	39
1,3-Dichlorobenzene		390	U	35	390
Benzoic acid		390	U J	390	390
1,4-Dichlorobenzene		390	U	44	390
1,2-Dichlorobenzene		390	U	45	390
N-Nitrosodi-n-propylamine		39	U	6.5	39
Hexachloroethane		39	U	4.3	39
Nitrobenzene		39	U	5.5	39
Isophorone		390	U	47	390
Bis(2-chloroethoxy)methane		390	U	50	390
1,2,4-Trichlorobenzene		39	U	4.4	39
Naphthalene		390	U	45	390
4-Chloroaniline		390	U	100	390
Hexachlorobutadiene		79	U	9.5	79
2-Methylnaphthalene		390	U	50	390
Hexachlorocyclopentadiene		390	U	46	390
2-Chloronaphthalene		390	U	43	390
2-Nitroaniline		790	U	160	790
Dimethyl phthalate		390	U	46	390
Acenaphthylene		390	U	46	390
2,6-Dinitrotoluene		79	U	12	79
3-Nitroaniline		790	U	140	790
Acenaphthene		390	U	57	390
Dibenzofuran		390	U	46	390
2,4-Dinitrotoluene		79	U	13	79
Diethyl phthalate		390	U	46	390
4-Chlorophenyl phenyl ether		390	U	46	390
Fluorene		390	U	50	390
4-Nitroaniline		790	U	120	790
N-Nitrosodiphenylamine		390	U	38	390
4-Bromophenyl phenyl ether		390	U	39	390
Hexachlorobenzene		39	U	5.3	39

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-08 (12.8-13.9)**

Lab Sample ID: 200-11441-10
Client Matrix: Solid % Moisture: 15.1

Date Sampled: 06/19/2012 1600
Date Received: 06/23/2012 1010

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118458	Instrument ID:	BNAMS10
Prep Method:	3541	Prep Batch:	460-118324	Lab File ID:	p31587.d
Dilution:	1.0			Initial Weight/Volume:	15.00 g
Analysis Date:	07/03/2012 0815			Final Weight/Volume:	1 mL
Prep Date:	07/02/2012 1327			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		390	U	50	390
Anthracene		390	U	47	390
Carbazole		390	U	46	390
Di-n-butyl phthalate		390	U	48	390
Fluoranthene		390	U	52	390
Pyrene		390	U	33	390
Butyl benzyl phthalate		390	U	36	390
3,3'-Dichlorobenzidine		790	U	140	790
Benzo[a]anthracene		39	U	2.7	39
Chrysene		390	U	45	390
Bis(2-ethylhexyl) phthalate		390	U	130	390
Di-n-octyl phthalate		390	U	25	390
Benzo[b]fluoranthene		39	U	2.5	39
Benzo[k]fluoranthene		39	U	3.0	39
Benzo[a]pyrene		39	U	2.8	39
Indeno[1,2,3-cd]pyrene		39	U	7.2	39
Dibenz(a,h)anthracene		39	U	4.9	39
Benzo[g,h,i]perylene		390	U	29	390
2,2'-oxybis[1-chloropropane]		390	U	43	390

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	78		38 - 105
Phenol-d5	73		41 - 118
Terphenyl-d14	97		16 - 151
2,4,6-Tribromophenol	60		10 - 120
2-Fluorophenol	76		37 - 125
2-Fluorobiphenyl	78		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-22 (5.7-6.7)**

Lab Sample ID: 200-11460-1
Client Matrix: Solid

% Moisture: 17.8

Date Sampled: 06/23/2012 1200
Date Received: 06/26/2012 1050

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118767	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-118532	Lab File ID:	z19446.d
Dilution:	1.0			Initial Weight/Volume:	15.02 g
Analysis Date:	07/05/2012 1758			Final Weight/Volume:	1 mL
Prep Date:	07/03/2012 1954			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		400	U	54	400
2-Chlorophenol		400	U	53	400
2-Methylphenol		400	U	69	400
2-Nitrophenol		400	U	45	400
3 & 4 Methylphenol		400	U	69	400
2,4-Dimethylphenol		400	U	99	400
2,4-Dichlorophenol		400	U	59	400
4-Chloro-3-methylphenol		400	U	61	400
2,4,6-Trichlorophenol		400	U	47	400
2,4,5-Trichlorophenol		400	U	52	400
2,4-Dinitrophenol		1200	U	230	1200
4-Nitrophenol		1200	U	260	1200
4,6-Dinitro-2-methylphenol		1200	U	110	1200
Pentachlorophenol		1200	U	120	1200
Bis(2-chloroethyl)ether		40	U	5.5	40
1,3-Dichlorobenzene		400	U	36	400
Benzoic acid		400	U	400	400
1,4-Dichlorobenzene		400	U	45	400
1,2-Dichlorobenzene		400	U	47	400
N-Nitrosodi-n-propylamine		40	U	6.7	40
Hexachloroethane		40	U	4.5	40
Nitrobenzene		40	U	5.7	40
Isophorone		400	U	49	400
Bis(2-chloroethoxy)methane		400	U	52	400
1,2,4-Trichlorobenzene		40	U	4.6	40
Naphthalene		96	J	47	400
4-Chloroaniline		400	U	110	400
Hexachlorobutadiene		81	U	9.8	81
2-Methylnaphthalene		57	J	52	400
Hexachlorocyclopentadiene		400	U	47	400
2-Chloronaphthalene		400	U	45	400
2-Nitroaniline		810	U	170	810
Dimethyl phthalate		400	U	48	400
Acenaphthylene		89	J	47	400
2,6-Dinitrotoluene		81	U	12	81
3-Nitroaniline		810	U	140	810
Acenaphthene		400	U	59	400
Dibenzofuran		400	U	47	400
2,4-Dinitrotoluene		81	U	13	81
Diethyl phthalate		400	U	48	400
4-Chlorophenyl phenyl ether		400	U	47	400
Fluorene		400	U	51	400
4-Nitroaniline		810	U	130	810
N-Nitrosodiphenylamine		400	U	40	400
4-Bromophenyl phenyl ether		400	U	40	400
Hexachlorobenzene		40	U	5.5	40

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-22 (5.7-6.7)**

Lab Sample ID: 200-11460-1
Client Matrix: Solid % Moisture: 17.8

Date Sampled: 06/23/2012 1200
Date Received: 06/26/2012 1050

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118767	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-118532	Lab File ID:	z19446.d
Dilution:	1.0			Initial Weight/Volume:	15.02 g
Analysis Date:	07/05/2012 1758			Final Weight/Volume:	1 mL
Prep Date:	07/03/2012 1954			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		550		51	400
Anthracene		150	J	49	400
Carbazole		400	U	47	400
Di-n-butyl phthalate		400	U	50	400
Fluoranthene		930		54	400
Pyrene		990		34	400
Butyl benzyl phthalate		400	U	37	400
3,3'-Dichlorobenzidine		810	U	140	810
Benzo[a]anthracene		710		2.8	40
Chrysene		800		47	400
Bis(2-ethylhexyl) phthalate		210	J	130	400
Di-n-octyl phthalate		400	U	26	400
Benzo[b]fluoranthene		860		2.5	40
Benzo[k]fluoranthene		280		3.0	40
Benzo[a]pyrene		790		2.8	40
Indeno[1,2,3-cd]pyrene		800		7.5	40
Dibenz(a,h)anthracene		120		5.1	40
Benzo[g,h,i]perylene		900		30	400
2,2'-oxybis[1-chloropropane]		400	U	44	400

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	78		38 - 105
Phenol-d5	71		41 - 118
Terphenyl-d14	83		16 - 151
2,4,6-Tribromophenol	43		10 - 120
2-Fluorophenol	70		37 - 125
2-Fluorobiphenyl	90		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-23 (5-6)**

Lab Sample ID: 200-11460-2
Client Matrix: Solid % Moisture: 10.1

Date Sampled: 06/23/2012 1245
Date Received: 06/26/2012 1050

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118767	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-118532	Lab File ID:	z19447.d
Dilution:	1.0			Initial Weight/Volume:	14.99 g
Analysis Date:	07/05/2012 1821			Final Weight/Volume:	1 mL
Prep Date:	07/03/2012 1954			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		370	U	49	370
2-Chlorophenol		370	U	48	370
2-Methylphenol		370	U	63	370
2-Nitrophenol		370	U	41	370
3 & 4 Methylphenol		370	U	63	370
2,4-Dimethylphenol		370	U	91	370
2,4-Dichlorophenol		370	U	54	370
4-Chloro-3-methylphenol		370	U	56	370
2,4,6-Trichlorophenol		370	U	43	370
2,4,5-Trichlorophenol		370	U	48	370
2,4-Dinitrophenol		1100	U	210	1100
4-Nitrophenol		1100	U	240	1100
4,6-Dinitro-2-methylphenol		1100	U	100	1100
Pentachlorophenol		1100	U	110	1100
Bis(2-chloroethyl)ether		37	U	5.0	37
1,3-Dichlorobenzene		370	U	33	370
Benzoic acid		370	U	370	370
1,4-Dichlorobenzene		370	U	42	370
1,2-Dichlorobenzene		370	U	43	370
N-Nitrosodi-n-propylamine		37	U	6.1	37
Hexachloroethane		37	U	4.1	37
Nitrobenzene		37	U	5.2	37
Isophorone		370	U	45	370
Bis(2-chloroethoxy)methane		370	U	48	370
1,2,4-Trichlorobenzene		37	U	4.2	37
Naphthalene		200	J	43	370
4-Chloroaniline		370	U	98	370
Hexachlorobutadiene		75	U	9.0	75
2-Methylnaphthalene		210	J	47	370
Hexachlorocyclopentadiene		370	U	43	370
2-Chloronaphthalene		370	U	41	370
2-Nitroaniline		750	U	150	750
Dimethyl phthalate		370	U	44	370
Acenaphthylene		55	J	44	370
2,6-Dinitrotoluene		75	U	11	75
3-Nitroaniline		750	U	130	750
Acenaphthene		340	J	54	370
Dibenzofuran		280	J	43	370
2,4-Dinitrotoluene		75	U	12	75
Diethyl phthalate		370	U	44	370
4-Chlorophenyl phenyl ether		370	U	43	370
Fluorene		250	J	47	370
4-Nitroaniline		750	U	110	750
N-Nitrosodiphenylamine		370	U	36	370
4-Bromophenyl phenyl ether		370	U	37	370
Hexachlorobenzene		37	U	5.0	37

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: SB-23 (5-6)

Lab Sample ID: 200-11460-2
Client Matrix: Solid

% Moisture: 10.1

Date Sampled: 06/23/2012 1245
Date Received: 06/26/2012 1050

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118767	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-118532	Lab File ID:	z19447.d
Dilution:	1.0			Initial Weight/Volume:	14.99 g
Analysis Date:	07/05/2012 1821			Final Weight/Volume:	1 mL
Prep Date:	07/03/2012 1954			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		4000		47	370
Anthracene		600		45	370
Carbazole		230	J	44	370
Di-n-butyl phthalate		370	U	45	370
Fluoranthene		3000		49	370
Pyrene		2600		31	370
Butyl benzyl phthalate		370	U	34	370
3,3'-Dichlorobenzidine		750	U	130	750
Benzo[a]anthracene		1400		2.6	37
Chrysene		1600		43	370
Bis(2-ethylhexyl) phthalate		120	J	120	370
Di-n-octyl phthalate		370	U	23	370
Benzo[b]fluoranthene		1400		2.3	37
Benzo[k]fluoranthene		460		2.8	37
Benzo[a]pyrene		1300		2.6	37
Indeno[1,2,3-cd]pyrene		1200		6.8	37
Dibenz(a,h)anthracene		210		4.6	37
Benzo[g,h,i]perylene		1200		27	370
2,2'-oxybis[1-chloropropane]		370	U	41	370

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	73		38 - 105
Phenol-d5	72		41 - 118
Terphenyl-d14	80		16 - 151
2,4,6-Tribromophenol	39		10 - 120
2-Fluorophenol	69		37 - 125
2-Fluorobiphenyl	84		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-24 (5.5-6.5)**

Lab Sample ID: 200-11460-3
Client Matrix: Solid % Moisture: 2.9

Date Sampled: 06/23/2012 1330
Date Received: 06/26/2012 1050

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118964	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-118532	Lab File ID:	z19474.d
Dilution:	1.0			Initial Weight/Volume:	15.05 g
Analysis Date:	07/06/2012 0915			Final Weight/Volume:	1 mL
Prep Date:	07/03/2012 1954			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		340	U	46	340
2-Chlorophenol		340	U	45	340
2-Methylphenol		340	U	58	340
2-Nitrophenol		340	U	38	340
3 & 4 Methylphenol		340	U	58	340
2,4-Dimethylphenol		340	U	84	340
2,4-Dichlorophenol		340	U	50	340
4-Chloro-3-methylphenol		340	U	51	340
2,4,6-Trichlorophenol		340	U	40	340
2,4,5-Trichlorophenol		340	U	44	340
2,4-Dinitrophenol		1000	U	190	1000
4-Nitrophenol		1000	U	220	1000
4,6-Dinitro-2-methylphenol		1000	U	92	1000
Pentachlorophenol		1000	U	100	1000
Bis(2-chloroethyl)ether		34	U	4.6	34
1,3-Dichlorobenzene		340	U	31	340
Benzoic acid		340	U	340	340
1,4-Dichlorobenzene		340	U	38	340
1,2-Dichlorobenzene		340	U	39	340
N-Nitrosodi-n-propylamine		34	U	5.7	34
Hexachloroethane		34	U	3.8	34
Nitrobenzene		34	U	4.8	34
Isophorone		340	U	41	340
Bis(2-chloroethoxy)methane		340	U	44	340
1,2,4-Trichlorobenzene		34	U	3.8	34
Naphthalene		340	U	39	340
4-Chloroaniline		340	U	90	340
Hexachlorobutadiene		69	U	8.3	69
2-Methylnaphthalene		340	U	44	340
Hexachlorocyclopentadiene		340	U	40	340
2-Chloronaphthalene		340	U	38	340
2-Nitroaniline		690	U	140	690
Dimethyl phthalate		340	U	40	340
Acenaphthylene		340	U	40	340
2,6-Dinitrotoluene		69	U	10	69
3-Nitroaniline		690	U	120	690
Acenaphthene		340	U	49	340
Dibenzofuran		340	U	40	340
2,4-Dinitrotoluene		69	U	11	69
Diethyl phthalate		340	U	40	340
4-Chlorophenyl phenyl ether		340	U	40	340
Fluorene		340	U	43	340
4-Nitroaniline		690	U	110	690
N-Nitrosodiphenylamine		340	U	33	340
4-Bromophenyl phenyl ether		340	U	34	340
Hexachlorobenzene		34	U	4.6	34

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-24 (5.5-6.5)**

Lab Sample ID: 200-11460-3
Client Matrix: Solid
% Moisture: 2.9

Date Sampled: 06/23/2012 1330
Date Received: 06/26/2012 1050

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118964	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-118532	Lab File ID:	z19474.d
Dilution:	1.0			Initial Weight/Volume:	15.05 g
Analysis Date:	07/06/2012 0915			Final Weight/Volume:	1 mL
Prep Date:	07/03/2012 1954			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		340	U	43	340
Anthracene		340	U	41	340
Carbazole		340	U	40	340
Di-n-butyl phthalate		340	U	42	340
Fluoranthene		340	U	45	340
Pyrene		340	U	28	340
Butyl benzyl phthalate		340	U	31	340
3,3'-Dichlorobenzidine		690	U	120	690
Benzo[a]anthracene		34	U	2.4	34
Chrysene		340	U	40	340
Bis(2-ethylhexyl) phthalate		340	U	110	340
Di-n-octyl phthalate		340	U	22	340
Benzo[b]fluoranthene		34	U	2.1	34
Benzo[k]fluoranthene		34	U	2.6	34
Benzo[a]pyrene		34	U	2.4	34
Indeno[1,2,3-cd]pyrene		34	U	6.3	34
Dibenz(a,h)anthracene		34	U	4.3	34
Benzo[g,h,i]perylene		340	U	25	340
2,2'-oxybis[1-chloropropane]		340	U	38	340

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	56		38 - 105
Phenol-d5	63		41 - 118
Terphenyl-d14	98		16 - 151
2,4,6-Tribromophenol	53		10 - 120
2-Fluorophenol	56		37 - 125
2-Fluorobiphenyl	57		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-17 (10-10.7)**

Lab Sample ID: 200-11460-4
Client Matrix: Solid % Moisture: 36.8

Date Sampled: 06/25/2012 1200
Date Received: 06/26/2012 1050

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118767	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-118532	Lab File ID:	z19445.d
Dilution:	10			Initial Weight/Volume:	15.03 g
Analysis Date:	07/05/2012 1734	Run Type:	DL	Final Weight/Volume:	1 mL
Prep Date:	07/03/2012 1954			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		5200	U J	700	5200
2-Chlorophenol		5200	U	690	5200
2-Methylphenol		5200	U	890	5200
2-Nitrophenol		5200	U	580	5200
3 & 4 Methylphenol		5200	U	890	5200
2,4-Dimethylphenol		5200	U	1300	5200
2,4-Dichlorophenol		5200	U	760	5200
4-Chloro-3-methylphenol		5200	U	790	5200
2,4,6-Trichlorophenol		5200	U	610	5200
2,4,5-Trichlorophenol		5200	U	670	5200
2,4-Dinitrophenol		16000	U	3000	16000
4-Nitrophenol		16000	U	3400	16000
4,6-Dinitro-2-methylphenol		16000	U	1400	16000
Pentachlorophenol		16000	U	1600	16000
Bis(2-chloroethyl)ether		520	U	71	520
1,3-Dichlorobenzene		5200	U	470	5200
Benzoic acid		5200	U	5200	5200
1,4-Dichlorobenzene		5200	U	590	5200
1,2-Dichlorobenzene		5200	U	610	5200
N-Nitrosodi-n-propylamine		520	U	87	520
Hexachloroethane		520	U	58	520
Nitrobenzene		520	U	74	520
Isophorone		5200	U	630	5200
Bis(2-chloroethoxy)methane		5200	U	670	5200
1,2,4-Trichlorobenzene		520	U	59	520
Naphthalene		63000	D J	600	5200
4-Chloroaniline		5200	U J	1400	5200
Hexachlorobutadiene		1100	U J	130	1100
2-Methylnaphthalene		6200	D J	670	5200
Hexachlorocyclopentadiene		5200	U J	610	5200
2-Chloronaphthalene		5200	U	580	5200
2-Nitroaniline		11000	U	2200	11000
Dimethyl phthalate		5200	U	620	5200
Acenaphthylene		5200	U	620	5200
2,6-Dinitrotoluene		1100	U	160	1100
3-Nitroaniline		11000	U	1800	11000
Acenaphthene		5200	U	760	5200
Dibenzofuran		2100	J D	610	5200
2,4-Dinitrotoluene		1100	U J	170	1100
Diethyl phthalate		5200	U J	620	5200
4-Chlorophenyl phenyl ether		5200	U J	610	5200
Fluorene		3400	J D	670	5200
4-Nitroaniline		11000	U J	1600	11000
N-Nitrosodiphenylamine		5200	U	510	5200
4-Bromophenyl phenyl ether		5200	U	520	5200
Hexachlorobenzene		520	U	71	520

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-17 (10-10.7)**

Lab Sample ID: 200-11460-4
Client Matrix: Solid

% Moisture: 36.8

Date Sampled: 06/25/2012 1200
Date Received: 06/26/2012 1050

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118767	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-118532	Lab File ID:	z19445.d
Dilution:	10			Initial Weight/Volume:	15.03 g
Analysis Date:	07/05/2012 1734	Run Type:	DL	Final Weight/Volume:	1 mL
Prep Date:	07/03/2012 1954			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		10000	D J	660	5200
Anthracene		2300	J D	630	5200
Carbazole		5200	U J	620	5200
Di-n-butyl phthalate		5200	U J	640	5200
Fluoranthene		4300	J D	700	5200
Pyrene		3700	J D	440	5200
Butyl benzyl phthalate		5200	U J	480	5200
3,3'-Dichlorobenzidine		11000	U J	1800	11000
Benzo[a]anthracene		2500	D J	36	520
Chrysene		2700	J D	610	5200
Bis(2-ethylhexyl) phthalate		5200	U J	1700	5200
Di-n-octyl phthalate		5200	U J	330	5200
Benzo[b]fluoranthene		1700	D J	33	520
Benzo[k]fluoranthene		670	D	40	520
Benzo[a]pyrene		1500	D	37	520
Indeno[1,2,3-cd]pyrene		1400	D	97	520
Dibenz(a,h)anthracene		340	J D	66	520
Benzo[g,h,i]perylene		1500	J D	390	5200
2,2'-oxybis[1-chloropropane]		5200	U J	580	5200

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	0	D	38 - 105
Phenol-d5	0	D	41 - 118
Terphenyl-d14	0	D	16 - 151
2,4,6-Tribromophenol	0	D	10 - 120
2-Fluorophenol	0	D	37 - 125
2-Fluorobiphenyl	0	D	40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-17 (11.2-12.2)**

Lab Sample ID: 200-11460-5
Client Matrix: Solid

% Moisture: 36.4

Date Sampled: 06/25/2012 1205
Date Received: 06/26/2012 1050

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118767	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-118532	Lab File ID:	z19449.d
Dilution:	2.0			Initial Weight/Volume:	15.03 g
Analysis Date:	07/05/2012 1908			Final Weight/Volume:	1 mL
Prep Date:	07/03/2012 1954			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		1000	U	140	1000
2-Chlorophenol		1000	U	140	1000
2-Methylphenol		1000	U	180	1000
2-Nitrophenol		1000	U	120	1000
3 & 4 Methylphenol		1000	U	180	1000
2,4-Dimethylphenol		1000	U	260	1000
2,4-Dichlorophenol		1000	U	150	1000
4-Chloro-3-methylphenol		1000	U	160	1000
2,4,6-Trichlorophenol		1000	U	120	1000
2,4,5-Trichlorophenol		1000	U	130	1000
2,4-Dinitrophenol		3100	U	590	3100
4-Nitrophenol		~~3100~~	~~U~~ R	~~670~~	~~3100~~
4,6-Dinitro-2-methylphenol		3100	U	280	3100
Pentachlorophenol		3100	U J	310	3100
Bis(2-chloroethyl)ether		100	U	14	100
1,3-Dichlorobenzene		1000	U	94	1000
Benzoic acid		1000	U	1000	1000
1,4-Dichlorobenzene		1000	U	120	1000
1,2-Dichlorobenzene		1000	U	120	1000
N-Nitrosodi-n-propylamine		100	U	17	100
Hexachloroethane		100	U	12	100
Nitrobenzene		100	U	15	100
Isophorone		1000	U	130	1000
Bis(2-chloroethoxy)methane		1000	U	130	1000
1,2,4-Trichlorobenzene		100	U	12	100
Naphthalene		1000	U	120	1000
4-Chloroaniline		~~1000~~	~~U~~ R	~~270~~	~~1000~~
Hexachlorobutadiene		210	U	25	210
2-Methylnaphthalene		1000	U	130	1000
Hexachlorocyclopentadiene		1000	U J	120	1000
2-Chloronaphthalene		1000	U	120	1000
2-Nitroaniline		2100	U	430	2100
Dimethyl phthalate		1000	U	120	1000
Acenaphthylene		1000	U	120	1000
2,6-Dinitrotoluene		210	U	31	210
3-Nitroaniline		2100	U J	370	2100
Acenaphthene		1000	U	150	1000
Dibenzofuran		1000	U	120	1000
2,4-Dinitrotoluene		210	U	34	210
Diethyl phthalate		1000	U	120	1000
4-Chlorophenyl phenyl ether		1000	U	120	1000
Fluorene		1000	U	130	1000
4-Nitroaniline		2100	U J	320	2100
N-Nitrosodiphenylamine		1000	U J	100	1000
4-Bromophenyl phenyl ether		1000	U	100	1000
Hexachlorobenzene		100	U	14	100

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-17 (11.2-12.2)**

Lab Sample ID: 200-11460-5
Client Matrix: Solid % Moisture: 36.4

Date Sampled: 06/25/2012 1205
Date Received: 06/26/2012 1050

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118767	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-118532	Lab File ID:	z19449.d
Dilution:	2.0			Initial Weight/Volume:	15.03 g
Analysis Date:	07/05/2012 1908			Final Weight/Volume:	1 mL
Prep Date:	07/03/2012 1954			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		1000	U	130	1000
Anthracene		1000	U	130	1000
Carbazole		1000	U	120	1000
Di-n-butyl phthalate		1000	U	130	1000
Fluoranthene		1000	U	140	1000
Pyrene		280	J	87	1000
Butyl benzyl phthalate		1000	U	95	1000
3,3'-Dichlorobenzidine		~~2100~~	~~U~~ R	~~360~~	~~2100~~
Benzo[a]anthracene		100	U	7.2	100
Chrysene		190	J	120	1000
Bis(2-ethylhexyl) phthalate		1000	U	340	1000
Di-n-octyl phthalate		1000	U	66	1000
Benzo[b]fluoranthene		210	J	6.6	100
Benzo[k]fluoranthene		110		7.9	100
Benzo[a]pyrene		240		7.3	100
Indeno[1,2,3-cd]pyrene		170	J	19	100
Dibenz(a,h)anthracene		33	J	13	100
Benzo[g,h,i]perylene		210	J	77	1000
2,2'-oxybis[1-chloropropane]		1000	U	110	1000

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	83		38 - 105
Phenol-d5	70		41 - 118
Terphenyl-d14	79		16 - 151
2,4,6-Tribromophenol	59		10 - 120
2-Fluorophenol	73		37 - 125
2-Fluorobiphenyl	93		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-18 (11.1-11.7)**

Lab Sample ID: 200-11460-6
Client Matrix: Solid % Moisture: 21.9

Date Sampled: 06/25/2012 1330
Date Received: 06/26/2012 1050

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118964	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-118532	Lab File ID:	z19475.d
Dilution:	1.0			Initial Weight/Volume:	15.02 g
Analysis Date:	07/06/2012 0955			Final Weight/Volume:	1 mL
Prep Date:	07/03/2012 1954			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		420	U	57	420
2-Chlorophenol		420	U	56	420
2-Methylphenol		420	U	72	420
2-Nitrophenol		420	U	47	420
3 & 4 Methylphenol		420	U	72	420
2,4-Dimethylphenol		420	U	100	420
2,4-Dichlorophenol		420	U	62	420
4-Chloro-3-methylphenol		420	U	64	420
2,4,6-Trichlorophenol		420	U	50	420
2,4,5-Trichlorophenol		420	U	55	420
2,4-Dinitrophenol		1300	U	240	1300
4-Nitrophenol		1300	U	270	1300
4,6-Dinitro-2-methylphenol		1300	U	120	1300
Pentachlorophenol		1300	U	130	1300
Bis(2-chloroethyl)ether		42	U	5.8	42
1,3-Dichlorobenzene		420	U	38	420
Benzoic acid		420	U	420	420
1,4-Dichlorobenzene		420	U	48	420
1,2-Dichlorobenzene		420	U	49	420
N-Nitrosodi-n-propylamine		42	U	7.1	42
Hexachloroethane		42	U	4.7	42
Nitrobenzene		42	U	6.0	42
Isophorone		420	U	51	420
Bis(2-chloroethoxy)methane		420	U	55	420
1,2,4-Trichlorobenzene		42	U	4.8	42
Naphthalene		420	U	49	420
4-Chloroaniline		420	U	110	420
Hexachlorobutadiene		86	U	10	86
2-Methylnaphthalene		420	U	54	420
Hexachlorocyclopentadiene		420	U	50	420
2-Chloronaphthalene		420	U	47	420
2-Nitroaniline		860	U	180	860
Dimethyl phthalate		420	U	50	420
Acenaphthylene		420	U	50	420
2,6-Dinitrotoluene		86	U	13	86
3-Nitroaniline		860	U	150	860
Acenaphthene		420	U	62	420
Dibenzofuran		420	U	50	420
2,4-Dinitrotoluene		86	U	14	86
Diethyl phthalate		420	U	50	420
4-Chlorophenyl phenyl ether		420	U	50	420
Fluorene		420	U	54	420
4-Nitroaniline		860	U	130	860
N-Nitrosodiphenylamine		420	U	42	420
4-Bromophenyl phenyl ether		420	U	42	420
Hexachlorobenzene		42	U	5.8	42

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-18 (11.1-11.7)**

Lab Sample ID: 200-11460-6
Client Matrix: Solid % Moisture: 21.9

Date Sampled: 06/25/2012 1330
Date Received: 06/26/2012 1050

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118964	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-118532	Lab File ID:	z19475.d
Dilution:	1.0			Initial Weight/Volume:	15.02 g
Analysis Date:	07/06/2012 0955			Final Weight/Volume:	1 mL
Prep Date:	07/03/2012 1954			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		91	J	54	420
Anthracene		420	U	51	420
Carbazole		420	U	50	420
Di-n-butyl phthalate		420	U	52	420
Fluoranthene		260	J	56	420
Pyrene		320	J	35	420
Butyl benzyl phthalate		420	U	39	420
3,3'-Dichlorobenzidine		860	U	150	860
Benzo[a]anthracene		180		3.0	42
Chrysene		190	J	49	420
Bis(2-ethylhexyl) phthalate		420	U	140	420
Di-n-octyl phthalate		420	U	27	420
Benzo[b]fluoranthene		130		2.7	42
Benzo[k]fluoranthene		49		3.2	42
Benzo[a]pyrene		130		3.0	42
Indeno[1,2,3-cd]pyrene		62		7.9	42
Dibenz(a,h)anthracene		42	U	5.3	42
Benzo[g,h,i]perylene		100	J	31	420
2,2'-oxybis[1-chloropropane]		420	U	47	420

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	87		38 - 105
Phenol-d5	68		41 - 118
Terphenyl-d14	82		16 - 151
2,4,6-Tribromophenol	61		10 - 120
2-Fluorophenol	76		37 - 125
2-Fluorobiphenyl	88		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **DUP-04-06252012**

Lab Sample ID: 200-11460-8
Client Matrix: Solid % Moisture: 44.2

Date Sampled: 06/25/2012 0000
Date Received: 06/26/2012 1050

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118967	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-118532	Lab File ID:	z19496.d
Dilution:	5.0			Initial Weight/Volume:	15.01 g
Analysis Date:	07/06/2012 2000			Final Weight/Volume:	1 mL
Prep Date:	07/03/2012 1954			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		3000	U	400	3000
2-Chlorophenol		3000	U	390	3000
2-Methylphenol		3000	U	500	3000
2-Nitrophenol		3000	U	330	3000
3 & 4 Methylphenol		3000	U	500	3000
2,4-Dimethylphenol		3000	U	730	3000
2,4-Dichlorophenol		3000	U	430	3000
4-Chloro-3-methylphenol		3000	U	450	3000
2,4,6-Trichlorophenol		3000	U	350	3000
2,4,5-Trichlorophenol		3000	U	380	3000
2,4-Dinitrophenol		8900	U	1700	8900
4-Nitrophenol		8900	U	1900	8900
4,6-Dinitro-2-methylphenol		8900	U	810	8900
Pentachlorophenol		8900	U	880	8900
Bis(2-chloroethyl)ether		300	U	40	300
1,3-Dichlorobenzene		3000	U	270	3000
Benzoic acid		3000	U	3000	3000
1,4-Dichlorobenzene		3000	U	330	3000
1,2-Dichlorobenzene		3000	U	340	3000
N-Nitrosodi-n-propylamine		300	U	49	300
Hexachloroethane		300	U	33	300
Nitrobenzene		300	U	42	300
Isophorone		3000	U	360	3000
Bis(2-chloroethoxy)methane		3000	U	380	3000
1,2,4-Trichlorobenzene		300	U	34	300
Naphthalene		27000		340	3000
4-Chloroaniline		3000	U	780	3000
Hexachlorobutadiene		600	U	72	600
2-Methylnaphthalene		3400		380	3000
Hexachlorocyclopentadiene		3000	U	350	3000
2-Chloronaphthalene		3000	U	330	3000
2-Nitroaniline		6000	U	1200	6000
Dimethyl phthalate		3000	U	350	3000
Acenaphthylene		3000	U	350	3000
2,6-Dinitrotoluene		600	U	89	600
3-Nitroaniline		6000	U	1000	6000
Acenaphthene		3000	U	430	3000
Dibenzofuran		3000	U	350	3000
2,4-Dinitrotoluene		600	U	98	600
Diethyl phthalate		3000	U	350	3000
4-Chlorophenyl phenyl ether		3000	U	350	3000
Fluorene		460	J	380	3000
4-Nitroaniline		6000	U	920	6000
N-Nitrosodiphenylamine		3000	U	290	3000
4-Bromophenyl phenyl ether		3000	U	290	3000
Hexachlorobenzene		300	U	40	300

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **DUP-04-06252012**

Lab Sample ID: 200-11460-8
Client Matrix: Solid % Moisture: 44.2

Date Sampled: 06/25/2012 0000
Date Received: 06/26/2012 1050

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-118967	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-118532	Lab File ID:	z19496.d
Dilution:	5.0			Initial Weight/Volume:	15.01 g
Analysis Date:	07/06/2012 2000			Final Weight/Volume:	1 mL
Prep Date:	07/03/2012 1954			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		2500	J	380	3000
Anthracene		570	J	360	3000
Carbazole		3000	U	350	3000
Di-n-butyl phthalate		3000	U	370	3000
Fluoranthene		1300	J	390	3000
Pyrene		2400	J	250	3000
Butyl benzyl phthalate		3000	U	270	3000
3,3'-Dichlorobenzidine		6000	U	1000	6000
Benzo[a]anthracene		1200		21	300
Chrysene		1300	J	350	3000
Bis(2-ethylhexyl) phthalate		3000	U	980	3000
Di-n-octyl phthalate		3000	U	190	3000
Benzo[b]fluoranthene		700		19	300
Benzo[k]fluoranthene		330		22	300
Benzo[a]pyrene		840		21	300
Indeno[1,2,3-cd]pyrene		660		55	300
Dibenz(a,h)anthracene		190	J	37	300
Benzo[g,h,i]perylene		890	J	220	3000
2,2'-oxybis[1-chloropropane]		3000	U	330	3000

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	71		38 - 105
Phenol-d5	75		41 - 118
Terphenyl-d14	91		16 - 151
2,4,6-Tribromophenol	56		10 - 120
2-Fluorophenol	69		37 - 125
2-Fluorobiphenyl	90		40 - 109

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-18 (3-3.5)**

Lab Sample ID: 200-11441-1
Client Matrix: Solid

% Moisture: 40.7

Date Sampled: 06/22/2012 0950
Date Received: 06/23/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41316	Instrument ID:	5253.i
Prep Method:	3541	Prep Batch:	200-40879	Initial Weight/Volume:	15.63 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	07/03/2012 0254			Injection Volume:	1 uL
Prep Date:	06/25/2012 1030			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		28	U	9.1	28
PCB-1221		28	U	7.0	28
PCB-1232		28	U	5.3	28
PCB-1242		28	U	11	28
PCB-1248		28	U J	3.2	28
PCB-1254		28	U	4.5	28
PCB-1260		28	U	3.9	28
PCB-1262		28	U	2.4	28
PCB-1268		28	U	2.3	28

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	37		30 - 130
DCB Decachlorobiphenyl	41	X	45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-18 (3-3.5)**

Lab Sample ID: 200-11441-1
Client Matrix: Solid
% Moisture: 40.7

Date Sampled: 06/22/2012 0950
Date Received: 06/23/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41316	Instrument ID:	5253.i
Prep Method:	3541	Prep Batch:	200-40879	Initial Weight/Volume:	15.63 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	07/03/2012 0254			Injection Volume:	1 uL
Prep Date:	06/25/2012 1030			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	37		30 - 130
DCB Decachlorobiphenyl	59		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-17 (4-5)**

Lab Sample ID: 200-11441-2
Client Matrix: Solid
% Moisture: 32.4

Date Sampled: 06/22/2012 1420
Date Received: 06/23/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41296	Instrument ID:	5253.i
Prep Method:	3541	Prep Batch:	200-40879	Initial Weight/Volume:	14.91 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/29/2012 1123			Injection Volume:	1 uL
Prep Date:	06/25/2012 1030			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		25	U	8.3	25
PCB-1221		25	U	6.4	25
PCB-1232		25	U	4.9	25
PCB-1242		25	U	10	25
PCB-1248		25	U	3.0	25
PCB-1254		25	U	4.2	25
PCB-1260		25	U	3.6	25
PCB-1262		25	U	2.2	25
PCB-1268		25	U	2.1	25

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	54		30 - 130
DCB Decachlorobiphenyl	37	X	45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-17 (4-5)**

Lab Sample ID: 200-11441-2
Client Matrix: Solid
% Moisture: 32.4

Date Sampled: 06/22/2012 1420
Date Received: 06/23/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41296	Instrument ID:	5253.i
Prep Method:	3541	Prep Batch:	200-40879	Initial Weight/Volume:	14.91 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/29/2012 1123			Injection Volume:	1 uL
Prep Date:	06/25/2012 1030			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	61		30 - 130
DCB Decachlorobiphenyl	50		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-28A (8.7-9.7)**

Lab Sample ID: 200-11441-3
Client Matrix: Solid % Moisture: 37.8

Date Sampled: 06/22/2012 1310
Date Received: 06/23/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41296	Instrument ID:	5253.i
Prep Method:	3541	Prep Batch:	200-40879	Initial Weight/Volume:	14.74 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/29/2012 1147			Injection Volume:	1 uL
Prep Date:	06/25/2012 1030			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		28	U	9.2	28
PCB-1221		28	U	7.0	28
PCB-1232		28	U	5.4	28
PCB-1242		28	U	11	28
PCB-1248		28	U	3.3	28
PCB-1254		28	U	4.6	28
PCB-1260		28	U	3.9	28
PCB-1262		28	U	2.5	28
PCB-1268		28	U	2.3	28

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	97		30 - 130
DCB Decachlorobiphenyl	78		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-28A (8.7-9.7)**

Lab Sample ID: 200-11441-3
Client Matrix: Solid
% Moisture: 37.8

Date Sampled: 06/22/2012 1310
Date Received: 06/23/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41296	Instrument ID:	5253.i
Prep Method:	3541	Prep Batch:	200-40879	Initial Weight/Volume:	14.74 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/29/2012 1147			Injection Volume:	1 uL
Prep Date:	06/25/2012 1030			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	102		30 - 130
DCB Decachlorobiphenyl	79		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-15 (5.5-6.5)**

Lab Sample ID: 200-11441-4
Client Matrix: Solid % Moisture: 23.3

Date Sampled: 06/22/2012 1200
Date Received: 06/23/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41296	Instrument ID:	5253.i
Prep Method:	3541	Prep Batch:	200-40879	Initial Weight/Volume:	14.72 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/29/2012 1211			Injection Volume:	1 uL
Prep Date:	06/25/2012 1030			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		23	U	7.4	23
PCB-1221		23	U	5.7	23
PCB-1232		23	U	4.4	23
PCB-1242		23	U	8.9	23
PCB-1248		23	U	2.7	23
PCB-1254		23	U	3.7	23
PCB-1260		23	U	3.2	23
PCB-1262		23	U	2.0	23
PCB-1268		23	U	1.9	23

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	86		30 - 130
DCB Decachlorobiphenyl	71		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-15 (5.5-6.5)**

Lab Sample ID: 200-11441-4
Client Matrix: Solid % Moisture: 23.3

Date Sampled: 06/22/2012 1200
Date Received: 06/23/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41296	Instrument ID:	5253.i
Prep Method:	3541	Prep Batch:	200-40879	Initial Weight/Volume:	14.72 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/29/2012 1211			Injection Volume:	1 uL
Prep Date:	06/25/2012 1030			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	88		30 - 130
DCB Decachlorobiphenyl	73		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-10 (5-6)**

Lab Sample ID: 200-11441-5
Client Matrix: Solid

% Moisture: 9.1

Date Sampled: 06/22/2012 1030
Date Received: 06/23/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41383	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-41331	Initial Weight/Volume:	15.09 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	07/05/2012 1153			Injection Volume:	1 uL
Prep Date:	07/03/2012 1640			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		19	U	6.1	19
PCB-1221		19	U	4.7	19
PCB-1232		19	U	3.6	19
PCB-1242		19	U	7.3	19
PCB-1248		19	U	2.2	19
PCB-1254		19	U	3.1	19
PCB-1260		19	U	2.6	19
PCB-1262		19	U	1.6	19
PCB-1268		19	U	1.5	19

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	49		30 - 130
DCB Decachlorobiphenyl	42	X	45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-10 (5-6)**

Lab Sample ID: 200-11441-5
Client Matrix: Solid

% Moisture: 9.1

Date Sampled: 06/22/2012 1030
Date Received: 06/23/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41383	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-41331	Initial Weight/Volume:	15.09 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	07/05/2012 1153			Injection Volume:	1 uL
Prep Date:	07/03/2012 1640			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	49		30 - 130
DCB Decachlorobiphenyl	54		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-10 (7.4-8.4)**

Lab Sample ID: 200-11441-6
Client Matrix: Solid
% Moisture: 11.7

Date Sampled: 06/22/2012 1035
Date Received: 06/23/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41296	Instrument ID:	5253.i
Prep Method:	3541	Prep Batch:	200-40879	Initial Weight/Volume:	15.41 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/29/2012 1235			Injection Volume:	1 uL
Prep Date:	06/25/2012 1030			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		19	U	6.2	19
PCB-1221		19	U	4.7	19
PCB-1232		19	U	3.6	19
PCB-1242		19	U	7.4	19
PCB-1248		19	U	2.2	19
PCB-1254		19	U	3.1	19
PCB-1260		19	U	2.6	19
PCB-1262		19	U	1.7	19
PCB-1268		19	U	1.5	19

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	88		30 - 130
DCB Decachlorobiphenyl	83		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-10 (7.4-8.4)**

Lab Sample ID: 200-11441-6
Client Matrix: Solid
% Moisture: 11.7

Date Sampled: 06/22/2012 1035
Date Received: 06/23/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41296	Instrument ID:	5253.i
Prep Method:	3541	Prep Batch:	200-40879	Initial Weight/Volume:	15.41 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/29/2012 1235			Injection Volume:	1 uL
Prep Date:	06/25/2012 1030			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	96		30 - 130
DCB Decachlorobiphenyl	87		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-16 (7.9-8.9)**

Lab Sample ID: 200-11441-7
Client Matrix: Solid
% Moisture: 10.4

Date Sampled: 06/22/2012 0945
Date Received: 06/23/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41296	Instrument ID:	5253.i
Prep Method:	3541	Prep Batch:	200-40879	Initial Weight/Volume:	15.27 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/29/2012 1258			Injection Volume:	1 uL
Prep Date:	06/25/2012 1030			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		19	U	6.1	19
PCB-1221		19	U	4.7	19
PCB-1232		19	U	3.6	19
PCB-1242		19	U	7.3	19
PCB-1248		19	U	2.2	19
PCB-1254		19	U	3.1	19
PCB-1260		19	U	2.6	19
PCB-1262		19	U	1.6	19
PCB-1268		19	U	1.5	19

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	83		30 - 130
DCB Decachlorobiphenyl	79		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-16 (7.9-8.9)**

Lab Sample ID: 200-11441-7
Client Matrix: Solid
% Moisture: 10.4

Date Sampled: 06/22/2012 0945
Date Received: 06/23/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41296	Instrument ID:	5253.i
Prep Method:	3541	Prep Batch:	200-40879	Initial Weight/Volume:	15.27 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/29/2012 1258			Injection Volume:	1 uL
Prep Date:	06/25/2012 1030			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	90		30 - 130
DCB Decachlorobiphenyl	80		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-09 (8-8.9)**

Lab Sample ID: 200-11441-8
Client Matrix: Solid

% Moisture: 9.7

Date Sampled: 06/22/2012 0920
Date Received: 06/23/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41296	Instrument ID:	5253.i
Prep Method:	3541	Prep Batch:	200-40879	Initial Weight/Volume:	15.36 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/29/2012 1346			Injection Volume:	1 uL
Prep Date:	06/25/2012 1030			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		18	U	6.1	18
PCB-1221		18	U	4.6	18
PCB-1232		18	U	3.6	18
PCB-1242		18	U	7.2	18
PCB-1248		18	U	2.2	18
PCB-1254		18	U	3.0	18
PCB-1260		18	U	2.6	18
PCB-1262		18	U	1.6	18
PCB-1268		18	U	1.5	18

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	84		30 - 130
DCB Decachlorobiphenyl	79		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-09 (8-8.9)**

Lab Sample ID: 200-11441-8
Client Matrix: Solid
% Moisture: 9.7

Date Sampled: 06/22/2012 0920
Date Received: 06/23/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41296	Instrument ID:	5253.i
Prep Method:	3541	Prep Batch:	200-40879	Initial Weight/Volume:	15.36 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/29/2012 1346			Injection Volume:	1 uL
Prep Date:	06/25/2012 1030			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	89		30 - 130
DCB Decachlorobiphenyl	81		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-08 (13.9-14.5)**

Lab Sample ID: 200-11441-9
Client Matrix: Solid
% Moisture: 18.6

Date Sampled: 06/19/2012 1610
Date Received: 06/23/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41296	Instrument ID:	5253.i
Prep Method:	3541	Prep Batch:	200-40879	Initial Weight/Volume:	15.59 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/29/2012 1410			Injection Volume:	1 uL
Prep Date:	06/25/2012 1030			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		20	U	6.6	20
PCB-1221		20	U	5.1	20
PCB-1232		20	U	3.9	20
PCB-1242		20	U	7.9	20
PCB-1248		20	U	2.4	20
PCB-1254		20	U	3.3	20
PCB-1260		20	U	2.8	20
PCB-1262		20	U	1.8	20
PCB-1268		20	U	1.7	20

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	84		30 - 130
DCB Decachlorobiphenyl	81		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-08 (13.9-14.5)**

Lab Sample ID: 200-11441-9
Client Matrix: Solid
% Moisture: 18.6

Date Sampled: 06/19/2012 1610
Date Received: 06/23/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41296	Instrument ID:	5253.i
Prep Method:	3541	Prep Batch:	200-40879	Initial Weight/Volume:	15.59 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/29/2012 1410			Injection Volume:	1 uL
Prep Date:	06/25/2012 1030			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	87		30 - 130
DCB Decachlorobiphenyl	82		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-08 (12.8-13.9)**

Lab Sample ID: 200-11441-10
Client Matrix: Solid
% Moisture: 15.1

Date Sampled: 06/19/2012 1600
Date Received: 06/23/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41296	Instrument ID:	5253.i
Prep Method:	3541	Prep Batch:	200-40879	Initial Weight/Volume:	15.15 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/29/2012 1434			Injection Volume:	1 uL
Prep Date:	06/25/2012 1030			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		20	U	6.5	20
PCB-1221		20	U	5.0	20
PCB-1232		20	U	3.8	20
PCB-1242		20	U	7.8	20
PCB-1248		20	U	2.3	20
PCB-1254		20	U	3.3	20
PCB-1260		20	U	2.8	20
PCB-1262		20	U	1.7	20
PCB-1268		20	U	1.6	20

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	76		30 - 130
DCB Decachlorobiphenyl	72		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-08 (12.8-13.9)**

Lab Sample ID: 200-11441-10
Client Matrix: Solid
% Moisture: 15.1

Date Sampled: 06/19/2012 1600
Date Received: 06/23/2012 1010

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41296	Instrument ID:	5253.i
Prep Method:	3541	Prep Batch:	200-40879	Initial Weight/Volume:	15.15 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/29/2012 1434			Injection Volume:	1 uL
Prep Date:	06/25/2012 1030			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	80		30 - 130
DCB Decachlorobiphenyl	74		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-22 (5.7-6.7)**

Lab Sample ID: 200-11460-1
Client Matrix: Solid

% Moisture: 17.8

Date Sampled: 06/23/2012 1200
Date Received: 06/26/2012 1050

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41383	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40997	Initial Weight/Volume:	14.75 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	07/05/2012 1243			Injection Volume:	1 uL
Prep Date:	06/27/2012 1018			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		21	U	6.9	21
PCB-1221		21	U	5.3	21
PCB-1232		21	U	4.1	21
PCB-1242		21	U	8.3	21
PCB-1248		21	U	2.5	21
PCB-1254		21	U	3.5	21
PCB-1260		65		3.0	21
PCB-1262		21	U	1.9	21
PCB-1268		21	U	1.7	21

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	74		30 - 130
DCB Decachlorobiphenyl	59		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-22 (5.7-6.7)**

Lab Sample ID: 200-11460-1
Client Matrix: Solid
% Moisture: 17.8

Date Sampled: 06/23/2012 1200
Date Received: 06/26/2012 1050

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41383	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40997	Initial Weight/Volume:	14.75 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	07/05/2012 1243			Injection Volume:	1 uL
Prep Date:	06/27/2012 1018			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	84		30 - 130
DCB Decachlorobiphenyl	63		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-23 (5-6)**

Lab Sample ID: 200-11460-2
Client Matrix: Solid
% Moisture: 10.1

Date Sampled: 06/23/2012 1245
Date Received: 06/26/2012 1050

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41383	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40997	Initial Weight/Volume:	14.75 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	07/05/2012 1308			Injection Volume:	1 uL
Prep Date:	06/27/2012 1018			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		19	U	6.3	19
PCB-1221		19	U	4.9	19
PCB-1232		19	U	3.7	19
PCB-1242		19	U	7.6	19
PCB-1248		19	U	2.3	19
PCB-1254		19	U	3.2	19
PCB-1260		19	U	2.7	19
PCB-1262		19	U	1.7	19
PCB-1268		19	U	1.6	19

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	78		30 - 130
DCB Decachlorobiphenyl	59		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-23 (5-6)**

Lab Sample ID: 200-11460-2
Client Matrix: Solid
% Moisture: 10.1

Date Sampled: 06/23/2012 1245
Date Received: 06/26/2012 1050

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41383	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40997	Initial Weight/Volume:	14.75 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	07/05/2012 1308			Injection Volume:	1 uL
Prep Date:	06/27/2012 1018			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	88		30 - 130
DCB Decachlorobiphenyl	67		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-24 (5.5-6.5)**

Lab Sample ID: 200-11460-3
Client Matrix: Solid % Moisture: 2.9

Date Sampled: 06/23/2012 1330
Date Received: 06/26/2012 1050

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41316	Instrument ID:	5253.i
Prep Method:	3541	Prep Batch:	200-40997	Initial Weight/Volume:	15.41 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	07/02/2012 2144			Injection Volume:	1 uL
Prep Date:	06/27/2012 1018			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		17	U	5.6	17
PCB-1221		17	U	4.3	17
PCB-1232		17	U	3.3	17
PCB-1242		17	U	6.7	17
PCB-1248		17	U	2.0	17
PCB-1254		17	U	2.8	17
PCB-1260		17	U	2.4	17
PCB-1262		17	U	1.5	17
PCB-1268		17	U	1.4	17

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	89		30 - 130
DCB Decachlorobiphenyl	90		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-24 (5.5-6.5)**

Lab Sample ID: 200-11460-3
Client Matrix: Solid % Moisture: 2.9

Date Sampled: 06/23/2012 1330
Date Received: 06/26/2012 1050

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41316	Instrument ID:	5253.i
Prep Method:	3541	Prep Batch:	200-40997	Initial Weight/Volume:	15.41 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	07/02/2012 2144			Injection Volume:	1 uL
Prep Date:	06/27/2012 1018			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	99		30 - 130
DCB Decachlorobiphenyl	100		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-17 (10-10.7)**

Lab Sample ID: 200-11460-4
Client Matrix: Solid

% Moisture: 36.8

Date Sampled: 06/25/2012 1200
Date Received: 06/26/2012 1050

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41503	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40997	Initial Weight/Volume:	14.97 g
Dilution:	50			Final Weight/Volume:	5000 uL
Analysis Date:	07/06/2012 2320			Injection Volume:	1 uL
Prep Date:	06/27/2012 1018			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		1300	U	440	1300
PCB-1221		1300	U	340	1300
PCB-1232		1300	U	260	1300
PCB-1242		1300	U	530	1300
PCB-1248		1300	U	160	1300
PCB-1254		1300	U	220	1300
PCB-1260		1300	U	190	1300
PCB-1262		1300	U	120	1300
PCB-1268		1300	U	110	1300

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	0	X	30 - 130
DCB Decachlorobiphenyl	0	X	45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-17 (10-10.7)**

Lab Sample ID: 200-11460-4
Client Matrix: Solid
% Moisture: 36.8

Date Sampled: 06/25/2012 1200
Date Received: 06/26/2012 1050

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41503	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40997	Initial Weight/Volume:	14.97 g
Dilution:	50			Final Weight/Volume:	5000 uL
Analysis Date:	07/06/2012 2320			Injection Volume:	1 uL
Prep Date:	06/27/2012 1018			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	0	X	30 - 130
DCB Decachlorobiphenyl	0	X	45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-17 (11.2-12.2)**

Lab Sample ID: 200-11460-5
Client Matrix: Solid % Moisture: 36.4

Date Sampled: 06/25/2012 1205
Date Received: 06/26/2012 1050

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41316	Instrument ID:	5253.i
Prep Method:	3541	Prep Batch:	200-40997	Initial Weight/Volume:	15.43 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	07/02/2012 2255			Injection Volume:	1 uL
Prep Date:	06/27/2012 1018			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		26	U	8.6	26
PCB-1221		26	U	6.6	26
PCB-1232		26	U	5.0	26
PCB-1242		26	U	10	26
PCB-1248		26	U	3.1	26
PCB-1254		26	U	4.3	26
PCB-1260		26	U	3.7	26
PCB-1262		26	U	2.3	26
PCB-1268		26	U	2.1	26

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	91		30 - 130
DCB Decachlorobiphenyl	93		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-17 (11.2-12.2)**

Lab Sample ID: 200-11460-5
Client Matrix: Solid
% Moisture: 36.4

Date Sampled: 06/25/2012 1205
Date Received: 06/26/2012 1050

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41316	Instrument ID:	5253.i
Prep Method:	3541	Prep Batch:	200-40997	Initial Weight/Volume:	15.43 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	07/02/2012 2255			Injection Volume:	1 uL
Prep Date:	06/27/2012 1018			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	97		30 - 130
DCB Decachlorobiphenyl	99		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-18 (11.1-11.7)**

Lab Sample ID: 200-11460-6
Client Matrix: Solid % Moisture: 21.9

Date Sampled: 06/25/2012 1330
Date Received: 06/26/2012 1050

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41316	Instrument ID:	5253.i
Prep Method:	3541	Prep Batch:	200-40997	Initial Weight/Volume:	15.53 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	07/02/2012 2207			Injection Volume:	1 uL
Prep Date:	06/27/2012 1018			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		21	U	6.9	21
PCB-1221		21	U	5.3	21
PCB-1232		21	U	4.1	21
PCB-1242		21	U	8.3	21
PCB-1248		21	U	2.5	21
PCB-1254		21	U	3.5	21
PCB-1260		21	U	3.0	21
PCB-1262		21	U	1.9	21
PCB-1268		21	U	1.7	21

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	85		30 - 130
DCB Decachlorobiphenyl	86		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-18 (11.1-11.7)**

Lab Sample ID: 200-11460-6
Client Matrix: Solid % Moisture: 21.9

Date Sampled: 06/25/2012 1330
Date Received: 06/26/2012 1050

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41316	Instrument ID:	5253.i
Prep Method:	3541	Prep Batch:	200-40997	Initial Weight/Volume:	15.53 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	07/02/2012 2207			Injection Volume:	1 uL
Prep Date:	06/27/2012 1018			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	89		30 - 130
DCB Decachlorobiphenyl	90		45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **DUP-04-06252012**

Lab Sample ID: 200-11460-8
Client Matrix: Solid

% Moisture: 44.2

Date Sampled: 06/25/2012 0000
Date Received: 06/26/2012 1050

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41503	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40997	Initial Weight/Volume:	14.69 g
Dilution:	50			Final Weight/Volume:	5000 uL
Analysis Date:	07/07/2012 0011			Injection Volume:	1 uL
Prep Date:	06/27/2012 1018			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		1600	U J	510	1600
PCB-1221		1600	U	390	1600
PCB-1232		1600	U	300	1600
PCB-1242		1600	U	610	1600
PCB-1248		1600	U	180	1600
PCB-1254		1600	U	260	1600
PCB-1260		1600	U	220	1600
PCB-1262		1600	U	140	1600
PCB-1268		1600	U	130	1600

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	0	X	30 - 130
DCB Decachlorobiphenyl	0	X	45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **DUP-04-06252012**

Lab Sample ID: 200-11460-8
Client Matrix: Solid
% Moisture: 44.2

Date Sampled: 06/25/2012 0000
Date Received: 06/26/2012 1050

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	200-41503	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch:	200-40997	Initial Weight/Volume:	14.69 g
Dilution:	50			Final Weight/Volume:	5000 uL
Analysis Date:	07/07/2012 0011			Injection Volume:	1 uL
Prep Date:	06/27/2012 1018			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	0	X	30 - 130
DCB Decachlorobiphenyl	0	X	45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-18 (3-3.5)**

Lab Sample ID: 200-11441-1
Client Matrix: Solid
% Moisture: 40.7

Date Sampled: 06/22/2012 0950
Date Received: 06/23/2012 1010

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41473	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40979	Lab File ID:	070712-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.46 g
Analysis Date:	07/06/2012 2215			Final Weight/Volume:	100 mL
Prep Date:	06/26/2012 1708				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		6410		19.6	23.1
Antimony		11.0		0.57	6.9
Arsenic		44.4		0.65	1.2
Barium		28.1		0.60	23.1
Beryllium		0.48	J	0.037	0.58
Cadmium		0.58	U	0.090	0.58
Calcium		961		58.9	578
Chromium		70.8		0.13	1.2
Cobalt		8.7		0.094	5.8
Copper		76.7		0.25	2.9
Iron		77300	J	15.0	23.1
Lead		65.5		0.51	1.2
Magnesium		76.8	J	16.2	578
Manganese		257		0.52	1.7
Nickel		86.3		0.34	4.6
Potassium		841		17.3	578
Selenium		4.0	U	1.0	4.0
Silver		1.2	U	0.15	1.2
Sodium		550	J	8.7	578
Thallium		0.51	J	0.47	2.9
Vanadium		27.9		0.15	5.8
Zinc		34.8		0.65	2.3

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41238	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41224	Lab File ID:	070212AA.PRN
Dilution:	5.0			Initial Weight/Volume:	0.30 g
Analysis Date:	07/02/2012 1348			Final Weight/Volume:	50 mL
Prep Date:	06/28/2012 1600				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		8.0		0.019	0.28

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-17 (4-5)**

Lab Sample ID: 200-11441-2
Client Matrix: Solid % Moisture: 32.4

Date Sampled: 06/22/2012 1420
Date Received: 06/23/2012 1010

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41473	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40979	Lab File ID:	070712-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.32 g
Analysis Date:	07/06/2012 2230			Final Weight/Volume:	100 mL
Prep Date:	06/26/2012 1708				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		1520		19.0	22.4
Antimony		2.3	J	0.55	6.7
Arsenic		12.5		0.63	1.1
Barium		45.9		0.58	22.4
Beryllium		0.55	J	0.036	0.56
Cadmium		0.23	J	0.087	0.56
Calcium		797		57.1	560
Chromium		29.0		0.12	1.1
Cobalt		8.7		0.091	5.6
Copper		72.8		0.25	2.8
Iron		32600	J	14.6	22.4
Lead		78.0		0.49	1.1
Magnesium		144	J	15.7	560
Manganese		97.0		0.50	1.7
Nickel		37.9		0.32	4.5
Potassium		189	J	16.8	560
Selenium		3.9	U	0.97	3.9
Silver		1.1	U	0.15	1.1
Sodium		128	J	8.4	560
Thallium		2.8	U	0.46	2.8
Vanadium		28.2		0.15	5.6
Zinc		35.1		0.63	2.2

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41238	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41224	Lab File ID:	070212AA.PRN
Dilution:	1.0			Initial Weight/Volume:	0.33 g
Analysis Date:	07/02/2012 1305			Final Weight/Volume:	50 mL
Prep Date:	06/28/2012 1600				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.95		0.0030	0.044

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-28A (8.7-9.7)**

Lab Sample ID: 200-11441-3
Client Matrix: Solid
% Moisture: 37.8

Date Sampled: 06/22/2012 1310
Date Received: 06/23/2012 1010

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41473	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40979	Lab File ID:	070712-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.37 g
Analysis Date:	07/06/2012 2235			Final Weight/Volume:	100 mL
Prep Date:	06/26/2012 1708				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Lead		13.6		0.52	1.2
Thallium		2.9	U	0.48	2.9

Analysis Method:	6010C	Analysis Batch:	200-41484	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40979	Lab File ID:	070712-04.ttx
Dilution:	10			Initial Weight/Volume:	1.37 g
Analysis Date:	07/07/2012 1131			Final Weight/Volume:	100 mL
Prep Date:	06/26/2012 1708				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		18100		200	235
Antimony		70.4	U	5.8	70.4
Arsenic		13.6		6.6	11.7
Barium		41.1	J	6.1	235
Beryllium		0.97	J	0.38	5.9
Cadmium		5.9	U	0.92	5.9
Calcium		4900	J	599	5870
Chromium		35.5		1.3	11.7
Cobalt		11.8	J	0.95	58.7
Copper		12.9	J	2.6	29.3
Iron		39600	J	153	235
Magnesium		7730		164	5870
Manganese		646		5.3	17.6
Nickel		26.6	J	3.4	47.0
Potassium		4170	J	176	5870
Selenium		41.1	U	10.2	41.1
Silver		11.7	U	1.5	11.7
Sodium		806	J	88.0	5870
Vanadium		49.1	J	1.5	58.7
Zinc		76.7		6.6	23.5

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41238	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41224	Lab File ID:	070212AA.PRN
Dilution:	1.0			Initial Weight/Volume:	0.32 g
Analysis Date:	07/02/2012 1312			Final Weight/Volume:	50 mL
Prep Date:	06/28/2012 1600				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.074		0.0033	0.050

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-15 (5.5-6.5)**

Lab Sample ID: 200-11441-4
Client Matrix: Solid % Moisture: 23.3

Date Sampled: 06/22/2012 1200
Date Received: 06/23/2012 1010

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41473	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40979	Lab File ID:	070712-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.44 g
Analysis Date:	07/06/2012 2240			Final Weight/Volume:	100 mL
Prep Date:	06/26/2012 1708				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		4880		15.4	18.1
Antimony		0.59	J	0.44	5.4
Arsenic		4.6		0.51	0.91
Barium		13.1	J	0.47	18.1
Beryllium		0.090	J	0.029	0.45
Cadmium		0.45	U	0.071	0.45
Calcium		3360		46.2	453
Chromium		7.3		0.10	0.91
Cobalt		6.4		0.073	4.5
Copper		31.6		0.20	2.3
Iron		47000	J	11.8	18.1
Lead		12.7		0.40	0.91
Magnesium		3730		12.7	453
Manganese		467		0.41	1.4
Nickel		8.4		0.26	3.6
Potassium		382	J	13.6	453
Selenium		3.2	U	0.79	3.2
Silver		0.91	U	0.12	0.91
Sodium		4980		6.8	453
Thallium		0.40	J	0.37	2.3
Vanadium		36.4		0.12	4.5
Zinc		51.6		0.51	1.8

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41238	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41224	Lab File ID:	070212AA.PRN
Dilution:	1.0			Initial Weight/Volume:	0.32 g
Analysis Date:	07/02/2012 1314			Final Weight/Volume:	50 mL
Prep Date:	06/28/2012 1600				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.065		0.0027	0.040

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-10 (5-6)**

Lab Sample ID: 200-11441-5
Client Matrix: Solid
% Moisture: 9.1

Date Sampled: 06/22/2012 1030
Date Received: 06/23/2012 1010

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41473	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40979	Lab File ID:	070712-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.35 g
Analysis Date:	07/06/2012 2245			Final Weight/Volume:	100 mL
Prep Date:	06/26/2012 1708				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		720		13.9	16.3
Antimony		4.9	U	0.40	4.9
Arsenic		1.9		0.46	0.82
Barium		16.8		0.42	16.3
Beryllium		0.33	J	0.026	0.41
Cadmium		0.074	J	0.064	0.41
Calcium		1570		41.6	408
Chromium		1.7		0.090	0.82
Cobalt		3.7	J	0.066	4.1
Copper		19.4		0.18	2.0
Iron		2220	J	10.6	16.3
Lead		10.7		0.36	0.82
Magnesium		218	J	11.4	408
Manganese		11.9		0.37	1.2
Nickel		11.7		0.24	3.3
Potassium		89.8	J	12.2	408
Selenium		2.9	U	0.71	2.9
Silver		0.82	U	0.11	0.82
Sodium		71.2	J	6.1	408
Thallium		2.0	U	0.33	2.0
Vanadium		11.9		0.11	4.1
Zinc		10.3		0.46	1.6

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41238	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41224	Lab File ID:	070212AA.PRN
Dilution:	1.0			Initial Weight/Volume:	0.30 g
Analysis Date:	07/02/2012 1317			Final Weight/Volume:	50 mL
Prep Date:	06/28/2012 1600				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.014	J	0.0024	0.036

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-10 (7.4-8.4)**

Lab Sample ID: 200-11441-6
Client Matrix: Solid

% Moisture: 11.7

Date Sampled: 06/22/2012 1035
Date Received: 06/23/2012 1010

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41473	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40979	Lab File ID:	070712-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.32 g
Analysis Date:	07/06/2012 2250			Final Weight/Volume:	100 mL
Prep Date:	06/26/2012 1708				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		5.1	U	0.42	5.1
Arsenic		1.5		0.48	0.86
Cadmium		0.078	J	0.067	0.43
Chromium		29.2		0.094	0.86
Cobalt		7.5		0.070	4.3
Copper		28.9		0.19	2.1
Iron		18800	J	11.2	17.2
Lead		5.7		0.38	0.86
Manganese		251		0.39	1.3
Nickel		18.8		0.25	3.4
Selenium		3.0	U	0.75	3.0
Silver		0.86	U	0.11	0.86
Thallium		2.1	U	0.35	2.1
Vanadium		32.3		0.11	4.3
Zinc		39.9		0.48	1.7

Analysis Method:	6010C	Analysis Batch:	200-41484	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40979	Lab File ID:	070712-04.ttx
Dilution:	10			Initial Weight/Volume:	1.32 g
Analysis Date:	07/07/2012 1202			Final Weight/Volume:	100 mL
Prep Date:	06/26/2012 1708				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		15600		146	172
Barium		139	J	4.5	172
Beryllium		0.49	J	0.27	4.3
Calcium		1430	J	438	4290
Magnesium		5750		120	4290
Potassium		4570		129	4290
Sodium		106	J	64.4	4290

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41238	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41224	Lab File ID:	070212AA.PRN
Dilution:	1.0			Initial Weight/Volume:	0.31 g
Analysis Date:	07/02/2012 1320			Final Weight/Volume:	50 mL
Prep Date:	06/28/2012 1600				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.036	U	0.0024	0.036

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-16 (7.9-8.9)**

Lab Sample ID: 200-11441-7
Client Matrix: Solid % Moisture: 10.4

Date Sampled: 06/22/2012 0945
Date Received: 06/23/2012 1010

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41473	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40979	Lab File ID:	070712-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.22 g
Analysis Date:	07/06/2012 2310			Final Weight/Volume:	100 mL
Prep Date:	06/26/2012 1708				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		12400		15.5	18.3
Antimony		5.5	U	0.45	5.5
Arsenic		1.5		0.51	0.91
Barium		102		0.48	18.3
Beryllium		0.30	J	0.029	0.46
Cadmium		0.076	J	0.071	0.46
Calcium		1790		46.6	457
Chromium		27.8		0.10	0.91
Cobalt		12.4		0.074	4.6
Copper		45.7		0.20	2.3
Iron		20300	J	11.9	18.3
Lead		5.6		0.40	0.91
Magnesium		4300		12.8	457
Manganese		360		0.41	1.4
Nickel		21.5		0.27	3.7
Potassium		3530		13.7	457
Selenium		3.2	U	0.80	3.2
Silver		0.91	U	0.12	0.91
Sodium		130	J	6.9	457
Thallium		2.3	U	0.37	2.3
Vanadium		36.2		0.12	4.6
Zinc		37.0		0.51	1.8

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41238	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41224	Lab File ID:	070212AA.PRN
Dilution:	1.0			Initial Weight/Volume:	0.32 g
Analysis Date:	07/02/2012 1322			Final Weight/Volume:	50 mL
Prep Date:	06/28/2012 1600				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.035	U	0.0023	0.035

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-09 (8-8.9)**

Lab Sample ID: 200-11441-8
Client Matrix: Solid
% Moisture: 9.7

Date Sampled: 06/22/2012 0920
Date Received: 06/23/2012 1010

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41473	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40979	Lab File ID:	070712-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.43 g
Analysis Date:	07/06/2012 2315			Final Weight/Volume:	100 mL
Prep Date:	06/26/2012 1708				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		11200		13.2	15.5
Antimony		4.6	U	0.38	4.6
Arsenic		1.2		0.43	0.77
Barium		102		0.40	15.5
Beryllium		0.29	J	0.025	0.39
Cadmium		0.085	J	0.060	0.39
Calcium		1610		39.5	387
Chromium		29.5		0.085	0.77
Cobalt		7.7		0.063	3.9
Copper		25.7		0.17	1.9
Iron		17200	J	10.1	15.5
Lead		4.4		0.34	0.77
Magnesium		4480		10.8	387
Manganese		234		0.35	1.2
Nickel		18.4		0.22	3.1
Potassium		4340		11.6	387
Selenium		2.7	U	0.67	2.7
Silver		0.77	U	0.10	0.77
Sodium		89.4	J	5.8	387
Thallium		0.60	J	0.32	1.9
Vanadium		29.8		0.10	3.9
Zinc		39.8		0.43	1.5

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41238	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41224	Lab File ID:	070212AA.PRN
Dilution:	1.0			Initial Weight/Volume:	0.32 g
Analysis Date:	07/02/2012 1324			Final Weight/Volume:	50 mL
Prep Date:	06/28/2012 1600				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.034	U	0.0023	0.034

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-08 (13.9-14.5)**

Lab Sample ID: 200-11441-9
Client Matrix: Solid
% Moisture: 18.6

Date Sampled: 06/19/2012 1610
Date Received: 06/23/2012 1010

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41473	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40979	Lab File ID:	070712-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.24 g
Analysis Date:	07/06/2012 2320			Final Weight/Volume:	100 mL
Prep Date:	06/26/2012 1708				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		3660		16.8	19.8
Antimony		5.9	U	0.49	5.9
Arsenic		1.8		0.55	0.99
Barium		9.5	J	0.52	19.8
Beryllium		0.25	J	0.032	0.50
Cadmium		0.50	U	0.077	0.50
Calcium		1780		50.5	495
Chromium		13.2		0.11	0.99
Cobalt		3.8	J	0.080	5.0
Copper		5.6		0.22	2.5
Iron		14900	J	12.9	19.8
Lead		5.4		0.44	0.99
Magnesium		1540		13.9	495
Manganese		173		0.45	1.5
Nickel		12.3		0.29	4.0
Potassium		628		14.9	495
Selenium		3.5	U	0.86	3.5
Silver		0.99	U	0.13	0.99
Sodium		117	J	7.4	495
Thallium		2.5	U	0.41	2.5
Vanadium		11.8		0.13	5.0
Zinc		17.6		0.55	2.0

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41238	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41224	Lab File ID:	070212AA.PRN
Dilution:	1.0			Initial Weight/Volume:	0.33 g
Analysis Date:	07/02/2012 1326			Final Weight/Volume:	50 mL
Prep Date:	06/28/2012 1600				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.037	U	0.0025	0.037

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-08 (12.8-13.9)**

Lab Sample ID: 200-11441-10
Client Matrix: Solid % Moisture: 15.1

Date Sampled: 06/19/2012 1600
Date Received: 06/23/2012 1010

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41473	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-40979	Lab File ID:	070712-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.25 g
Analysis Date:	07/06/2012 2325			Final Weight/Volume:	100 mL
Prep Date:	06/26/2012 1708				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		4960		16.0	18.8
Antimony		5.7	U	0.46	5.7
Arsenic		1.6		0.53	0.94
Barium		6.7	J	0.49	18.8
Beryllium		0.18	J	0.030	0.47
Cadmium		0.090	J	0.074	0.47
Calcium		375	J	48.1	471
Chromium		21.8		0.10	0.94
Cobalt		2.7	J	0.076	4.7
Copper		5.9		0.21	2.4
Iron		7920	J	12.3	18.8
Lead		2.8		0.41	0.94
Magnesium		1280		13.2	471
Manganese		43.1		0.42	1.4
Nickel		9.6		0.27	3.8
Potassium		510		14.1	471
Selenium		3.3	U	0.82	3.3
Silver		0.94	U	0.12	0.94
Sodium		139	J	7.1	471
Thallium		2.4	U	0.39	2.4
Vanadium		10.1		0.12	4.7
Zinc		17.1		0.53	1.9

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41238	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41224	Lab File ID:	070212AA.PRN
Dilution:	1.0			Initial Weight/Volume:	0.30 g
Analysis Date:	07/02/2012 1329			Final Weight/Volume:	50 mL
Prep Date:	06/28/2012 1600				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.039	U	0.0026	0.039

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-22 (5.7-6.7)**

Lab Sample ID: 200-11460-1
Client Matrix: Solid

% Moisture: 17.8

Date Sampled: 06/23/2012 1200
Date Received: 06/26/2012 1050

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41474	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-41175	Lab File ID:	070712-02.ttx
Dilution:	1.0			Initial Weight/Volume:	1.45 g
Analysis Date:	07/07/2012 0202			Final Weight/Volume:	100 mL
Prep Date:	06/29/2012 1430				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8190	J	14.3	16.8
Antimony		0.80	J	0.41	5.0
Arsenic		7.0	J	0.47	0.84
Barium		82.9	J	0.44	16.8
Beryllium		0.47	J	0.027	0.42
Cadmium		0.093	J	0.065	0.42
Calcium		36400	J	42.8	419
Chromium		15.3	J	0.092	0.84
Cobalt		4.0	J	0.068	4.2
Copper		33.9	J	0.18	2.1
Iron		31700	J	10.9	16.8
Lead		99.9		0.37	0.84
Magnesium		7130	J	11.7	419
Manganese		213	J	0.38	1.3
Nickel		10.7	J	0.24	3.4
Potassium		1990	J	12.6	419
Selenium		2.9	UJ	0.73	2.9
Silver		0.84	UJ	0.11	0.84
Sodium		828	J	6.3	419
Thallium		2.1	U	0.34	2.1
Vanadium		24.6	J	0.11	4.2
Zinc		69.0	J	0.47	1.7

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41330	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41294	Lab File ID:	070312FF.PRN
Dilution:	1.0			Initial Weight/Volume:	0.35 g
Analysis Date:	07/03/2012 1534			Final Weight/Volume:	50 mL
Prep Date:	07/03/2012 1000				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury	0.052	~~0.052~~	U B	0.0023	~~0.034~~ 0.052

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-23 (5-6)**

Lab Sample ID: 200-11460-2
Client Matrix: Solid

% Moisture: 10.1

Date Sampled: 06/23/2012 1245
Date Received: 06/26/2012 1050

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41474	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-41175	Lab File ID:	070712-02.ttx
Dilution:	1.0			Initial Weight/Volume:	1.25 g
Analysis Date:	07/07/2012 0207			Final Weight/Volume:	100 mL
Prep Date:	06/29/2012 1430				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		11000	J	15.1	17.8
Antimony		0.78	J	0.44	5.3
Arsenic		3.6	J	0.50	0.89
Barium		110	J	0.46	17.8
Beryllium		0.38	J	0.028	0.44
Cadmium		0.67	J	0.069	0.44
Calcium		3950	J	45.4	445
Chromium		22.8	J	0.098	0.89
Cobalt		8.7	J	0.072	4.4
Copper		79.2	J	0.20	2.2
Iron		24300	J	11.6	17.8
Lead		170		0.39	0.89
Magnesium		3580	J	12.5	445
Manganese		453	J	0.40	1.3
Nickel		18.4	J	0.26	3.6
Potassium		3390	J	13.3	445
Selenium		3.1	U J	0.77	3.1
Silver		0.89	U J	0.12	0.89
Sodium		205	J	6.7	445
Thallium		0.42	J	0.36	2.2
Vanadium		32.4	J	0.12	4.4
Zinc		468	J	0.50	1.8

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41330	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41294	Lab File ID:	070312FF.PRN
Dilution:	1.0			Initial Weight/Volume:	0.34 g
Analysis Date:	07/03/2012 1537			Final Weight/Volume:	50 mL
Prep Date:	07/03/2012 1000				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.16	B	0.0022	0.032

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-24 (5.5-6.5)**

Lab Sample ID: 200-11460-3
Client Matrix: Solid

% Moisture: 2.9

Date Sampled: 06/23/2012 1330
Date Received: 06/26/2012 1050

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41474	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-41175	Lab File ID:	070712-02.ttx
Dilution:	1.0			Initial Weight/Volume:	1.28 g
Analysis Date:	07/07/2012 0212			Final Weight/Volume:	100 mL
Prep Date:	06/29/2012 1430				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		3580	J	13.7	16.1
Antimony		0.42	J	0.39	4.8
Arsenic		1.8	J	0.45	0.80
Barium		7.0	J	0.42	16.1
Beryllium		0.19	J	0.026	0.40
Cadmium		0.10	J	0.063	0.40
Calcium		1850	J	41.0	402
Chromium		40.9	J	0.089	0.80
Cobalt		3.4	J	0.065	4.0
Copper		7.6	J	0.18	2.0
Iron		9790	J	10.5	16.1
Lead		6.3		0.35	0.80
Magnesium		2200	J	11.3	402
Manganese		75.7	J	0.36	1.2
Nickel		11.0	J	0.23	3.2
Potassium		512	J	12.1	402
Selenium		2.8	U J	0.70	2.8
Silver		0.80	U J	0.10	0.80
Sodium		151	J	6.0	402
Thallium		2.0	U	0.33	2.0
Vanadium		11.0	J	0.10	4.0
Zinc		19.7	J	0.45	1.6

7471B Mercury In Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41330	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41294	Lab File ID:	070312FF.PRN
Dilution:	1.0			Initial Weight/Volume:	0.35 g
Analysis Date:	07/03/2012 1539			Final Weight/Volume:	50 mL
Prep Date:	07/03/2012 1000				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.034	J B	0.0019	~~0.029~~ 0.034

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: SB-17 (10-10.7)

Lab Sample ID: 200-11460-4
Client Matrix: Solid % Moisture: 36.8

Date Sampled: 06/25/2012 1200
Date Received: 06/26/2012 1050

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41474	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-41175	Lab File ID:	070712-02.ttx
Dilution:	1.0			Initial Weight/Volume:	1.32 g
Analysis Date:	07/07/2012 0217			Final Weight/Volume:	100 mL
Prep Date:	06/29/2012 1430				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		1400	J	20.4	24.0
Antimony		11.4	J	0.59	7.2
Arsenic		29.2	J	0.67	1.2
Barium		56.8	J	0.62	24.0
Beryllium		0.87	J	0.038	0.60
Cadmium		11.7	J	0.093	0.60
Calcium		2780	J	61.1	599
Chromium		124	J	0.13	1.2
Cobalt		10.1	J	0.097	6.0
Copper		110	J	0.26	3.0
Magnesium		178	J	16.8	599
Manganese		351	J	0.54	1.8
Nickel		33.7	J	0.35	4.8
Potassium		197	J	18.0	599
Silver		0.30	J	0.16	1.2
Sodium		270	J	9.0	599
Vanadium		46.0	J	0.16	6.0
Zinc		1110	J	0.67	2.4

Analysis Method:	6010C	Analysis Batch:	200-41689	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-41175	Lab File ID:	071112-01.ttx
Dilution:	1.0			Initial Weight/Volume:	1.32 g
Analysis Date:	07/11/2012 1453			Final Weight/Volume:	100 mL
Prep Date:	06/29/2012 1430				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Lead		568	J	0.53	1.2
Selenium		4.2	U J	1.0	4.2
Thallium		2.1	J	0.49	3.0

Analysis Method:	6010C	Analysis Batch:	200-41689	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-41175	Lab File ID:	071112-01.ttx
Dilution:	2.0			Initial Weight/Volume:	1.32 g
Analysis Date:	07/11/2012 1458			Final Weight/Volume:	100 mL
Prep Date:	06/29/2012 1430				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Iron		227000	J	31.1	47.9

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-17 (10-10.7)**

Lab Sample ID: 200-11460-4
Client Matrix: Solid

% Moisture: 36.8

Date Sampled: 06/25/2012 1200
Date Received: 06/26/2012 1050

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41330	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41294	Lab File ID:	070312FF.PRN
Dilution:	1.0			Initial Weight/Volume:	0.35 g
Analysis Date:	07/03/2012 1541			Final Weight/Volume:	50 mL
Prep Date:	07/03/2012 1000				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.76	~~B~~ J	0.0030	0.045

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-17 (11.2-12.2)**

Lab Sample ID: 200-11460-5
Client Matrix: Solid
% Moisture: 36.4

Date Sampled: 06/25/2012 1205
Date Received: 06/26/2012 1050

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41474	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-41175	Lab File ID:	070712-02.ttx
Dilution:	1.0			Initial Weight/Volume:	1.23 g
Analysis Date:	07/07/2012 0222			Final Weight/Volume:	100 mL
Prep Date:	06/29/2012 1430				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		12800	J	21.7	25.5
Antimony		0.69	J	0.63	7.7
Arsenic		8.6	J	0.72	1.3
Barium		30.8	J	0.66	25.5
Beryllium		0.62	J	0.041	0.64
Cadmium		0.14	J	0.10	0.64
Calcium		18100	J	65.1	639
Chromium		25.5	J	0.14	1.3
Cobalt		8.2	J	0.10	6.4
Copper		9.8	J	0.28	3.2
Iron		37200	J	16.6	25.5
Lead		13.2		0.56	1.3
Magnesium		5540	J	17.9	639
Manganese		580	J	0.57	1.9
Nickel		17.8	J	0.37	5.1
Potassium		3110	J	19.2	639
Selenium		4.5	U J	1.1	4.5
Silver		1.3	U J	0.17	1.3
Sodium		941	J	9.6	639
Thallium		3.2	U	0.52	3.2
Vanadium		33.2	J	0.17	6.4
Zinc		54.9	J	0.72	2.6

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41330	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41294	Lab File ID:	070312FF.PRN
Dilution:	1.0			Initial Weight/Volume:	0.34 g
Analysis Date:	07/03/2012 1543			Final Weight/Volume:	50 mL
Prep Date:	07/03/2012 1000				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		~~0.020~~ 0.046	~~J B~~ UB	0.0030	0.046

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: **SB-18 (11.1-11.7)**

Lab Sample ID: 200-11460-6
Client Matrix: Solid

% Moisture: 21.9

Date Sampled: 06/25/2012 1330
Date Received: 06/26/2012 1050

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41474	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-41175	Lab File ID:	070712-02.ttx
Dilution:	1.0			Initial Weight/Volume:	1.30 g
Analysis Date:	07/07/2012 0303			Final Weight/Volume:	100 mL
Prep Date:	06/29/2012 1430				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.58	J	0.48	5.9
Arsenic		8.1	J	0.55	0.99
Cadmium		0.15	J	0.077	0.49
Chromium		21.4	J	0.11	0.99
Cobalt		9.0	J	0.080	4.9
Copper		15.4	J	0.22	2.5
Iron		21200	J	12.8	19.7
Lead		36.7		0.43	0.99
Manganese		429	J	0.44	1.5
Nickel		16.3	J	0.29	3.9
Selenium		3.4	U J	0.86	3.4
Silver		0.99	U J	0.13	0.99
Thallium		2.5	U	0.40	2.5
Vanadium		27.3	J	0.13	4.9
Zinc		55.9	J	0.55	2.0

Analysis Method:	6010C	Analysis Batch:	200-41689	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-41175	Lab File ID:	071112-01.ttx
Dilution:	2.0			Initial Weight/Volume:	1.30 g
Analysis Date:	07/11/2012 1508			Final Weight/Volume:	100 mL
Prep Date:	06/29/2012 1430				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		12400	J	33.5	39.4
Barium		46.3	J	1.0	39.4
Beryllium		0.49	J	0.063	0.99
Calcium		3930	J	100	985
Magnesium		5660	J	27.6	985
Potassium		2760	J	29.6	985
Sodium		803	J B	14.8	985

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41330	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41294	Lab File ID:	070312FF.PRN
Dilution:	1.0			Initial Weight/Volume:	0.35 g
Analysis Date:	07/03/2012 1556			Final Weight/Volume:	50 mL
Prep Date:	07/03/2012 1000				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.12	U B	0.0024	~~0.036~~ 0.12

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

Client Sample ID: DUP-04-06252012

Lab Sample ID: 200-11460-8
Client Matrix: Solid

% Moisture: 44.2

Date Sampled: 06/25/2012 0000
Date Received: 06/26/2012 1050

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	200-41474	Instrument ID:	METICP7
Prep Method:	3050B	Prep Batch:	200-41175	Lab File ID:	070712-02.ttx
Dilution:	1.0			Initial Weight/Volume:	1.36 g
Analysis Date:	07/07/2012 0308			Final Weight/Volume:	100 mL
Prep Date:	06/29/2012 1430				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		662	J	22.4	26.3
Antimony		5.6	J	0.65	7.9
Arsenic		18.5	J	0.74	1.3
Barium		16.7	J	0.68	26.3
Beryllium		0.21	J	0.042	0.66
Cadmium		0.12	J	0.10	0.66
Calcium		2970	J	67.2	658
Chromium		43.6	J	0.14	1.3
Cobalt		6.1	J	0.11	6.6
Copper		68.2	J	0.29	3.3
Iron		59600	J	17.1	26.3
Lead		41.6	J	0.58	1.3
Magnesium		980	J	18.4	658
Manganese		55.2	J	0.59	2.0
Nickel		43.6	J	0.38	5.3
Potassium		67.5	J	19.8	658
Selenium		4.6	UJ	1.1	4.6
Silver		1.3	UJ	0.17	1.3
Sodium		80.2	J	9.9	658
Thallium		3.3	U	0.54	3.3
Vanadium		28.0	J	0.17	6.6
Zinc		44.8	J	0.74	2.6

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	200-41330	Instrument ID:	MEPCV3 II
Prep Method:	7471B	Prep Batch:	200-41294	Lab File ID:	070312FF.PRN
Dilution:	1.0			Initial Weight/Volume:	0.35 g
Analysis Date:	07/03/2012 1558			Final Weight/Volume:	50 mL
Prep Date:	07/03/2012 1000				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.10	U B	0.0034	~~0.051~~ 0.10

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

General Chemistry

Client Sample ID: **SB-18 (3-3.5)**

Lab Sample ID: 200-11441-1
Client Matrix: Solid

Date Sampled: 06/22/2012 0950
Date Received: 06/23/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	5.60	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-119669	Analysis Date: 07/12/2012 1607					DryWt Corrected: N
Corrosivity	5.60	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-119669	Analysis Date: 07/12/2012 1607					DryWt Corrected: N
Percent Solids	59.3		%	0.25	0.25	1.0	Moisture
	Analysis Batch: 200-40897	Analysis Date: 06/25/2012 1331					DryWt Corrected: N

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

General Chemistry

Client Sample ID: **SB-17 (4-5)**

Lab Sample ID: 200-11441-2
Client Matrix: Solid

Date Sampled: 06/22/2012 1420
Date Received: 06/23/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	6.68	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-119669	Analysis Date: 07/12/2012 1608					DryWt Corrected: N
Corrosivity	6.68	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-119669	Analysis Date: 07/12/2012 1608					DryWt Corrected: N
Percent Solids	67.6		%	0.25	0.25	1.0	Moisture
	Analysis Batch: 200-40897	Analysis Date: 06/25/2012 1331					DryWt Corrected: N

General Chemistry

Client Sample ID: **SB-28A (8.7-9.7)**

Lab Sample ID: 200-11441-3
Client Matrix: Solid

Date Sampled: 06/22/2012 1310
Date Received: 06/23/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	5.52	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-119669	Analysis Date: 07/12/2012 1609					DryWt Corrected: N
Corrosivity	5.52	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-119669	Analysis Date: 07/12/2012 1609					DryWt Corrected: N
Percent Solids	62.2		%	0.25	0.25	1.0	Moisture
	Analysis Batch: 200-40897	Analysis Date: 06/25/2012 1331					DryWt Corrected: N

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

General Chemistry

Client Sample ID: **SB-15 (5.5-6.5)**

Lab Sample ID: 200-11441-4
Client Matrix: Solid

Date Sampled: 06/22/2012 1200
Date Received: 06/23/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	7.53	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-119669	Analysis Date: 07/12/2012 1610					DryWt Corrected: N
Corrosivity	7.53	HF J	SU			1.0	9045C
	Analysis Batch: 460-119669	Analysis Date: 07/12/2012 1610					DryWt Corrected: N
Percent Solids	76.7		%	0.25	0.25	1.0	Moisture
	Analysis Batch: 200-40897	Analysis Date: 06/25/2012 1331					DryWt Corrected: N

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

General Chemistry

Client Sample ID: **SB-10 (5-6)**

Lab Sample ID: 200-11441-5
Client Matrix: Solid

Date Sampled: 06/22/2012 1030
Date Received: 06/23/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	7.47	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-119669	Analysis Date: 07/12/2012 1611					DryWt Corrected: N
Corrosivity	7.47	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-119669	Analysis Date: 07/12/2012 1611					DryWt Corrected: N
Percent Solids	90.9		%	0.25	0.25	1.0	Moisture
	Analysis Batch: 200-40897	Analysis Date: 06/25/2012 1331					DryWt Corrected: N

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

General Chemistry

Client Sample ID: **SB-10 (7.4-8.4)**

Lab Sample ID: 200-11441-6
Client Matrix: Solid

Date Sampled: 06/22/2012 1035
Date Received: 06/23/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	7.72	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-119669	Analysis Date: 07/12/2012 1612					DryWt Corrected: N
Corrosivity	7.72	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-119669	Analysis Date: 07/12/2012 1612					DryWt Corrected: N
Percent Solids	88.3		%	0.25	0.25	1.0	Moisture
	Analysis Batch: 200-40897	Analysis Date: 06/25/2012 1331					DryWt Corrected: N

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

General Chemistry

Client Sample ID: **SB-16 (7.9-8.9)**

Lab Sample ID: 200-11441-7
Client Matrix: Solid

Date Sampled: 06/22/2012 0945
Date Received: 06/23/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	7.35	~~HP~~ J	SU			1.0	9045C
	Analysis Batch: 460-119669	Analysis Date: 07/12/2012 1613					DryWt Corrected: N
Corrosivity	7.35	~~HP~~ J	SU			1.0	9045C
	Analysis Batch: 460-119669	Analysis Date: 07/12/2012 1613					DryWt Corrected: N
Percent Solids	89.6		%	0.25	0.25	1.0	Moisture
	Analysis Batch: 200-40897	Analysis Date: 06/25/2012 1331					DryWt Corrected: N

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

General Chemistry

Client Sample ID: **SB-09 (8-8.9)**

Lab Sample ID: 200-11441-8
Client Matrix: Solid

Date Sampled: 06/22/2012 0920
Date Received: 06/23/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	7.80	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-119669	Analysis Date: 07/12/2012 1615					DryWt Corrected: N
Corrosivity	7.80	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-119669	Analysis Date: 07/12/2012 1615					DryWt Corrected: N
Percent Solids	90.3		%	0.25	0.25	1.0	Moisture
	Analysis Batch: 200-40897	Analysis Date: 06/25/2012 1331					DryWt Corrected: N

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

General Chemistry

Client Sample ID: **SB-08 (13.9-14.5)**

Lab Sample ID: 200-11441-9
Client Matrix: Solid

Date Sampled: 06/19/2012 1610
Date Received: 06/23/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	6.21	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1605					DryWt Corrected: N
Corrosivity	6.21	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1605					DryWt Corrected: N
Percent Solids	81.4		%	0.25	0.25	1.0	Moisture
	Analysis Batch: 200-40897	Analysis Date: 06/25/2012 1331					DryWt Corrected: N

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

General Chemistry

Client Sample ID: **SB-08 (12.8-13.9)**

Lab Sample ID: 200-11441-10
Client Matrix: Solid

Date Sampled: 06/19/2012 1600
Date Received: 06/23/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	4.18	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1606					DryWt Corrected: N
Corrosivity	4.18	~~HF~~ J	SU			1.0	9045C
	Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1606					DryWt Corrected: N
Percent Solids	84.9		%	0.25	0.25	1.0	Moisture
	Analysis Batch: 200-40897	Analysis Date: 06/25/2012 1331					DryWt Corrected: N

General Chemistry

Client Sample ID: **SB-22 (5.7-6.7)**

Lab Sample ID: 200-11460-1
Client Matrix: Solid

Date Sampled: 06/23/2012 1200
Date Received: 06/26/2012 1050

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
pH	9.33	~~HF~~ J	SU			1.0	9045C
Analysis Batch: 460-119669	Analysis Date: 07/12/2012 1616						DryWt Corrected: N
Corrosivity	9.33	~~HF~~ J	SU			1.0	9045C
Analysis Batch: 460-119669	Analysis Date: 07/12/2012 1616						DryWt Corrected: N
Chloride-Soluble	1940		mg/Kg	24.2	121	5.0	9056
Analysis Batch: 680-242043	Analysis Date: 06/30/2012 0509						DryWt Corrected: Y
Nitrate as N-Soluble	2.9	J	mg/Kg	1.8	6.0	5.0	9056
Analysis Batch: 680-241960	Analysis Date: 06/28/2012 2309						DryWt Corrected: Y
Nitrite as N-Soluble	~~6.0~~	R ~~U~~	mg/Kg	~~1.8~~	~~6.0~~	5.0	9056
Analysis Batch: 680-241960	Analysis Date: 06/28/2012 2309						DryWt Corrected: Y
Sulfate-Soluble	1070		mg/Kg	24.2	121	5.0	9056
Analysis Batch: 680-242043	Analysis Date: 06/30/2012 0509						DryWt Corrected: Y
Fluoride-Soluble	7.9	J	mg/Kg	4.8	24.2	5.0	9056
Analysis Batch: 680-242043	Analysis Date: 06/30/2012 0509						DryWt Corrected: Y
Percent Solids	82.2		%	0.25	0.25	1.0	Moisture
Analysis Batch: 200-40970	Analysis Date: 06/26/2012 1507						DryWt Corrected: N
Bicarbonate Alkalinity as CaCO3-Soluble	24.3	U	mg/Kg	24.3	24.3	1.0	SM 2320B
Analysis Batch: 460-118518	Analysis Date: 07/03/2012 1741						DryWt Corrected: Y
Carbonate Alkalinity as CaCO3-Soluble	53.7		mg/Kg	24.3	24.3	1.0	SM 2320B
Analysis Batch: 460-118518	Analysis Date: 07/03/2012 1741						DryWt Corrected: Y
Alkalinity-Soluble	77.7		mg/Kg	24.3	24.3	1.0	SM 2320B
Analysis Batch: 460-118518	Analysis Date: 07/03/2012 1741						DryWt Corrected: Y

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

General Chemistry

Client Sample ID: **SB-23 (5-6)**

Lab Sample ID: 200-11460-2
Client Matrix: Solid

Date Sampled: 06/23/2012 1245
Date Received: 06/26/2012 1050

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Solids	89.9		%	0.25	0.25	1.0	Moisture

Analysis Batch: 200-40970 Analysis Date: 06/26/2012 1507 DryWt Corrected: N

General Chemistry

Client Sample ID: **SB-24 (5.5-6.5)**

Lab Sample ID: 200-11460-3
Client Matrix: Solid

Date Sampled: 06/23/2012 1330
Date Received: 06/26/2012 1050

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia (as N)-ASTM Leach	0.018	J	mg/L	0.013	0.10	1.0	4500 NH3 H
Analysis Batch: 460-120125	Analysis Date: 07/17/2012 1154						DryWt Corrected: N
Prep Batch: 460-120071	Prep Date: 07/17/2012 0630						
Sulfide	9.0	U J	mg/Kg	3.3	9.0	1.0	9034
Analysis Batch: 460-121677	Analysis Date: 06/30/2012 1533						DryWt Corrected: Y
Prep Batch: 460-121675	Prep Date: 06/30/2012 1200						
pH	8.27	~~HF~~ J	SU			1.0	9045C
Analysis Batch: 460-119669	Analysis Date: 07/12/2012 1617						DryWt Corrected: N
Corrosivity	8.27	~~HF~~ J	SU			1.0	9045C
Analysis Batch: 460-119669	Analysis Date: 07/12/2012 1617						DryWt Corrected: N
Chloride-Soluble	36.2	J	mg/Kg	20.6	103	5.0	9056
Analysis Batch: 680-242043	Analysis Date: 06/30/2012 0521						DryWt Corrected: Y
Nitrate as N-Soluble	5.1	U	mg/Kg	1.5	5.1	5.0	9056
Analysis Batch: 680-241960	Analysis Date: 06/28/2012 2324						DryWt Corrected: Y
Nitrite as N-Soluble	5.1	U	mg/Kg	1.5	5.1	5.0	9056
Analysis Batch: 680-241960	Analysis Date: 06/28/2012 2324						DryWt Corrected: Y
Sulfate-Soluble	26.3	J	mg/Kg	20.6	103	5.0	9056
Analysis Batch: 680-242043	Analysis Date: 06/30/2012 0521						DryWt Corrected: Y
Fluoride-Soluble	20.6	U	mg/Kg	4.1	20.6	5.0	9056
Analysis Batch: 680-242043	Analysis Date: 06/30/2012 0521						DryWt Corrected: Y
Percent Solids	97.1		%	0.25	0.25	1.0	Moisture
Analysis Batch: 200-40970	Analysis Date: 06/26/2012 1507						DryWt Corrected: N
Bicarbonate Alkalinity as CaCO3-Soluble	41.2	~~H~~ J	mg/Kg	20.6	20.6	1.0	SM 2320B
Analysis Batch: 460-119472	Analysis Date: 07/11/2012 1838						DryWt Corrected: Y
Carbonate Alkalinity as CaCO3-Soluble	20.6	U ~~UH~~	mg/Kg	20.6	20.6	1.0	SM 2320B
Analysis Batch: 460-119472	Analysis Date: 07/11/2012 1838						DryWt Corrected: Y
Alkalinity-Soluble	45.2	~~H~~ J	mg/Kg	20.6	20.6	1.0	SM 2320B
Analysis Batch: 460-119472	Analysis Date: 07/11/2012 1838						DryWt Corrected: Y
Phosphorus as PO4	300		mg/Kg	3.1	7.7	5.0	SM 4500 P E
Analysis Batch: 460-119560	Analysis Date: 07/11/2012 1530						DryWt Corrected: Y
Prep Batch: 460-119552	Prep Date: 07/11/2012 1138						
Phosphorus as P	98.0		mg/Kg	3.1	7.7	5.0	SM 4500 P E
Analysis Batch: 460-119560	Analysis Date: 07/11/2012 1530						DryWt Corrected: Y
Prep Batch: 460-119552	Prep Date: 07/11/2012 1138						

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

General Chemistry

Client Sample ID: **SB-17 (10-10.7)**

Lab Sample ID: 200-11460-4
Client Matrix: Solid

Date Sampled: 06/25/2012 1200
Date Received: 06/26/2012 1050

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Solids	63.2		%	0.25	0.25	1.0	Moisture

Analysis Batch: 200-40970 Analysis Date: 06/26/2012 1507 DryWt Corrected: N

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

General Chemistry

Client Sample ID: **SB-17 (11.2-12.2)**

Lab Sample ID: 200-11460-5
Client Matrix: Solid

Date Sampled: 06/25/2012 1205
Date Received: 06/26/2012 1050

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Solids	63.6		%	0.25	0.25	1.0	Moisture

Analysis Batch: 200-40970 Analysis Date: 06/26/2012 1507 DryWt Corrected: N

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

General Chemistry

Client Sample ID: **SB-18 (11.1-11.7)**

Lab Sample ID: 200-11460-6
Client Matrix: Solid

Date Sampled: 06/25/2012 1330
Date Received: 06/26/2012 1050

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Solids	78.1		%	0.25	0.25	1.0	Moisture

Analysis Batch: 200-40970 Analysis Date: 06/26/2012 1507 DryWt Corrected: N

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1
Sdg Number: 11441

General Chemistry

Client Sample ID: **DUP-04-06252012**

Lab Sample ID: 200-11460-8
Client Matrix: Solid

Date Sampled: 06/25/2012 0000
Date Received: 06/26/2012 1050

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Solids	55.8		%	0.25	0.25	1.0	Moisture

Analysis Batch: 200-40970 Analysis Date: 06/26/2012 1507 DryWt Corrected: N

Client: ARCADIS U.S. Inc

Job Number: 200-11441-2
Sdg Number: 11441-2

General Chemistry

Client Sample ID: **SB-18 (3-3.5)**

Lab Sample ID: 200-11441-1
Client Matrix: Solid
% Moisture: 40.7

Date Sampled: 06/22/2012 0950
Date Received: 06/23/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	2040		mg/Kg	9.1	84.4	100	9012A
	Analysis Batch: 460-118857	Analysis Date: 07/06/2012 1451					DryWt Corrected: Y
	Prep Batch: 460-118786	Prep Date: 07/06/2012 0630					
Cyanide, Free	56.5		mg/Kg	0.35	1.4	2.0	9016
	Analysis Batch: 460-118248	Analysis Date: 06/28/2012 1200					DryWt Corrected: Y
	Prep Batch: 460-118240	Prep Date: 06/28/2012 0600					

Client: ARCADIS U.S. Inc

Job Number: 200-11441-2
Sdg Number: 11441-2

General Chemistry

Client Sample ID: **SB-17 (4-5)**

Lab Sample ID: 200-11441-2
Client Matrix: Solid
% Moisture: 32.4

Date Sampled: 06/22/2012 1420
Date Received: 06/23/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	523		mg/Kg	4.0	37.0	50	9012A
Analysis Batch: 460-118857	Analysis Date: 07/06/2012 1456						DryWt Corrected: Y
Prep Batch: 460-118786	Prep Date: 07/06/2012 0630						
Cyanide, Free	8.6		mg/Kg	0.16	0.63	1.0	9016
Analysis Batch: 460-118248	Analysis Date: 06/28/2012 1200						DryWt Corrected: Y
Prep Batch: 460-118240	Prep Date: 06/28/2012 0600						

General Chemistry

Client Sample ID: **SB-28A (8.7-9.7)**

Lab Sample ID: 200-11441-3
Client Matrix: Solid

% Moisture: 37.8

Date Sampled: 06/22/2012 1310
Date Received: 06/23/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.65	J	mg/Kg	0.087	0.80	1.0	9012A
Analysis Batch: 460-118881	Analysis Date: 07/06/2012 1635						DryWt Corrected: Y
Prep Batch: 460-118790	Prep Date: 07/06/2012 0900						
Cyanide, Free	2.7		mg/Kg	0.17	0.67	1.0	9016
Analysis Batch: 460-118248	Analysis Date: 06/28/2012 1200						DryWt Corrected: Y
Prep Batch: 460-118240	Prep Date: 06/28/2012 0600						

Client: ARCADIS U.S. Inc

Job Number: 200-11441-2
Sdg Number: 11441-2

General Chemistry

Client Sample ID: **SB-15 (5.5-6.5)**

Lab Sample ID: 200-11441-4
Client Matrix: Solid

% Moisture: 23.3

Date Sampled: 06/22/2012 1200
Date Received: 06/23/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.28	J	mg/Kg	0.070	0.65	1.0	9012A
Analysis Batch: 460-118881	Analysis Date: 07/06/2012 1638						DryWt Corrected: Y
Prep Batch: 460-118790	Prep Date: 07/06/2012 0900						
Cyanide, Free	6.4		mg/Kg	0.14	0.56	1.0	9016
Analysis Batch: 460-118248	Analysis Date: 06/28/2012 1200						DryWt Corrected: Y
Prep Batch: 460-118240	Prep Date: 06/28/2012 0600						

Client: ARCADIS U.S. Inc

Job Number: 200-11441-2
Sdg Number: 11441-2

General Chemistry

Client Sample ID: **SB-10 (5-6)**

Lab Sample ID: 200-11441-5
Client Matrix: Solid

% Moisture: 9.1

Date Sampled: 06/22/2012 1030
Date Received: 06/23/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	5.2		mg/Kg	0.059	0.55	1.0	9012A
Analysis Batch: 460-118881	Analysis Date: 07/06/2012 1639						DryWt Corrected: Y
Prep Batch: 460-118790	Prep Date: 07/06/2012 0900						
Cyanide, Free	0.89		mg/Kg	0.11	0.45	1.0	9016
Analysis Batch: 460-118248	Analysis Date: 06/28/2012 1200						DryWt Corrected: Y
Prep Batch: 460-118240	Prep Date: 06/28/2012 0600						

Client: ARCADIS U.S. Inc

Job Number: 200-11441-2
Sdg Number: 11441-2

General Chemistry

Client Sample ID: **SB-10 (7.4-8.4)**

Lab Sample ID: 200-11441-6
Client Matrix: Solid

% Moisture: 11.7

Date Sampled: 06/22/2012 1035
Date Received: 06/23/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.30	J	mg/Kg	0.061	0.57	1.0	9012A
Analysis Batch: 460-118881	Analysis Date: 07/06/2012 1640						DryWt Corrected: Y
Prep Batch: 460-118790	Prep Date: 07/06/2012 0900						
Cyanide, Free	0.48	U	mg/Kg	0.12	0.48	1.0	9016
Analysis Batch: 460-118248	Analysis Date: 06/28/2012 1200						DryWt Corrected: Y
Prep Batch: 460-118240	Prep Date: 06/28/2012 0600						

Client: ARCADIS U.S. Inc

Job Number: 200-11441-2
Sdg Number: 11441-2

General Chemistry

Client Sample ID: **SB-16 (7.9-8.9)**

Lab Sample ID: 200-11441-7
Client Matrix: Solid

% Moisture: 10.4

Date Sampled: 06/22/2012 0945
Date Received: 06/23/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	2.0		mg/Kg	0.060	0.56	1.0	9012A
	Analysis Batch: 460-118881	Analysis Date: 07/06/2012 1641					DryWt Corrected: Y
	Prep Batch: 460-118790	Prep Date: 07/06/2012 0900					
Cyanide, Free	0.51		mg/Kg	0.12	0.46	1.0	9016
	Analysis Batch: 460-118248	Analysis Date: 06/28/2012 1200					DryWt Corrected: Y
	Prep Batch: 460-118240	Prep Date: 06/28/2012 0600					

Client: ARCADIS U.S. Inc

Job Number: 200-11441-2
Sdg Number: 11441-2

General Chemistry

Client Sample ID: **SB-09 (8-8.9)**

Lab Sample ID: 200-11441-8
Client Matrix: Solid

% Moisture: 9.7

Date Sampled: 06/22/2012 0920
Date Received: 06/23/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.79		mg/Kg	0.060	0.55	1.0	9012A
Analysis Batch: 460-118881	Analysis Date: 07/06/2012 1642						DryWt Corrected: Y
Prep Batch: 460-118790	Prep Date: 07/06/2012 0900						
Cyanide, Free	0.47	U	mg/Kg	0.12	0.47	1.0	9016
Analysis Batch: 460-118248	Analysis Date: 06/28/2012 1200						DryWt Corrected: Y
Prep Batch: 460-118240	Prep Date: 06/28/2012 0600						

Client: ARCADIS U.S. Inc

Job Number: 200-11441-2
Sdg Number: 11441-2

General Chemistry

Client Sample ID: **SB-08 (13.9-14.5)**

Lab Sample ID: 200-11441-9
Client Matrix: Solid

% Moisture: 18.6

Date Sampled: 06/19/2012 1610
Date Received: 06/23/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.32	J	mg/Kg	0.066	0.61	1.0	9012A
	Analysis Batch: 460-118346	Analysis Date: 07/02/2012 1501					DryWt Corrected: Y
	Prep Batch: 460-118311	Prep Date: 07/02/2012 1030					
Cyanide, Free	0.56		mg/Kg	0.13	0.51	1.0	9016
	Analysis Batch: 460-118469	Analysis Date: 07/03/2012 1200					DryWt Corrected: Y
	Prep Batch: 460-118468	Prep Date: 07/03/2012 0600					

Client: ARCADIS U.S. Inc

Job Number: 200-11441-2
Sdg Number: 11441-2

General Chemistry

Client Sample ID: **SB-08 (12.8-13.9)**

Lab Sample ID: 200-11441-10
Client Matrix: Solid
% Moisture: 15.1

Date Sampled: 06/19/2012 1600
Date Received: 06/23/2012 1010

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.25	J	mg/Kg	0.064	0.59	1.0	9012A
Analysis Batch: 460-118346	Analysis Date: 07/02/2012 1502						DryWt Corrected: Y
Prep Batch: 460-118311	Prep Date: 07/02/2012 1030						
Cyanide, Free	0.79		mg/Kg	0.13	0.50	1.0	9016
Analysis Batch: 460-118469	Analysis Date: 07/03/2012 1200						DryWt Corrected: Y
Prep Batch: 460-118468	Prep Date: 07/03/2012 0600						

Client: ARCADIS U.S. Inc

Job Number: 200-11441-2
Sdg Number: 11441-2

General Chemistry

Client Sample ID: **SB-22 (5.7-6.7)**

Lab Sample ID: 200-11460-1
Client Matrix: Solid

% Moisture: 17.8

Date Sampled: 06/23/2012 1200
Date Received: 06/26/2012 1050

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	8.4		mg/Kg	0.066	0.61	1.0	9012A
Analysis Batch: 460-118881	Analysis Date: 07/06/2012 1644						DryWt Corrected: Y
Prep Batch: 460-118790	Prep Date: 07/06/2012 0900						
Cyanide, Free	0.52	U	mg/Kg	0.13	0.52	1.0	9016
Analysis Batch: 460-118469	Analysis Date: 07/03/2012 1200						DryWt Corrected: Y
Prep Batch: 460-118468	Prep Date: 07/03/2012 0600						

General Chemistry

Client Sample ID: **SB-23 (5-6)**

Lab Sample ID: 200-11460-2
Client Matrix: Solid
% Moisture: 10.1

Date Sampled: 06/23/2012 1245
Date Received: 06/26/2012 1050

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	3.5		mg/Kg	0.060	0.56	1.0	9012A
Analysis Batch: 460-118881	Analysis Date: 07/06/2012 1645						DryWt Corrected: Y
Prep Batch: 460-118790	Prep Date: 07/06/2012 0900						
Cyanide, Free	0.47	U	mg/Kg	0.12	0.47	1.0	9016
Analysis Batch: 460-118469	Analysis Date: 07/03/2012 1200						DryWt Corrected: Y
Prep Batch: 460-118468	Prep Date: 07/03/2012 0600						

General Chemistry

Client Sample ID: **SB-24 (5.5-6.5)**

Lab Sample ID: 200-11460-3
Client Matrix: Solid
% Moisture: 2.9

Date Sampled: 06/23/2012 1330
Date Received: 06/26/2012 1050

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.15	J	mg/Kg	0.056	0.51	1.0	9012A
	Analysis Batch: 460-118881	Analysis Date: 07/06/2012 1646					DryWt Corrected: Y
	Prep Batch: 460-118790	Prep Date: 07/06/2012 0900					
Cyanide, Free	0.43	U	mg/Kg	0.11	0.43	1.0	9016
	Analysis Batch: 460-118469	Analysis Date: 07/03/2012 1200					DryWt Corrected: Y
	Prep Batch: 460-118468	Prep Date: 07/03/2012 0600					

General Chemistry

Client Sample ID: **SB-17 (10-10.7)**

Lab Sample ID: 200-11460-4
Client Matrix: Solid
% Moisture: 36.8

Date Sampled: 06/25/2012 1200
Date Received: 06/26/2012 1050

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	583	J	mg/Kg	4.3	39.5	50	9012A
	Analysis Batch: 460-118942	Analysis Date: 07/07/2012 1755					DryWt Corrected: Y
	Prep Batch: 460-118938	Prep Date: 07/07/2012 1430					
Cyanide, Free	74.2		mg/Kg	0.33	1.3	2.0	9016
	Analysis Batch: 460-118469	Analysis Date: 07/03/2012 1200					DryWt Corrected: Y
	Prep Batch: 460-118468	Prep Date: 07/03/2012 0600					

Client: ARCADIS U.S. Inc

Job Number: 200-11441-2
Sdg Number: 11441-2

General Chemistry

Client Sample ID: **SB-17 (11.2-12.2)**

Lab Sample ID: 200-11460-5
Client Matrix: Solid
% Moisture: 36.4

Date Sampled: 06/25/2012 1205
Date Received: 06/26/2012 1050

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	1.6	J	mg/Kg	0.085	0.79	1.0	9012A
Analysis Batch: 460-118942	Analysis Date: 07/07/2012 1754						DryWt Corrected: Y
Prep Batch: 460-118938	Prep Date: 07/07/2012 1430						
Cyanide, Free	1.7		mg/Kg	0.17	0.67	1.0	9016
Analysis Batch: 460-118469	Analysis Date: 07/03/2012 1200						DryWt Corrected: Y
Prep Batch: 460-118468	Prep Date: 07/03/2012 0600						

General Chemistry

Client Sample ID: **SB-18 (11.1-11.7)**

Lab Sample ID: 200-11460-6
Client Matrix: Solid

% Moisture: 21.9

Date Sampled: 06/25/2012 1330
Date Received: 06/26/2012 1050

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.64	U	mg/Kg	0.069	0.64	1.0	9012A
Analysis Batch: 460-118942	Analysis Date: 07/07/2012 1800						DryWt Corrected: Y
Prep Batch: 460-118938	Prep Date: 07/07/2012 1430						
Cyanide, Free	0.54	U	mg/Kg	0.14	0.54	1.0	9016
Analysis Batch: 460-118469	Analysis Date: 07/03/2012 1200						DryWt Corrected: Y
Prep Batch: 460-118468	Prep Date: 07/03/2012 0600						

General Chemistry

Client Sample ID: **DUP-04-06252012**

Lab Sample ID: 200-11460-8
Client Matrix: Solid

% Moisture: 44.2

Date Sampled: 06/25/2012 0000
Date Received: 06/26/2012 1050

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	240	J	mg/Kg	2.4	22.4	25	9012A
	Analysis Batch: 460-118942	Analysis Date: 07/07/2012 1811					DryWt Corrected: Y
	Prep Batch: 460-118938	Prep Date: 07/07/2012 1430					
Cyanide, Free	16.2		mg/Kg	0.19	0.75	1.0	9016
	Analysis Batch: 460-118469	Analysis Date: 07/03/2012 1200					DryWt Corrected: Y
	Prep Batch: 460-118468	Prep Date: 07/03/2012 0600					