

Appendix **E**

Data Usability Summary Reports



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

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.

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

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
377-040 02006	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		
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	Detected sample results	"UB" at the RL
SB-07 (4.5-5)	1,2,4-Trichlorobenzene Toluene	< RL and < BAL	0 2 at 110 112
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)		Chloroethane	16.2 %
SB-07 (4.5-5) SB-29 (17-18) SB-29 (18-19)	Initial %RSD	Acetone	19.6 %
SB-27 (17.5-18.5) SB-01 (12-13) SB-02 (14-15) SB-12 (11-12)		2-Butanone	20.4 %

Sample Locations	Initial / Continuing	Compound	Criteria
SB-25 (3.5-5) DUP-01-06122012 SB-28 (3-5) TB-06132012		Dichlorodifluoromethane	-21.7 % (decrease in sensitivity)
SB-03 (4.5-5) SB-06 (4-5) TB-06142012	Continuing %D	Bromomethane	-24.0 % (decrease in sensitivity)
SB-01 (10-10.8) SB-26 (10-11) SB-26 (12-13) TB-06152012		4-Methyl-2-pentanone	+20.8 % (increase in sensitivity)
		Dichlorodifluoromethane	-24.9 % (decrease in sensitivity)
		Chloromethane	-28.6 % (decrease in sensitivity)
SB-02 (11.5-13.1)	Continuing %D	Bromomethane	-53.0 % (decrease in sensitivity)
		Acetone	+22.4 % (increase in sensitivity)
		2-Butanone	+20.2 % (increase in sensitivity)
OD 44 (4.0.5)	Ocationing 0/ D	2-Butanone	-23.7 % (decrease in sensitivity)
SB-11 (1-2.5)	Continuing %D	1,2-Dibromo-3-chloropropane	-21.9 % (decrease in sensitivity)
SB-25 (12.7-13.7)		2-Butanone	+75.5 % (increase in sensitivity)
SB-04 (0-1) SB-07 (4.5-5)	0 11 1 01 0	2-Hexanone	+86.6 % (increase in sensitivity)
SB-29 (17-18) SB-29 (18-19)	Continuing %D	4-Methyl-2-pentanone	+106.8 % (increase in sensitivity)
SB-27 (17.5-18.5)		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)	0 11 1 615	Dichlorodifluoromethane	-30.1 % (decrease in sensitivity)
SB-12 (11-12)	Continuing %D	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
	KKF < 0.05	Detect	J
	RRF < 0.01 ¹	Non-detect	R
	KKF < U.U	Detect	J

Initial/Continuing	Criteria	Sample Result	Qualification
	RRF > 0.05 or RRF > 0.01 ¹	Non-detect	
	KKF > 0.00 01 KKF > 0.01	Detect	No Action
Initial Calibration	%RSD > 15% or a	Non-detect	UJ
Initial Calibration	correlation coefficient < 0.99	Detect	J
	%D >20% and <90%	Non-detect	No Action
	(increase in sensitivity)	Detect	J
Continuing Colibration	%D >20% and <90%	Non-detect	UJ
Continuing Calibration	(decrease in sensitivity)	Detect	J
	%D >90%	Non-detect	R
	70D >9U70	Detect	J

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
> UL	Detect	J
411 but > 100/	Non-detect	UJ
< LL but > 10%	Detect	J
< 10%	Non-detect	R
< 1070	Detect	J

Control Limit	Sample Result	Qualification
Surrogates diluted below the calibration curve	Non-detect	UJ ¹
Surrogates diluted below the calibration curve	Detect	J^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) Fluorobenzene Chlorobenzene-d ₅		AC
SB-04 (0-1)	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 central limit (III.)	Non-detect	No action
> the upper control limit (UL)	Detect	J
the level control limit (LL) but 250/	Non-detect	UJ
< the lower control limit (LL) but > 25%	Detect	J
. 250/	Non-detect	R
< 25%	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
	Carbon disulfide Methyl tert-butyl ether 1,1-Dichloroethane Chloroform	< LL but > 10%	< LL but > 10%
SB-12 (11-12)	Bromomethane 1,1,2-Trichloro-1,2,2-trichfluoroethane trans-1,2-Dichloroethene cis-1,2-Dichloroethane 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
> the upper control limit (OL)	Detect	J
the lower central limit (LL) but > 100/	Non-detect	UJ
< the lower control limit (LL) but > 10%	Detect	J
< 10%	Non-detect	R
< 10%	Detect	J
Parent sample concentration > 4x the	Detect	No Action
MS/MSD spiking solution concentration.	Non-detect	INO ACTION

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
. 111	Non-detect	UJ
> UL	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 central limit (LIL)	Non-detect	No Action	
> the upper control limit (UL)	Detect	J	
the lower central limit (LL) but a 100/	Non-detect	UJ	
< the lower control limit (LL) but > 10%	Detect	J	
. 100/	Non-detect	R	
< 10%	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

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.

J Estimated (result is < RL)

DATA VALIDATION CHECKLIST FOR VOCs

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

%R

Percent recovery
Relative percent difference RPD %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
3VV-040 6270C	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	
	RRF < 0.05	Non-detect	R	
	KKF < 0.00	Detect	J	
Initial and Continuing	RRF < 0.01 ¹	Non-detect	R	
Calibration	KKF < 0.01	Detect	J	
	RRF > 0.05 or RRF > 0.01 ¹	Non-detect	No Action	
	KKF > 0.05 0 KKF > 0.01	Detect	NO ACTION	
Initial Calibration	%RSD > 15% or a	Non-detect	UJ	
Initial Calibration	correlation coefficient < 0.99	Detect	J	
	%D > 20%	Non-detect	No Action	
Continuing Colibration	(increase in sensitivity)	Detect	J	
Continuing Calibration	%D > 20%	Non-detect	UJ	
	(decrease in sensitivity)	Detect	J	

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	О

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 central limit (LIII.)	Non-detect	No Action
> the upper control limit (UL)	Detect	J
the lower central limit (LL) but a 100/	Non-detect	UJ
< the lower control limit (LL) but > 10%	Detect	J
< 10%	Non-detect	R
< 10%	Detect	J
Surrogates diluted below	Non-detect	J ¹
the calibration range	Detect	J

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	
	Hexachlorocyclopentadiene	< 10%	< 10%	
SB-04 (0-1)	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
> the upper control limit (OL)	Detect	J
the lower central limit (LL) but > 100/	Non-detect	UJ
< the lower control limit (LL) but > 10%	Detect	J
< 10%	Non-detect	R
< 10%	Detect	J
Parent sample concentration > 4x the	Detect	No Action
MS/MSD spiking solution concentration.	Non-detect	INO ACTION

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
> UL	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 central limit (LIL)	Non-detect	No Action
> the upper control limit (UL)	Detect	J
the lower central limit (LL) but > 109/	Non-detect	UJ
< the lower control limit (LL) but > 10%	Detect	J
< 10%	Non-detect	R
< 1070	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
	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 %
SB-25 (3.5-5) /	Carbazole	220 J	3300 U	AC
DUP-01-06122012	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

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.

J Estimated (result is < RL)

DATA VALIDATION CHECKLIST FOR SVOCs

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

%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 Soil		14 days from collection to extraction and 40 days from extraction to analysis	Cool to 4±2 °C
SW-846 8015B	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)	Diesel Range Organics	Detected sample results	"UB" at the RL
SB-02 (14-15)	[C10-C28]	< RL and < BAL	

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
> UL	Detect	J
< LL but > 10%	Non-detect	UJ
< LL but > 10 %	Detect	J
< 10%	Non-detect	R
< 10%	Detect	J
D – Surrogates diluted below	Non-detect	₁ 1
the calibration curve	Detect	J

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	Kequired
GAS CHROMATOGRAPHY (GC/FID)					
Tier II Validation					
Holding Times		Х		Х	
Reporting Limits (Units)		Х		Х	
Blanks		•			
A. Method Blanks		Х	Х		
B. Equipment Blanks					Х
Laboratory Control Sample (LCS) Accuracy (%R)		Х		Х	
Laboratory Control Sample Duplicate (LCSD) %R					Х
LCS/LCSD Precision (RPD)					Х
Matrix Spike (MS) %R					Х
Matrix Spike Duplicate (MSD) %R					Х
MS/MSD RPD					Х
Field/Laboratory Duplicate Sample RPD					Х
Surrogate Spike %R		Х	Х		
Dilution Factor		Х		Х	
Moisture Content		Х		Х	
Tier III Validation					•
Initial Calibration %RSDs		Х		Х	
Continuing Calibration %Ds		Х		Х	
System Performance and Column Resolution		Х		Х	
Compound Identification and Quantitation		1		1	
A. Quantitation Reports		Х		Х	
B. RT of Sample Compounds Within Established RT Windows		Х		Х	
C. Pattern Identification		Х		Х	
D. Transcription/Calculation Errors Present		Х		Х	
E. Reporting Limits adjusted for Sample Dilutions		Х		Х	

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

Percent Difference %D

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
3VV-040 6U6ZA	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 central limit (LIL)	Non-detect	No Action
> the upper control limit (UL)	Detect	J
the lower central limit (LL) but a 100/	Non-detect	UJ
< the lower control limit (LL) but > 10%	Detect	J
< 10%	Non-detect	R
< 10%	Detect	J
One surrogate exhibiting recovery	Non-detect	No Action
outside the control limits but > 10%	Detect	NO Action
Surrogates diluted below	Non-detect	J ¹
the calibration curve	Detect	J

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	Required
GAS CHROMATOGRAPHY (GC/ECD)					
Tier II Validation					
Holding times		Х		Х	
Reporting limits (units)		X		Х	
Blanks					
A. Method blanks		X		Х	
B. Equipment/Field blanks					Х
Laboratory Control Sample (LCS) Accuracy %R		X		Х	
Laboratory Control Sample Duplicate (LCSD) %R					Х
LCS/LCSD Precision (RPD)					Х
Matrix Spike (MS) %R		Х		Х	
Matrix Spike Duplicate (MSD) %R		Х		Х	
MS/MSD RPD		Х		Х	
Field/Laboratory Duplicate Sample RPD		Х		Х	
Surrogate Spike %R		Х	Х		
Column (%D) (If dual column is performed-not confirmation purposes only)		Х		Х	
Dilution Factor		X		X	
Moisture Content		Х		Х	
Tier III Validation					
Initial calibration %RSDs		Х		Х	
Continuing calibration %Ds		Х		Х	
System performance and column resolution		Х		Х	
Compound identification and quantitation					
A. Quantitation Reports		Х	_	Х	
B. RT of sample compounds within the established RT windows		Х		Х	
C. Identification/Confirmation		Х		Х	
D. Quantitation transcriptions/calculations		Х		Х	
E. Reporting limits adjusted for sample dilutions		Х		Х	

%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 comple		
SB-02 (11.5-13.1) SB-02 (14-15) SB-12 (11-12)	Sodium	Detected sample results < RL and < BAL	"UB" at the RL	

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
MS percent recovery 50% to 74%	Detect	J
MS percent recovery 4 200/	Non-detect	R
MS percent recovery < 30%	Detect	J
MS percent recovery > 125%	Non-detect	No Action
ivio percent recovery > 125%	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	Water: 20%	Non-detect	UJ
concentration > 5x RL	Soil: 35%	Detect	J
Parent sample and/or laboratory			UJ
duplicate sample result • 5x the RL and difference between samples > RL	Soil: 2x RL	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
	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
SB-25 (3.5-5) /	Chromium	14.3	19.2	29.3 %
DUP-01-06122012	Cobalt	1.9 J	3 J	44.9 %
	Copper	24.0	40.3	50.7 %
	Iron	11500	12900	11.5 %
Lead Magnesium		14.9	17.5	16.0 %
		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
	Potassium	210 J	362 J	AC
	Selenium	2.3 J	4.3 J	AC
SB-25 (3.5-5) /	Sodium	164 J	282 J	AC
DUP-01-06122012	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)</p>

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)
	Barium	22 %
	Chromium	21 %
	Cobalt	25 %
	Copper	16 %
SD 25 (12 7 12 7)	Iron	28 %
SB-25 (12.7-13.7)	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)
	Iron	22 %
	Magnesium	23 %
	Manganese	24 %
SB-12 (11-12)	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
> UL	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		orted		mance ptable	Not
	No	Yes	No	Yes	Required
Inductively Coupled Plasma – Atomic Emission Spect Atomic Absorption – Manual Cold Vapor (CV)	rometry (I	CP)			
Tier II Validation					
Holding Times		Х		Х	
Reporting limits (units)		Х		Х	
Blanks					
A. Instrument Blanks		Х	Х		
B. Method Blanks		Х	Х		
C. Equipment/Field Blanks					Х
Laboratory Control Sample (LCS)		Х		Х	
Matrix Spike (MS) Accuracy (%R)		Х	Х		
Matrix Spike Duplicate (MSD) %R					Х
MS/MSD Precision (RPD)					Х
Field/Laboratory Duplicate Sample RPD		Х		Х	
ICP Serial Dilution		Х	Х		
Dilution Factor		Х		Х	
Moisture Content		Х		Х	
Tier III Validation					
Initial Calibration Verification		Х		Х	
Continuing Calibration Verification		Х		Х	
RL Standard		Х		Х	
ICP Interference Check		Х		Х	
Quantitation transcriptions/calculations		Х		Х	
Reporting limits adjusted to reflect sample dilutions		Х		Х	

[%]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	Water	28 days from collection to analysis	Cool to 4±2 °C; pH of < 2
by SM 4500-NH3-H	Soil	28 days from collection to analysis	Cool to 4±2 °C;
Cyanide by SW-846 9012,	Water	14 days from collection to analysis	Cool to 4±2 °C; pH of > 12.
9016	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	Water	28 days from collection to analysis	Cool to 4±2 °C; pH of < 2
by SM 4500-P-E	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	Water	28 days from collection to analysis	Cool to 4±2 °C; pH of < 2
by SW-846 9056	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)	Corrosivity	> 14 Days	7 Days	
SB-02 (14-15) SB-12 (11-12)	pН	> 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)	Corrosivity	> 14 Days	7 Days
SB-23 (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)	рН	> 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.

	Qualification		
Criteria	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 200/ to 740/	Non-detect	UJ
MS/MSD percent recovery 30% to 74%	Detect	J
MS/MSD percent recovery a 200/	Non-detect	R
MS/MSD percent recovery < 30%	Detect	J
MS/MSD percent recovery > 1259/	Non-detect	No Action
MS/MSD percent recovery > 125%	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 %
	рН	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,	Rep	Reported		Performance Acceptable	
and 4500-P-E	No	Yes	No	Yes	Required
Miscellaneous Instrumentation					
Tier II Validation					
Holding times		Х	X		
Reporting limits (units)		Х		Х	
Blanks					
A. Method blanks		Х	Х		
B. Equipment blanks					Х
Laboratory Control Sample (LCS) Accuracy (%R)		Х		Х	
Laboratory Control Sample Duplicate (LCSD) %R		Х		Х	
LCS/LCSD Precision (RPD)		Х		Х	
Matrix Spike (MS) %R		Х	Х		
Matrix Spike Duplicate (MSD) %R		Х	Х		
MS/MSD RPD		Х		Х	
Field/Laboratory Duplicate Sample RPD		Х		Х	
Dilution Factor		Х		Х	
Moisture Content		Х		Х	
Tier III Validation					
Initial calibration %RSD or correlation coefficient		Х		Х	
Continuing calibration %R		Х		Х	
Raw Data		Х		Х	
Quantitation transcriptions/calculations		Х		Х	
Reporting limits adjusted for sample dilutions		Х		Х	

[%]RSD – relative standard deviation

[%]R – percent recovery
RPD – relative percent difference
%D – difference

SAMPLE COMPLIANCE REPORT

Sample Delivery							Compl	liancy ¹			
Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	VOC	svoc	РСВ	DRO	MET	MISC	Noncompliance
	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
200-11278	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							Compl	liancy ¹			
Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	voc	svoc	РСВ	DRO	MET	MISC	Noncompliance
	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
200-11278	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
200 11210	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							Comp	liancy ¹			
Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	voc	svoc	РСВ	DRO	MET	MISC	Noncompliance
	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
200-11278	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							Comp	iancy ¹			
Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	VOC	svoc	РСВ	DRO	MET	MISC	Noncompliance
	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
200-11278	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 Bv:	Dennis Dvke

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) 549-3679

TestAmerica

CHAIN OF CUSTODY / ANALYSIS REQUEST

TAL - 0016 (0408) LAB USE ONLY Project No: Sample Numbers Job No: SDL Mater Metals Filtered (Yes/No)? Other: 0002.0800 Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132) Company Company Site/Project Identification

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

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THE LEADER IN ENVIRONMENTAL TESTING

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(Sub Contract Lab)	Sampler:			Lab PM: Madison,	on, Ja	James W	۶					Carr	Carrier Tracking No(s):	cking	No(s)				COC No: 200-8622,1	
	Phone:			E-Mail: jim.madison@testamericainc.com	dison	@tes:	tamer	icain	COM COM	_	İ	\vdash							Page: Page 1 of 1	
atories, Inc.									Analysis	YSis		Requested	le Se		1			<u> </u>	200-11278-1	
	Due Date Requested: 6/27/2012	# 							•										A-HCL M	M - Hexane
	TAT Requested (days):	/s):					- Juli		IVAS								•		B - NaOM C - Zn Acetate D - Nitric Acid	N - None O - AsNaO2 P - Na2O4S
State, Zip: NJ, 08817									St IOI E											Q - Na2SO3 R - Na2S2SO3
900(Tel) 732-549-3679(Fax)	PO#:				10)		3		Ino Lis			thod		-					ći	S - H2SO4 T - TSP Dodecahydrate
	WO#				A secondary and agent		nalytes		ompoi	3 B		cal Me						ers	J - DI Water K - EDTA	V-MCAA V-ph 4-5
Project Name: Krasckale, Hunts Point Bronx, NY	Project #: 20003974	•					ору А		rget C	500NH								ntain	L-EDA	Z - other (specity)
	SSOW#:				A commence		IOD) C		la	H/SM4						***		of co	Other:	
County Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp,	Matrix (w-water, S=solid, O-waste/oll, BT-Tissue, A-Air)	Field Filtered Perform MS/N	9045C	9012A_Calc/ (N	9016/9016_Ext	8270C/3541 (M 9012A/9013	SM4500_NH3_	4500_P_E/SM4	2320B/DI_LEA	9034/9030B					Total Numbe	Special In	pecial instructions/Note: 4
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SB-29 (18-19) (200-11346-4)	6/15/12	10:00 Eastern		Solid		×	×	×	×	×	-		<u> </u>	-		1	1	-		Pag
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	Date/Time:			Company		₹ R	Recorded by			4	I	1	0			Date/Time:	1000	è	30/2	Company &
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THE LEADER IN ENVIRONMENTAL TESTING

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Client Information (Sub Contract Lab)	Sampler			Madis	Madison, James W	nes W					2	Callier Fracking (vote).	2	19).			200	200-8621.1			<u> </u>
***************************************	Phone:			jim.mail:	E-Malt: jim.madison@testamericainc.com	⊉testa	merica	ainc.co	ă ∃								Page: Page	Page: Page 1 of 1			
Company: TestAmerica I shorstories Inc.								Ą	Analysis		Requested	sted					Job #: 200-	Job #: 200-11278-1			
Address:	Due Date Requested:	#		S. Oak	(Spot)												Pre	Preservation Codes:	des:		
City:	TAT Requested (days):	/s):						NAs				_			. <u></u>		၇၀	B - NaOH C - Zn Acetate	0 2	N - None O - AsNaO2	
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Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO#				10)	: 		ınd Lis									± Θ	G - Amchlor H - Ascorble Acid	: - S - S - S - S - S	S - H2SO4 T - TSP Dodecahydrate	
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Project Name: Krasdale, Hunts Point Bronx, NY	Project #: 20003974				of Common day	ору А		rget C								ntain		L-EDA	2-0	Z - other (specify)	
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Deliverable Requested: I, II, III, IV, Other (specify)					Ş	Special Instructions/QC Requirements:	struct	ions/C	C Re	quire	nents										
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yes						Cooler	Cooler Temperature(s) °C and Other Remarks:	rature(s) °C ar	1d Othe	r Rema	rks:			んべん	¢	P	22			l
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THE LEADER IN ENVIRONMENTAL	TestAme	
ENVIRORMENTAL TESTIN	Anerico Anerico	

Client Information (Sub Contract Lab)	Sampler:			Lab PM: Madison, James W	in, Ja	ames	٤						Carrier Tracking No(s):	Track	ing N)(s):			N 0	COC Na: 200-8620,1	
	Phone:			E-Mail: jim.ma	E-Mail: jim.madison@testamericainc.com	@ @	stam	enca	nc.	Ĭ	ĺ			l		ĺ	ĺ		77.70	Page: Page 1 of 1	
Company: TestAmerica Laboratories, Inc.									À	Analysis	iš.	Requested	lest	8					N 6	Job #: 200-11278-1	
Address: 777 New Durham Road,	Due Date Requested: 6/27/2012	8.												4						Preservation Codes:	M. Hexans
Oty: Edison	TAT Requested (days):	/s):							NAs												N-None O-AsNaO2
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Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO#;				0)	9 1 1 2 200 10 10 10 10 10 10 10 10 10 10 10 10 1			nd List						·					ā	S - H2SO4 T - TSP Dodecahydrate
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Shelton, CT 06484 Phone (203) 929-8140 Fax (203) 929-8142

TestAmerica Connecticut

128 Long Hill Cross Road

TestAmerico THE LEADER IN ENVIRONMENTAL TESTING

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Client Contact Micro Ast Hayes	Field Sampler J. C	J. Oliver 14151		TAT Required (business days):	ess days):		Lab PM/Contact: 7) m	tact:	`	Hodison	COC Number 2	C
Company: ARCANIS	Mobile/Field Number.	-0104					Lab Job Number (Lab Use Only):	nber (Lab	Use Only):		Page of	
Address: GSS Thirk Ave	E-Mail:		Deliver	Deliverable Type (Report/EDD):	port/EDD):	-	Post Door	l) sound	December Ond Course II at 1100 Onto		Carrier Tracking	Π
City, State, Zip:	PO#:		Sample	Sample Disposal: [] Return to Client	Return to C	lient	[]Yes [l l No	an use only).		Notes:	
Phone: 717 - 587-97.71	WO#:		A fee a	[] Disposal by Lab [] Archive for Months (A fee may be assessed if samples are	ths ed if sample	sare	Cooler Temp	eratures (Cooler Temperatures (Lab Use Only):	ä		
Email: Canal St. 1	Project #:		retained	retained for longer than 1 month)	n 1 month)		Analysis	(Attach lis	Analysis (Attach list if more space is needed)	ce is needed)		
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Project Name(Site Location (State): (Croskee) N /	SSOW#: Requirements:		Require	ments:			5 0	/A \ 9()	188			
Samples submitted for analysis will be subject to TestAmerice Terms and Conditions	TestAmence Terms and	Canditions	ž	No. of Containers/Preservatives	srs/Preserv	atives	0/1 00)) 2	מיו		Comments	
	Collection Time Collection (24-Hour	Matrix Aq=Aqueous, S=Solid, W=Waste(O) MS/ MSD	pevieseined	NO3	⁹ ОН СГ	HOsWpAn Iner	1 72 <u>1</u> 1 72 <u>1</u>	ר צמנו זין האל	851 [V]			
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Relinquisped by:	Date/Time/	Company	ξι	Received by	1 by:			Date	Date/Time;		Company	
Comments: \not $SDG-1 \rightarrow A\{($ $Samples >_{DA}COC $ a.c. DISTRIBUTION: WHITE - Stays with the Samples; CANARY - Returned to Client with Report; PINK - Field Copy	Slumples 211. 37 - Returned to Client with R	COC a.c.		5DG-1	Field S	TAL Field Sampling / Sh	Metals pping Instruction	جر tions and L	Includer	MC. Co	MLT of ε Include. He scarry Shipping Instructions and Laboratory Sample Receipt Policy included on Reverse Side of COC	000
TAL-0015 (0609)]

1/2/2 Phospha, Corboral In organis include Hawana Lalkill heter include the Field Sampling / Shipping Instructions and Laboratory Sample Receipt Policy included on Reverse Side of COC ANTONS INCLUDE altila Chicolde and COC Number: Carrier Tracking THE LEADER IN ENVIRONMENTAL TESTING TABUR TestAmerico Page of J Company Company Company Notes: 1 volux Madison Analysis (Attach list if more space is needed) इराणाहीय प B 5.5 Cooler Temperatures (Lab Use Only): Passed Rad Screen (Lab Use Only): 6-16-12 Lab Job Number (Lab Use Onfy) J'r 15.0 HAL Date/Time: Date/Time: Date/Time. 5000 Matols Lab PM/Contact: Sample Disposal: [] Return to Client [] Disposal by Lab [] Archive for __Months (A fee may be assessed if samples are No. of Containers/Preservatives HOsMbAn3 Chain of Custody Record Deliverable Type (Report/EDD): / R B (HTAT Required (business days): etained for longer than 1 month) HOSV Project #: 300 (302 f. 000 C. 0800 State Regulatory QC Criteria Received by: TOF HO3 Requirements: 1580¢ 4RCAPI Company NVC Jupreserved M W N ฉั 7. MS/ MSD (Yes or No) DISTRIBUTION: WHITE - Stays with the Samples; CANARY - Returned to Client with Report; PINK - Field Copy Company W=Waste/Oil, O≕Other 1500 Aq=Aqueous, S=Solid, Matrix 50% ples submitted for analysis will be subject to TestAmenca Terms and Conditions Field Sampler: 3.0) JUL Ed (24-Hour Clock) 1700 Collection 056 1/30 6/14/12 1530 1000 Sh Sl 21/h1/9 6/15/12/14/05 Mobile/Field Number: SEAL 21/61/3 07:1/5/2 6/14/12 11511 が区グ 0/15/0 6/15/12 Collection Date Date/Time: SSOW#: E-Mail: # 9 8 in heyer a droad to we, con (Containers for each sample may be combined on one line) でなり人 City, State, Zip: NY NY 10017 roject Name/Sité Location (State): 1626 655 think Asc Field Sample Identification (2.5-18.5) 10-11.8 8)-21 £1-21 - 0 61-8 Phone (203) 929-8140 Fax (203) 929-8142 TB-06152012 1.5-5 81-20 01 -289-212 Client Contact: Mercel 14 **TestAmerica Connecticut** ARCADIS 10 513-07 35-85 128 Long Hill Cross Road B-79 SB-24 SB-26 10-85 58-01 Shelton, CT 06484 Relinquished by: delinquished by: telinquished by S Comments: Company: Address: Phone: Email:

7AL-0015 (0609)

Test America

N - None
N - Asha02
P - Na2045
Q - Na2053
Q - Na2SSO3
S - H2SSO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - ph 4-5
Z - other (specify) Special Instructions/Note: Months Company Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Month Company Company Preservation Codes: G - Amchlor H - Ascorbic Acid 200-11278-1 A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH COC No: 200-8619.1 f - fce J - DI Water K - EDTA L - EDA Job #: Total Number of containers Date/Time Date/Time: Jate/Time Method of Shipment: Carrier Tracking No(s) Analysis Requested Cooler Temperature(s) °C and Other Remarks: Special Instructions/QC Requirements: Received by: Received by: Received by: Lab PM: Madison, James W 9066_48HR/DI_LEACH (MOD) Custom Sublist × × × × 9906_28D/DI_LEACH (MOD) Custom Sublist × × × × Certorm MS/MSD (Yes or No) E Mail Company TA BUK B∓≖Tissue, A=Alr (W=water, S=solid, O=waste/oil, Matrix Preservation Code: Solid Solid Solid Solid Company Company Sample (C=comb, G=grab) Туре Sample Eastern 14:05 (9cc) Eastern 15:30 Eastern 15:45 Eastern 14:00 Date: IAT Requested (days): Due Date Requested: 6/27/2012 Sample Date 6/15/12 Date/Time; $(\xi/(g)/(2)$ 6/15/12 6/14/12 6/14/12 Project #: 20003974 Phone: Date/Time: WO#: Client Information (Sub Contract Lab) Deliverable Requested: I, II, III, IV, Other (specify) Sample Identification - Client ID (Lab ID) Custody Seal No. 912-354-7858(Tel) 912-352-0165(Fax) Project Name: Krasdale, Hunts Point Bronx, NY TestAmerica Laboratories, Inc Possible Hazard Identification SB-01 (10-10.8) (200-11346-6) SB-01 (12-13) (200-11346-7) SB-26 (10-11) (200-11346-8) SB-26 (12-13) (200-11346-9) Empty Kit Relinquished by: 5102 LaRoche Avenue Custody Seals Intact: Shippina/Receivina A Yes A No City: Savannah State, Zip: GA, 31404 Unconfirmed elinquished by: Relinquished by Phone; mail 4435 of 4454 Page

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THE LEADER IN ENVIRONMENTAL TESTING

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

777 New Durham Road

CHAIN OF CUSTODY / ANALYSIS REQUEST

18 36% a5 # TAL - 0016 (0408) LAB USE ONLY 120 Project No: Sample Numbers Job No: Water Metals Filtered (Yes/No)? Z Other: Page . Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). N: N 気なった 1725 Company Company Company Company 2noins ANALYSIS REQUIERTED, ENTER 'X: BELOW TO INDICATE REQUEST) State (Location of site): NJ: Site/Project Identification Regulatory Program: HØ Con -4041. PC ל יון איניין לניין מי איניין לניין Ž 12/1/1/2 P.O. # BOD 19302 7,0007,08000 Received by Received by Mannin Includes $\frac{1}{\sqrt{2}}$ ଚ 5001 1920 Robal Date / Time Date / Time Date / Time No. of. Soil: Water: 11 4/9/ Samplers Name (Printed Cont N 7 Rush Chrages Authorized For: Analysis Turnaround Time Matrix 535/ 5081 1285 N Dell Standard X Preservation Used: 1 = ICE, 2 = HCI, $3 = H_2SO_4$, $4 = HNO_3$, 5 = NaOHOther 1600 2 Week 1 Week 0/13/12 1610 725 Time 500-21/91/9 6/15/12 7 ≂ Other Company Company Sompany Company State Sanplas Sample Identification 11.5-13 212-682-72 21 51-1 ū Special Instructions All6 = Other Name (for report and invoice 1 yeredille ARCADIS 278 Relinquished by Relingdished by SB-02 70-21 SB-12 Company Relinquist Address

271.UD

DOITON

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

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: Prep Method:

8260B 5035

Analysis Batch:

200-40464

Instrument ID:

N.i

Dilution:

Prep Batch:

Lab File ID:

1.0

200-40354

Initial Weight/Volume:

ngaj06.d

Analysis Date:

06/15/2012 1527

5.16 g

Prep Date:

06/14/2012 1519

Final Weight/Volume:

5 mL

Analyte	DryWt Corrected: \	(· · · · · · · · · · · · · · · · · · ·	Result (ug/Kg)	Qualifier	MDL	RL	
Dichlorodifluoromethane		~	5.4	UI	0.25	5.4	
Chloromethane		N	5.4	U	0.28	5.4	
Vinyl chloride	4.	30	5.4	 U	0.32	5.4	
Bromomethane			5.4	U	0.80	5.4	
Chloroethane			5.4	Uゴ	0.41	5.4	
Trichlorofluoromethane			5.4	U	0.36	5.4	
1,1-Dichloroethene	f :		5.4	U	0.40	5.4	
1,1,2-Trichloro-1,2,2-tricht	fluoroethane		5.4	U_	0.36	5.4	
Acetone			28	丁	1.1	5.4	
Carbon disulfide			88.0	J	0.33	5.4	
Methyl acetate			5.4	U	0.68	5.4	
Methylene Chloride		5,4	4.4	- 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	I	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	J0.45-	AB OB	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

1,4-Dichlorobenzene

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U

0.16

0.25

5.4

5.4

5.4

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: Prep Method:

8260B 5035

Analysis Batch:

200-40464

Instrument ID:

N.i

Dilution:

1.0

Prep Batch: 200-40354

Lab File ID:

ngaj06.d

Analysis Date:

06/15/2012 1527

Initial Weight/Volume:

5.16 g

Prep Date:

06/14/2012 1519

Final Weight/Volume:

Analyte	I:	DryWt Corrected: Y	E-47	Result (ug/Kg)		Qualifier	.)	MDL	RL
1,2-Dichlorob	enzene	**************************************	7	5.4		U		0.24	5.4
1,2-Dibromo-	3-Chloropropane			5.4		ロゴ		0.98	5.4
1,2,4-Trichlor	obenzene		5,4	10.2 8-	· ·	JB-UB		0.22	5.4

Surrogate	7°	%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: Initial Weight/Volume: lhbab11.d

Dilution:

4.4

06/25/2012 1731

Final Weight/Volume:

5.41 g 10 mL

Analysis Date: Prep Date:

06/14/2012 1528

Analyte	DryWt Corrected: Y	Result (ug/Kg)		Qualifier	*MDL	RL	
Dichlorodifluoromethane		690		UAT	140	690	* *
Chloromethane		690		U	180	690	
Vinyl chloride		690		U	140	690	
Bromomethane		690		UI	170	690	
Chloroethane		690		U	100	690	
Trichlorofluoromethane		690	, ?	U	90	690	
1,1-Dichloroethene	Programme Transfer	690		U	150	690	
1,1,2-Trichloro-1,2,2-trichfluo	proethane	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		Ü	120	690	
Trichloroethene		690		Ü	120	690	
Methylcyclohexane		690		Ü	120	690	
1,2-Dichloropropane		690		Ü	130	690	
Bromodichloromethane		690		Ū	130	690	
cis-1,3-Dichloropropene		690		Ü	120	690	
4-Methyl-2-pentanone		3400		Ü	740	3400	
Toluene		390		J	140	690	
trans-1,3-Dichloropropene		690		Ŭ	120	690	
1.1.2-Trichloroethane		690		Ü	130	690	
Tetrachloroethene		690		Ü	140	690	
2-Hexanone		3400		Ü	530	3400	
Dibromochloromethane		690		Ü	110	690	
1.2-Dibromoethane		690		Ŭ	130	690	
Chlorobenzene		690		U	140	690	
Ethylbenzene		1200		U	140		
Xylenes, Total		4900				690	
•					140	690	
Styrene		690 690		U	120	690	
Bromoform				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 Voiatile Organic Compounds (GC/MS)

Analysis Method:

8260B

Analysis Batch:

200-40972

Instrument ID:

L.i

Prep Method:

5035

Lab File ID:

Prep Batch:

200-40358

lhbab11.d

Dilution:

4.4

Initial Weight/Volume:

Analysis Date:

5.41 g

Prop Data:

06/25/2012 1731

Final Weight/Volume:

Prep	Date:

:	06/14/2012	1528

Analyte		DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorober	nzene		690	U	140	690
1,2-Dibromo-3-	Chloropropane	. 3	690	U	120	690
1,2,4-Trichlorob	enzene		690	U	140	690

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	90	\$ \$\dag{\text{constraints} \text{constraints} \text	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)

Result (ug/Kg)

Analysis Method:

8260B

Analysis Batch:

200-40972

Instrument ID:

L.i

Prep Method:

5035

Prep Batch:

200-40358

Qualifier

Lab File ID: Initial Weight/Volume: lhbab12.d 5.81 g

Dilution: Analysis Date: 2.9

06/25/2012 1803

DryWt Corrected: Y

Final Weight/Volume:

MDL

10 mL

RL

Prep Date:

Analyte

06/14/2012 1528

Allalyte	Dryvvi Conecieu. 1		result (ug/rg)		Qualifier	IVIDL	RL
Dichlorodifluoromethane			650		リグ	140	650
Chloromethane			650	,	U	170	650
Vinyl chloride			650		U	130	650
Bromomethane			650		ロゴ	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-trichfluo	roethane		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		17	650		U	110	650
Trichloroethene			650		U	110	650
Methylcyclohexane			650		U	120	650
1,2-Dichloropropane			650		U	120	650
Bromodichloromethane			650		Ü	120	650
cis-1,3-Dichloropropene			650		Ü	120	650
4-Methyl-2-pentanone			3300		Ü	710	3300
Toluene			370		J	130	650
trans-1,3-Dichloropropene			650		Ü	110	650
1,1,2-Trichloroethane			650		Ü	120	650
Tetrachloroethene			650		Ü	130	650
2-Hexanone			3300		Ü	500	3300
Dibromochloromethane			650	18	Ü	100	650
1,2-Dibromoethane			650		Ü	120	650
Chlorobenzene			650		Ŭ	130	650
Ethylbenzene		3	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
4.0 D. L.L.			000			120	000

1,3-Dichlorobenzene

1,4-Dichlorobenzene

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U

120

120

650

650

650

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 5035

Analysis Batch:

200-40972

Instrument ID:

L.i

Prep Method:

Lab File ID:

Dilution:

2.9

Prep Batch:

200-40358

lhbab12.d

Analysis Date:

Qualifier

Qualifier

Initial Weight/Volume:

5.81 g

06/25/2012 1803

650

100

Prep Date:

Toluene-d8

06/14/2012 1528

Final Weight/Volume:

MDL

10 mL

Analyte	

00/14/20	-	102	,
	n-	AAA	\sim

Analyte	DryWt Corrected: Y	Result (ug/Kg)
1,2-Dichlorobenzene	**************************************	650
1,2-Dibromo-3-Chloropropane		650

U	130
U	110
U	130

650
650
CEO

RL

1,2,4-Trichlorot	enzene
Surrogate	

Bromofluorobenzene

1,2-Dichlorobenzene-d4

45 - 145

Acceptance Limits

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: Dilution:

5035 1.0

Prep Batch:

200-40358

Lab File ID: Initial Weight/Volume: lhbab13.d 5.58 g

Analysis Date:

06/25/2012 1835

Prep Date:

06/14/2012 1528

Final Weight/Volume:

10 mL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane	```	150	UA	32	150
Chloromethane		150	U	40	150
Vinyl chloride		150	U	30	150
Bromomethane		150	リグ	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-tricl	nfluoroethane	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, Tota	I	150	U	27	150
1,1-Dichloroethane		150	U	30	150
cis-1,2-Dichloroethene		150	Ū	27	150
2-Butanone		760	Ü	130	760
Chloroform		540		29	150
1,1,1-Trichloroethane		150	U	30	150
Cyclohexane		150	Ū	30	150
Carbon tetrachloride		150	Ü	23	150
Benzene		1300		32	150
1,2-Dichloroethane		150	U	26	150
Trichloroethene		150	Ū	26	150
Methylcyclohexane		92	J	27	150
1,2-Dichloropropane		150	Ū	29	150
Bromodichloromethane		150	Ū	29	150
cis-1,3-Dichloropropene		150	Ü	27	150
4-Methyl-2-pentanone		760	Ū	160	760
Toluene		430	•	30	150
trans-1,3-Dichloroproper	ne .	150	U	26	150
1,1,2-Trichloroethane		150	Ü	29	150
Tetrachloroethene		150	Ü	30	150
2-Hexanone		760	Ü	120	760
Dibromochloromethane		150	Ü	24	150
1,2-Dibromoethane		150	U	29	150
Chlorobenzene		150	U	30	150
Ethylbenzene		360	O	30	150
Xylenes, Total		2100		32	150
Styrene		150	U	26	150
Bromoform		150	U	26	150
Isopropylbenzene		37	J	29	
1,1,2,2-Tetrachloroethan		150	U	2 9 27	150
1,3-Dichlorobenzene	C	150	U	27 29	150
i,3-Dichiorobenzene		150	U	29	150

1,4-Dichlorobenzene

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150

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:

Prep Method:

5035

Prep Batch:

Lab File ID:

L.i

Dilution:

1.0

200-40358

lhbab13.d

Initial Weight/Volume:

Analysis Date:

06/25/2012 1835

5.58 g

Prep Date:

06/14/2012 1528

Final Weight/Volume:

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	

88		~~~
		65 - 155
101		80 - 115
100		80 - 115
101		45 - 145
	100	100

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: Prep Date:

06/25/2012 2147 06/25/2012 2147 Final Weight/Volume:

*					
Analyte		Result (ug/L)	Qualifier	MDL	RL "Tales"
Dichlorodifluoromethane		1.0	ت کر∪	0.090	1.0
Chloromethane		1.0	U	0.12	1.0
Vinyl chloride		1.0	U	0.090	1.0
Bromomethane		1.0	UZZ	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-trichfluoro	ethane	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	Ü	0.16	1.0
cis-1,2-Dichloroethene	100	1.0	Ū	0.16	1.0
2-Butanone		5.0	Ū	1.1	5.0
Chloroform		1.0	Ü	0.16	1.0
1,1,1-Trichloroethane		1.0	Ü	0.16	1.0
Cyclohexane		1.0	Ū	0.23	1.0
Carbon tetrachloride		1.0	Ŭ 2	0.17	1.0
Benzene		1.0	Ü	0.17	1.0
1,2-Dichloroethane		1.0	Ü	0.15	1.0
Trichloroethene		1.0	Ü	0.14	1.0
Methylcyclohexane		1.0	Ū	0.25	1.0
1,2-Dichloropropane		1.0	Ü	0.17	1.0
Bromodichloromethane		1.0	Ū	0.16	1.0
cis-1,3-Dichloropropene		1.0	Ū	0.16	1.0
4-Methyl-2-pentanone		5.0	Ū	0.90	5.0
Toluene		1.0	Ü	0.17	1.0
trans-1,3-Dichloropropene		1.0	Ü	0.18	1.0
1,1,2-Trichloroethane		1.0	Ü	0.18	1.0
Tetrachloroethene		1.0	Ü	0.18	1.0
2-Hexanone		5.0	Ū	1.1	5.0
Dibromochloromethane		1.0	Ū	0.17	1.0
1,2-Dibromoethane		1.0	Ü	0.18	1.0
Chlorobenzene		1.0	Ü	0.19	1.0
Ethylbenzene		1.0	Ü	0.18	1.0
Xylenes, Total		1.0	Ü	0.17	1.0
Styrene		1.0	Ü	0.17	1.0
Bromoform		1.0	Ŭ	0.17	1.0
Isopropylbenzene		1.0	Ü	0.17	1.0
1,1,2,2-Tetrachloroethane		1.0	Ü	0.17	1.0
1,3-Dichlorobenzene		1.0	Ü	0.17	1.0
1,4-Dichlorobenzene		1.0	Ü	0.16	1.0
1,4-DIGHOTODEHZEHE		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

Analysis Method: Prep Method:

8260B

5030B

1.0

Analysis Date: Prep Date:

Dilution:

06/25/2012 2147 06/25/2012 2147 Analysis Batch: Prep Batch:

200-40972 N/A

Instrument ID:

L.i lhbab19.d

Initial Weight/Volume:

Lab File ID:

5 mL

Final Weight/Volume:

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	### ##################################	orred direct articlement district in mile statement des monente annota a debut de la compensión en messon en m L	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 Voiatile Organic Compounds (GC/MS)

Analysis Method:

8260B 5035

Analysis Batch:

200-40972

Instrument ID:

Li

Prep Method: Dilution:

2.9

Prep Batch:

200-40532

Lab File ID:

lhbab14.d

Analysis Date: 06/25/2012 1907

Initial Weight/Volume:

5.7 g

Prep Date:

06/19/2012 0832

Final Weight/Volume:

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethar	ne	510	UJ	110	510
Chloromethane		510	U	130	510
Vinyl chloride		510	U	100	510
Bromomethane		510	UJ	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-tri	chfluoroethane	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-Dichloroethei	ne	510	U	100	510
Methyl t-butyl ether		510	U	93	510
1,2-Dichloroethene, To	tal	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
Methylcyciohexane		510	U	93	510
1,2-Dichloropropane		510	U	98	510
Bromodichloromethane		510	U	98	510
cis-1,3-Dichloropropen	e	510	U	93	510
4-Methyl-2-pentanone		2600	U	560	2600
Toluene		120	J	100	510
trans-1,3-Dichloroprope	ene	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
Kylenes, Total		170	J	110	510
Styrene		510	U	87	510
Bromoform		510	U	87	510
sopropylbenzene		510	U	98	510
1,1,2,2-Tetrachloroetha	ine	510	U	93	510
1,3-Dichlorobenzene		510	U	98	510
1,4-Dichlorobenzene		510	Ü	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

Lab File ID:

Dilution:

Prep Batch:

200-40532

lhbab14.d

2.9

Initial Weight/Volume:

5.7 g

Analysis Date:

06/25/2012 1907

Prep Date:

06/19/2012 0832

Final Weight/Volume:

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 Lim	its
1,2-Dichloroethane-d4	89	intribility (in the material control on the physiology). All displaces a section of the control control of the	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: Prep Method:

8260B 5035

Analysis Batch:

200-40972

Instrument ID: Lab File ID:

L.i

lhbab15.d

Dilution:

7.3

Prep Batch:

200-40532

Initial Weight/Volume:

5.49 g

Analysis Date:

06/25/2012 1939

ū				
Final	Weight/Volume:			

10 mL

1700

_ `	
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	UI	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-trichflu	oroethane	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	Ü	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	Ū	1800	8500
Toluene		530	J	340	1700
trans-1,3-Dichloropropene		1700	Ü	290	1700
1,1,2-Trichloroethane		1700	Ü	320	1700
Tetrachloroethene		1700	Ü	340	1700
2-Hexanone		8500	Ü	1300	8500
Dibromochloromethane		1700	Ü	270	1700
1,2-Dibromoethane		1700	Ü	320	1700
Chlorobenzene		1700	Ü	340	1700
Ethylbenzene		1700	Ü	340	1700
Xylenes, Total		1500	J	360	1700
Styrene		1700	Ü	290	1700
Bromoform		1700	Ü	290	1700
Isopropylbenzene		1700	Ü	320	1700
1,1,2,2-Tetrachloroethane		1700	Ü	310	1700
1,3-Dichlorobenzene		1700	U	320	1700
4.4 Disklasskassassass		1700		320	1700

1,4-Dichlorobenzene

1700

U

320

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: Prep Method:

8260B 5035

Analysis Batch:

200-40972

Instrument ID:

L.i

Dilution:

Prep Batch:

200-40532

U

Lab File ID:

340

lhbab15.d

7.3

Initial Weight/Volume:

5.49 g

Analysis Date:

1,2,4-Trichlorobenzene

06/25/2012 1939

Final Weight/Volume:

10 mL

1700

Prep Date:

06/19/2012 0832

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

1700

%Rec	Qualifier	Acceptance Limits
87	h thirtheadarai nebuur eun euin volon de earain de euin de earain earain earain a teann eun eun eun eun eun eu	65 - 155
100		80 - 115
95		80 - 115
97		45 - 145
	87 100 95	87 100 95

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: Prep Method:

8260B 5035

Analysis Batch:

200-40924

Instrument ID: Lab File ID:

N.i

Dilution:

1.0

Prep Batch:

200-40538

Initial Weight/Volume:

ngam07.d

Analysis Date:

06/20/2012 1453

5.12 g

Prep Date:

06/19/2012 1016

Final Weight/Volume: 5 mL

	prrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		5.5	U J	0.25	5.5
Chloromethane	V. 1	5.5	U	0.29	5.5
Vinyl chloride	- N. C THE	5.5	U	0.33	5.5
Bromomethane		5.5	U	0.82	5.5
Chloroethane		5.5	UJ	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	1	1.1	5.5
Carbon disulfide	5,5	1.0 5.5 0.90	JB UB	0.34	5.5
Methyl acetate		_ 5.5	U	0.69	5.5
Methylene Chloride	5.5		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	UII	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	Ü	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	Ü	0.66	5.5
Toluene		5.5	U	0.11	5.5
traris-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
sopropylbenzene		5.5	Ü	0.085	5.5
1,1,2,2-Tetrachloroethane		5.5	Ū	0.29	5.5
1,3-Dichlorobenzene		5.5	Ū	0.17	5.5
1,4-Dichlorobenzene		5.5	Ü	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: Prep Method:

Analysis Batch:

200-40924

Instrument ID:

N.i

Dilution:

5035 1.0

8260B

Prep Batch:

200-40538

Lab File ID:

ngam07.d

Initial Weight/Volume:

5.12 g

Analysis Date:

06/20/2012 1453

Final Weight/Volume:

Prep Date:

06/19/2012 1016

Analyte	DryWt Corrected: Y		Result (ug/Kg)	***	Qualifier	MDL	RL	
1,2-Dichlorobenzene		4	5.5		U	0.24	 5.5	
1,2-Dibromo-3-Chloropropane		والما	5.5		U	1.0	5.5	
1,2,4-Trichlorobenzene		5.5	0.94		-JB- UB	0.22	5.5	,

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	82	t midd tu than tu thairth fu thair da gheat, an tun tu du an tud a cuineachd an tud an tud an tud an tud an tu	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: Prep Method:

8260B 5035

Analysis Batch:

200-40858

Instrument ID:

N.i

Dilution:

1.0

Prep Batch:

200-40538

Lab File ID: Initial Weight/Volume: ngal18.d 5.24 g

Analysis Date:

Prep Date:

06/19/2012 1957 06/19/2012 1016 Final Weight/Volume:

5 mL

	ryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL	
Dichlorodifluoromethane		7.3	U .T	0.34	7.3	***************************************
Chloromethane		7.3	U	0.38	7.3	11 -1 -
Vinyl chloride	E. S. L.	7.3	U	0.44	7.3	
Bromomethane		7.3	U	1.1	7.3	
Chloroethane		7.3	ULIT	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-trichfluoroeth	ane	7.3	U	0.48	÷ 7.3	
Acetone		210		1.5	7.3	
Carbon disulfide		13	ゴ	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	-5	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 P	-0.88	-73	
Toluene	7.3	-2.6-	JB-UB	0.15	7.3	
trans-1,3-Dichloropropene	· (1)	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	Ū	0.16	7.3	
1,2-Dibromoethane		7.3	Ū	0.22	7.3	
Chlorobenzene		7.3	Ū	0.11	7.3	
Ethylbenzene		9.9	5	0.082	7.3	
Xylenes, Total		23	7	1.1	7.3	
Styrene		7.3	Ú	0.15	7.3	
Bromoform		7.3	Ü	0.29	7.3	
Isopropylbenzene		6.3	J	0.11	7.3	
1,1,2,2-Tetrachloroethane		7.3	ů T	0.38	7.3	
1,3-Dichlorobenzene		7.3	کر زا	0.38	7.3 7.3	
1,4-Dichlorobenzene		7.3	<u>ر</u> بر	0.22	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 5035

Analysis Batch:

200-40858

Instrument ID:

N.i

Prep Method: Dilution:

Prep Batch:

200-40538

Lab File ID:

1.0

ngal18.d

Initial Weight/Volume:

Analysis Date:

06/19/2012 1957

5.24 g

Prep Date:

06/19/2012 1016

Final Weight/Volume:

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier MDL	RL 🗼
1,2-Dichlorobenzene	* - * * *	7.3	U 5 0.32	7.3
1,2-Dibromo-3-Chloropropane		7.3	U ブ 1.3	7.3
1,2,4-Trichlorobenzene		7.3	U 🔰 0.29	7.3

Surrogate		%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	2. melli direk elemek ere elemek e	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:

200-11320-

Solid

% Moisture:

34.8

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

8	MS)			
Analysis Method: 8260B	Analysis Batch: 200-4	10924	Instrument ID:	N.i
Prep Method: 5035	Prep Batch: 200-4		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: Q6/19/2012 1016			The state of the s	
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				
Analyte DryWt Corrected: Y	Result (ug/Kg)	Qualifi	er MDL	RL SAME
Dichlorodifluoromethane	7.5	U	0.34	7.5
Chloromethane	7.5	U	0.39	7.5
Vinyl chlonde	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	В	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	<i>ኢ</i> 5	χÚ	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/	y	0.93	7.5
Trichloroethene	<i>7</i> /.5	υ\	0.72	7.5
Methylcyclohexane	/2.8	1 /	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	JB	√0.15	7.5
trans-1,3-Dichloropropene	7.5	U	Ò ₂ 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-Dicklorobenzene	7.5	U	0.22	7.5
1,4-Dichlorobenzene	7.5	U	0.34	7.5

TestAmerica Burlington

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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:

200-11320

Solid

% Moisture:

34.8

Date Sampled: 06/14/2012 1150

Date Received: 06/15/2012 1015

		8260B Volatile Organic Co	mpounds (GC/MS)			
Prep Method: Dilution: Analysis Date:	8260B 5035 1.0 06/20/2012 1523 06/19/2012 1016	•	40538 Lat	trument ID: File ID: ial Weight/Volume: al Weight/Volume:	N.i ngam08.d 5.13 g 5 mL	
Analyte	DryWt Corrected: `	Result (ug/Kg)	Qualifier	MDL	RL	
1,2-Dichlorobenzene		7.5	U	0.33	7.5	
1,2-Dibromo-3-Chloro	propane	7.5	U	1.4	7.5	1
1,2,4-Trichlorobenzen	e	7.5	U	0.30	7.5	
Surrogate		%Rec	Qualifier	Acceptan	ce Limits	
1,2-Dichloroethane-d4	on a a sua numero de a la comp resensa de actividade de alternación de alternación de alternación de alternación	78		65 - 155		
Toluene-d8		58	X	80 - 115		
Bromofluorobenzene		55	X	80 - 115		
1,2-Dichlorøbenzene-	d 4	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 Voiatile Organic Compounds (GC/MS)

Analysis Method:

8260B 5030B Analysis Batch:

200-40972

Instrument ID:

Li

Prep Method:

Prep Batch:

N/A

Lab File ID:

lhbab20.d

Dilution: Analysis Date: 1.0

06/25/2012 2220

Initial Weight/Volume:

5 mL

Prep Date:

Final Weight/Volume:

nalyte	
Nichlorodiff	

06/25/2012	2220
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Result (ug/L)	Qualifier	MDL	RL
10	ПŢ	በ በወበ	11 N

Dichiorodifluoromethane	Analyte	Result (ug/L)	Qualifier	MDL	RL
Viry Lohoride	Dichlorodifluoromethane	1.0	 UA	0.090	1.0
Bromomethane 1.0 U	Chloromethane	1.0	U	0.12	1.0
Chlorofethane	Vinyl chloride	1.0	U	0.090	1.0
Trichlorothuromethane	Bromomethane	1.0	ULIT	0.43	1.0
1.1-Dickloresthene	Chloroethane	1.0	U	0.12	1.0
1.12-Trichloro-1,2,2-trichfluoroethane 1.0	Trichlorofluoromethane	1.0	U	0.092	1.0
Acetone	1,1-Dichloroethene	1.0	U	0.18	1.0
Carbon disulfide 1.0 U 0.15 1.0 Methyla cetate 1.0 U 0.23 1.0 Methylanc Chloride 0.22 J 0.21 1.0 trans-12-Dichloroethene 1.0 U 0.17 1.0 Methyl t-buly ether 1.0 U 0.17 1.0 1,2-Dichloroethene, Total 1.0 U 0.32 1.0 1,1-Dichloroethene, Total 1.0 U 0.16 1.0 1,1-Dichloroethene, Total 1.0 U 0.16 1.0 1,1-Dichloroethane 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 Cyclobexane 1.0 U 0.16 1.0 Cyclobexane 1.0 U 0.17 1.0 Benzene 1.0 U 0.15 1.0	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.18	1.0
Methylacetate 1.0 U 0.23 1.0 Methylene Chloride 0.22 J 0.21 1.0 trans-12-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 0.16 1.0 1,1-Dichloroethane 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-Trichloroethane 1.0 U 0.16 1.0 Cyclohexane 1.0 U 0.16 1.0 Carbon tetrachloride 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 12-Dichloroethane 1.0 U 0.17 1.0 12-Dichloroptopane 1.0 U 0.15 1.0 17-Dichloroptopane 1.0 U 0.14 1.0 <td>Acetone</td> <td>5.0</td> <td>U</td> <td>0.92</td> <td>5.0</td>	Acetone	5.0	U	0.92	5.0
Methylene Chloride 0.22 J 0.21 1.0 Irans-1,2-Dichloroethene 1.0 U 0.17 1.0 Methyl Eubyl ether 1.0 U 0.17 1.0 1,2-Dichloroethene, Total 1.0 U 0.16 1.0 1,1-Dichloroethane 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 0.17 1.0 Garbon tetrachloride 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 1,2-Dichloroethane 1.0 U 0.17 1.0 1,2-Dichloroethane 1.0 U 0.14	Carbon disulfide	1.0	U	0.15	1.0
Trans-1,2-Dichloroethene	Methyl acetate	1.0	U	0.23	1.0
Methyl t-butyl ether 1.0 U 0.17 1.0 1.1 1.2 - Dichloroethene, Total 1.0 U 0.32 1.0 1.1 - Dichloroethene 1.0 U 0.36 1.0 cis-1,2-Dichloroethene 1.0 U 0.16 1.0 cis-1,2-Dichloroethene 5.0 U 1.1 5.0 Chloroform 1.0 U 0.16 1.0 U 0.17 1.0 U 0.15 1.0 U 0.17 1.0 U 0.15 1.0 U 0.17 1.0 U 0.15 1.0 U 0.17 1.0 U 0.18 1.0 U 0.17 1.0 Ethylbenzene 1.0 U 0.18 1.0 U 0.18 1.0 U 0.18 1.0 U 0.17 1.0 Ethylbenzene 1.0 U 0.17 1.0 Ethylbenzene 1.0 U 0.17 1.0 Ethylbenzene 1.0 U 0.17 1.0 Elhylbenzene 1.0 U 0.17 1.0 U 0.18 1.0 U 0.17 1.0 Elhylbenzene 1.0 U 0.17 1.0 U 0.18 1.0 U 0.17 1.	Methylene Chloride	0.22	J	0.21	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 0.17 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 0.15 1.0 Methylyclohexane 1.0 U 0.15 1.0 1,2-Dichloropropane 1.0 U 0.17 1.0 Methylyclohexane 1.0 U 0.16 1.0 1,2-Dichloropropane 1.0 U 0.16 1.0 1,2-Dichloropropane 1.0 U 0.16 1.0	trans-1,2-Dichloroethene	1.0	U	0.17	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 0.17 1.0 Carbon tetrachloride 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Trcholrorethane 1.0 U 0.17 1.0 Trcholrorethene 1.0 U 0.15 1.0 Trcholrorethene 1.0 U 0.14 1.0 Methylcyclohexane 1.0 U 0.14 1.0 1,2-Dichloropropane 1.0 U 0.16 1.0 <td< td=""><td>Methyl t-butyl ether</td><td>1.0</td><td>U</td><td>0.17</td><td>1.0</td></td<>	Methyl t-butyl ether	1.0	U	0.17	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 Trichloroethane 1.0 U 0.15 1.0 Trichloroethene 1.0 U 0.14 1.0 Methyloydohexane 1.0 U 0.14 1.0 Methyloydohexane 1.0 U 0.15 1.0 1,2-Dichloroethane 1.0 U 0.17 1.0 Bromodichloromethane 1.0 U 0.16 1.0 Cis-3,-Dichloroethane 1.0 U 0.18 1.0 <	1,2-Dichloroethene, Total	1.0	U	0.32	1.0
2-Butanone	1,1-Dichloroethane	1.0	U	0.16	1.0
Chloroform 1.0 U 0.16 1.0 1.0 1.1-Trichloroethane 1.0 U 0.16 1.0 Cyclohexane 1.0 U 0.23 1.0 Carbon tetrachloride 1.0 U 0.23 1.0 Carbon tetrachloride 1.0 U 0.17 1.0 Eenzene 1.0 U 0.17 1.0 U 0.15 1.0 U 0.17 1.0 U 0.15 1.0 U 0.17 1.0 U 0.17 1.0 U 0.17 1.0 U 0.18 1.0 U 0.17 1.0 U 0.18 1.0 U 0.18 1.0 U 0.19 1.0 U 0.19 1.0 U 0.18 1.0 U 0.19 1.0 U 0.18 1.0 U 0.19 1.0 Ethylbenzene 1.0 U 0.18 1.0 U 0.17 1.0 U 0.18 1.0 U 0.17 1.0 Styrene 1.0 U 0.17 1.0 U 0.17 1.0 Erdrachloroethane 1.0 U 0.18 1.0 U 0.17 1.0 Erdrachloroethane 1.0 U 0.18 1.0 U 0.17 1.0 Erdrachloroethane 1.0 U 0.18 1.0 U 0.	cis-1,2-Dichloroethene	1.0	U	0.16	.1.0
1,1,1-Trichloroethane 1.0 U 0.66 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 1,2-Dichloroethane 1.0 U 0.14 1.0 Methylcyclohexane 1.0 U 0.17 1.0 Bromodichloromethane 1.0 U 0.17 1.0 Bromodichloromethane 1.0 U 0.16 1.0 Bromodichloropropane 1.0 U 0.16 1.0 Bromodichloropropane 1.0 U 0.16 1.0 4-Methyl-2-pentanone 5.0 U 0.90 5.0 Tolluene 1.0 U 0.16 1.0 4-Methyl-2-pentanone 5.0 U 0.18 1.0 Tolluene 1.0 U 0.18 1.0 1,1,2-Trichloroethane 1.0 U 0.18 1.0 <	2-Butanone	5.0	U	1.1	5.0
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-Dichloropethane 1.0 U 0.15 1.0 Trichloroethene 1.0 U 0.14 1.0 Methylcyclohexane 1.0 U 0.14 1.0 1,2-Dichloropropane 1.0 U 0.17 1.0 Bromodichloromethane 1.0 U 0.16 1.0 1,2-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 0.17 1.0 trans-1,3-Dichloropropene 1.0 U 0.18 1.0 1,1,2-Trichloroethane 1.0 U 0.18 1.0 2-Hexanone 5.0 U 0.18 1.0 2-Hexanone 1.0 U 0.17 1.0	Chloroform	1.0	U	0.16	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 0.16 1.0 1,2-Dichloropropane 1.0 U 0.16 1.0 1,2-Dichloropropane 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 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 Tetrachloroethane 1.0 U 0.18 1.0 1,1,2-Trichloroethane 1.0 U 0.18 1.0 2-Hexanone 5.0 U 0.18 1.0	1,1,1-Trichloroethane	1.0	U	0.16	1.0
Benzene	Cyclohexane	1.0	U	0.23	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-Tichloroethane 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 0.18 1.0 Ethylbenzene 1.0 U 0.17 1.0	Carbon tetrachloride	1.0	U	0.17	1.0
Trichloroethene 1.0 U 0.14 1.0 Methylcydohexane 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-Trichloropropene 1.0 U 0.18 1.0 1,1,2-Trichloropropene 1.0 U 0.18 1.0 2-Hexanone 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 0.17 1.0 </td <td>Benzene</td> <td>1.0</td> <td>U</td> <td>0.17</td> <td>1.0</td>	Benzene	1.0	U	0.17	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 1,1,2-Trichloroethane 1.0 U 0.18 1.0 2-Hexanone 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 0.18 1.0 Ethylbenzene 1.0 U 0.17 1.0 Styrene 1.0 U 0.17 1.0	·	1.0	U	0.15	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 Tetrachloroethane 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 0.18 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 1,	Trichloroethene	1.0	U	0.14	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 Tetrachloroethane 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 0.18 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 Isopropylbenzene 1.0 U 0.17 1.0	Methylcyclohexane	1.0	U	0.25	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 2-Hexanone 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 0.18 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 0.18 1.0 1,3-Dic	1,2-Dichloropropane	1.0	U	0.17	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 Tetrachloroethane 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 0.18 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	Bromodichloromethane	1.0	U	0.16	1.0
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 0.18 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	cis-1,3-Dichloropropene	1.0	U	0.16	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 0.18 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	4-Methyl-2-pentanone	5.0	U	0.90	5.0
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	Toluene	1.0	U	0.17	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	trans-1,3-Dichloropropene		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	1,1,2-Trichloroethane	1.0	U	0.18	1.0
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	Tetrachloroethene	1.0	U	0.18	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	2-Hexanone	5.0	U	1.1	5.0
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	Dibromochloromethane		U	0.17	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	1,2-Dibromoethane	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	Chlorobenzene		U	0.19	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	Ethylbenzene		U	0.18	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	Xylenes, Total	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	Styrene	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	Bromoform	1.0	U	0.17	1.0
1,3-Dichlorobenzene 1.0 U 0.18 1.0	Isopropylbenzene		U	0.17	1.0
·				0.17	1.0
1,4-Dichlorobenzene 1.0 U 0.15 1.0	•		_	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

Analysis Method:

8260B 5030B Analysis Batch:

200-40972

Instrument ID:

L.i

Prep Method:

Prep Batch:

Lab File ID:

lhbab20.d

Dilution:

1.0

N/A

Initial Weight/Volume:

5 mL

Analysis Date:

06/25/2012 2220

Prep Date:

06/25/2012 2220

Final Weight/Volume:

Analyte	
1,2-Dichlorobe	nzene
1,2-Dibromo-3-	Chloropropane
1,2,4-Trichlorol	penzene

Result (ug/L)	Qualifier
1.0	U
1.0	U
1.0	U

MDL	RL
0.15	1.0
0.22	1.0
0.18	1.0

Surrogate		%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	- Bulleton de de la	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 1.0

Lab File ID:

Dilution:

Prep Batch:

200-40494

Initial Weight/Volume:

ngal06.d 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	⁸ ₹.	6.2	υŢ	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	UI	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-trichfluoroe	thane	6.2	Ū	0.41	6.2
Acetone		31	-5	1.2	6.2
Carbon disulfide		2.1	J	0.38	6.2
Methyl acetate		6.2	Ü	0.78	6.2
Methylene Chloride	6	220	JUB	0.68	6.2
trans-1,2-Dichloroethene		6.2	U	0.46	6.2
Methyl t-butyl ether		6.2	Ū	0.37	6.2
1,2-Dichloroethene, Total		6.2	Ü	0.96	6.2
1,1-Dichloroethane		6.2	U		
cis-1,2-Dichloroethene		6.2	U	0.51	6.2
•			<u> </u>	0.52	6.2
2-Butanone		9.0	<u></u> "	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	Jm 12	0.74	-6.2
Toluene	6.0	2-0.31 -	20 سعد	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
Tetrachioroethene		6.2	U	0.14	6.2
2-Hexanone		6.2	Ū⊀	0.61	6.2
Dibromochloromethane		6.2	Ü	0.14	6.2
1,2-Dibromoethane		6.2	Ü	0.19	6.2
Chlorobenzene		6.2	ŭ	0.094	6.2
Ethylbenzene		6.2	ŭ	0.069	6.2
Xylenes, Total		6.2	Ü	0.009	6.2
Styrene		6.2	U		
Bromoform		6.2	U	0.12	6.2
				0.25	6.2
Isopropylbenzene		6.2	ロズ	0.096	6.2
1,1,2,2-Tetrachloroethane		6.2	U ,	0.32	6.2
1,3-Dichlorobenzene		6.2	U X	0.19	6.2
1,4-Dichlorobenzene		6.2	U	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:

Result (ug/Kg)

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

Lab File ID:

Prep Batch:

ngal06.d

Dilution:

1.0

200-40494

Initial Weight/Volume:

5.25 g

Analysis Date:

DryWt Corrected: Y

Prep Date:

06/19/2012 1351

Final Weight/Volume:

5 mL

Analyta		

06/18/2012 1352

Qualifier

MDL 0.27

RL

- 1	,2-Dichiorobenzene
1	,2-Dibromo-3-Chloropropane
1	,2,4-Trichlorobenzene

6.2 6.20.00

6.2

Uゴ ログ JB- UB

Qualifier

1.1 0.25 6.2 6.2

6.2

Surrogate	
1,2-Dichloroethane-d4	
Toluene-d8	

Bromofluorobenzene

1,2-Dichlorobenzene-d4

%Rec 84 95 110

79

65 - 155 80 - 115 80 - 115

45 - 145

Acceptance Limits

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:

200-11340-1

Solid

% Moisture:

23.3

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

		8:	260B Volatile Orga	nic Compoun	ds (GC/M	IS)		
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	D	ryWt Corrected: Y	Result (u	ıg/Kg)	Qualifie	er MDL	RL	
Dichlorodifluoromet	Nane	eller felt i Mandaladalada ferindeplikkalanpelaksi en inferiori kinnerak en myskeepingspalanking	5.8		U	0.26	5.8	1
Chloromethane			5.8		U	0.30	5.8	
/inyl chloride			5.8		U	0.35	5.8	
Bromomethane			5.8		U	0,85	5.8	
Chloroethane			5.8		U	0.44	5.8	
richlorofluorometh	ane 🗀		5.8		U	0.38	5.8	
,1-Dichloroethene			5.8		U	0.43	5.8	
,1,2-Trichloro-1,2,2	2-trichfluoroetl	nane	5.8		U	0.38	5.8	
cetone			50			1.2 .	5.8	
Carbon disulfide			4.3		JB /	0.36	5.8	
Nethyl acetate			5.8		u /	0.73	5.8	
Methylene Chloride			1.2		J/	0.63	5.8	
rans-1,2-Dichloroe	thene	`	5.8		צע	0.43	5.8	
Methyl t-butyl ether			5.8	,	/υ	0.35	5.8	
,2-Dichloroethene,	Total		5.8		U	0.89	5.8	
,1-Dichloroethane			5,8		U	0.47	5.8	
is-1,2-Dichloroethe	ene		5.8		U	0.48	5.8	
-Butanone			16			1.7	5.8	
Chloroform			5.8	\/	U	0.37	5.8	
,1,1-Trichloroethar	ne		5.8	X	U	0.81	5.8	
Cyclohexane			5.8		U	0.98	5.8	
Carbon tetrachloride	е		5.8		U	0.87	5.8	
Benzene			5.8		U	0.82	5.8	
,2-Dichloroethane			5.8		\u	0.71	5.8	
richloroethene			<i>5</i> 6.8		υ\	0.55	5.8	
Methylcyclohexane			5.8		U \	0.20	5.8	
,2-Dichloropropane	е		5.8		U	0.33	5.8	
Bromodichlorometh	ane		5.8		U	0.24	5.8	
is-1,3-Dichloropro	oene		5.8		U	0.40	5.8	
-Methyl-2-pentano	ne	/	5.8		U	Q.69	5.8	
oluene			0.26		JB	0.12	5.8	
rans-1,3-Dichloropa	ropene		5.8		U	0.15	5.8	
,1,2-Trichloroethar	ne		5.8		U	0.39	5.8	
Tetrachloroethene			5.8		U	0.13	5.8	
?-Hexanone			5.8		U	0.56	5.8	
Dibromochlorometh	ane		5.8		U	0.13	5.8	
,2-Dibromoethane			5.8		U	0.17	5.8	
Chlorobenzene	/	/	5.8		U	0.087	₹.8	
thylbenzene			0.37		J	0.064	5.8	
(ylenes, Total			5.8		U	0.84	5.8	
Styrene			5.8		U	0.12	5.8	
Bromoform			5.8		U	0.23	5.8	
sopropylbenzene			5.8		U	0.089	5.8	
,1,2,2-Tetrachloroe	thane		5.8		U	0.30	5.8	
,3-Dichlorobenzen			5.8		U	0.17	5.8	\
,4-Dichlorobenzen			5.8		U	0.26	5.8	

TestAmerica Burlington

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Client: ARCADIS U.S. Inc

Job Number: 200-11278-1

Sdg Number: 11278

Client Sample ID:

Bromofluorobenzene

1,2-Dichlorobenzene-d4

SB-04 (0-1)

Lab Sample ID:

200-11346-1

Client Matrix:

Solid

....

% Moisture:

152

98

23.3

Date Sampled: 06/14/2012 1445

Date Received: 06/16/2012 1000

80 - 115

45 - 145

	8	260B Volatile Organ	nic Compounds (GC/N	IS)	
	2042 1554 2012 1352	Analysis Batch: Prep Batch: Run Type:	200-40924 200-40494 RE	Instrument ID: Lab File ID: Initial Weight/Volume: Final Weight/Volume:	N.i ngam09.d 5.66 g 5 mL
Analyte	DryWt Corrected: Y	Result (ug	g/Kg) Qualifie	er MDL	RL
1,2-Dichlorobenzene		5.8	U	0.25	5.8
1,2-Dibromo-3-Chloropropar	ne /	5.8	U	1.0	5.8
1,2,4-Trichlorobenzene		0.50	JB	0.23	5.8
Surrogate		%Rec	Qualifie	Accepta	nce Limits
1,2-Dichloroethane-d4	o naciona cia Decessi alca ani sanzani na naciona na naciona con	. 113		65 - 155	\$\tau^{\tau} \tau \tau \tau \tau \tau \tau \tau \tau
Toluene-d8		118	- X	80 - 115	

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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:

Result (ug/Kg)

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

Lab File ID:

Qualifier

ngal07.d

Dilution:

1.0

Prep Batch:

200-40494

Initial Weight/Volume:

6.19 g

Analysis Date: Pren Date:

06/19/2012 1422

Final Weight/Volume:

MDL

0.12

0.32

0.10

0.46

0.10

0.14

0.071

0.052

0.68

0.093

0.19

0.072

0.24

0.14

0.21

5 mL

RL

4.7

4.7

4.7

4.7

4.7

4.7

4.7

4.7

4.7

4.7

4.7

4.7

4.7

4.7

4.7

Prep	Date:	

trans-1,3-Dichloropropene

1,1,2-Trichloroethane

Dibromochloromethane

TestAmerica Burlington

Tetrachloroethene

1,2-Dibromoethane

Chlorobenzene

Ethylbenzene

Xylenes, Total

Styrene

2-Hexanone

Analyte

06/18/2012 13	52
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DryWt Corrected: Y

Dichlorodifluoromethane	4.7	U_A	0.21	4.7
Chloromethane	4.7	U	0.24	4.7
Vinyl chloride	4.7	and the first of the	0.28	4.7
Bromomethane	4.7	Ú	0.69	4.7
Chloroethane	5.5 4.7	U A	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		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	~5	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	Ü	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	JUN R	-0.50	-4.7
Toluene	4.7 0.21	TR OB	0.093	4.7

4.7

4.7

4.7

4.7

4.7

4.7

4.7

0.11

4.7

4.7

Bromoform 4.7 Isopropylbenzene 0.087 1,1,2,2-Tetrachloroethane 4.7 1,3-Dichlorobenzene 4.7 1,4-Dichlorobenzene 4.7

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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	Volatiie	Organic	Compounds	(GC/MS)
~~~~	TOIGLING	O gaine	Compounts	00110101

Analysis Method:

8260B

Analysis Batch:

200-40858

Instrument ID:

N.i

Prep Method:

5035

Prep Batch:

Dilution:

Lab File ID: 200-40494

ngal07.d

Analysis Date:

1.0

Initial Weight/Volume:

6.19 g

06/19/2012 1422

Prep Date:

06/18/2012 1352

Final Weight/Volume:

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene	E	4.7		0.20	4.7
1,2-Dibromo-3-Chloropropane		4.7	U	0.85	4.7
1,2,4-Trichlorobenzene	43	0.23	AB UB	0.19	4.7

Surrogate	4.	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4		86		65 - 155	
Toluene-d8		97		80 - 115	
Bromofluorobenzene		117	Х	80 - 115	
1,2-Dichlorobenzene-d4	1	99		45 - 145	

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1

Sdg Number: 11278

Client Sample ID:

TestAmerica Buriington

SB-07 (4.5-5)

Lab Sample 10;

200-11346-2

Client Matrix:

Solid

% Moisture: 13.2

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

			8260B Voiatile Organ	nic Compoun	ds (GC/N	IS)		
Analysis Method:	8260B		Analysis Batch:	200-40924		Instrument ID:	N.i	
Prep Method:	5035	70 (_2 tr	Prep Batch:	200-40494		Lab File ID:	ngam10.d	
Dilution:	1.0	Age Coll, May 1	,			Initial Weight/Volume:	5.54 g	
Analysis Date:	06/20/2013	2 1625	Run Type:	RE		Final Weight/Volume:	5 mL	
Prep Date:	06/18/2013	\						
Top Date:								
Analyte	1	DryWt Corrected: \	Result (ug	ı/Kg)	Qualifie	er / MDL	RL	
Dichlorodifluorometl	hane		5.2		U	0.24	5.2	*
Chloromethane			5.2		U	0.27	5.2	131
Vinyl chloride			5.2		U /	0.31	5.2	
Bromomethane			5.2		U/	0.77	5.2	
Chloroethane			5.2		W	0.40	5.2	7
Trichlorofluorometha	ane		5.2		/U	0.34	5.2	
1,1-Dichloroethene			5.2	-/	Ú	0.38	5.2	
1,1,2-Trichloro-1,2,2	trichfluoroe	thane	5.2		U	0.34	5.2	
Acetone			44	/ /		1.0	5.2	
Carbon disulfide			4.9		JB	0.32	5.2	
Methyl acetate			5.2	\/	U	0.66	5.2	
Methylene Chloride			0.98	X	J	0.57	5.2	
rans-1,2-Dichloroet	hene		5.2	/ \	Ū	0.38	5.2	
Methyl t-butyl ether			5.2		U	0.31	5.2	
,2-Dichloroethene,	Total		5.2		Ü	0.80	5.2	
,1-Dichloroethane			5.2	\	νŪ	0.43	5.2	
is-1,2-Dichloroethe	ne		5.2		VI	0.44	5.2	
-Butanone			1		7	1.6	5.2	
Chloroform			5.2		υ\	0.33	5.2	
,1,1-Trichloroethan	e		5.2		ŭ \	0.73	5.2	
Cyclohexane			5.2		Ü \	0.73	5.2 5.2	
Carbon tetrachloride	2		5.2		Ü	0.79	5.2	
Benzene	•		5.2		U	0.79	5.2 5.2	
,2-Dichloroethane			5.2		U	0.64	5.2 5.2	
richloroethene		/	5.2		U	0.50		
Methylcyclohexane		/	5.2		U	0.50	5.2	
,2-Dichloropropane			5.2		U		5.2	-
,2-Didiloloplopane Bromodichlorometha			5.2		_	0.30	5.2	
is-1,3-Dichloroprop			5.2 5.2		U	0.22	5.2	
					U	0.36	5.2	
-Methyl-2-pentanor	ne		5.2		U	0.62	5.2	
oluene			0.46		JB	0.10	5.2	
rans-1,3-Dichloropr			5.2		U	0.14	5.2	
,1,2-Trichloroethan	е	/	5.2		U	0.35	5.2	
etrachloroethene	/	/	5.2		U	0.11	5.2	
-Hexanone			5.2		U	0.51	5.2	
Dibromochlorometha	ane /		5.2		U	0.11	5.2	
,2-Dibromoethane	/		5.2		U	0.16	5.2	
Chlorobenzene			5.2		U	0.079	\5.2	
thylbenzene			5.2		U	0.058	5\2	
(ylenes, Total	/		5.2		U	0.76	5.2	
Styrene /			5.2		U	0.10	5.2	
Bromoform /			5.2		U	0.21	5.2	
sopropylbenzene			5.2		U	0.080	5.2	\
,1,2,2-Tetraghloroe			5.2		U	0.27	5.2	
						0.40		\
,3-Dichlorobenzene	9		5.2		U	0.16	5.2	\

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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/M	S)		
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 TOTAL	Final Weight/Volume:	-1-1	
Prep Date:	06/18/2012 1352	` /		J 22 TANK		
Analyte	DryWt Corrected:	Y Result (ug/k	(g) Qualifie	r s Krimu <b>MDL</b>	RL	3
1,2-Dichlorobenzene		5.2	U	0.23	5.2	1 (-1 1 .
1,2-Dibromo-3-Chloro	propane	5.2	U	0.95	5.2	
1,2,4-Trichlorobenzen	e Major /	5.2	U_/	0.21	5.2	10
0.7			20 2			
Surrogate		%Rec	Qualifie	r Acceptan	ice Limits	
1,2-Dichloroethane-d4	ra vitari di terci da tra trata trata trata trata trata de la constanta de la	······································	n en	65 - 155		. 145111
Toluene-d8		98	10	80 - 115		
Bromofluorobenzene	10.0	120	/ X	80 - 115	A., I. A. 3	
1,2-Dichlorobenzene-	d <b>4</b> = 1	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 5035

Analysis Batch:

200-40858

Instrument ID:

N.i

Prep Method: Dilution:

Prep Batch:

200-40494

Lab File ID: Initial Weight/Volume:

ngal08.d

Analysis Date:

1.0

5.94 g

Prep Date:

06/19/2012 1452 06/18/2012 1352 Final Weight/Volume:

5 mL

Analyte	DryWt Corrected: Y			ualifier	MDL	RL
Dichlorodifluoromethane		4.9		<b>5</b>	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	3	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-trichfluo	proethane	4.9	U		0.32	4.9
Acetone		44		5	0.98	4.9
Carbon disulfide		0.31	J		0.30	4.9
Methyl acetate		4.9	U		0.61	4.9
Methylene Chloride		19 274	- 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	Ü		0.75	4.9
1,1-Dichloroethane		4.9	Ü		0.40	4.9
cis-1,2-Dichloroethene		4.9	Ü		0.41	4.9
2-Butanone		8.0		- ~	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	
Trichloroethene		4.9	U			4.9
					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			0.59	4.9
Toluene		49-0-10			0.098	4.9
rans-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
Kylenes, Total		4.9	U		0.71	4.9
Styrene		4.9	U		0.098	4.9
Bromoform		4.9	U		0.20	4.9
sopropylbenzene		4.9	U		0.075	4.9
1,1,2,2-Tetrachloroethane		4.9	Ū		0.25	4.9
1,3-Dichlorobenzene		4.9	Ü		0.15	4.9
1,4-Dichlorobenzene		4.9	Ü		0.22	4.9

TestAmerica Burlington

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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

Dilution:

Prep Batch:

Lab File ID:

1.0

200-40494

ngal08.d

Analysis Date:

1,2-Dichlorobenzene

1,2,4-Trichlorobenzene

1,2-Dibromo-3-Chloropropane

DryWt Corrected: Y

Initial Weight/Volume:

5.94 g

06/19/2012 1452

Final Weight/Volume:

0.20

5 mL

Prep Date:

Analyte

06/18/2012 1352

Result (ug/Kg)	Qualifier	MDL (	RL
4.9	 U	0.21	4.9
4.9	U	0.89	4.9

U

Surrogate			%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4		Michaelan adhireada na teath a' Shiphadh ghuir ang da Aydh ghaigh ga ga ghair, a	79	om het vindethild the rite diehe sid til stabil de viste hem von dessennen stabil vin die sowet bende, som vin von sowet en sow	65 - 155
Toluene-d8			93		80 - 115
Bromofluorobenzene			101		80 - 115
1,2-Dichlorobenzene-d4			92		45 - 145

4.9

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: Dilution:

5035

Prep Batch:

Lab File ID:

ngal09.d

Analysis Date:

1.0

200-40494

Initial Weight/Volume:

5.86 g

Prep Date:

06/19/2012 1523 06/18/2012 1352 Final Weight/Volume:

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL 400	RL	
Dichlorodifluoromethane		5.0	UJ	0.23	5.0	
Chloromethane		5.0	U	0.26	5.0	
Vinyl chloride	1	5.0	U	0.30	5.0	
Bromomethane		5.0	U	0.74	5.0	
Chloroethane		5.0	کته ۱	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-trichfluc	proethane	5.0	U	0.33	5.0	
Acetone		62	1	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-	+ UB	0.55	5.0	
trans-1,2-Dichloroethene	•	5.0	U J	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	Ū	0.42	5.0	
2-Butanone		7.8	-5	1.5	5.0	
Chloroform		5.0	U	0.32	5.0	
1,1,1-Trichloroethane		5.0	Ū	0.70	5.0	
Cyclohexane		5.0	Ü	0.85	5.0	
Carbon tetrachloride		5.0	Ü	0.76	5.0	
Benzene		5.0	Ū	0.71	5.0	
1,2-Dichloroethane		5.0	Ū	0.62	5.0	
Trichloroethene		5.0	Ū	0.48	5.0	
Methylcyclohexane		5.0	Ū	0.17	5.0	
1,2-Dichloropropane		5.0	Ū	0.29	5.0	
Bromodichloromethane		5.0	Ü	0.21	5.0	
cis-1,3-Dichloropropene		5.0	Ü	0.35	5.0	
4-Methyl-2-pentanone		<del>-5.0</del>	W-R	<del>-0.60</del>	-5.0	
Toluene		5.0	Ü	0.10	5.0	
trans-1,3-Dichloropropene		5.0	Ü	0.13	5.0	
1,1,2-Trichloroethane		5.0	Ü	0.34	5.0	
Tetrachloroethene		5.0	Ü	0.11	5.0	
2-Hexanone		5.0	U.f	0.49	5.0	
Dibromochloromethane		5.0	U	0.49	5.0	
1,2-Dibromoethane		5.0	U	0.11	_	
Chlorobenzene		5.0	U		5.0	
Ethylbenzene		5.0	U	0.076	5.0	
Xylenes, Total		5.0		0.056	5.0	
Ayrenes, rotal Styrene			U	0.73	5.0	
Styrene Bromoform		5.0	U	0.10	5.0	
		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

200-40494

Lab File ID:

Dilution:

Prep Batch:

ngal09.d

Analysis Date:

1.0

Initial Weight/Volume:

5.86 g

06/19/2012 1523

Final Weight/Volume:

Prep Date:

06/18/2012 1352

Analyte		DryWt Corrected: Y	·	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorob	enzene			5.0	U	0.22	5.0
1,2-Dibromo-	3-Chloropropane		.9	5.0	U	0.92	5.0
1,2,4-Trichlor	robenzene			5.0	U	0.20	5.0

Surrogate	1	%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: Prep Method:

8260B 5035

Analysis Batch:

200-40858

Instrument ID:

N.i

Dilution:

Prep Batch:

200-40494

Lab File ID: Initial Weight/Volume: ngal10.d 7.61 g

Analysis Date:

1.0

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
Dichlorodifluorometh	ane	4.0	UAT	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 🍼	0.30	4.0
Trichlorofluorometha	ne	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	~ 5	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-Dichloroeth	ene	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-Dichloroether	ne	4.0	U	0.33	4.0
2-Butanone		9.1	~ 7	1.2	4.0
Chloroform		4.0	U	0.25	4.0
1,1,1-Trichloroethane		4.0	Ū	0.55	4.0
Cyclohexane		4.0	U	0.67	4.0
Carbon tetrachloride		4.0	Ü	0.60	4.0
Benzene		4.0	Ü	0.56	4.0
1,2-Dichloroethane		4.0	Ū	0.49	4.0
Trichloroethene		4.0	Ū	0.38	4.0
Methylcyclohexane		4.0	Ū	0.13	4.0
1,2-Dichloropropane		4.0	Ü	0.23	4.0
Bromodichlorometha	ne	4.0	Ü	0.17	4.0
cis-1,3-Dichloroprope	ene	4.0	Ü	0.28	4.0
4-Methyl-2-pentanon		4.0	UR	0.48	<del>-4.0</del>
Toluene		4.0	U	0.079	4.0
trans-1,3-Dichloropro	pene	4.0	Ü	0.10	4.0
1,1,2-Trichloroethane		4.0	Ü	0.27	4.0
Tetrachloroethene		4.0	Ü	0.087	4.0
2-Hexanone		4.0	Ŭ.ź	0.39	4.0
Dibromochlorometha	ne	4.0	U	0.087	4.0
1.2-Dibromoethane		4.0	Ü	0.12	4.0
Chlorobenzene		4.0	Ü	0.060	4.0
Ethylbenzene		4.0	Ü	0.044	4.0
Xylenes, Total		4.0	U	0.58	4.0
Styrene		4.0	Ü	0.079	4.0
Bromoform		4.0	Ü	0.079	4.0
Isopropylbenzene		4.0	U	0.16	4.0
1,1,2,2-Tetrachloroet	hane	4.0	U	0.061	4.0 4.0
1, 1,2,2-16.10.10.10.06.	iano	<b>→.</b> ∪	U	U.Z I	4.0

1,3-Dichlorobenzene

1,4-Dichlorobenzene

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U

U

0.12

0.18

4.0

4.0

4.0

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 5035

Analysis Batch:

200-40858

Instrument ID:

N.i

Prep Method:

Prep Batch:

Lab File ID:

Dilution:

1.0

200-40494

ngal10.d

Analysis Date:

06/19/2012 1554

Initial Weight/Volume:

7.61 g

Prep Date:

06/18/2012 1352

Final Weight/Volume:

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene	7. 4.	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: Dilution:

5035

Prep Batch:

200-40487

Lab File ID: Initial Weight/Volume: lhbab08.d

Analysis Date:

11

06/25/2012 1555

4.92 g

Prep Date:

06/18/2012 1253

Final Weight/Volume:

Analyte	DryWt Corrected: Y	Result (ug/Kg)	44	Qualifier	MDL	RL
Dichlorodifluoromethane		2300	4 ,	UJ	480	2300
Chloromethane		2300		U	590	2300
Vinyl chloride		2300		U	460	2300
Bromomethane		2300		UJ	570	2300
Chloroethane		2300		υ	340	2300
Trichlorofluoromethane		2300		U	300	2300
1,1-Dichloroethene		2300		U	500	2300
1,1,2-Trichloro-1,2,2-trichfluo	roethane	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		Ū	410	2300
1,3-Dichlorobenzene		2300		Ū	430	2300
1,4-Dichlorobenzene		2300		Ü	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 5035

Analysis Batch:

200-40972

Instrument ID:

L.i

Prep Method:

Prep Batch:

Lab File ID:

200-40487

lhbab08.d

Dilution:

11

Initial Weight/Volume:

4.92 g

Analysis Date:

06/25/2012 1555

Prep Date:

06/18/2012 1253

Final Weight/Volume:

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	the common the state of the sta	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: Prep Method:

8260B 5035

Analysis Batch:

200-40924

Instrument ID:

N.i

Dilution:

Prep Batch:

200-40494

Lab File ID: Initial Weight/Volume: ngam11.d

Analysis Date:

1.0

06/20/2012 1655

Prep Date:

06/18/2012 1352

Final Weight/Volume:

5.61 g 5 mL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL	
Dichlorodifluoromethane		5.0	U J	0.23	5.0	1 1
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	UJ	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-trichfluoro	ethane	5.0	U	0.33	5.0	
Acetone	, / ₄	41	5	1.0	5.0	
Carbon disulfide	5,0	1.2	LA UB	0.31	5.0	
Methyl acetate	•	5.0	U	0.63	5.0	
Methylene Chloride	5,0	J.94	JOB JB UB	0.55	5.0	
trans-1,2-Dichloroethene	920	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	リグ	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	Ú	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

Lab File ID:

Dilution:

1.0

Prep Batch:

ngam11.d

200-40494

Initial Weight/Volume:

Analysis Date:

06/20/2012 1655

5.61 g

Prep Date:

06/18/2012 1352

Final Weight/Volume:

Analyte pa	DryWt Correcte	d: Y	Result (ug/Kg	)	Qualifier	MDL		RL	
1,2-Dichlorobenzene		· · · · · · · · · · · · · · · · · · ·	5.0		U	0.22	• :	5.0	
1,2-Dibromo-3-Chloroproparie			5.0	1	U	0.91		5.0	
1,2,4-Trichlorobenzene			5.0		U	0.20		5.0	

Surrogate		%Rec	Qualifier	Acceptano	ce Limits	
1,2-Dichloroethane-d4		78	സം ഇത് ഇത് ഇത് നിന്ന് കാർ ക്രിക്ക് വിവര്ഷ് വിവര്ഗാന് വിവര്ഷ് വിവര്ഷ് വിവര്ഷ്ട്ര വിവര്ഷ്ട്ര വിവര്ഷ്ട്ര വിവര്ഷ്ട വിവര്ഷ്ട്ര വിവര്ഷ്ട്ര വിവര്ഷ്ട്ര വിവര്ഷ്ട്ര വിവര്ഷ്ട്ര വിവര്ഷ്ട്ര വിവര്ഷ്ട്ര വിവര്ഷ്ട്ര വിവര്ഷ്ട്ര വിവര്ഷ്ട്ര വ	65 - 155	************************	
Toluene-d8		81	J	80 - 115		
Bromofluorobenzene		86		80 - 115	1.	
1,2-Dichlorobenzene-d4		85		45 - 145		
	34.4		A CONTRACT OF THE PARTY OF THE			

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)

Result (ug/Kg)

1600

1600

1600

1600

1600

1600

1600

Analysis Method: Prep Method:

8260B 5035

Analysis Batch:

200-40972

Qualifier

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Dilution:

8.8

Prep Batch:

200-40487

Initial Weight/Volume:

Analysis Date:

06/25/2012 1627 06/18/2012 1253

Final Weight/Volume:

MDL

340

420

330

410

240

210

360

290

1500

260

340

440

330

290

290

330

290

1400

310

330

330

240

340

280

280

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310

310

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1800

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1300

260

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Prep Date:	06/	18/2012	125
Analyte	37 V	D	ryWt
Dichlorodiflu	oromethane	life the free minimum for the second part of an appropriate and platefung	
Chlorometha	ane		
A Rev. 1 - 1-1-12-2			

nalyte	Dryvvi Corrected. 1
ichlorodifluoromethane	
hloromethane	
invl chloride	

0.1	
hfluoroethane	

Carbon disulfide Methyl acetate Methylene Chloride trans-1,2-Dichloroethene Methyl t-butyl ether

1,2-Dichloroethene, Total 1,1-Dichloroethane cis-1,2-Dichloroethene 2-Butanone Chloroform

Carbon tetrachloride	
Benzene	
1,2-Dichloroethane	
Trichloroethene	
Methylcyclohexane	

1,1,1-Trichloroethane

Cyclohexane

1,2-Dichloropropane
Bromodichloromethane
cis-1,3-Dichloropropene
4-Methyl-2-pentanone
Toluene

trans-1,3-Dichloropropene

1,1,2-Trichloroethane
Tetrachloroethene
2-Hexanone
Dibromochloromethane
1,2-Dibromoethane
Chlorobenzene

Ethylbenzene

Xylenes, Total

Styrene

Bromoform
Isopropylbenzene
1;1,2,2-Tetrachloroethane
1,3-Dichlorobenzene
1,4-Dichlorobenzene

U U J U U U 1600 U 1600 U 1600 U

Instrument ID: Lab File ID:

lhbab09.d 4.85 g

10 mL

RL

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Client: ARCADIS U.S. Inc

Job Number: 200-11278-1

Sdg Number: 11278

1600 - Align - 187

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

Lab File ID:

lhbab09.d

Dilution:

8.8

Prep Batch:

200-40487

Analysis Date:

06/25/2012 1627

Initial Weight/Volume:

4.85 g

Final Weight/Volume:

10 mL

Prep Date:

06/18/2012 1253

Analyte	DryWt Corrected: Y	, 11140	Result (ug/Kg)		Qualifier	MDL	RL
1,2-Dichlorobenzene		ξ.	1600		U	330	1600
1,2-Dibromo-3-Chloropropane	1. 6.		1600		U .	280	1600
1,2,4-Trichlorobenzene			1600	1, 11	U	330	1600

	The same of the sa				
Surrogate	%Re	C 3141	Qualifier	Acceptance Limit	ts
1,2-Dichloroethane-d4	104	hetend militarretranskrivenskrivenskrivenskrivenskrivenskrivenskrivenskrivenskrivenskrivenskrivenskrivenskriven	halanda da d	65 - 155	
Toluene-d8	100			80 - 115	70 1 = 1
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: Prep Method:

8260B 5035

Analysis Batch:

200-40972

Instrument ID:

lhbab10.d

Dilution:

Prep Date:

1.0

Prep Batch:

200-40487

Lab File ID: Initial Weight/Volume:

5.11 g

Analysis Date:

06/25/2012 1659

06/18/2012 1253

Final Weight/Volume: 10 mL

Analyte	DryWt Corrected: Y	Result (ug/	Kg)	Qualifier	MDL	RL	
Dichlorodifluoromethane		200		UJ	41	200	A Company of the Comp
Chloromethane		200		U	51	200	
Vinyl chloride		200		U	39	200	
Bromomethane		200		US	49	200	
Chloroethane		200		U	30	200	1
Trichlorofluoromethane		200		U	26	200	
1,1-Dichloroethene		200		U	43	200	
1,1,2-Trichloro-1,2,2-trichfluor	roethane	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:

Lab File ID:

Dilution:

1.0

200-40487

lhbab10.d

06/25/2012 1659

Initial Weight/Volume:

5.11 g

Analysis Date:

06/18/2012 1253

Final Weight/Volume:

Prep Date:

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL .
1,2-Dichlorobenzene	124	200	U	39	200 .
1,2-Dibromo-3-Chloropropane	796	200	U	34	200
1,2,4-Trichlorobenzene		200	U	39	200

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	101	BUCCHIC HICKORYNY BURGUNG AN BURGUNG AN BURGUNG AN BURGUNG AN	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

Cilent 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 Voiatile Organic Compounds (GC/MS)

N/A

Analysis Method: Prep Method:

8260B

5030B

Analysis Batch: Prep Batch:

200-40972

Instrument ID:

Lab File ID:

L.i lhbab21.d

Dilution: Analysis Date: 1.0

06/25/2012 2252

Prep Date:

Initial Weight/Volume: Final Weight/Volume:

5 mL 5 mL

Analyte	
Dichloro	difluoro
Chloron	nethane
Vinyl ch	loride
Bromon	nethane
Chloroe	thane
Trichlor	ofluorom
1,1-Dich	loroethe

06/25/2012 2252

Analyte	ich.	Result (ug/L	_)	Qualifier	MDL	RL
Dichlorodifluoromethane		1.0	Ah Ah Constitute (den et Ahrysel neurologica), popularitus pro	リケ	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ブ	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-trichfluoroe	ethane	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		Ü	0.23	1.0
Methylene Chloride		1.0		Ū	0.21	1.0
trans-1,2-Dichloroethene		1.0		Ū	0.17	1.0
Methyl t-butyl ether		1.0		Ü	0.17	1.0
1,2-Dichloroethene, Total		1.0		Ŭ	0.32	1.0
1,1-Dichloroethane		1.0		Ü	0.16	1.0
cis-1,2-Dichloroethene		1.0		Ü	0.16	1.0
2-Butanone		5.0		Ü	1.1	5.0
Chloroform		1.0		Ü	0.16	1.0
1,1,1-Trichloroethane		1.0		Ŭ	0.16	1.0
Cyclohexane		1.0		Ü	0.23	1.0
Carbon tetrachloride		1.0		Ŭ	0.17	1.0
Benzene		1.0		Ŭ	0.17	1.0
1,2-Dichloroethane		1.0		Ü	0.17	1.0
Trichloroethene		1.0		Ŭ	0.14	1.0
Methylcyclohexane		1.0		Ŭ	0.25	1.0
1,2-Dichloropropane		1.0		Ŭ	0.17	1.0
Bromodichloromethane		1.0		Ŭ	0.16	1.0
cis-1,3-Dichloropropene		1.0		Ü	0.16	1.0
4-Methyl-2-pentanone		5.0		U	0.10	5.0
Toluene		1.0		Ü	0.30	1.0
trans-1,3-Dichloropropene		1.0		Ü	0.17	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	
Dibromochloromethane		1.0		U		5.0
1.2-Dibromoethane		1.0		U	0.17	1.0
Chlorobenzene				-	0.18	1.0
		1.0		U	0.19	1.0
Ethylbenzene Vylanas Tatal		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

TestAmerica Buriington

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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

8260R	Volatile	Organic	Compounds (	(CC/MS)
OTOOD	ACIGNIC	Organic	CONTROUNTED	COMISI

Analysis Method:

8260B 5030B Analysis Batch: Prep Batch:

200-40972

Instrument ID:

L.i

Prep Method: Dilution:

N/A

Lab File ID:

lhbab21.d

1.0

Initial Weight/Volume:

5 mL

Analysis Date:

06/25/2012 2252

Prep Date:

Surrogate

Toluene-d8

1,2-Dichloroethane-d4

Bromofluorobenzene

1,2-Dichlorobenzene-d4

06/25/2012 2252

Final Weight/Volume:

5 mL

RL 1.0 1.0 1.0

Analyte	
1,2-Dichlorobenzene	
1,2-Dibromo-3-Chloropropane	
1,2,4-Trichlorobenzene	

Result (ug/L)	Qualifier	MDL	
1.0	U	0.15	
1.0	U	0.22	
1.0	U	0.18	

%Rec	Qualifier	Acceptance Limits			
91	kala di kalada da kalada da kalada ang Balada ang Balada da kalada da kalada da kalada da kalada da kalada kal Kalada da kalada da k	80 - 115			
103		80 - 115			
103		85 - 120			
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: Prep Method:

8260B 5035

Analysis Batch:

200-41091

Instrument ID:

L.i

Dilution:

Prep Batch:

200-40685

Lab File ID: Initial Weight/Volume: lhbae16.d

Analysis Date:

8.8

06/27/2012 1730

6.12 g

Prep Date:

06/21/2012 1020

Final Weight/Volume:

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL .	RL
Dichlorodifluoromethane		1700	UJ	360	1700
Chloromethane		1700	リブ	450	1700
Vinyl chloride		1700	U	340	1700
Bromomethane		1700	UI	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-trichfle	uoroethane	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

**TestAmerica Buriington** 

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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 5035

Analysis Batch:

200-41091

Instrument ID:

Li

Prep Method:

Prep Batch:

Lab File ID:

Dilution:

8.8

200-40685

lhbae16.d

Initial Weight/Volume:

6.12 g

Analysis Date:

06/27/2012 1730

Prep Date:

06/21/2012 1020

Final Weight/Volume:

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene	1 -	1700	U	340	1700
1,2-Dibromo-3-Chloropropane		1700	U	290	1700
1,2,4-Trichlorobenzene	167	1700	U	340	1700

Surrogate		%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4	et total a standard et alle de description de de description de la color de dels de de description, forte de proper de very	88	ranner ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (	65 - 155	and the second second
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: Dilution:

5035

Prep Batch:

200-40686

Lab File ID: Initial Weight/Volume: ngan06.d

Analysis Date:

1.0

06/26/2012 1415

5.14 g  $\mathsf{mL}$ 

Prep Date:

06/21/2012 1027

Final Weight/Volume:	5
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	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		6.0	UJ	0.28	6.0
Chloromethane		6.0	U	0.31	6.0
Vinyl chloride	-	6.0	Ü	0.36	6.0
Bromomethane		6.0	UJ	0.89	6.0
Chloroethane		6.0	ロゴ	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-trichfluoroe	thane	6.0	U	0.40	6.0
Acetone		240	エ	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	1	1.8	6.0
Chloroform	6.0	12-	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	Ŭ	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	ប	0.18	6.0
Chlorobenzene		6.0	Ü	0.092	6.0
Ethylbenzene	6.0	_ <del>0.72</del> ~	AB UB	0.068	6.0
Xylenes, Total	4.0	6.0	0.9	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

TestAmerica Buriington

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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:

Lab File ID:

Dilution:

1.0

200-40686

ngan06.d

Initial Weight/Volume:

5.14 g

Analysis Date:

06/26/2012 1415

Final Weight/Volume:

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	<del>-0.39 -</del>	-ABNB	0.24	6.0

Surrogate		%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4	电子性原体 细胞类型 医结合性性 化二甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基	79	pt met dan terja at the francisco for the construction was the restrict of the state and the state of the	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: Prep Date:

06/26/2012 1446 06/21/2012 1027

Final Weight/Volume:

riep Dale. 00/21/							
Analyte	DryWt Corrected: Y	***************************************	Result (ug/Kg)		Qualifier	MDL	RL
Dichlorodifluoromethane			5.3		V J	0.25	5.3
Chloromethane			5.3	,	UAT	0.28	5.3
Vinyl chloride			5.3		U _	0.32	5.3
Bromomethane			5.3		UJ	0.79	5.3
Chloroethane	*		5.3	٠,	UI	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-trichfluc	proethane		5.3		کتے ں	0.35	5.3
Acetone			13		J	1.1	5.3
Carbon disulfide			3.0		Ĵ	0.33	5.3
Methyl acetate			5.3		U	0.67	5.3
Methylene Chloride		5.3	2.1-		-J- UB	0.59	5.3
rans-1,2-Dichloroethene			5.3		UAT	0.39	5.3
Methyl t-butyl ether			5.3		UJ	0.32	5.3
1,2-Dichloroethene, Total			5.3		リケ	0.82	5.3
,1-Dichloroethane			5.3		U	0.44	5.3
sis-1,2-Dichloroethene			5.3		US	0.45	5.3
2-Butanone			5.3		Ŭ Ā	1.6	5.3
Chloroform		51	, <del>-0.77</del>		-JB- UB	0.34	5.3
,1,1-Trichloroethane		ى, ح	5.3		U 5	0.75	5.3
Cyclohexane			5.3		UI	0.73	5.3
Carbon tetrachloride			5.3			0.81	5.3
Benzene			5.3		UT	0.76	5.3
,2-Dichloroethane			5.3		U	0.76	5.3
richloroethene			5.3		υχ	0.51	5.3
			5.3		ů Á	0.31	5.3
Methylcyclohexane			5.3		u テ	0.16	5.3 5.3
1,2-Dichloropropane					UJ		
Bromodichloromethane			5.3			0.22	5.3
cis-1,3-Dichloropropene			5.3		U,T	0.37	5.3
I-Methyl-2-pentanone			5.3		U	0.64	5.3
Toluene			5.3		U	0.11	5.3
rans-1,3-Dichloropropene			5.3		Uブ	0.14	5.3
1,1,2-Trichloroethane			5.3		U	0.36	5.3
Tetrachloroethene			5.3		UJ	0.12	5.3
2-Hexanone			5.3		U	0.52	5.3
Dibromochloromethane			5.3		U	0.12	5.3
,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
(ylenes, Total			5.3		リブ	0.78	5.3
Styrene			5.3		Uゴ	0.11	5.3
Bromoform			5.3		υĺ	0.21	5.3
sopropylbenzene			5.3		Ū	0.082	5.3
1,1,2,2-Tetrachloroethane			5.3		Ü	0.28	5.3
1,3-Dichlorobenzene			5.3		Ü	0.16	5.3
1.3-Dichloropenzene							

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)
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Analysis Method:

8260B

Analysis Batch:

200-41070

Instrument ID:

N.i

Prep Method:

5035

Lab File ID:

Dilution:

1.0

Prep Batch:

200-40686

ngan07.d

Initial Weight/Volume:

5.22 g

Analysis Date:

06/26/2012 1446

Prep Date:

06/21/2012 1027

Final Weight/Volume:

5 mL

Analyte	DryWt Corrected: Y		Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene	5.u ?		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		174	%Rec	Qualifier	Accept	ance Limits

65 - 155

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: Dilution:

5035

Prep Batch:

Lab File ID:

lhbae16.d

8.8

200-40685

Initial Weight/Volume:

6.12 g

Analysis Date: Prep Date:

06/27/2012 1730 06/21/2012 1020 Final Weight/Volume:

1700 1700 1700 1700 1700 1700 1700 1700	0 7 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	360 450 340 430 260 220 380 310 1500 280 360	1700 1700 1700 1700 1700 1700 1700 1700	1
1700 1700 1700 1700 1700 1700 3900 28000 1700 1700 1700 1700	0 0 0 0 0 0 0 0 0	340 430 260 220 380 310 1500 280 360	1700 1700 1700 1700 1700 1700 8600 1700	
1700 1700 1700 1700 1700 3900 28000 1700 1700 1700 1700	) ) ) ) )	430 260 220 380 310 1500 280 360	1700 1700 1700 1700 1700 8600 1700	
1700 1700 1700 1700 3900 28000 1700 1700 1700 1700	n n n n	260 220 380 310 1500 280 360	1700 1700 1700 1700 8600 1700	
1700 1700 1700 3900 28000 1700 1700 1700 1700	U U U U	220 380 310 1500 280 360	1700 1700 1700 8600 1700	
1700 1700 3900 28000 1700 1700 1700 1700	n n n n	380 310 1500 280 360	1700 1700 8600 1700	
1700 3900 28000 1700 1700 1700 1700	n n 1	310 1500 280 360	1700 8600 1700	
3900 28000 1700 1700 1700 1700 1700	U U J	1500 280 360	8600 1700	
28000 1700 1700 1700 1700 1700	U U U	280 360	1700	
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1700 1700 1700	U		1700	
1700 1700		470	1700	
1700		340	1700	
	U	310	1700	
4-9-	U	310	1700	
1700	U	340	1700	
1700	U	310	1700	
8600	U	1500	8600	
1700	U	330	1700	
1700	U	340	1700	
1700	U	340	1700	
1700	U	260	1700	
1700	U	360	1700	
1700	U	290	1700	
1700	U	290	1700	
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	1700 1700	1700 U 1700 U 1700 U 1700 U 1700 U 8600 U 470 J 1700 U	1700       U       310         1700       U       330         1700       U       330         1700       U       310         8600       U       1900         470       J       340         1700       U       290         1700       U       330         1700       U       340         8600       U       1300         1700       U       280         1700       U       330         1700       U       340         4500       360         1700       U       290         1700       U       290         1700       U       330         1700 </td <td>1700       U       310       1700         1700       U       330       1700         1700       U       330       1700         1700       U       310       1700         1700       U       310       1700         8600       U       1900       8600         470       J       340       1700         1700       U       290       1700         1700       U       330       1700         1700       U       340       1700         1700       U       280       1700         1700       U       330       1700         1700       U       340       1700         1700       U       340       1700         4500       J       340       1700         1700       U       290       1700         1700       U       290       1700         1700       U       290       1700         1700       U       330       1700</td>	1700       U       310       1700         1700       U       330       1700         1700       U       330       1700         1700       U       310       1700         1700       U       310       1700         8600       U       1900       8600         470       J       340       1700         1700       U       290       1700         1700       U       330       1700         1700       U       340       1700         1700       U       280       1700         1700       U       330       1700         1700       U       340       1700         1700       U       340       1700         4500       J       340       1700         1700       U       290       1700         1700       U       290       1700         1700       U       290       1700         1700       U       330       1700

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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

Lab File ID:

Dilution:

Prep Batch:

102

200-40685

lhbae16.d

Analysis Date:

8.8

Initial Weight/Volume:

6.12 g

1,2-Dichlorobenzene-d4

06/27/2012 1730

Prep Date:

06/21/2012 1020

Final Weight/Volume:

45 - 145

Analyte	DryWt Correcte	d: Y 👉 👚	Result (ug/K	(g) :	Qualifier	MDL	RL
1,2-Dichlorobenzene		7 4	1700		U	340	1700
1,2-Dibromo-3-Chloropropane			1700		U	290	1700
1,2,4-Trichlorobenzene	2.		1700		U	340	1700
		Angle a					
Surrogate			%Rec		Qualifier	Accepta	nce Limits
1,2-Dichloroethane-d4			88		1800 1900 1800 1800 1800 1800 1800 1800	65 - 155	
Toluene-d8			101			80 - 115	
Bromofluorobenzene			101			80 - 115	

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1

Date Received: 06/20/2012 1010

Sdg Number: 11278

Client Sample ID:

SB-02 (14-15)

Lab Sample ID:

200-11384-2

Client Matrix:

Solid

% Moisture:

Date Sampled: 06/15/2012 1615

## 8260B Volatile Organic Compounds (GC/MS)

Analysis Method:

8260B

Analysis Batch:

200-41070

19.5

Instrument ID:

N.i

Prep Method:

5035

Prep Batch:

200-40686

Lab File ID:

Dilution:

1.0

ngan06.d

Analysis Date:

Initial Weight/Volume:

5.14 g

Prep Date:

06/26/2012 1415 06/21/2012 1027 Final Weight/Volume:

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		6.0	UJ	0.28	6.0
Chloromethane		6.0	U	0.31	6.0
Vinyl chloride		6.0	Ü	0.36	6.0
Bromomethane		6.0	UJ	0.89	6.0
Chloroethane		6.0	ロゴ	0.46	6.0
Trichlorofluoromethane		6.0	U	0.40	6.0
1,1-Dichloroethene		6.0	บ	0.45	6.0
1,1,2-Trichloro-1,2,2-trichfluoro	pethane	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	บ	0.45	6.0
Methyl t-butyl ether		6.0	บ	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	<i>I</i>	1.8	6.0
Chloroform	6.0	12	-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	บ	0.75	6.0
Trichloroethene		6.0	บ	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	_ <del>0.72</del> ~	AB UB	0.068	6.0
Xylenes, Total	4.0	6.0	• /	0.88	6.0
Styrene		6.0	U	0.12	6.0
Bromoform		6.0	Ü	0.24	6.0
Isopropylbenzene		6.0	Ü	0.093	6.0
1,1,2,2-Tetrachloroethane		6.0	บ	0.31	6.0
1,3-Dichlorobenzene		6.0	U	0.18	6.0

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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

Lab File ID:

Dilution:

Prep Batch:

ngan06.d

1.0

200-40686

Initial Weight/Volume:

Analysis Date:

06/26/2012 1415

5.14 g

Prep Date:

06/21/2012 1027

Final Weight/Volume:

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	<del>-0.39-</del>	-AB-UB	0.24	6.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	79	Prilia de la cellida de deleta de cilida de deleta centralida de la decentralida de de de deleta de la celeta d -	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 5035

Analysis Batch:

200-41070

Instrument ID:

N.i

Prep Method: Dilution:

1.0

Prep Batch:

200-40686

Lab File ID:

ngan07.d

Analysis Date:

Prep Date:

06/26/2012 1446 06/21/2012 1027 Initial Weight/Volume:

5.22 g

Final Weight/Volume: 5 mL

Analyte –	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		5.3	U J	0.25	5.3
Chloromethane		5.3	U	0.28	5.3
Vinyl chloride		5.3	U	0.32	5.3
Bromomethane		5.3	υゴ	0.79	5.3
Chloroethane		5.3	UI	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-trichfluo	roethane	5.3	U 🎞	0.35	5.3
Acetone		13	T	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	- UB	0.59	5.3
trans-1,2-Dichloroethene	90	5.3	UAT	0.39	5.3
Methyl t-butyl ether		5.3	UJ	0.32	5.3
1,2-Dichloroethene, Total		5.3	UJ	0.82	5.3
1,1-Dichloroethane		5.3	U	0.44	5.3
cis-1,2-Dichloroethene		5.3	UJ	0.45	5.3
2-Butanone		5.3	Ū Ā	1.6	5.3
Chloroform	51	<del>-0.77</del>	18- UB	0.34	5.3
1,1,1-Trichloroethane	2,3	5.3	ログ	0.75	5.3
Cyclohexane		5.3	U A	0.91	5.3
Carbon tetrachloride		5.3	مرا الم	0.81	5.3
Benzene		5.3	UT	0.76	5.3
1,2-Dichloroethane		5.3	U	0.66	5.3
Trichloroethene		5.3		0.51	5.3
Methylcyclohexane		5.3	0 4 H V	0.18	5.3
1,2-Dichloropropane		5.3	ii テ	0.31	5.3
Bromodichloromethane		5.3	ŭ F	0.22	5.3
cis-1,3-Dichloropropene		5.3	U J	0.22	5.3
4-Methyl-2-pentanone		5.3	U	0.64	5.3
Toluene		5.3	U	0.04	5.3
trans-1,3-Dichloropropene		5.3	US	0.14	5.3
• •		5.3	•		
1,1,2-Trichloroethane			U	0.36	5.3
Tetrachloroethene		5.3	UJ	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	UI	0.78	5.3
Styrene		5.3	UI	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
1,1,2,2-Tetrachloroethane 1,3-Dichlorobenzene 1,4-Dichlorobenzene					

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

Lab File ID:

ngan07.d

Dilution:

1.0

Prep Batch:

200-40686

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	× 2		5.3	U	0.23	5.3
1,2-Dibromo-3-Chloropropane	15.0	3 1	5.3	U	0.97	5.3
1.2.4-Trichlorobenzene			5.3	U	0.21	5.3

Surrogate		i y kazi	%Rec	Qualifier	Acceptance Limits		
1,2-Dichloroethane-d4		en egenen mandrokon kirin lik 1 ver molekon eksentarre	85	t with the time to the time of the following form and the traffice the time to the following form to the time to t	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:

200-11270

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	

•				•	injection rotation , de		
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		Ū	550	5500	
Bis(2-chloroethyl)ether		180		U	25	180	
1,3-Dichlorobenzene		1800		Ū∱	170	1800	
Benzoic acid		1800	-	Ū	1800	1800	
1,4-Dichlorobenzene		1800		Ú≠	210	1800	
1,2-Dichlorobenzene		1800		Ü	210	1800	
N-Nitrosodi-n-propylamine		180		Ü	31	180	
Hexachloroethane	()	180		Ü	20	180	
Nitrobenzene	7	180		Ü	26	180	
Isophorone		1800		Ü	220	1800	
Bis(2-chloroethoxy)methane		1800		Ü	240	1800	
1,2,4-Trichlorobenzene		180		Ü	21	180	
Naphthalene		580		J	210	1800	
4-Chloroaniline		1800		Ŭ	490	1800	
Hexachlorobutadiene		370		Ü	45	370	
2-Methylnaphthalene		270		J	240	1800	
Hexachlorocyclopentadiene		1800		Ü	220	1800	
2-Chloronaphthalene		1800		Ŭ	200	1800	
2-Nitroaniline		3700		U	770	3700	
Dimethyl phthalate		1800		U	220	1800	
Acenaphthylene		980		J	220		
2,6-Dinitrotoluene		370		U	55	1800	
3-Nitroaniline		3700		U		370	
Acenaphthene		580			650	3700	
Acenaphinene Dibenzofuran				J	270	1800	
		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: Prep Method:

8270C 3541

Analysis Batch:

460-118204

Instrument ID: Lab File ID:

BNAMS11 z19292.d

Dilution:

5.0

Prep Batch:

460-117106

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
DryWt Corrected: Y	Result (ug/K	g) 1944 -	Qualifier	MDL		RL
	16000	177.		230		18
	5700			220		18

Analyte	DryWt Corrected: Y	Result (ug/	Kg) may	Qualifier	MDL	RL
Phenanthrene		16000	177.	ti. Jugat V. malakalah mindingkan pel proprinsi pengangan pengah pengal	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	1.1		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	0000-00000 / 00-0000000000 / 0000000000	- 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: Prep Method:

8270C 3541 Analysis Batch: Prep Batch: 460-118204 460-117106

Instrument ID: Lab File ID: BNAMS11 z19298.d

Dilution:

2.0

07/01/2012 2101

Initial Weight/Volume: Final Weight/Volume:

15.00 g

Analysis Date: Prep Date:

06/22/2012 0849

Final Weight/Volume:

Prep Date: 06/22/2	2012 0849			шу	ection 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		Ü.	960	960
1,4-Dichlorobenzene		960		Ū1	110	960
1,2-Dichlorobenzene		960		U	110	960
N-Nitrosodi-n-propylamine		96		Ü	16	96
Hexachloroethane		96		Ū	11	96
Nitrobenzene		96		Ü	14	96
sophorone		960		Ü	120	960
Bis(2-chloroethoxy)methane		960	1	Ü	120	960
1,2,4-Trichlorobenzene		96		Ü	11	96
Naphthalene		14000		J	110	960
4-Chloroaniline		960		_U ;	250	960
Hexachlorobutadiene		190		Ü	23	190
2-Methylnaphthalene		2900		J	120	960
Hexachlorocyclopentadiene		960		U	110	960
2-Chloronaphthalene		960		U	110	960
2-Nitroaniline		1900		U	400	
Dimethyl phthalate		960		U	110	1900
Acenaphthylene		530			110	960
2,6-Dinitrotoluene		190		) J		960
3-Nitroaniline					29	190
		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	8	1500			120	960
1-Nitroaniline	<u></u>	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

Cilent 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)
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Analysis Method:

8270C 3541

Analysis Batch:

460-118204

Instrument ID:

BNAMS11

Prep Method:

2.0

Prep Batch: 460-117106

Lab File ID:

z19298.d

Dilution:

Initial Weight/Volume:

15.00 g

Analysis Date: Prep Date:

07/01/2012 2101 06/22/2012 0849

Final Weight/Volume: Injection Volume:

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 phth	nalate		960		U	120	960
Fluoranthene			3500			130	960
Pyrene			4200			80	960
Butyl benzyl pl	hthalate		960		U	88	960
3,3'-Dichlorobe	enzidine		1900		U	340	1900
Benzo[a]anthra	acene		3500			6.7	96
Chrysene			4700			110	960
Bis(2-ethylhex	yl) phthalate		960		U	320	960
Di-n-octyl phth	nalate		960		U	61	960
Benzo[b]fluora	anthene		6200			6.1	96
Benzo[k]fluora	inthene		2800			7.3	96
Benzo[a]pyren			3000			6.8	96
Indeno[1,2,3-c	cd]pyrene		5400			18	96
Dibenz(a,h)an	thracene		1500			12	96
Benzo[g,h,i]pe	rylene		5300			71 .	960
2,2'-oxybis[1-c	-		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

Cilent Sample ID:

DUP-01-06122012

Lab Sample ID:

Analysis Method:

200-11278-3

Client Matrix:

Solid

8270C

% Moisture:

Analysis Batch:

50.7

460-118432

Instrument ID:

Date Sampled: 06/12/2012 0000

Date Received: 06/14/2012 1030

BNAMS11

#### 8270C Semivolatile Organic Compounds (GC/MS)

Dilution: 5.0		Prep Batch: 46	0-117106		Lab File ID: Initial Weight/Volume:	z19355.d 15.02 g	
Analysis Date: 07	//02/2012 2205 ·				Final Weight/Volume:	1 mL	
Prep Date: 06	6/22/2012 0849				Injection Volume:	1 uL	
Analyte	DryWt Corrected: Y	Result (ug/Kg)		Qualifie	MDL	RL	
Phenol		3300	reconsissional and a second contraction	U	450	3300	***************************************
2-Chlorophenol		3300		Ü	440	3300	
2-Methylphenol		3300		U	570	3300	
2-Nitrophenol		3300		U	370	3300	
3 & 4 Methylphenol		3300		U	570	3300	4 7
2,4-Dimethylphenol		3300		U	830	3300	
2,4-Dichlorophenol		3300		U	490	3300	
4-Chloro-3-methylpheno	d =	3300		U	500	3300	
2,4,6-Trichlorophenol	"	3300		U	390		
2,4,5-Trichlorophenol		3300		U		3300	
2,4-Dinitrophenol		10000	11.2	U	430 1900	3300	
		10000		U		10000	
I-Nitrophenol III. I 6 Dinitro 2 mothylphor	and			_	2200	10000	
4,6-Dinitro-2-methylpher	101	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	ŕ	3300		U	390	3300	
N-Nitrosodi-n-propylamii	ne	330		U	56	330	
Hexachloroethane		330		U	37	330	
Nitrobenzene		330		U	48	330	
sophorone		3300		U	410	3300	
Bis(2-chloroethoxy)meth	iane	3300		U	430	3300	
1,2,4-Trichlorobenzene		330		U	38	330	
Vaphthalene		27000			390	3300	
1-Chloroaniline		3300		Ū	890	3300	
-lexachlorobutadiene		680		U	82	680	
2-Methylnaphthalene		6200			430	3300	
-lexachlorocyclopentadi	ene	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	
I-Chlorophenyl phenyl e	ther	3300		U	390	3300	
Fluorene		2400		J	430	3300	
I-Nitroaniline		6800		Ū	1000	6800	
N-Nitrosodiphenylamine		3300		Ū	330	3300	
4 Promonhonid phonid o		3300		-	220	0000	

Hexachlorobenzene

4-Bromophenyl phenyl ether

U

330

46

3300

330

3300

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: Prep Method:

8270C 3541

Analysis Batch:

460-118432

Instrument ID:

BNAMS11 z19355.d

Dilution:

5.0

Prep Batch:

460-117106

Lab File ID: Initial Weight/Volume:

15.02 g

Analysis Date: Prep Date:

07/02/2012 2205 06/22/2012 0849 Final Weight/Volume: Injection Volume:

Analyte	DryWt Corrected: Y	Result (ug/	Kg) 🖟	Qualifier	MDL	RL
Phenanthrene		8000	than for the first manager of the second		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	7.1	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	*110	7200			250	3300
2,2'-oxybis[1-chloropropane]		3300	117	U	370	3300

	%Rec	Qualifier	Acceptance Limits
3	58		38 - 105
	54		41 - 118
	64		16 - 151
	33		10 - 120
	54		37 - 125
}	67		40 - 109
		58 54 64 33 54	58 54 64 33 54

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 3541 Analysis Batch:

460-118432 460-117106 Instrument ID: Lab File ID: BNAMS11

Prep Method: Dilution:

25

Prep Batch:

Initial Weight/Volume:

z19356.d 15.01 g

Analysis Date: Prep Date: 25

07/02/2012 2229 06/22/2012 0849 Run Type: DL

Final Weight/Volume: Injection Volume:

Analyte	DryWt Corrected: Y		Result (ug/Kg)	Qualifier	MDL	RL
Phenol		1.	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		35.7	12000	U	1700	12000
4-Chloro-3-methylphenol	1		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	υļ	7700	36000
4,6-Dinitro-2-methylphenol			36000	U	3300	36000
Pentachlorophenol			36000	U	3600	36000
Bis(2-chloroethyl)ether		1.	1200	υ	160	1200
1,3-Dichlorobenzene			12000	U.F.	1100	12000
Benzoic acid			12000	υ	12000	12000
1,4-Dichlorobenzene		14	12000	U#	1300	12000
1,2-Dichlorobenzene			12000	υ	1400	12000
N-Nitrosodi-n-propylamine			1200	U	200	1200
Hexachloroethane			1200	U	130	1200
Nitrobenzene			1200	υİ	170	1200
Isophorone			12000	U	1400	12000
Bis(2-chloroethoxy)methane		-	12000	U	1500	12000
1,2,4-Trichlorobenzene			1200	υ <b>†</b>	140	1200
Naphthalene			49000	DI	1400	12000
4-Chloroaniline			12000	Ū5	3200	12000
Hexachlorobutadiene			2400	US	290	2400
2-Methylnaphthalene			34000	DI	1500	12000
Hexachlorocyclopentadiene			12000	U5	1400	12000
2-Chloronaphthalene			12000	U 1	1300	12000
2-Nitroaniline			24000	u l	5000	24000
Dimethyl phthalate			12000	U	1400	12000
Acenaphthylene			32000	DJ	1400	12000
2,6-Dinitrotoluene			2400	Ū	360	2400
3-Nitroaniline			24000	Ū J	4200	24000
Acenaphthene			5600	JD	1700	12000
Dibenzofuran			12000	Ū, J	1400	12000
2,4-Dinitrotoluene			2400	J U	390	2400
Diethyl phthalate			12000	Ü	1400	12000
4-Chlorophenyl phenyl ether			12000	Ŭ ₩,	1400	12000
Fluorene			39000	D J	1500	12000
4-Nitroaniline			24000	UF	3700	24000
N-Nitrosodiphenylamine			12000	υĺ	1200	12000
• •			12000	υ	1200	12000
4-Bromophenyl phenyl ether						

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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)
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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 07/02/2012 2229 Analysis Date: Run Type: DL Final Weight/Volume: 1 mL 06/22/2012 0849 Prep Date: Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/k	(g) : .	Qualifier	MDL	RL
Phenanthrene.		170000		D <b>3</b>	1500	12000
Anthracene		46000		DJ	1500	12000
Carbazole		3500		JD	1400	12000
Di-n-butyl phthalate		12000		リブ	1500	12000
Fluoranthene		53000		DJ	1600	12000
Pyrene		120000		D. <b>5</b>	1000	12000
Butyl benzyl phthalate		12000		U.5	1100	12000
3,3'-Dichlorobenzidine		24000		リグ	4200	24000
Benzo[a]anthracene		43000		DJ	83	1200
Chrysene		52000		DJ	1400	12000
Bis(2-ethylhexyl) phthalate		12000		U 🖍	4000	12000
Di-n-octyl phthalate		12000		US	760	12000
Benzo[b]fluoranthene		26000		DJ	76	1200
Benzo[k]fluoranthene		7800		DJ	91	1200
Benzo[a]pyrene		34000		Dブ	85	1200
Indeno[1,2,3-cd]pyrene		19000		DJ	220	1200
Dibenz(a,h)anthracene		5300		DJ	150	1200
Benzo[g,h,i]perylene		28000		DJ	890	12000
2,2'-oxybis[1-chloropropane]		12000		Uブ	1300	12000
Curronate		9/ Dag		Ovelifier	A A	and the state
Surrogate		%Rec	kilgantina katalan na anang menangkan katalangkan katalangkan katalangkan kangan kangan kangan kangan kangan k B	Qualifier	~~~	ance Limits
Nitrobenzene-d5		0		D	38 - 109	
Phenol-d5		0		D	41 - 118	
Terphenyl-d14		0		D	16 - 15°	

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)
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Analysis Method:

8270C

Analysis Batch:

460-118177

Instrument ID:

BNAMS11

Prep Method:

3541

Prep Batch: 460-117106

z19224.d

Dilution:

1.0

Initial Weight/Volume:

MDL

73

72

93

61

93

80

82

64

70

310

350

150

160

7.4

49

540

61

63

9.1

6.1

7.7

66

70

6.2

63

140

13

70

64

61

230

65

64

16

190

79

64

18

65

64

70

170

54

54

7.4

130

Analysis Date:

06/29/2012 2344 06/22/2012 0849 Final Weight/Volume: Injection Volume:

1 mL 1 uL

Prep Date:
Analyte
Phenol
2-Chloropher
2-Methylpher
2-Nitropheno
3 & 4 Methylp
2,4-Dimethyl
2,4-Dichlorop
4-Chloro-3-m
2,4,6-Trichlor
2,4,5-Trichlor
2,4-Dinitroph
4-Nitropheno
4,6-Dinitro-2-
Pentachlorop
•
Bis(2-chloroe

Analyte	DryWt Corrected: Y
Phenol	
2-Chlorophenol	
2-Methylphenol	
2-Nitrophenol	
3 & 4 Methylphenol	
2,4-Dimethylphenol	
2,4-Dichlorophenol	
4-Chloro-3-methylphenol	
2,4,6-Trichlorophenol	
2,4,5-Trichlorophenol	
2,4-Dinitrophenol	

-methylphenol henol Bis(2-chloroethyl)ether 1,3-Dichlorobenzene Benzoic acid 1,4-Dichlorobenzene 1,2-Dichlorobenzene N-Nitrosodi-n-propylamine Hexachloroethane Nitrobenzene Isophorone Bis(2-chloroethoxy)methane 1,2,4-Trichlorobenzene Naphthalene 4-Chloroaniline Hexachlorobutadiene 2-Methylnaphthalene Hexachlorocyclopentadiene 2-Chloronaphthalene 2-Nitroaniline

Dimethyl phthalate Acenaphthylene 2.6-Dinitrotoluene 3-Nitroaniline Acenaphthene Dibenzofuran 2.4-Dinitrotoluene Diethyl phthalate 4-Chlorophenyl phenyl ether Fluorene 4-Nitroaniline N-Nitrosodiphenylamine 4-Bromophenyl phenyl ether Hexachlorobenzene

TestAmerica Burlington

Result (ug/Kg) Qualifier U 540 540 U 540 U 540 U 130 J 540 U 540 U 540 U 540 U 540 U 1600 U 1600 U 1600 U 1600 U 54 U 540 U ₹ 540 U 540 υź 540 U 54 U 54 U 54 U 540 U 540 U 54 U 6000 U 540 110 U 1400 540 U 540 U 1100 U 540 U 930 U 110 1100

U J U IJ U U U U U

Lab File ID: 15.03 g

1100

540

540

110

1100

330

4700

110

540

540

3200

1100

540

540

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 C	ompounds (	(GC/MS)
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Analysis Method:

8270C 3541

Analysis Batch:

460-118177

Instrument ID:

BNAMS11

Prep Method:

Prep Batch:

460-117106

Lab File ID:

z19224.d

Dilution:

1.0

Initial Weight/Volume:

15.03 g

Analysis Date: Prep Date:

06/29/2012 2344

06/22/2012 0849

Final Weight/Volume: Injection Volume:

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	nnt min men de men ser van de kan men de de van de de van de de de de de de de de de de de de de	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:

200 11020

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 3541 Analysis Batch:

460-118204

Instrument ID: Lab File ID: BNAMS11 z19293.d

Prep Method: Dilution:

5.0

Prep Batch:

460-117106

Initial Weight/Volume:

219293.d 15.02 g

Analysis Date: 07/01/2012 1904 Prep Date: 06/22/2012 0849 Final Weight/Volume: 1 mL Injection Volume: 1 uL

			injector rotatio.			, 42
Analyte	DryWt Corrected: Y	Result (ug/K	(g)	Qualifier	MDL	RL III
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		Ū	990	10000
Bis(2-chloroethyl)ether		330		Ū	45	330
1.3-Dichlorobenzene		3300		U⊀	300	3300
Benzoic acid		3300		Ü	3300	3300
1,4-Dichlorobenzene		3300		U.f	370	3300
1,2-Dichlorobenzene		3300		Ū.	390	3300
N-Nitrosodi-n-propylamine		330		Ü	55	330
Hexachloroethane		330		Ü	37	330
Nitrobenzene		330		Ŭ	47	330
Isophorone		3300		Ü	400	3300
Bis(2-chloroethoxy)methane		3300		Ü	430	3300
1,2,4-Trichlorobenzene		330		Ü	38	330
Naphthalene		45000		Ü	380	3300
4-Chloroaniline		3300		U	880	3300
Hexachlorobutadiene		670		Ü	81	670
2-Methylnaphthalene		6200		O	430	3300
Hexachlorocyclopentadiene		3300		U	390	3300
2-Chloronaphthalene		3300		U	370	3300
2-Nitroaniline		6700		U	1400	6700
		3300		U	390	
Dimethyl phthalate						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	<b>Organic Com</b>	pounds (GC/MS)
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Analysis Method: Prep Method:

8270C 3541

Analysis Batch:

460-118204

Instrument ID:

BNAMS11

Dilution:

5.0

Prep Batch:

460-117106

Lab File ID: Initial Weight/Volume: z19293.d 15.02 g

Analysis Date: Prep Date:

07/01/2012 1904 06/22/2012 0849

Final Weight/Volume: Injection Volume:

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	1	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 ut

Prep Date: 00/22/2012 0049				Injection Volume: 1 u.L.			
Analyte	DryWt Corrected: Y	Result (ug/Kg)		Qualifier	MDL	RL OF	
Phenoi		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	cr; iii	1100		Ū	240	1100	
4,6-Dinitro-2-methylphenol		1100		Ū	100	1100 4 5 4 N	
Pentachlorophenol		1100		U	110	#121100 PLC/15, LCC/	
Bis(2-chloroethyl)ether		37		U	5.1	37	
1,3-Dichlorobenzene		370		Ŭ <b></b> ∕	34	370	
Benzoic acid		370		U .		370	
1,4-Dichlorobenzene		370		u≠	42	370	
1,2-Dichlorobenzene		370		U	43 methy		
N-Nitrosodi-n-propylamine		37		U	6.2	0.0	
Hexachloroethane		37		U	4.1	37	
Nitrobenzene		37		U		37	
Isophorone				U	5.3	37	
Bis(2-chloroethoxy)methane		070			45	370	
1,2,4-Trichlorobenzene		07		U	48	370	
Naphthalene				U	4.2	37	
4-Chloroaniline		370		U	43	370	
		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	1	U	130	750	
Acenaphthene		370	1	U	54	370	
Dibenzofuran		370		U	44	370	
2,4-Dinitrotoluene		75	1	U	12	75	
Diethyl phthalate		370	1	U	44	370	
4-Chlorophenyl phenyl ether		370		U	44	370	
Fluorene		370	1	U	48	370	
		750		U	120		
4-Nitroaniline		750		U	120	/ 50	
		370		U	37	750 370	
4-Nitroaniline N-Nitrosodiphenylamine 4-Bromophenyl phenyl ether			ı		· — <del>-</del>		

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

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 06/26/2012 1200 Analysis Date: Final Weight/Volume: 1 mL 06/22/2012 0849 Prep Date: Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)		Qualifier	MDL	RL = N, -
Phenanthrene	1 pt	47		J	47	370
Anthracene		370		U	45	370 - 11.5 11.5 11.5 1
Carbazole	- ÷	370	- W.	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	<b></b> .	370		U	24	370
Benzo[b]fluoranthene		14		J	2.4	37
Benzo[k]fluoranthene		37		U	2.8	37 magnic com T
Benzo[a]pyrene		13		J	2.6	37: \$10 com/[2].
Indeno[1,2,3-cd]pyrene	``.,	37		Uブ	6.9	37
Dibenz(a,h)anthracene		37		υ	4.7	37
Benzo[g,h,i]perylene	1.1	370		U	28	370
2,2'-oxybis[1-chloropropane]		370		U	41	370
Surrogate		%Rec		Qualifier	Accep	tance Limits

	%Rec	Qualifier	Acceptance Limits	
e	83		38 - 105	2
	88		41 - 118	
	94	TO THE RESERVE OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON O	16 - 151 [%]	
	58		10 - 120	To 11 .
	79		37 - 125	427. 100
	81		40 - 109	
		83 88 94 58 79	83 88 94 58 79	83 38 - 105 88 41 - 118 94 16 - 151 58 10 - 120 79 37 - 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

#### 8270C Semivolatile Organic Compounds (GC/MS)

Analysis	Method:

8270C

Analysis Batch:

460-118432

Instrument ID: Lab File ID:

BNAMS11 z19357.d

Prep Method: Dilution:

3541 1.0

Prep Batch: 460-117106

Initial Weight/Volume:

15.02 g

Analysis Date: Prep Date:

07/02/2012 2252 06/22/2012 0849

Final Weight/Volume: 1 mL 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.Z	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	Ū	50	510
Hexachlorobenzene		51	Ü	6.9	51

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Client: ARCADIS U.S. Inc

Job Number: 200-11278-1

Sdg Number: 11278

Cilent 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 Co	mpounds (GC/MS	3)
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Analysis Method: Prep Method:

8270C 3541

Analysis Batch: Prep Batch:

460-118432 460-117106 Instrument ID: Lab File ID:

BNAMS11 z19357.d

Dilution:

1.0

Initial Weight/Volume:

15.02 g

Analysis Date: Prep Date:

07/02/2012 2252 06/22/2012 0849 Final Weight/Volume: Injection Volume:

Analyte	DryWt Corrected: Y	Result (ug/Kg)		Qualifier	MDL	RL
Phenanthrene	***	3600	teritorialisti de con l'accommentation de l'accommentation de l'accommentation de l'accommentation de l'accomme		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	(COMMATA) (Sept Try state have related and state for American consequent variables and the American consequence and sept and the American consequence and sept and the American consequence and sept and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American consequence and the American conse	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: Prep Method:

8270C 3541

Analysis Batch:

460-118330

Instrument ID:

BNAMS10

Dilution:

1.0

Prep Batch:

460-117695

Lab File ID: Initial Weight/Volume: p31537.d 15.00 g

Analysis Date: Prep Date:

07/02/2012 0630 06/27/2012 1531

Final Weight/Volume: Injection Volume:

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	1	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		137	430		U	39	430
Benzoic acid		1 1	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
-lexachloroethane			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		-t-R	<del>-51</del>	<del>-430</del>
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		Ū	51	430
1-Chlorophenyl phenyl ether			430		Ü	51	430
Fluorene			570			55	430
1-Nitroaniline			870		U	130	870
N-Nitrosodiphenylamine			430		Ü	42	430
4-Bromophenyl phenyl ether			430		Ü	43	430
Hexachlorobenzene			43		Ü	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)
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Analysis Method:

8270C 3541

Analysis Batch:

460-118330

Instrument ID:

BNAMS10

Prep Method: Dilution:

1.0

Prep Batch:

Lab File ID:

p31537.d

460-117695

Initial Maight Adume

15.00

Dilution: 1.0					Initial Weight/Volume:	15.00 g	
Analysis Date: 07/02/20	012 0630				Final Weight/Volume:	1 mL	
Prep Date: 06/27/20	012 1531				Injection Volume:	1 uL	
Analyte	DryWt Corrected: Y	Result (ug/Kg)		Qualifie	r i go - MDL .	RL	Ji le i
Phenanthrene		2900	***************************************	etabannapapradustidar, etrinaleridasidanap •	55	430	*
Anthracene		1000			52	430	
Carbazole		390		J	51	430	
Di-n-butyl phthalate		430		U	53	430	- 1.1. In
Fluoranthene		3400		T	57	430	4 6 7
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		<b>ブ</b>	2.7	43	
Benzo[k]fluoranthene		940			3.3	43	
Benzo[a]pyrene		1800		1	3.0	43	1.
ndeno[1,2,3-cd]pyrene		1800		゙゙゙゙゙゙゙゙゙゙゙	8.0	43	
Dibenz(a,h)anthracene		510		J	5.4	43	
Benzo[g,h,i]perylene		1800		ナ	32	430	
2,2'-oxybis[1-chloropropane]		430		4444-	48	430	stook ." ·
						all of recipies	1.
Surrogate	· 14	%Rec		Qualifie	r Acceptan	ce Limits	
Nitrobenzene-d5		67	200000000000000000000000000000000000000	amagaaninadahininadal _{ahin} aga sydaan -damahira	38 - 105		Al-norlennessensensensensensensensensensensense
Phenol-d5		67			41 - 118		
Terphenyl-d14		77			16 - 151		
2,4,6-Tribromophenol		64	*		10 - 120	3.	
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: Dilution:

3541

Prep Batch:

460-117695

Lab File ID: Initial Weight/Volume: p31536.d

Analysis Date:

1.0

Final Weight/Volume:

15.05 g 1 mL

Prep Date:

07/02/2012 0607 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	UJ	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	Ū	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

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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

Analysis Method:

8270C

Analysis Batch:

460-118330

Instrument ID:

BNAMS10

Prep Method:

3541

Lab File ID:

p31536.d

Dilution:

1.0

Prep Batch:

460-117695

Initial Weight/Volume:

Analysis Date:

Final Weight/Volume:

15.05 g

Prep Date:

07/02/2012 0607 06/27/2012 1531

Injection Volume:

10 - 120

37 - 125

40 - 109

1 mL 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	, 1 , 2
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	e Limits	
Nitrobenzene-d5	antakinterarin fantakanan merinarian anda antakanan tahun ta	62			38 - 105		***************************************
Phenol-d5		63			41 - 118		
Terphenyl-d14		85			16 - 151		

63

61

77

2,4,6-Tribromophenol

2-Fluorophenol

2-Fluorobiphenyl

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: Lab File ID:

BNAMS11

Prep Method: Dilution:

3541 1.0

Prep Batch:

460-117106

Initial Weight/Volume:

z19068.d 15.03 g

Analysis Date:

Prep Date:

06/26/2012 1223 06/22/2012 0849 Final Weight/Volume: 1 mL Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Res	sult (ug/Kg)	Qualifier	MDL	RL
Phenol	,	380	es manure de manure en en en en en en en en en en en en en	U	51	380
2-Chlorophenol		380	1	U	50	380
2-Methylphenol		380	1	U	65	380
2-Nitrophenol		380	1	U	43	380
3 & 4 Methylphenol		380	1	U	65	380
2,4-Dimethylphenol		380	1	U	.94	380
2,4-Dichlorophenol		380	1	U	56	380
4-Chloro-3-methylphenol		380	1	U	58	380
2,4,6-Trichlorophenol		380	1	U	45	380
2,4,5-Trichlorophenol		380	1	U	49	380
2,4-Dinitrophenol		120	0	U	220	1200
4-Nitrophenol		120	0	U	250	1200
4,6-Dinitro-2-methylphenol		120	0	U	100	1200
Pentachlorophenol		120	0	U	110	1200
Bis(2-chloroethyl)ether		38		U	5.2	38
1,3-Dichlorobenzene		380	1	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	1	U	44	380
4-Chloroaniline		380	)	U	100	380
Hexachlorobutadiene		78		U	9.3	78
2-Methylnaphthalene		380	1	U	49	380
Hexachlorocyclopentadiene		380	1	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	1	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 Promonhonyl phonyl other		380	1	U	38	380
4-Bromophenyl phenyl ether		500	,	U	30	300

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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)
	o i gaino	Compound	(00,000)

Analysis Method: Prep Method:

8270C 3541

Analysis Batch: Prep Batch:

460-117976

Instrument ID: Lab File ID:

BNAMS11 z19068.d

Dilution:

1.0

460-117106

Initial Weight/Volume:

15.03 g

Analysis Date: Prep Date:

06/26/2012 1223 06/22/2012 0849

Final Weight/Volume: Injection Volume:

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	υ	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	4 - 4	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
2-Fluorophenol	72		37 - 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

#### 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 124	6			Final Weight/Volume:	1 mL
Prep Date:	06/22/2012 084	9			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/l	<b>(</b> g)	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	71 8	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	<b>7</b> 9
Diethyl phthalate		390		U	46	390
4-Chlorophenyl phenyl ether		390		U	46	390
Fluorene		390		Ū	50	390
4-Nitroaniline		790		Ū	120	790
N-Nitrosodiphenylamine		390		Ū	38	390
4-Bromophenyl phenyl ether		390		Ū	39	390
Hexachlorobenzene		39		Ü	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:

Prep Date: 06/22/20	012 0849				Injection	n Volume:	1 uL	
Analyte	DryWt Corrected: Y	ŧ ,	Result (ug/Kg)		Qualifier	MDL	RL	
Phenanthrene			390		U	50	390	4
Anthracene			390	2,	U	47	390 😁	lev m'r
Carbazole			390		U	46	390	
Di-n-butyl phthalate			390		U	48	390	27 14 5
Fluoranthene			58		J	52	390	1
Pyrene			52		J	33	390	
Butyl benzyl phthalate			390		U	36	390	7 1 2
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ブ	7.2	39	Set 1
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	Acceptar	nce Limits	
Nitrobenzene-d5		1	73			38 - 105		
Phenol-d5			76			41 - 118		
Terphenyl-d14			85			16 - 151		
2,4,6-Tribromophenol			63			10 - 120	. 1	E 25
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	JF.	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenoi			400	U	53	400
2-Chlorophe	enoi		400	U	52	400
2-Methylphe	enol		400	U	68	400
2-Nitrophen	ol		400	U	44	400
3 & 4 Methy	Iphenol		400	U	68	400
2,4-Dimethy	Iphenol		400	U	98	400
2,4-Dichloro	phenol		400	U	58	400
4-Chloro-3-r	methylphenol		400	U	60	400
2,4,6-Trichlo	rophenol		400	U	47	400
2,4,5-Trichlo	rophenol		400	U	51	400
2,4-Dinitropl	henol		1200	U	230	1200
4-Nitrophen	ol		1200	U	260	1200
4.6-Dinitro-2	?-methylphenol		1200	U	110	1200
Pentachloro	• •		1200	Ŭ	120	1200
Bis(2-chloro	•		40	Ŭ	5.4	40 (45)
1,3-Dichloro	• •		400	Ū. <b>f</b>	36	400
Benzoic acid			400	Ū	400	400
1,4-Dichloro	benzene		400	Ū≠∕	45	400
1,2-Dichloro			400	Ü	46	400
	n-propylamine		40	Ŭ	6.6	40
Hexachloroe			40	Ü	4.4	40
Nitrobenzen			40	Ü	5.7	40
Isophorone			400	Ü	48	400
•	ethoxy)methane		400	Ū	51	400
1,2,4-Trichlo			40	Ü	4.5	40
Naphthalene			400	Ü	46	400
4-Chloroanil			400	Ü	110	400
Hexachlorot			81	Ü	9.7	81
2-Methylnap			400	Ŭ	5.7 51	400
	cyclopentadiene		400	Ü	47	400
2-Chloronap			400	Ü	44	400
2-Nitroanilin			810	Ü	170	810
Dimethyl ph			400	U	47	400
Acenaphthy			400	U	47	
2,6-Dinitroto			81	U	12	400 81
3-Nitroanilin			810	U	140	= :
Acenaphthe			400	U		810
Dibenzofura			400	U	58	400
			81		47	400
2,4-Dinitroto				U	13	81
Diethyl phth			400	U	47	400
, r	nyl phenyl ether		400	U	47	400
Flüorene	_		400	U	51	400
4-Nitroanilin			810	U	120	810
N-Nitrosodip	•		400	U	39	400
	nyl phenyl ether		400	U	39	400
Hexachlorob	enzene		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)
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Analysis Method: Prep Method:

8270C 3541

Analysis Batch:

460-117976

Instrument ID:

Final Weight/Volume:

5.0

29

44

Injection Volume:

BNAMS11 z19070.d

Dilution:

Dibenz(a,h)anthracene

2,2'-oxybis[1-chloropropane]

Benzo[g,h,i]perylene

1.0

Prep Batch:

460-117106 Lab File ID: Initial Weight/Volume:

U

U

U

15.04 g 1 mL

40

400

400

1 uL

Analysis Date: Prep Date:

06/26/2012 1310 06/22/2012 0849

Analyte	DryWt Corrected: Y	Result (ug/Kg)		Qualifier	MDL	RL
Phenanthrene		400	4 1	U	51	400
Anthracene y		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ブ	7.4	- 40

40

400

400

Surrogate		%Rec	Qualifier	Acceptance Lir	nits III and III and III
Nitrobenzene-d5	4	85	9	38 - 105	
Phenol-d5	*	91		41 - 118	
Terphenyl-d14		105		16 - 151	
2,4,6-Tribromophenol		64		10 - 120	or, anymy the
2-Fluorophenol		81		37 - 125	J. C. H. L.
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: Prep Method:	8270C 3541	Analysis Batch: Prep Batch:	460-118204 460-117106	Instrument ID: Lab File ID:	BNAMS11 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	750	5600
2-Chloroph	enol			5600	บา	740	5600
2-Methylph	enol			5600	υÌ	960	5600
2-Nitrophe	nol		S	5600	U )	630	5600
3 & 4 Meth	ylphenol			5600	U	960	5600
2,4-Dimeth	ylphenol			5600	U	1400	5600
2,4-Dichlor	ophenol			5600	U	820	5600
4-Chloro-3-	-methylphenol			5600	U	850	5600
2,4,6-Trichl	iorophenol			5600	υļ	660	5600
2,4,5-Trichl	lorophenol			5600	U	720	5600
2,4-Dinitrop	phenol			17000	υ	3200	17000
4-Nitropher	nof			17000	U	3600	17000
4,6-Dinitro-	2-methylphenol	4	25	17000	υ\	1500	17000
Pentachlor	ophenol			17000	U	1700	17000
3is(2-chlor	oethyl)ether			560	U	77	560
1,3-Dichlor	obenzene			5600	U	510	5600
Benzoic ac	id			5600	U	5600	5600
4-Dichlor	obenzene			5600	U	630	5600
1,2-Dichlor	obenzene		75 I	5600	U	650	5600
N-Nitrosodi	i-n-propylamine			560	υĺ	94	560
lexachloro	ethane			560	υ	62	560
Vitrobenze	ne			560	U	80	560
sophorone				5600	υ	680	5600
3is(2-chlore	oethoxy)methane			5600	υŢ	720	5600
I,2,4-Trichl	orobenzene			560	U 🌠	64	560
Naphthaler	ne			68000	DJ	650	5600
l-Chloroan	iline			5600	UJ	1500	5600
<del>l</del> exachloro	butadiene			1100	UJ	140	1100
2-Methylna	phthalene			4400	JD	720	5600
dexachloro	cyclopentadiene			5600	υ <i>ブ</i>	660	5600
2-Chlorona	phthalene			5600	υļ	630	5600
2-Nitroanili	ne			11000	υļ	2300	11000
Dimethyl pl	nthalate			5600	u 🏌	670	5600
Acenaphthy	ylene			800	JD	660	5600
2,6-Dinitrot	oluene			1100	Uブ	170	1100
8-Nitroanilii	ne			11000	υļ	2000	11000
Acenaphthe	ene			5600	U 🌡	820	5600
Dibenzofur	an			7500	DÍ	660	5600
4.4-Dinitrot	oluene			1100	UJ	190	1100
Diethyl phth	nalate			5600	υĺ	670	5600
-Chloroph	enyl phenyl ether			5600	ŭ	660	5600
luorene				11000	05	720	5600
I-Nitroanilii	ne			11000	Ū 🛣	1700	11000
	phenylamine			5600	υĺ	550	5600
	enyl phenyl ether			5600	Ü	560	5600
•	benzene			560	ŭ 🕽	77	560

Page 146 of 4454

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	8270C Semivol	atile Organic	Compounds	(GC/MS
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Analysis Method:

8270C

Analysis Batch:

460-118204

Instrument ID:

BNAMS11

Prep Method:

3541

Prep Batch:

460-117106

Lab File ID:

z19294.d

Dilution:

Initial Weight/Volume:

15.02 g

10

	2012 1928 2012 0849	Run T	ype: DL			Final Weight/Volume: Injection Volume:	1 mL
Analyte	DryWt Corrected: Y		Result (ug/Kg)	. 4	Qualifie	r MDL	RL
Phenanthrene			24000	*	DJ	710	5600
Anthracene			4400		JD	680	5600
Carbazole		ł	890		JD	660	5600
Di-n-butyl phthalate			5600		リブ	690	5600
Fluoranthene			9200		DJ	750	5600
Pyrene			11000		DJ	470	5600
Butyl benzyl phthalate			5600		UJ	510	5600
3,3'-Dichlorobenzidine			11000		UJ	2000	11000
Benzo[a]anthracene		f	7700		05	39	560
Chrysene			9200		D 5	660	5600
Bis(2-ethylhexyl) phthalate			5600		U5	1900	5600
Di-n-octyl phthalate			5600		ロゴ	360	5600
Benzo[b]fluoranthene	A = 1		6200		DJ	35	560
Benzo[k]fluoranthene			2500		D	43	560
Benzo[a]pyrene		1	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		いゴ	620	5600
Surrogate			%Rec		Qualifie	r Accepta	nce Limits
Nitrobenzene-d5			0		D	38 - 105	
Phenol-d5			0		D	41 - 118	To make the
Terphenyl-d14			0		D	16 - 151	
2,4,6-Tribromophenol		Y H	0		D	10 - 120	
2-Fluorophenol			0 ,	Thire'	D	37 - 125	When it
2-Fluorobiphenyl		C in	0		D	40 - 109	and a suid to
		1 3					

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/	Result (ug/Kg)		MDL	RL
Phenol		370		U	50	370
2-Chlorophenol		370	Ĩ,	Ų	49	370
2-Methylphenol		370	unf.	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	11.1	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 É	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
sophorone		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	99800	U	37	370
4-Bromophenyl phenyl ether		370	100	U	37	370
Hexachlorobenzene		37		U	5.1	37

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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

Analysis Batch:

Prep Batch:

Date Sampled: 06/15/2012 1405

Date Received: 06/16/2012 1000

8270C Semivolatile Organic Compo	unds	(GC/MS)
----------------------------------	------	---------

Analysis Method: 8270C Prep Method: 3541 Dilution:

460-117976 460-117106 Instrument ID: Lab File ID:

BNAMS11 z19071.d

Dilution: 1.0	THE VACUE					Weight/Volume:	15.02 g	
	012 1333				Final	Weight/Volume:	1 mL	
Prep Date: 06/22/20	012 0849				Injecti	on Volume:	1 uL	
Analyte	DryWt Corrected: Y	1.	Result (ug/Kg)		Qualifier	MDL	RL	
Phenanthrene			370	-	U	47	370	,
Anthracene			370		U	45	370	11 27
Carbazole			370		U	44	370	
Di-n-butyl phthalate			370		U	46	370	
Fluoranthene			370		U	50	370	
Pyrene			370	21	U	31	370	1
Butyl benzyl phthalate			370		U	34	370	
3,3'-Dichlorobenzidine			750	1,5	U	130	750	
Benzo[a]anthracene			37	nví	U	2.6	37	
Chrysene			370		U	43	370	4;
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	28	370	
2,2'-oxybis[1-chloropropane]			370		U	41	370	
		,					4 1337	5 .
Surrogate			%Rec		Qualifier	Acceptane	ce Limits	
Nitrobenzene-d5		an managarang panggaran	80	, and an annual of the second		38 - 105		1 2 1 4 7
Phenol-d5			86	300		41 - 118		
Terphenyl-d14			95			16 - 151		
2,4,6-Tribromophenol		1	61	16		10 - 120		
2-Fluorophenol			79			37 - 125		
2-Fluorobiphenyl			80			40 - 109		71.1
1 1 1							1744	

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:

200-110-0-0

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: Lab File ID: BNAMS11

Prep Method: Dilution: 3541

Prep Batch:

460-117106

Initial Weight/Volume:

z19295.d 15.01 g

Analysis Date:

10 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	υJ	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	υl	1300	5100
2,4-Dichlorophenol		5100	υ	740	5100
4-Chloro-3-methylphenol		5100	υİ	770	5100
2,4,6-Trichlorophenol	* * * * * * * * * * * * * * * * * * * *	5100	υl	590	5100
2,4,5-Trichlorophenol	-	5100	υÌ	660	5100
2,4-Dinitrophenol		15000	U	2900	15000
4-Nitrophenol		15000	υ	3300	15000
4,6-Dinitro-2-methylphenol	8	15000	U	1400	15000
Pentachlorophenol		15000	Ū/	1500	15000
Bis(2-chloroethyl)ether		510	υl	69	510
1.3-Dichlorobenzene		5100	υŀ	460	5100
Benzoic acid		5100	U	5100	5100
1,4-Dichlorobenzene	ř	5100	üŀ	570	5100
1,2-Dichlorobenzene	, , ,	5100	ŭί	590	5100
N-Nitrosodi-n-propylamine		510	ŭΙ	85	510
Hexachloroethane		510	υl	56	510
Vitrobenzene		510	ŭΪ	72	510
sophorone		5100	ŭ	620	5100
Bis(2-chloroethoxy)methane		5100	ŭ	660	5100
1,2,4-Trichlorobenzene		510	ŭ ¶	58	510
Vaphthalene		83000	DJ	590	5100
4-Chloroaniline		5100	 US	1300	5100
-lexachlorobutadiene		1000	u 🗗	120	1000
2-Methylnaphthalene		11000	DJ	650	5100
Hexachlorocyclopentadiene		5100	UJ	600	5100
2-Chloronaphthalene		5100	ار U	570	5100
2-Nitroaniline		10000	U	2100	
Dimethyl phthalate		5100	Ü	_	10000
Acenaphthylene		2900	J D	600	5100
2.6-Dinitrotoluene		1000	UF	600	5100
3-Nitroaniline		1000	U 5	150	1000
				1800	10000
Acenaphthene		1200	JD	740	5100
Dibenzofuran		16000	DJ	600	5100
2,4-Dinitrotoluene		1000	US	170	1000
Diethyl phthalate		5100	U [	600	5100
1-Chlorophenyl phenyl ether		5100	UP	600	5100
Fluorene		27000	DI	650	5100
4-Nitroaniline		10000	UJ	1600	10000
N-Nitrosodiphenylamine		5100	U	500	5100
4-Bromophenyl phenyl ether		5100	U /	500	5100
-lexachlorobenzene		510	U Å	69	510

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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:

Date Sampled: 06/14/2012 1530

Date Received: 06/16/2012 1000

8270C Semivolatile	Organic	Compounde	(CC/MS)
82/UC Semiyolatile	Organic	Compounds	(GC/MS)

Analysis Method:

8270C 3541

Analysis Batch:

460-118204

34.9

Instrument ID:

BNAMS11

Prep Method: Dilution:

Prep Batch:

460-117106

Lab File ID: Initial Weight/Volume: z19295.d 15.01 g

Surrogate

Phenol-d5

Nitrobenzene-d5

Terphenyl-d14

2-Fluorophenol

2-Fluorobiphenyl

2,4,6-Tribromophenol

10

Run Type:

DL

Final Weight/Volume:

1 mL

Analysis Date: Prep Date:

07/01/2012 1951 06/22/2012 0849

Injection Volume:

1 uL

Acceptance Limits

38 - 105

41 - 118

16 - 151

10 - 120

37 - 125

40 - 109

Analyte	DryWt Corrected: Y	Result (ug/Kg)		Qualifier	MDL	RL Na I
Phenanthrene		57000		DΣ	650	5100
Anthracene		26000		D.J	620	5100 armon in 2
Carbazole		3200		JD.	600	5100
Di-n-butyl phthalate		5100		UJ	630	5100
Fluoranthene		25000		DJ	680	5100
Pyrene		21000		DJ	430	5100
Butyl benzyl phthalate		5100		υJ	470	5100
3,3'-Dichlorobenzidine		10000		ロゴ	1800	10000
Benzo[a]anthracene		14000		DI	35	510
Chrysene		14000		DI	590	5100
Bis(2-ethylhexyl) phthalate		2100		JD	1700	5100
Di-n-octyl phthalate		5100		リグ	320	5100
Benzo[b]fluoranthene		12000		DJ	32	510
Benzo[k]fluoranthene		5100		DĬ	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	991	UJ	560	5100

%Rec

0

0

0

0

0

0

Qualifier

D

D

D

D

D

D

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:

200 11010 0

Solid

% Moisture:

Date Sampled: 06/14/2012 1545

Date Received: 06/16/2012 1000

#### 8270C Semivolatile Organic Compounds (GC/MS)

40.2

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 06/30/2012 0336 Analysis Date: Final Weight/Volume: 1 mL 06/22/2012 0849 Prep Date: Injection Volume: 1 uL

Analyte		DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol			550	· U	74	550
2-Chlorophe	nol 💮		550	U	73	550
2-Methylphe	nol		420	J	94	550
2-Nitropheno	ol =		550	U	62	550
3 & 4 Methyl	phenol		940		94	550
2,4-Dimethyl	phenol		430	J	140	550
2,4-Dichlorop	phenol		550	U	81	550
4-Chloro-3-m	nethylphenol		550	U	83	550
2,4,6-Trichlo	rophenol		550	U	65	550
2,4,5-Trichlo	rophenol		550	U	71	550
2,4-Dinitroph	enol		1700	U	310	1700
4-Nitropheno			1700	U	360	1700
4,6-Dinitro-2	-methylphenol		1700	U	150	1700
Pentachlorop	henol		1700	U	160	1700
Bis(2-chloroe	ethyl)ether		55	U	7.5	55
1,3-Dichlorob	oenzene		550	U₹	50	550
Benzoic acid			550	U	550	550
1,4-Dichlorob	oenzene		550	U≠	62	550
1,2-Dichlorob	penzene		550	U	64	550
N-Nitrosodi-r	n-propylamine		55	U	9.2	55
Hexachloroe	thane		55	U	6.1	55
Nitrobenzene	9		55	U	7.8	<b>55</b> He had
Isophorone			550	U	67	550
Bis(2-chloroe	ethoxy)methane		550	U	71	550
1,2,4-Trichlo	robenzene		55	U	6.3	55
Naphthalene			3500		64	550
4-Chloroanili	ne		550	U	150	550
Hexachlorob	utadiene		110	U	13	110
2-Methylnapl	hthalene		420	J	71	550
Hexachloroc	yclopentadiene		550	U	65	550
2-Chloronapl	hthalene		550	U	62	550
2-Nitroaniline	;		1100	U	230	1100
Dimethyl phtl	halate		550	U	65	550
Acenaphthyle	ene		490	J	65	550
2,6-Dinitrotol	uene		110	U	17	110
3-Nitroaniline	•		1100	U	200	1100
Acenaphther	ne		410	J	80	550
Dibenzofurar	า		180	J	65	550
2,4-Dinitrotol	uene		110	U	18	110
Diethyl phtha	late		550	U	66	550
4-Chloropher	nyl phenyl ether		550	U	65	550
Fluorene			610		71	550
4-Nitroaniline	•		1100	U	170	1100
N-Nitrosodipl	henylamine		550	U	54	550
	nyl phenyl ether		550	U	55	550
Hexachlorob			55	Ū	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

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

Analyte	DryWt Corrected: Y	Result (ug/Kg)	- 11.	Qualifier	MDL	RL
Phenanthrene		4400	***************************************	***************************************	70	550
Anthracene		2800			67	550
Carbazole		120	1	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
ndeno[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	Acceptanc	e 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	on and the
2-Fluorobiphenyl		71			40 - 109	THE SERVE

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:

200-11304-

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 Batch: Prep Method: 3541 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 06/19/2012 1530 Prep Date: Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		610	U	83	610
2-Chlorophenol		610	บ	81	610
2-Methylphenol		610	บ	100	610
2-Nitrophenol		610	บ	69	610
3 & 4 Methylphenol		610	U	100	610
2,4-Dimethylphenol		610	U	150	610
2,4-Dichlorophenol		610	บ	90	H#610 H., PHATTY A
4-Chloro-3-methylpher	nol	610	บ	93	610
2,4,6-Trichlorophenol		610	บ	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-methylph	enol	1900	U	170	1900
Pentachlorophenol		1900	U	180	1900
Bis(2-chloroethyl)ether	r	61	U.	8.4	61
1,3-Dichlorobenzene		610	U	56	610
Benzoic acid		610	บ	610	610
1,4-Dichlorobenzene		610	บ	69	610
1,2-Dichlorobenzene		610	U	71	610
N-Nitrosodi-n-propylan	nine	61	บ	10	61
		61	Ū	6.8	61
Nitrobenzene		61	U	8.7	61 1000 000 000
Isophorone		610	U	75	610
Bis(2-chloroethoxy)me	thane	610	U	79	610
1,2,4-Trichlorobenzene		61	Ū	7.0	61
Naphthalene		9700	_	71	610
4-Chloroaniline		610	 U	160	610
Hexachlorobutadiene		120	Ū	15	120
2-Methylnaphthalene		1500		79	610
Hexachlorocyclopenta	diene	610	U	72	610
2-Chloronaphthalene		610	Ü	69	610
2-Nitroaniline		1200	Ü	260	1200
Dimethyl phthalate		610	IJ	73	610
Acenaphthylene		250	j	73	610
2,6-Dinitrotoluene		120	Ü	19	120
3-Nitroaniline		1200	U	220	1200
Acenaphthene		170	J	90	610
Dibenzofuran		1800	5	72	610
2,4-Dinitrotoluene		120	U	20	120
Diethyl phthalate		610	U	73	610
4-Chlorophenyl phenyl	ether	610	U	73 72	610
Fluorene	Culci	2000	U	72 79	610
4-Nitroaniline		1200	บ	79 190	1200
N-Nitrosodiphenylamin	10	610	U	190 61	
4-Bromophenyl phenyl		610	U		610
4-втоторпенугрпенуг Hexachlorobenzene	Culci	610	U	61	610
nexacnioropenzene		0.1	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)
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Analysis Method: Prep Method:

8270C 3541

Analysis Batch:

460-116936

Instrument ID: Lab File ID:

BNAMS11 zz18919.d

Dilution: Analysis Date:

1.0 06/21/2012 0208 Prep Batch:

460-117694

Initial Weight/Volume:

15.05 g

Final Weight/Volume: 1 mL Injection Volume:

Prep Date: 06/19/26	012 1530			on Volume:	1 uL
Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene	j 6	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
					· III
Surrogate	T . St.	%Rec	Qualifier	Accept	tance Limits
Nitrobenzene-d5		54		38 - 10	05
Phenol-d5		57		41 - 11	8
Terphenyl-d14		<b>9</b> 69		16 - 15	51 - 111 - 1 5 - 113 111 1
2,4,6-Tribromophenol		70		10 - 12	20
2-Fluorophenol		50		37 - 12	25 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11 April 11
2-Fluorobiphenyl		74		40 - 10	)9 Reference 1

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: Dilution:

3541

Prep Batch:

Lab File ID: Initial Weight/Volume: zz18904.d

Analysis Date:

1.0

460-117694

15.02 g

Prep Date:

06/20/2012 2016 06/19/2012 1530 Final Weight/Volume: 1 mL Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	3 1 12 1	Qualifier	MDL	RL COLUMN
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	. 1	U	100	410
2,4-Dichlorophenol		410		Ü	60	410
4-Chloro-3-methylphenol		410		Ü	62	410
2,4,6-Trichlorophenol		410		Ü	48	410
2,4,5-Trichlorophenol		410		Ü	53	410
2,4-Dinitrophenol		1200		Ü	230	1200
4-Nitrophenol		1200		Ü	260	1200
4,6-Dinitro-2-methylphenol		1200		U	110	1200
Pentachlorophenol		1200		U	120	1200
• ,		41		U	5.6	
Bis(2-chloroethyl)ether 1.3-Dichlorobenzene		410		U		41 11 20 11 12 1
•		· -		-	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 = Tro/famil
Isophorone		410		U	50	410
Bis(2-chloroethoxy)methane		410		U	53	410
1,2,4-Trichlorobenzene		41		U	4.7	<b>41</b> n. ymfei (16.5
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		Ü	46	410
2-Nitroaniline		830		Ū	170	830
Dimethyl phthalate		410		Ü	49	410
Acenaphthylene		410		Ü	48	410
2,6-Dinitrotoluene		83		Ü	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 Semivoiatile Organic Compounds (GC/MS)

Analysis Method: Prep Method:

8270C 3541

Analysis Batch:

460-116936

Instrument ID: Lab File ID:

BNAMS11

Dilution:

1.0

Prep Batch:

460-117694

Initial Weight/Volume:

zz18904.d 15.02 g

Analysis Date:

Prep Date:

06/20/2012 2016 06/19/2012 1530

Final Weight/Volume: Injection Volume:

1 mL 1 uL

Analyte	DryWt Corrected: Y	Result (ug/K	g)	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	10.	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
Phenof-d5		70		41 - 118
Terphenyl-d14		66		16 - 151
2,4,6-Tribromophenol		72		10 - 120
2-Fluorophenol	. 7	71		37 - 125
2-Fluorobiphenyl		72	112	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
Prep Method:	3541

Analysis Batch:

460-116936

Instrument ID: "

BNAMS11 zz18905.d

Dilution:

1.0

Prep Batch:

460-117694

Lab File ID: Initial Weight/Volume:

14.97 g 1 mL

Analysis Date: Prep Date:

06/20/2012 2039 06/19/2012 1530 Final Weight/Volume: Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/K		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		<del>-370</del>	-U-R	56	<del>-370</del>	
2,4,6-Trichlorophenol		370	U	43	370	
2,4,5-Trichlorophenol		370	U	48	370	
2,4-Dinitrophenol		_1100	-4-R	<del>-210</del>	4100	
4-Nitrophenol		1100	U	240	1100	
4,6-Dinitro-2-methylphenol		1100	U	100	1100	
Pentachlorophenol		1100	UJ	110	1100	
Bis(2-chloroethyl)ether		37	່ ບົ	5.0	37	
1,3-Dichlorobenzene		370	Ū	33	370	
Benzoic acid		<del>-370</del>	-U-R	-370	370	
1,4-Dichlorobenzene		370	Ū	42	370	
1,2-Dichlorobenzene		370	Ū	43	370	
N-Nitrosodi-n-propylamine		37	Ü	6.2	37	
Hexachloroethane		37	Ū	4.1	37	
Nitrobenzene		37	u U	5.2	37	
Isophorone		370	Ü	45	370	
Bis(2-chloroethoxy)methane		370	Ü	48	370	
1,2,4-Trichlorobenzene		37	Ū	4.2	37	
Naphthalene		370	U	43	370	
4-Chloroaniline		370	U	98	370	
Hexachlorobutadiene		75	Ü	9.0	75	
2-Methylnaphthalene		370	Ū	47	370	
Hexachlorocyclopentadiene		370	Ü	43	370	
2-Chloronaphthalene		370	Ü	41	370	
2-Nitroaniline		750	Ü	150	750	
Dimethyl phthalate		370	Ü	44	370	
Acenaphthylene		370	Ü	44	370	
2.6-Dinitrotoluene		75	Ü	11	75	
3-Nitroaniline		750	Ü	130	750	
Acenaphthene		370	บ	54	370	
Dibenzofuran		370	U	43	370 370	
2,4-Dinitrotoluene		75	บ	43 12	370 75	
Diethyl phthalate		75 370	U	12 44	75 370	
• •		370 370	บ	44 43		
4-Chlorophenyl phenyl ether Fluorene		370 370	U		370 370	
				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)
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Analysis Method: Prep Method:

8270C 3541

Analysis Batch:

460-116936

Instrument ID:

BNAMS11

Dilution:

Prep Batch:

460-117694

Lab File ID:

zz18905.d

Analysis Date:

1.0

06/20/2012 2039

Initial Weight/Volume:

14.97 g

Prep Date:

06/19/2012 1530

Final Weight/Volume: Injection Volume:

1 mL 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	¥J.		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	L Sy a	U	120	370
Di-n-octyl phthalate			370		U	24	370
Benzo[b]fluoranthene			37		U	2.3	37
Benzo[k]fluoranthene		2	37		U	2.8	37
Benzo[a]pyrene		7.5	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]	0		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

Initial Weight/Volume:

Dilution:

20

Prep Batch:

29.91 g

200-40530

Analysis Date:

Final Weight/Volume:

2000 uL

Prep Date:

06/28/2012 1009 06/19/2012 0809 Injection Volume: Result Type:

2 uL **PRIMARY** 

Analyte

DryWt Corrected: Y

Result (mg/Kg)

Qualifier I

MDL 34

RL 230

Diesel Range Organics [C10-C28]

840 %Rec

Qualifier

Acceptance Limits

Surrogate o-Terphenyl

0

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B

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	<b>Organics</b>	(DRO)	(GC)

Analysis Method:

8015B

Analysis Batch:

200-40936

Instrument ID:

3012.i

Prep Method:

3550B

Prep Batch:

Initial Weight/Volume:

Dilution:

200-40530

30.44 g

1.0

Analysis Date:

Final Weight/Volume:

2000 uL

Prep Date:

06/20/2012 2114 06/19/2012 0809 Injection Volume: Result Type:

2 uL **PRIMARY** 

Analyte

Diesel Range Organics [C10-C28]

DryWt Corrected: Y

Result (mg/Kg) 4.3-7.4

Qualifier JB-UB MDL 1.1

RL 7.4

Surrogate

%Rec

Qualifier

Acceptance Limits

o-Terphenyl

79

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

06/28/2012 0212

06/22/2012 1046

Client Matrix:

Solid

% Moisture:

46.4

Date Sampled: 06/15/2012 1600

Date Received: 06/20/2012 1010

8015B Diesel Range Organics (D	RO)	(GC)
--------------------------------	-----	------

Analysis Method: Prep Method:

Analysis Date:

Prep Date:

8015B 3550B

10

Analysis Batch: Prep Batch:

200-41066 200-40766 Instrument ID:

3012.i

Initial Weight/Volume: Final Weight/Volume:

30.34 g 2000 uL

Injection Volume: Result Type:

2 uL

**PRIMARY** 

Analyte

Dilution:

DryWt Corrected: Y

Result (mg/Kg) 1000

Qualifier B I

MDL 18

RL 120

Diesel Range Organics [C10-C28] Surrogate

%Rec

Qualifier

Acceptance Limits

o-Terphenyl

0

X

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1

Sdg Number: 11278

Ciient 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	<b>Organics</b>	(DRO)	(GC)
00100	210301	1101190	VINGINGS	(DILO)	1001

Analysis Method:

8015B 3550B

Analysis Batch:

200-41066

Instrument ID:

3012.i

Prep Method: Dilution: Analysis Date:

1.0

06/28/2012 0248 06/22/2012 1046 Prep Batch:

200-40766

Initial Weight/Volume:

30.06 g

Final Weight/Volume: Injection Volume:

2000 uL

Result Type:

2 uL **PRIMARY** 

Analyte

Prep Date:

DryWt Corrected: Y

Result (mg/Kg)

Qualifier JB-UB MDL 1.2

RL 8.3

Diesel Range Organics [C10-C28]

-6.5 8.3

Qualifier

Acceptance Limits

Surrogate o-Terphenyl %Rec 55

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1

Sdg Number: 11278

Client Sample ID:

Tetrachloro-m-xylene

DCB Decachlorobiphenyl

SB-11 (1-2.5)

Lab Sample ID:

200-11278-1

Client Matrix:

0.51

Solid

% Moisture:

44

33

10.1

Date Sampled: 06/12/2012 0900

30 - 130

45 - 125

Date Received: 06/14/2012 1030

	8082A Polyc	hlorinated Biphenyl	s (PCBs) by	Gas Chro	omatography	9 B	
Analysis Method: Prep Method: Dilution: Analysis Date: Prep Date:	8082A 3541 1.0 06/18/2012 2107 06/14/2012 1739	Analysis Batch: Prep Batch:	200-40613 200-40366		Instrument ID: Initial Weight/Volume: Final Weight/Volume: Injection Volume: Result Type:	3283.i 15.52 g 5000 uL 1 uL PRIMARY	
Analyte	DryWt Corrected: Y	Result (ug/	Kg)	Qualifie	r MDL	RL	
PCB-1016		18	galir nerneras rasaudunnas sauce duceben appalates	U	6.0	1.18	
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		Qualifie	r Accepta	nce Limits	

Χ

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 Chromatogr
----------------------------------------------------------

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: Prep Date:

06/18/2012 2107 06/14/2012 1739 Injection Volume: Result Type:

1 uL **SECONDARY** 

Surrogate Tetrachloro-m-xylene DCB Decachlorobiphenyl

46 39

%Rec

Х

Qualifier

30 - 130 45 - 125

Acceptance Limits

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

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 06/14/2012 1739 Prep Date: Result Type: **PRIMARY** 

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL ***
PCB-1016	5 · { {	24	UJ	7.8	24
PCB-1221	35	24	U	6.0	24
PCB-1232		24	υ(	4.6	24
PCB-1242		24	υÌ	9.3	24
PCB-1248		24	υ	2.8	24
PCB-1254		24	υ	3.9	24
PCB-1260		24	U	3.3	24
PCB-1262		24	υ	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

Initial Weight/Volume:

Dilution:

1.0

Prep Batch:

200-40366

15.69 g

Final Weight/Volume:

5000 uL

Analysis Date: Prep Date:

06/18/2012 2137 06/14/2012 1739 Injection Volume: Result Type:

Qualifier

1 uL

SECONDARY

Surrogate Tetrachloro-m-xylene

DCB Decachlorobiphenyl

%Rec 31 31

Χ

Acceptance Limits 30 - 130

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 Polyc	hlorinated Bipheny	is (PCBs) by	Gas Chro	omatography		
Prep Method: : Dilution: : Analysis Date: :	8082A 3541 1.0 06/18/2012 2206 06/14/2012 1739	Analysis Batch: Prep Batch:	200-40613 200-40366		Instrument ID: Initial Weight/Volume: Final Weight/Volume: Injection Volume: Result Type:	3283.i 14.71 g 5000 uL 1 uL PRIMARY	
Analyte	DryWt Corrected: Y	Result (ug	/Kg)	Qualifie	r MDL	RL	
PCB-1016		35		U	12	35	***************************************
PCB-1221		35	41	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		Qualifie	r Accepta	nce Limits	
Tetrachloro-m-xylene		51		************************************	30 - 130		PPA-VIA-MAN V PRANTANANNY CZSANTANAKSAN NEBASA
DCB Decachlorobiphe	nyl	40		Х	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

Analysis Method:

8082A

Analysis Batch:

200-40613

Instrument ID:

3283.i

Prep Method:

3541

Initial Weight/Volume:

Prep Batch:

200-40366

14.71 g

Dilution:

1.0

Final Weight/Volume:

5000 uL

Analysis Date: Prep Date:

06/18/2012 2206 06/14/2012 1739 Injection Volume: Result Type:

Qualifier

1 uL SECONDARY

Surrogate Tetrachloro-m-xylene DCB Decachlorobiphenyl %Rec 56 52

Acceptance Limits 30 - 130 45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1

Sdg Number: 11278

Client Sample ID:

DCB Decachlorobiphenyl

SB-28 (3-5)

Lab Sample ID:

200-11278-4

Client Matrix:

200-1127

Solid

% Moisture:

30.9

Date Sampled: 06/12/2012 1045

Date Received: 06/14/2012 1030

Analysis Method: 8082A Analysis Batch: 200-40613 Instrument ID: 3283.i Prep Method: 3541 Prep Batch: 15.94 g 200-40366 Initial Weight/Volume: 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

10

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL MUNICE
PCB-1016	nter i dischi triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di triadi di tr	23	UJ	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	υ	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	υŧ	1.9	23
Surrogate		%Rec	Qualifier	Accep	otance Limits
Tetrachloro-m-xyl	ene	21	X	30 - 1	30

Х

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 Polychiorinated Biphenyis (PCBs)	by Gas Chromatography
----------------------------------------	-----------------------

Analysis Method:

8082A

Analysis Batch:

200-40613

Instrument ID:

3283.i

Prep Method:

3541

Prep Batch:

Initial Weight/Volume:

15.94 g

Dilution:

1.0

200-40366

Final Weight/Volume:

5000 uL

Analysis Date: Prep Date:

06/18/2012 2236

06/14/2012 1739

Injection Volume: 1 uL

Result Type:

**SECONDARY** 

Surrogate	14.474	%Rec	Qualifier Acceptance Lir	nits
Tetrachloro-m-xylene	1 ~	22	X 30 - 130	4
DCB Decachlorobiphenyl	i	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:

e: 39.4

Date Sampled: 06/14/2012 1130

Date Received: 06/15/2012 1015

	8082A Polyd	hiorinated Bipheny	is (PCBs) by	Gas Chro	matography		
Prep Method: 38 Dilution: 1. Analysis Date: 06	082A 541 0 6/20/2012 1839 6/18/2012 0928	Analysis Batch: Prep Batch:	200-40761 200-40461		Instrument ID: Initial Weight/Volume: Final Weight/Volume: Injection Volume: Result Type:	3283.i 15.23 g 5000 uL 1 uL PRIMARY	
Analyte	DryWt Corrected: Y	Result (ug	/Kg)	Qualifie	r MDL	RL	
PCB-1016		28	a de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition de la composition della comp	U	9.1	28	2 s.p. *
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		Qualifie	r Acceptan	ce Limits	
Tetrachloro-m-xylene		48			30 - 130	\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$	044403400-03444-4660 (hvy 6,45340490)-6350044446.com
DCB Decachlorobiphen	yl	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

06/18/2012 0928

% Moisture:

39.4

Date Sampled: 06/14/2012 1130

Date Received: 06/15/2012 1015

8082A Polychiorinated Biphenyls (PCBs) by Gas Chromatography
--------------------------------------------------------------

Analysis Method:

8082A

Analysis Batch:

200-40761

Instrument ID:

3283.i

Prep Method:

3541

Initial Weight/Volume:

15.23 g

Dilution:

Prep Batch:

200-40461

1.0

Final Weight/Volume:

5000 uL

Analysis Date: Prep Date:

06/20/2012 1839

Injection Volume:

1 uL

Result Type:

Qualifier

SECONDARY

Surrogate Tetrachloro-m-xylene DCB Decachlorobiphenyl

%Rec 55 55

30 - 130 45 - 125

Acceptance Limits

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 Polychiorinated	Biphenyls (PCBs) by G	Sas Chromatography

Analysis Method: Prep Method:

8082A 3541

Analysis Batch:

200-40761

Instrument ID:

3283.i

Dilution:

1.0

Prep Batch: 200-40461

Initial Weight/Volume: Final Weight/Volume:

15.48 g 5000 uL

Analysis Date: Prep Date:

06/20/2012 1909 06/18/2012 0928 Injection Volume: Result Type:

1 uL PRIMARY

. Top Bato.				I Cou	пстурс.	FIXIMART
Analyte	DryWt Corrected: Y	Result (ug/Kg)		Qualifier	MDL	RL
PCB-1016		33		U	11	33
PCB-1221		33		U	8.4	33 30 0000
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	Acce	otance Limits
Tetrachloro-m-xyle	ene	50	·	ti Sonditili della lanni la la la la la la la la la la la la la	30 - 130	
DCB Decachlorob	iphenyl	50			45 - 1	25

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1

Sdg Number: 11278

Cilent 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

Initial Weight/Volume:

Dilution:

15.48 g

1.0

Prep Batch:

200-40461

5000 uL

Analysis Date:

Final Weight/Volume: Injection Volume:

1 uL

Prep Date:

06/20/2012 1909 06/18/2012 0928

Result Type:

Qualifier

**SECONDARY** 

Surrogate Tetrachioro-m-xylene

DCB Decachlorobiphenyl

%Rec 51 50

30 - 130 45 - 125

Acceptance Limits

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:

Surrogate

Tetrachloro-m-xylene

DCB Decachlorobiphenyl

Solid

% Moisture:

11.4

Date Sampled: 06/14/2012 0910

Date Received: 06/15/2012 1015

Acceptance Limits

30 - 130

45 - 125

		8082A Polyc	hlorinated Bipheny	ls (PCBs) by	Gas Chro	omatography		
Analysis Meth	od: 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	or of country Dr	yWt Corrected: Y	Result (ug	/Kg)	Qualifie	r MDL	RL	de la
PCB-1016			19		U	6.2	- 19	* /
PCB-1221			19		U	4.7	19	
PCB-1232			19		Ü	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		Ü	1.5	19	

Qualifier

%Rec

76

69

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

Analysis Method:

8082A 3541

Analysis Batch:

200-40761

Instrument ID:

3283.i

Prep Method:

Initial Weight/Volume:

15.36 g

Dilution:

1.0

Prep Batch:

200-40461

Final Weight/Volume:

Analysis Date:

Injection Volume:

5000 uL 1 uL

Prep Date:

06/20/2012 1938 06/18/2012 0928

Result Type:

Qualifier

**SECONDARY** 

Surrogate

DCB Decachlorobiphenyl

Tetrachloro-m-xylene

%Rec 80 73

30 - 130 45 - 125

Acceptance Limits

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	Biphenyis (P	CBs) by Gas	Chromatography
-----------------------	--------------	-------------	----------------

		00027170190	mormated Diplicity	· (. 020, 23	Ous Oill	omatograpmy		
Analysis Method: Prep Method: Dilution: Analysis Date: Prep Date:	8: 8082A 3541 1.0 06/20/2012 06/18/2012			200-40761 200-40461		Instrument ID: Initial Weight/Volume: Final Weight/Volume: Injection Volume: Result Type:	3283.i 14.95 g 5000 uL 1 uL PRIMARY	
Analyte	Sign Page	DryWt Corrected: Y	Result (ug/l	(g)	Qualifie	er MDL	RL	
PCB-1016			26	territiretri renterrita eta este este en este en este este en este en este en este en este en este en este est	U	8.6	26	***************************************
PCB-1221			26		U	6.6	26	Over-Parent
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		Qualifie	er Accepta	nce Limits	
Tetrachloro-m-xy	/lene		73			30 - 130		995/cm3+m3, x45011110m4116.9704m64626666666666666666666666666
DCB Decachloro	biphenyl		52			45 - 125	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

#### 8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:

8082A 3541

Analysis Batch:

200-40761

Instrument ID:

3283.i

Prep Method: Dilution:

Prep Batch:

Initial Weight/Volume:

14.95 g

1.0

200-40461

Final Weight/Volume:

5000 uL

Analysis Date: Prep Date:

06/20/2012 2008 06/18/2012 0928

Injection Volume: Result Type:

Qualifier

1 uL SECONDARY

Surrogate Tetrachloro-m-xylene DCB Decachlorobiphenyl

78 56

%Rec

Acceptance Limits 30 - 130

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 Polyo	hlorinated Biphenyl	s (PCBs) by	Gas Chro	matography		
Analysis Method: Prep Method: Dilution: Analysis Date: Prep Date:	8082A 3541 1.0 06/20/2012 2037 06/18/2012 0928	Analysis Batch: Prep Batch:	200-40761 200-40461		Instrument ID: Initial Weight/Volume: Final Weight/Volume: Injection Volume: Result Type:	3283.i 15.28 g 5000 uL 1 uL PRIMARY	
Analyte	DryWt Corrected: Y	Result (ug/	Kg)	Qualifie	MDL	RL	6/1 1 100
PCB-1016	F 1	22	}	U	7.2	22	4 7 7
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		Qualifie	Accepta	nce Limits	
Tetrachloro-m-xylene		70		dalahnaki/Wannir A stayooni-gayaka	30 - 130		9965-10-1485-14-450-17-2014-1-165-566-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1
DCB Decachlorobiph	enyl	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

Analysis Method:

8082A

Analysis Batch:

200-40761

Instrument ID:

3283.i

Prep Method:

3541

Dilution:

Prep Batch:

200-40461

Initial Weight/Volume:

15.28 g

1.0

Final Weight/Volume:

Analysis Date:

Qualifier

5000 uL

Prep Date:

06/20/2012 2037 06/18/2012 0928 Injection Volume: Result Type:

1 uL SECONDARY

Surrogate

Tetrachloro-m-xylene DCB Decachlorobiphenyl %Rec 71 70

30 - 130 45 - 125

Acceptance Limits

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:

Surrogate

Tetrachloro-m-xylene

DCB Decachlorobiphenyl

Solid

% Moisture:

%Rec

86

52

13.2

Date Sampled: 06/14/2012 1700

Acceptance Limits

30 - 130

45 - 125

Date Received: 06/16/2012 1000

	8082A Polye	hlorinated Biphen	/ls (PCBs) by	Gas Chro	omatography		
Analysis Method Prep Method: Dilution: Analysis Date: Prep Date:	d: 8082A 3541 1.0 06/20/2012 2107 06/18/2012 0928	Analysis Batch: Prep Batch:	200-40761 200-40461		Instrument ID: Initial Weight/Volume: Final Weight/Volume: Injection Volume: Result Type:	3283.i 15.14 g 5000 uL 1 uL PRIMARY	
Analyte	DryWt Corrected: Y	Result (ug	g/Kg)	Qualifie	r 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	

Qualifier

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

Analysis Method:

8082A

Analysis Batch:

200-40761

Instrument ID:

3283.i

Prep Method:

3541

Prep Batch:

Initial Weight/Volume:

Dilution:

200-40461

15.14 g

Qualifier

1.0

Final Weight/Volume:

5000 uL

Analysis Date: Prep Date:

06/20/2012 2107 06/18/2012 0928 Injection Volume: Result Type:

1 uL SECONDARY

Surrogate

%Rec 89

Acceptance Limits

30 - 130

Tetrachloro-m-xylene DCB Decachlorobiphenyl

52

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 Polyc	hlorinated Biphenyls (PCB	s) by Gas Chro	matography		
Analysis Method Prep Method: Dilution: Analysis Date: Prep Date:		Analysis Batch: 200-40 Prep Batch: 200-40	761	Instrument ID: Initial Weight/Volume: Final Weight/Volume: Injection Volume: Result Type:	3283.i 15.69 g 5000 uL 1 uL PRIMARY	
Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifie	mDL	RL	
PCB-1016		19	U	6.2	• 19	- 1
PCB-1221	A	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	Ū	1.7	19	
PCB-1268		19	U	1.6	19	
Surrogate		%Rec	Qualifie	r Accepta	ance Limits	
Tetrachloro-m-xy	/lene	84		30 - 130		ner diseder S. districter is sommer repropriet store accept to be
DCB Decachlorobiphenyl		70		45 - 125	5	

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 Polychiorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:

8082A

Analysis Batch:

200-40761

Instrument ID:

3283.i

Prep Method:

3541

Prep Batch:

Initial Weight/Volume:

Dilution:

1.0

15.69 g

200-40461

Final Weight/Volume:

5000 uL

Analysis Date: Prep Date:

06/20/2012 2136 06/18/2012 0928 Injection Volume:

1 uL

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: Prep Method:

Dilution:

8082A 3541

1.0

Analysis Batch: Prep Batch:

200-40761 200-40461 Instrument ID: Initial Weight/Volume:

3283.i

15.57 g

Final Weight/Volume: 5000 uL

Analysis Date: Prep Date:		12 2206 12 0928		Injed	tion Volume: ult Type:	1 uL PRIMARY
Analyte	efector approach	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		kriste hitelitätätä kirit 1 (100 kirit 100 kiritaki kristati (kristati kristati kris	19	U	6.4	19
PCB-1221			19	U	4.9	19 10 11 15
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	Accepta	nce Limits
Tetrachloro-m-xylene		80	0.000000000000000000000000000000000000	30 - 130	6-06-000-000000 /-11 - 6-000-06-06-06-06-06-06-06-06-06-06-06-0	
DCB Decachlo	-		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:

06/18/2012 0928

Solid

% Moisture:

15.2

Date Sampled: 06/15/2012 1000

Date Received: 06/16/2012 1000

8082A Polychlorinated Biphenyis (PCBs) by Gas Chromatography

Analysis Method: Prep Method:

Prep Date:

8082A 3541

Analysis Batch:

200-40761

Instrument ID:

3283.i

15.57 g

Dilution: Analysis Date: 06/20/2012 2206

1.0

Prep Batch:

200-40461

Initial Weight/Volume: Final Weight/Volume:

Injection Volume:

5000 uL 1 uL

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

17.1

% Moisture:

Date Sampled: 06/15/2012 1130

Date Received: 06/16/2012 1000

	8082A Polyc	chiorinated Bipheny	is (PCBs) by	Gas Chro	matography		
Analysis Method: Prep Method: Dilution: Analysis Date: Prep Date:	8082A 3541 1.0 06/20/2012 2306 06/18/2012 0928	Analysis Batch: Prep Batch:	200-40761 200-40461		Instrument ID: Initial Weight/Volume: Final Weight/Volume: Injection Volume: Result Type:	3283.i 15.57 g 5000 uL 1 uL PRIMARY	
Analyte	DryWt Corrected: Y	Result (ug	/Kg)	Qualifie	r 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		Qualifie	r Acceptan	ice Limits	
Tetrachloro-m-xylen		81		ida di Calada, 1668 nin disentenen diseggiana, yani	30 - 130	\$\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	terres de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya
DCB Decachlorobip	henyl	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

Initial Weight/Volume:

Dilution:

Prep Batch:

200-40461

15.57 g

1.0

Final Weight/Volume:

5000 uL

Analysis Date:

Qualifier

Injection Volume:

1 uL

Prep Date:

06/20/2012 2306 06/18/2012 0928

Result Type:

**SECONDARY** 

Surrogate

%Rec 84

Acceptance Limits 30 - 130

Tetrachloro-m-xylene 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

			,,		
Analysis Method Prep Method: Dilution: Analysis Date: Prep Date:	8082A 3541 1.0 06/20/2012 2336 06/18/2012 0928		0-40761 0-40461	Instrument ID: Initial Weight/Volume Final Weight/Volume: Injection Volume: Result Type:	
Analyte	DryWt Correct	cted: Y Result (ug/Kg)	Qualif	ier MDL	RL :4/3/91
PCB-1016		28	· U	9.4	28° , Buí-F°
PCB-1221		28	υ	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	Qualif	ier Accep	etance Limits
Tetrachloro-m-xy	ene	66		30 - 1	30
DCB Decachloro	piphenyl	49		45 - 1	25

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 3541

Analysis Batch:

200-40761

Instrument ID:

3283.i

Prep Method:

Prep Batch:

Initial Weight/Volume:

15.23 g

Dilution:

1.0

%Rec

200-40461

Final Weight/Volume:

Qualifier

5000 uL

Analysis Date: Prep Date:

06/20/2012 2336 06/18/2012 0928

Injection Volume: Result Type:

1 uL SECONDARY

Surrogate Tetrachloro-m-xylene DCB Decachlorobiphenyl

74 52

30 - 130 45 - 125

Acceptance Limits

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 Polyc	hlorinated Bipheny	ls (PCBs) by	Gas Chro	omatography		
Analysis Method:	8082A	Analysis Batch:	200-40761		Instrument ID:	3283.i	
Prep Method:	3541 made One of trade	Prep Batch:	200-40461		Initial Weight/Volume:	15.36 g	
Dilution:	1.0 Emilion of periods				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)	Qualifie	r MDL	RL	2 2 2 1
PCB-1016		19		U	6.2	19	1500
PCB-1221	3 1 1 2 E	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		Qualifie	r Accepta	nce Limits	
Tetrachloro-m-xyle	ene	86	viller-Merebelar Art Artificientii Sa. Artifiqilar sigʻaletiyar gali	65854646.34-45-45-45-45-65-65-65-65-65-65-65-65-65-65-65-65-65	30 - 130	nn mar de la company de la company de la company de la company de la company de la company de la company de la	645 cm in California (Antinopolar Dispension (Antinopolar California (Alice India)
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

200-40461

Dilution:

Prep Batch:

Initial Weight/Volume:

15.36 g

1.0

Final Weight/Volume:

Qualifier Acceptance Limits

5000 uL

Analysis Date:

89

Prep Date:

06/21/2012 0006 06/18/2012 0928

Injection Volume: Result Type:

1 uL SECONDARY

Surrogate Tetrachloro-m-xylene

DCB Decachlorobiphenyl

%Rec 87

30 - 130 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 Poly	chlorinated Biphenyls (P	CBs) by Gas Chr	omatography	
Analysis Method: Prep Method:	8082A 3541	•	0-40761 0-40461	Instrument ID: Initial Weight/Volume:	3283.i 14.95 g
Dilution:	1911.0 1911 1911 1911 1911 1911 1911 191		, , , , , ,	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)	Qualifie	r MDL	RL
PCB-1016		26	U	8.6	26 ·
PCB-1221		26	Ú	6.6	26 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
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	Qualifie	r Accept	ance Limits
Tetrachloro-m-xyl	ene	55	www.yeeu.weguus.meleonolololololololololololololololololo	30 - 13	$ar{0}$
DCB Decachlorol	biphenyl	59		. 45 - 12	5

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

Analysis Method:

8082A

Analysis Batch:

200-40761

Instrument ID:

3283.i

Prep Method:

3541

200-40461

Initial Weight/Volume:

14.95 g

Dilution:

Prep Batch:

1.0

Final Weight/Volume: Injection Volume:

5000 uL 1 uL

Analysis Date: Prep Date:

06/21/2012 0035 06/18/2012 0928

Result Type:

Qualifier

SECONDARY

Surrogate	
Tetrachloro-m-xylene	è
DCB Decachlorobiph	enyl

%Rec 63 60

30 - 130 45 - 125

Acceptance Limits

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 Pol	ychlorinated	<b>Biphenyls</b>	(PCBs) b	v Gas	Chromatography
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Analysis Method Prep Method:	i: 8082A 3541	Analysis Batch:	200-40761		Instrument ID:	3283.i
Dilution:	1.0	Prep Batch:	200-40461		Initial Weight/Volume:	15.47 g
	06/21/2012 0105				Final Weight/Volume:	0000 UL
Analysis Date:					Injection Volume:	1 uL
Prep Date:	06/18/2012 0928				Result Type:	PRIMARY
Analyte	DryWt Corrected:	Y Result (ug	g/Kg)	Qualifie	r MDL	RL STATE
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	Biphenyis	(PCBs) by Gas	Chromatography
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Analysis Method:

8082A

Analysis Batch:

200-40761

Instrument ID:

3283.i

Prep Method:

3541

Initial Weight/Volume:

Dilution:

Prep Batch:

200-40461

15.47 g

1.0

Final Weight/Volume:

5000 uL

Analysis Date: Prep Date:

06/21/2012 0105 06/18/2012 0928

Injection Volume: Result Type:

Qualifier

1 uL SECONDARY

Surrogate Tetrachloro-m-xylene

DCB Decachlorobiphenyl

%Rec 83 62

30 - 130 45 - 125

Acceptance Limits

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1

Sdg Number: 11278

Client Sample ID:

DCB Decachlorobiphenyl

SB-02 (11.5-13.1)

Lab Sample ID:

200-11384-1

Client Matrix:

Solid

% Moisture:

54

46.4

Date Sampled: 06/15/2012 1600

Date Received: 06/20/2012 1010

45 - 125

	8082A Polyd	hlorinated Bipheny	ls (PCBs) by	Gas Chro	omatography		
Analysis Method: Prep Method: Dilution: Analysis Date: Prep Date:	8082A 3541 1.0 06/23/2012 0537 06/20/2012 1403	Analysis Batch: Prep Batch:	200-40902 200-40636		Instrument ID: Initial Weight/Volume: Final Weight/Volume: Injection Volume: Result Type:	3283.i 15.50 g 5000 uL 1 uL PRIMARY	
Analyte	DryWt Corrected: Y	Result (ug	/Kg)	Qualifie	r MDL	RL	
PCB-1016		31		U	10	31	
PCB-1221	*	31	4.7	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		Qualifie	r Acceptar	nce Limits	
Tetrachloro-m-xyler	ne	61	r vitte til till til atlatik til sammen tenssa VII sammannann en men vitse sve		30 - 130	000 x x x 200 x x x x 0000 (400 x x x x 200 400 400 400 400 400 400 400 400 400	mination (Albania e su tarante manara ana austra austra and a

Client: ARCADIS U.S. Inc

Job Number: | 200-11278-1

Sdg Number: 11278

Cilent 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

Initial Weight/Volume:

15.50 g

Dilution:

Prep Batch:

200-40636

Final Weight/Volume:

1.0

Injection Volume:

5000 uL

Analysis Date: Prep Date:

06/23/2012 0537 06/20/2012 1403

1 uL

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 Polyc	hiorinated Biphenyi	s (PCBs) by	Gas Chro	omatography		
Analysis Method: Prep Method: Dilution: Analysis Date: Prep Date:	8082A 3541 1.0 06/23/2012 0608 06/20/2012 1403	Analysis Batch: Prep Batch:	200-40902 200-40636		Instrument ID: Initial Weight/Volume: Final Weight/Volume: Injection Volume: Result Type:	3283.i 14.79 g 5000 uL 1 uL PRIMARY	
Analyte	DryWt Corrected: Y	Result (ug/	Kg)	Qualifie	r 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		Qualifie	r Accepta	ance Limits	
Tetrachloro-m-xylen	<b>e</b>	78	######################################		30 - 13	0	
DCB Decachlorobip	henyi	82			45 - 12	5	

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

Initial Weight/Volume:

Dilution:

Prep Batch:

200-40636

14.79 g

1.0

Final Weight/Volume:

Qualifier

5000 uL

Analysis Date:

06/23/2012 0608

Injection Volume:

1 uL

Prep Date:

06/20/2012 1403

Result Type:

SECONDARY

Surrogate

Tetrachloro-m-xylene DCB Decachlorobiphenyl %Rec 83 84

30 - 130 45 - 125

Acceptance Limits

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1

Sdg Number: 11278

Client Sample ID:

DCB Decachlorobiphenyl

SB-12 (11-12)

Lab Sample ID:

200-11384-3

Client Matrix:

Solid

% Moisture: 10.2

73

Date Sampled: 06/16/2012 0925

45 - 125

Date Received: 06/20/2012 1010

	606ZA FOIY	mormated bipnenyis (F	Cos, by Gas	Chromatography		
Analysis Method: Prep Method: Dilution: Analysis Date: Prep Date:	8082A 3541 1.0 06/23/2012 0638 06/20/2012 1403	and the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of th	0-40902 0-40636	Instrument ID: Initial Weight/\ Final Weight/\ Injection Volur Result Type:	Volume: 14.78 g /olume: 5000 uiL	
Analyte	DryWt Corrected: Y	Result (ug/Kg)	III Q	ualifier MDI	L 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	Qı	ualifier	Acceptance Limits	
Tetrachloro-m-xylene		67	ntontos est dote. Sotemas adang plantos, pegapapan ya	\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$	30 - 130	**************************************

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: Dilution:

Prep Date:

3541

Prep Batch:

200-40636

Initial Weight/Volume:

14.78 g

1.0

Final Weight/Volume:

5000 uL

Analysis Date:

06/23/2012 0638 06/20/2012 1403

Injection Volume: Result Type:

Qualifier

1 uL **SECONDARY** 

Surrogate Tetrachloro-m-xylene

DCB Decachlorobiphenyl

%Rec 75 74

30 - 130 45 - 125

Acceptance Limits

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

Metals	

Analysis Method: Prep Method: 6010C 3050B Analysis Batch: Prep Batch:

200-41198

Instrument ID: Lab File ID: METICP7 062612-05.ttx

Dilution:
Analysis Date:

1.0

200-40426

Initial Weight/Volume:

1.31 g

Prep Date:

06/26/2012 2226

06/15/2012 1000

Final Weight/Volume:

1.31 g 100 mL

Analyte	DryWt Corrected: Y		Result (mg/Kg)	Qualifier	MDL ***	RL	
Aluminum			6650		14.4	17.0	* · · · · · · · · · · · · · · · · · · ·
Antimony			5.1	U	0.42	5.1	1.6
Arsenic			3.8		0.48	0.85	11 19.4
Barium			37.7		0.44	17.0	
Beryllium			0.33	J	0.027	0.42	the Hypers
Cadmium			0.11	J	0.066	0.42	
Calcium			1800	<b>ブ</b>	43.3	424	
Chromium			12.9		0.093	0.85	
Cobalt			5.5		0.069	4.2	
Соррег		7.	14.5	I	0.19	2.1	
Iron		10	13800	I	11.0	17.0	
Lead			18.8		0.37	0.85	
Magnesium			2110	3	11.9	424	
Manganese		C	255	I	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 7471B Analysis Batch:
Prep Batch:

200-40480

Instrument ID: Lab File ID:

MEPCV3 II 061812AA.PRN

Dilution:

1.0

06/18/2012 1123

Analysis Date: Prep Date:

06/15/2012 1200

Initial Weight/Volume: Final Weight/Volume:

0.31 g 50 mL

Analyte Mercury DryWt Corrected: Y

Result (mg/Kg) 0.096

Qualifier T

MDL 0.0024

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: Prep Method:

6010C 3050B Analysis Batch:

200-41198

Instrument ID: Lab File ID:

METICP7 062612-05.ttx

Dilution:

1.0

Prep Batch:

200-40426

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	T v
Aluminum	\$	ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION AND ACTIVITATION ACTIVITATION AND ACTIVITATION AND ACTIVITATION ACTIVITATION ACTIVITATION ACTIVITATION ACTIVITAT	h-	448	 T.	18.4	21.6	1.51
Antimony				6.3	J	0.53	6.5	11
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	0.00			800	7	55.2	541	
Chromium				14.3		0.12	1.1	
Cobalt				1.9	J	0.088	5.4	
Copper				24.0	5	0.24	2.7	
Iron			1	11500	<u></u>	14.1	21.6	
Lead				14.9	Jan.	0.48	1.1	
Magnesium				118	J	15.1	541	
Manganese				78.3	<b>ブ</b>	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: Prep Method:

7471B 7471B Analysis Batch: Prep Batch:

200-40480 200-40425

Instrument ID: Lab File ID:

MEPCV3 II 061812AA.PRN

Dilution: Analysis Date:

Prep Date:

1.0

06/18/2012 1126

06/15/2012 1200

Initial Weight/Volume: Final Weight/Volume:

0.35 g 50 mL

Analyte Mercury DryWt Corrected: Y

Result (mg/Kg) 1.2

Qualifier I

MDL . 0.0027

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

R0100	Metals	(ICP)
	, ivietais	(ICF)

Analysis	Method:
Prep Met	thod:

6010C 3050B

Analysis Batch: Prep Batch:

200-41198

Instrument ID: Lab File ID:

METICP7 062612-05.ttx

Dilution:

1.0

200-40426

Initial Weight/Volume:

1.44 g

Analysis Date: Prep Date:

06/26/2012 2236 06/15/2012 1000 Final Weight/Volume:

100 mL

Analyte	DryWt Correcte	d: Y	Result (mg/	(g)	Qualifier	MDL	RL	
Aluminum		- {	291		<b>-</b>	23.9	28.1	, , , , , , , , , , , , , , , , , , , ,
Antimony			17.3			0.69	8.4	Ð.,
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	1.40
Calcium		7 -	1370		五	71.8	704	
Chromium			19.2			0.15	1.4	
Cobalt			3.0		J	0.11	7.0	
Copper		100	40.3		工	0.31	3.5	
Iron		1	12900		5	18.3	28.1	
Lead			17.5		-	0.62	1.4	
Magnesium			142		J	19.7	704	11 5
Manganese		-	112		7	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 Solld or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method: Prep Method:

7471B 7471B

Analysis Batch: Prep Batch:

200-40480 200-40425 Instrument ID: Lab File ID:

MEPCV3 II 061812AA.PRN

Dilution: Analysis Date: 2.0

06/18/2012 1143 06/15/2012 1200 Initial Weight/Volume: Final Weight/Volume: 0.32 g 50 mL

Prep Date: Analyte

Mercury

DryWt Corrected: Y

Result (mg/Kg) 3.4

Qualifier 5

MDL 0.0084

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1

Sdg Number: 11278

Ciient 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)
	metals	IICPI

Analysis Method: Prep Method:

6010C 3050B

Analysis Batch:

200-41198

Instrument ID:

METICP7

Prep Batch:

200-40426

Lab File ID:

062612-05.ttx

Dilution: Analysis Date: 1.0

Initial Weight/Volume:

1.49 g

Pron 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		-2-	2200	<i></i>	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		100	2660	<b>ブ</b>	49.5	485
Chromium			17.4		0.11	0.97
Cobalt			24.5		0.079	4.9
Copper		16.	78.6	7	0.21	2.4
Iron		196	6240	5	12.6	19.4
Lead		-	38.5	****	0.43	0.97
Magnesium			398	J	13.6	485
Manganese		128	24.4	<b>ブ</b>	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 Soild or Semisoild Waste (Manual Cold Vapor Technique)

Analysis Method: Prep Method:

7471B 7471B

Analysis Batch: Prep Batch:

200-40480 200-40425

Instrument ID: Lab File ID:

MEPCV3 II 061812AA.PRN

Dilution: Analysis Date:

Prep Date:

1.0

06/18/2012 1130 06/15/2012 1200 Initial Weight/Volume: Final Weight/Volume:

0.32 g 50 mL

Analyte Mercury DryWt Corrected: Y

Result (mg/Kg) 0.44

Qualifier I

MDL 0.0030

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:

0 51

06/18/2012 1920

DryWt Corrected: Y

DryWt Corrected: Y

Solid

% Moisture:

39.4

6010C Metals (ICP)

Date Sampled: 06/14/2012 1130

Date Received: 06/15/2012 1015

Analysis Method: Prep Method:	6010C 3050B	Analysis Batch:	th: 200-40876 200-40517	Instrument ID: Lab File ID:	METICP7 062312-01.tb	
Dilution: Analysis Date: Prep Date:	1.0 06/23/2012 1537 06/18/2012 1920			Initial Weight/Volume: Final Weight/Volume:	1.37 g 100 mL	
Analyte	DryWt Con	rected: Y Resu	ılt (mg/Kg) Qua	lifter leader MDL . 4	RL	
Antimony	*	23.1		0.59	7.2	***************************************
Arsenic		49.5	5	0.67	1.2	
Barium		29.4	丁	0.63	24.1	
Beryllium		0.60	Ū	0.039	0.60	
Cadmium		0.32	J	0.094	0.60	
Calcium		872		61.4	602	
Chromium		44.5	ر مطر	<b>プ</b> 0.13	1.2	
Cobalt		14.7		0.098	6.0	
Copper		480	h h	0.27	3.0	
Lead		177		0.53	1.2	
Magnesium		697	I	16.9	602	
Manganese		386	<b>H</b> HH H	0.54	1.8	
Nickel		72.7	7	0.35	4.8	
Potassium		855	<b>ブ</b>	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	5	0.16	6.0	
Analysis Method:	6010C	Analysis Bato	h: 200-41473	Instrument ID:	METICP7	
Prep Method:	3050B	Prep Batch:	200-40517	Lab File ID:	070712-01.tb	(
Dilution:	1.0	¥ *		Initial Weight/Volume:	1.37 g	-
Analysis Date:	07/06/2012 2000			Final Weight/Volume:	100 mL	

nalysis Method: 6010C ep Method: 3050B lution: 10 nalysis Date: 07/07/20 ep Date: 06/18/20		200-41484 200-40517	Instrument ID: Lab File ID: Initial Weight/Volume: Final Weight/Volume:	METICP7 070712-04.ttx 1.37 g 100 mL	
--------------------------------------------------------------------------------------------------------	--	------------------------	----------------------------------------------------------------------------------	----------------------------------------------	--

Result (mg/Kg)

Result (mg/Kg)

1080

25100

Qualifier

7

Qualifier

MDL

20.5

15.7

MDL

6.7

RL

24.1

24.1

RL

24.1

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

184

Prep Date:

Analyte

Analyte

Zinc

Iron

Aluminum

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

Lab File ID:

Dilution:

1.0

Prep Batch:

200-41014

Initial Weight/Volume:

062712CC.PRN

Analysis Date:

06/27/2012 1425

Final Weight/Volume:

0.30 g 50 mL

Prep Date:

06/26/2012 1500

Qualifier

MDL

RL

Analyte Mercury DryWt Corrected: Y

0.97

Result (mg/Kg)

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: Prep Method:

6010C 3050B Analysis Batch:

200-40876

Instrument ID: Lab File ID:

METICP7 062312-01.ttx

Dilution:

1.0

Prep Batch:

200-40517

Initial Weight/Volume:

1.27 g

Analysis Date: Prep Date:

06/23/2012 1542 06/18/2012 1920

Final Weight/Volume:

100 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		23.2		0.77	9.5
Arsenic		74.0	#	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	みゴ	0.17	1.6
Cobalt		15.2	7	0.13	7.9
Copper		436	ゴ	0.35	4.0
Lead		167		0.70	1.6
Magnesium		639	J	22.1	791
Manganese		341	5	0.71	2.4
Nickel		77.6	1	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: Prep Method:

6010C 3050B 1.0

Analysis Batch: Prep Batch:

200-41473 200-40517 Instrument ID: Lab File ID:

METICP7 070712-01.ttx

Dilution: Analysis Date:

Prep Date:

Analyte

Aluminum

07/06/2012 2005 06/18/2012 1920 Initial Weight/Volume: Final Weight/Volume:

MDL

26.9

20.6

1.27 g 100 mL

iron Analysis Method:

6010C 3050B 10

Analysis Batch: Prep Batch:

200-41484 200-40517 Instrument ID: Lab File ID:

METICP7 070712-04.ttx

31.6

RL

31.6

31.6

Prep Method: Dilution: Analysis Date:

07/07/2012 0945 06/18/2012 1920 Initial Weight/Volume: Final Weight/Volume:

MDL

8.9

1.27 g 100 mL

Prep Date: Analyte

DryWt Corrected: Y

DryWt Corrected: Y

Result (mg/Kg) 87.4

Result (mg/Kg)

1090

56900

Qualifier

1

Qualifier

RL

Zinc

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1

Sdg Number: 11278

Cilent 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

Lab File ID:

Dilution:

Prep Batch:

200-41014

062712CC.PRN

1.0

Initial Weight/Volume:

0.32 g

Analysis Date: Prep Date:

06/27/2012 1427 06/26/2012 1500

Final Weight/Volume:

50 mL

Analyte

DryWt Corrected: Y

Result (mg/Kg)

Qualifier

MDL 0.0041 RL 0.062

Mercury

3.0

Page 211 of 4454

**TestAmerica Burlington** 

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 Metais (ICP	)
-------------------	---

Analysis Method: Prep Method:

Dilution:

Prep Date:

Analyte

Antimony

6010C 3050B Analysis Batch: Prep Batch:

200-40876 200-40517

Instrument ID:

Qualifier

J

JJJU

METICP7 Lab File ID: 062312-01.ttx

Initial Weight/Volume: Final Weight/Volume:

MDL

0.45

0.51

0.47

0.029

0.071

46.4

0.10

0.074

0.20

0.40

12.7

0.41

0.26

13.7

0.79

0.12

6.8

0.37

0.12

1.24 g 100 mL

RL

5.5

0.91

18.2

0.46

0.46

455

0.91

4.6

2.3

0.91

455

1.4

3.6

455

3.2

0.91

455

2.3

4.6

Analysis Date:

1.0

06/23/2012 1547

06/18/2012 1920

DryWt Corrected: Y Result (mg/Kg) 0.58 0.81

Arsenic Barium 149 Beryllium 0.20 Cadmium 0.46 Calcium 1370

Chromium 35.6 Cobalt 12.0 Copper 26.4 Lead 4.9 6070 Magnesium

Manganese 251 Nickel 21.9 Potassium 6360 Selenium 3.2 Silver 0.91 Sodium 146 Thallium 1.1

Analysis Method: 6010C Prep Method: 3050B Dilution: 1.0

Vanadium

Analyte

Iron

Aluminum

07/06/2012 2010 Analysis Date: 06/18/2012 1920 Prep Date:

DryWt Corrected: Y

36.5

Analysis Batch: 200-41473 Prep Batch:

200-40517

Instrument ID: Lab File ID:

Qualifier

1

Initial Weight/Volume: Final Weight/Volume:

MDL

15.5

11.8

5.1

070712-01.ttx 1.24 g 100 mL

**METICP7** 

RL

18.2

18.2

RL

18.2

Analysis Method:

Prep Method:

Analysis Date:

Prep Date:

Analyte

Zinc

Dilution:

6010C 3050B 10

07/07/2012 0950 06/18/2012 1920 Analysis Batch: Prep Batch:

Result (mg/Kg)

13000

21000

200-41484 200-40517 Instrument ID: Lab File ID:

**METICP7** 070712-04.ttx Initial Weight/Volume: 1.24 g Final Weight/Volume: 100 mL

DryWt Corrected: Y Result (mg/Kg) Qualifier MDL

63.5

7471B Mercury in Solid or Semisoild 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: Prep Method:

7471B 7471B Analysis Batch:

200-41039

Instrument ID:

MEPCV3 II

Prep Batch:

Lab File ID:

Dilution:

1.0

200-41014

Initial Weight/Volume:

062712CC.PRN

Analysis Date:

Prep Date:

06/27/2012 1430

06/26/2012 1500

Final Weight/Volume:

0.37 g 50 mL

Result (mg/Kg)

Qualifier

U

MDL

RL

Analyte Mercury DryWt Corrected: Y

0.030

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

Official Widelia.	- Colid	70 WOIStare	. 04.0			Received. 06/1:	0/2012-101
	(Standard III) (Sec. 1)	6010C I	Metals (ICP)	11/5 8	CONTRACTOR OF		
Analysis Method: Prep Method: Dilution: Analysis Date: Prep Date:	6010C 3050B 1.0 06/23/2012 1552 06/18/2012 1920	Analysis Batch: Prep Batch:	200-40876 200-40517		Instrument ID: Lab File ID: Initial Weight/Volume: Final Weight/Volume:	METICP7 062312-01.tt 1.38 g 100 mL	
Analyte	DryWt Corrected: Y	Result (m	g/Kg)	Qualifie	r MDL	RL	
Antimony		6.7		U	0.54	6.7	**************************************
Arsenic		12.5		77	0.62	1.1	
Barium		109		I	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		サナ	0.12	1.1	
Cobalt		8.1		477	0.090	5.6	
Copper		69.7		I	0.24	2.8	
Lead		136			0.49	1.1	
Magnesium		4610		7	15.6	556	
Manganese		307		477	0.50	1.7	
Nickel		20.8		ナ	0.32	4.4	
Potassium		3260		<b>ブ</b>	16.7	556	
Selenium		1.0		J	0.97	3.9	
Silver		0.34		Ĵ	0.14	1.1	
Sodium		415		J	8.3	556	
Thallium		2.8		Ŭ	0.46	2.8	
Vanadium		34.5		<i>A</i>	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.tb	,
Dilution:	1.0	r rop batom	200 10011		Initial Weight/Volume:	1.38 g	`
Analysis Date:	07/06/2012 2015				Final Weight/Volume:	1.30 g 100 mL	
Prep Date:	06/18/2012 1920				rinai vveigni/voiume.	100 IIIL	
Analyte	DryWt Corrected: Y	Result (m	g/Kg)	Qualifie	r MDL	RL	
Iron	obsources consumed and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security and security	26000		<i></i>	14.5	22.2	Plan fir ha ha dha dha dhir ann an dha ann an aig ann a
Analysis Method:	6010C	Analysis Batch:	200-41484		Instrument ID:	METICP7	
Prep Method:	3050B	Prep Batch:	200-40517		Lab File ID:	070712-04.tb	•
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				Timal Vicigily Volume.	100 IIIL	
Analyte	DryWt Corrected: Y	Result (me	g/Kg)	Qualifie	r MDL	RL	
Aluminum		16800	niki i i ildariyy ii nikrih. Akikeenedassassas rasaa e. auruseemuus		189	222	

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:

Lab File ID:

Dilution:

7471B

Prep Batch:

200-41014

Initial Weight/Volume:

062712CC.PRN

Analysis Date:

2.0

06/27/2012 1531

Final Weight/Volume:

0.30 g 50 mL

Prep Date:

06/26/2012 1500

Result (mg/Kg)

Qualifier

MDL

RL

Analyte Mercury DryWt Corrected: Y

3.0

0.0068

0.10

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TestAmerica Burlington

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

BO4AC	Metals	(ICP)

Analysis Method: Prep Method:

6010C 3050B

Analysis Batch:

200-40876

Instrument ID: Lab File ID:

METICP7 062312-01.ttx

Dilution:

1.0

Prep Batch:

200-40517

Initial Weight/Volume:

1.32 g

Analysis Date: Prep Date:

06/23/2012 1439

Final Weight/Volume:

100 mL

Analyte	
Antimon	······································

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	5	0.55	0.99
Barium		116	ゴ	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	7	0.080	4.9
Copper		72.3	1	0.22	2.5
Lead		140		0.43	0.99
Magnesium		5100	<b>T</b>	13.8	494
Manganese		200	5	0.44	1.5
Nickel		22.6	ゴ	0.29	3.9
Potassium		3420	<b>ブ</b>	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	+	0.13	4.9

Analysis Method:
Prep Method:

6010C 3050B

Analysis Batch: Prep Batch:

200-41473

Instrument ID: Lab File ID:

METICP7 070712-01.ttx

Dilution: Analysis Date: 1.0

200-40517

Initial Weight/Volume: Final Weight/Volume:

1.32 g 100 mL

Prep	Date:

Iron

07/06/2012 1850 06/18/2012 1920

Analyte	
Aluminum	

DryWt Corrected: Y	Result (mg/Kg)
	10600
	25000

Qualifier MDL 16.8 12.8 J

19.7 19.7

RL

Analysis Method: Prep Method:

6010C 3050B 10

Analysis Batch: Prep Batch:

200-41484 200-40517 Instrument ID: Lab File ID:

METICP7 070712-04.ttx

19.7

Dilution: Analysis Date:

07/07/2012 0840 06/18/2012 1920 Final Weight/Volume:

Initial Weight/Volume:

MDL

5.5

1.32 g 100 mL

Prep Date:
Analyte

DryWt Corrected: Y

Result (mg/Kg) 177

Qualifier

RL

Zinc

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

Lab File ID:

Dilution:

Prep Batch:

062712CC.PRN

Analysis Date:

1.0

200-41014

Initial Weight/Volume:

0.32 g

06/27/2012 1434

Final Weight/Volume:

50 mL

Prep Date:

06/26/2012 1500

Result (mg/Kg)

Qualifier

MDL

RL

Analyte Mercury DryWt Corrected: Y

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

6010	CM	etale	(ICP)	١

Analysis Method:
Prep Method:

6010C 3050B

Analysis Batch:

200-40876

Instrument ID: Lab File ID:

METICP7

Dilution:

1.0

Prep Batch:

200-40517

Initial Weight/Volume:

062312-01.ttx 1.33 g

Analysis Date:

06/23/2012 1444

Final Weight/Volume:

100 mL

RL 5.2 0.87 17.3

0.43

0.43 433

0.87

4.3 2.2 0.87 433 1.3 3.5 433 3.0 0.87

Prep Date:

06/18/2012 1920

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL
Antimony		5.2	U	0.42
Arsenic		2.8	エ	0.49
Barium		52.3	工	0.45
Beryllium		0.35	J	0.028
Cadmium		0.16	j	0.068
Calcium		10400		44.2
Chromium		29.2	モブ	0.095
Cobalt		7.3	77	0.070
Copper		53.6	7	0.19
Lead		43.8		0.38
Magnesium		5420	7	12.1
Manganese		212		0.39
Nickel		56.4	7	0.25
Potassium		1420	7	13.0
Selenium		3.0	سر ں	0.75
Silver		0.87	U	0.11

Analysis Method: Prep Method:

Analysis Date:

Sodium

Thallium

Dilution:

Vanadium

6010C 3050B Analysis Batch: Prep Batch:

200-41473 200-40517 1

Instrument ID: Lab File ID:

METICP7 070712-01.ttx

433

2.2

4.3

1.0

07/06/2012 1855

Initial Weight/Volume: Final Weight/Volume:

6.5

0.36

0.11

1.33 g 100 mL

Analyte Aluminum

iron

Prep Date:

06/18/2012 1920

Result (mg/Kg) 8250 13700

160

2.2

101

Qualifier MDL 14.7 11.3 _____

RL

17.3

17.3

Analysis Method: Prep Method:

6010C 3050B 10

Analysis Batch: Prep Batch:

200-41484 200-40517 Instrument ID: Lab File ID:

METICP7 070712-04.ttx

Dilution: Analysis Date:

07/07/2012 0845 06/18/2012 1920 Initial Weight/Volume: Final Weight/Volume:

1.33 g 100 mL

Analyte

Prep Date:

DryWt Corrected: Y

DryWt Corrected: Y

Result (mg/Kg) 65.1

Qualifier

Zinc

MDL 4.9

RL 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 7471B Analysis Batch:

200-41039

Instrument ID:

MEPCV3 II

Prep Method:

Lab File ID:

Dilution:

062712CC.PRN

1.0

Prep Batch:

200-41014

Initial Weight/Volume:

Analysis Date:

06/27/2012 1437

Final Weight/Volume:

0.34 g 50 mL

Prep Date:

06/26/2012 1500

Result (mg/Kg)

Qualifier and the

MDL

RL

Analyte Mercury DryWt Corrected: Y

0.067

0.0022

0.034

TestAmerica Burlington

Page 219 of 4454

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

06/18/2012 1920

Client Matrix:

Prep Date:

Analysis Method:

Dilution:

Analysis Date:

6010C

10

07/07/2012 0850

Solid

.

% Moisture:

13.7

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

METICP7

1.30 g

100 mL

THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CO							
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		

Analyte		DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony	3		0.48	J	0.44	5.4
Arsenic			2.2	7	0.50	0.89
Barium			111	7	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	BJ.	0.098	0.89
Cobalt			8.2	7	0.072	4.5
Copper			23.8	ナ	0.20	2.2
Lead			10.9		0.39	0.89
Magnesium			4870	5	12.5	446
Manganese			263	5	0.40	1.3
Nickel			17.3	ゴ	0.26	3.6
Potassium			3550	7	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	7	0.12	4.5

Prep Method: Dilution: Analysis Date: Prep Date:	3050B 1.0 07/06/2012 06/18/2012		Prep Batch:	200-40517	2 _ 8	Lab File ID: Initial Weight/Volume: Final Weight/Volume:	070712-01.ttx 1.30 g 100 mL
Analyte	Dry	/Wt Corrected: Y	Result (n	ng/Kg)	Qualifie	r MDL	RL
Iron		reviewie karabi ilinia ku perkentara anto Are-Arabia ziak di bendara attariban, epous da rau-yan.	20600	er v A - A - A - A - A - A - A - A - A -	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

200-41473

Instrument ID:

Initial Weight/Volume:

Final Weight/Volume:

Analysis Batch:

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

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

Lab File ID:

062712CC.PRN

Prep Batch:

Dilution:

1.0

200-41014

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 U

MDL 0.0023 RL

Mercury

0.034

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

RN 1	nc	Metals	(ICD)

Analysis Method: Prep Method:

6010C 3050B Analysis Batch: Prep Batch:

200-40876 200-40517 Instrument ID: Lab File ID:

**METICP7** 062312-01.ttx

Dilution:

1.0

06/23/2012 1453

Initial Weight/Volume:

1.48 g

Analysis Date: Prep Date:

06/18/2012 1920

Final Weight/Volume:

100 mL

Analyte	DryWt Corrected	: Y	Result (	mg/Kg)	Qualifier	MDL	RL
Antimony			4.8		U	0.39	4.8
Arsenic			1.9		ゴ	0.45	0.80
Barium			77.4		ゴ	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		B-J-	0.088	0.80
Cobalt		Q.	8.1			0.065	4.0
Copper			27.5		J	0.18	2.0
Lead			46.9			0.35	0.80
Magnesium			3770		5	11.1	398
Manganese			199		至	0.36	1.2
Nickel			17.5		~	0.23	3.2
Potassium			2720		ゴ	11.9	398
Selenium		79	2.8		ロブ	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: Prep Method:

6010C 3050B Analysis Batch: Prep Batch:

200-41484 200-40517

Instrument ID: Lab File ID:

**METICP7** 070712-04.ttx

Dilution: Analysis Date: 10 07/07/2012 0855 Initial Weight/Volume: Final Weight/Volume: 1.48 g 100 mL

Prep Date:

06/18/2012 1920

Analyte	DryWt Corrected	d: Y	Result (mg/k	(g)	Qualifier	MDL	RL
Aluminum	 entrological description of the first of the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second		17900	**************************************		135	159
Iron	•	T-	24800		5	104	159
Zinc			51.3			4.5	15.9

## 7471B Mercury In Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method: Prep Method:

7471B 7471B 1.0

Analysis Batch: Prep Batch:

200-41039 200-41014 Instrument ID: Lab File ID:

MEPCV3 II 062712CC.PRN

Dilution: Analysis Date:

06/27/2012 1447

Initial Weight/Volume: Final Weight/Volume:

0.35 g 50 mL

Prep Date:

06/26/2012 1500

Result (mg/Kg)

Qualifier

J

MDL

Analyte Mercury DryWt Corrected: Y

0.019

0.0022

RL 0.033

Client: ARCADIS U.S. Inc

Job Number: 200-11278-1

Sdg Number: 11278

Cilent 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: Prep Method:

6010C 3050B

Analysis Batch: Prep Batch:

200-40876

Instrument ID: Lab File ID:

METICP7 062312-01.ttx

16.9

422

422

3.0

0.84

422

2.1

4.2

Dilution:

1.0

200-40517

Initial Weight/Volume: Final Weight/Volume:

1.43 g 100 mL

Analysis Date: Prep Date:

06/23/2012 1458

06/18/2012 1920

Analyte DryWt Corrected: Y Result (mg/Kg) Qualifier MDL RL Antimony 0.46 J 0.41 5.1 Arsenic 77 1.6 0.47 0.84 Barium 120 0.44 J 0.40 Beryllium 0.027 0.42 J Cadmium 0.071 0.066 0.42 Calcium 591 43.0 Chromium 30.2 0.093 0.84 Cobalt 10.1 0.068 4.2 Copper 31.0 0.19 2.1 Lead 10.9 0.37 0.84 Magnesium 5480 11.8 422 Manganese 239 0.38 1.3 Nickel 20.6 0.24 3.4

5110

3.0

0.84

353

0.58

39.6

Thallium Vanadium Analysis Method:

Prep Method:

Analysis Date:

Dilution:

Prep Date:

**Potassium** 

Selenium

Silver

Sodium

6010C 3050B

10 07/07/2012 0900 06/18/2012 1920 Analysis Batch: Prep Batch:

200-41484 200-40517 J

5

Instrument ID: Lab File ID:

**METICP7** 070712-04.ttx 1.43 g

Initial Weight/Volume: Final Weight/Volume:

12.7

0.73

0.11

6.3

0.35

0.11

100 mL

Analyte DryWt Corrected: Y Result (mg/Kg) Qualifier MDL RL Aluminum 20400 143 169 Iron 28800 110 169 1 Zinc 58.3 4.7 16.9

### 7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method: Prep Method:

7471B 7471B Analysis Batch: Prep Batch:

200-41039 200-41014 Instrument ID: Lab File ID:

MEPCV3 II 062712CC.PRN

Dilution: Analysis Date:

1.0 06/27/2012 1450 Initial Weight/Volume: Final Weight/Volume:

0.35 g 50 mL

Prep Date:

06/26/2012 1500

Qualifier

MDL

RL

Analyte Mercury DryWt Corrected: Y

0.018

Result (mg/Kg)

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

Client Matrix:	Solid	% Moisture: 41.2			Date Received: 06/16/2012 1000			
	G.º	6010C	Metals (ICP)					
Analysis Method:	6010C	Analysis Batch:	200-40876	Inst	rument ID:	METICP7		
Prep Method:	3050B	Prep Batch:	200-40517	Lab	File ID:	062312-01.ttx		
Dilution:	1.0			Initia	al Weight/Volume:	1.41 g		
Analysis Date:	06/23/2012 1503			Fina	al Weight/Volume:	100 mL		
Prep Date:	06/18/2012 1920							
Analyte	DryWt Corrected:	Y Result (n	ng/Kg)	Qualifier	MDL	RL ^		
Antimony		28.3	***************************************	*	0.59	7.2	the decimal of the charles for the colours of the serving.	
Arsenic		37.2		77	0.68	1.2		
Barium		38.8			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 I	0.13	1.2		
Cobalt		29.3		H-H	0.098	6.0		
Copper		452		تتہ	0.27	3.0		
_ead		246			0.53	1.2		
Magnesium		603 383		+ UB	16.9	603		
Manganese		115		77	0.54	1.8		
Nickel		351		I	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		5	0.16	6.0		
Analysis Method:	6010C	Analysis Batch:	200-41473	Inst	rument ID:	METICP7		
Prep Method:	3050B	Prep Batch:	200-40517	Lab	File ID:	070712-01.ttx		
Dilution:	1.0				al Weight/Volume:	1.41 g		
Analysis Date:	07/06/2012 1915				al Weight/Volume:	100 mL		
Prep Date:	06/18/2012 1920			1 1116	ii vveigrib volume.	100 IIIL		
Analyte	DryWt Corrected: \	Y Result (m	ng/Kg)	Qualifier	MDL	RL		
Aluminum		7740	international feet ennipsings-prominent synostysy.	95 Tarkan daribida Sarada da Pilanna da Amerikan da Amerikan da da da Amerikan da da da da da da da da da da d	20.5	24.1		
Silver		1.2		U.	0.16	1.2		
Analysis Method:	6010C	Analysis Batch:	200-41473	Inst	rument ID:	METICP7		
Prep Method:	3050B	Prep Batch:	200-40517		File ID:	070712-01.ttx		
Dilution:	10				al Weight/Volume:	1.41 g		
Analysis Date:	07/06/2012 1920		20	Fina	al Weight/Volume:	100 mL		
Prep Date:	06/18/2012 1920							
Analyte	DryWt Corrected: \		ng/Kg)	Qualifier	MDL	RL		
lron		136000		5	157	241		
Analysis Method:	6010C	Analysis Batch:	200-41484	Inst	rument ID:	METICP7		
Prep Method:	3050B	Prep Batch:	200-40517	Lab	File ID:	070712-04.ttx		
Dilution:	100	-			al Weight/Volume:	1.41 g		
Analysis Date:	07/07/2012 0905				al 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 Metais (ICP)

Analyte

DryWt Corrected: Y

Result (mg/Kg)

Qualifier

MDL

RL

Zinc

470

67.5

241

7471B Mercury in Solid or Semlsolid Waste (Manual Cold Vapor Technique)

Analysis Method:

7471B

Analysis Batch:

200-41039

Instrument ID:

MEPCV3 II

Prep Method:

7471B

Prep Batch:

Lab File ID:

062712CC.PRN

Dilution:

1.0

200-41014

Analysis Date:

06/27/2012 1452

Initial Weight/Volume: Final Weight/Volume:

0.31 g

50 mL

Prep Date:

06/26/2012 1500

Result (mg/Kg)

Qualifier

MDL

Analyte Mercury DryWt Corrected: Y

1.8

0.0036

RL 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:
Prep Me	thod:

6010C 3050B

Analysis Batch:

200-40876

Instrument ID: Lab File ID:

METICP7 062312-01.ttx

Dilution:

1.0

Prep Batch:

200-40517

Initial Weight/Volume:

1.26 g

Analysis Date: Prep Date:

06/23/2012 1508

06/18/2012 1920

Final Weight/Volume:

100 mL

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	<b>ブ</b>	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	サブ	0.098	0.89
Cobalt		8.7	7	0.072	4.5
Соррег		33.3	1	0.20	2.2
Lead		6.0		0.39	0.89
Magnesium		5150	444	12.5	446
Manganese		194	2	0.40	1.3
Nickel		19.5	2	0.26	3.6
Potassium		6330	J	13.4	446
Selenium		3.1	UJ	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	I	0.12	4.5

Analysis Method:
Prep Method:

6010C 3050B Analysis Batch: Prep Batch:

200-41473 200-40517 Instrument ID: Lab File ID:

METICP7 070712-01.ttx

Dilution: Analysis Date:

1.0 07/06/2012 1925

Initial Weight/Volume: Final Weight/Volume:

1.26 g 100 mL

Prep Date: Analyte

Aluminum

Iron

06/18/2012 1920

DryWt Corrected: Y

Result (mg/Kg) 14800 24800

Qualifier MDL 15.2 1 11.6

RL

Analysis Method: Prep Method:

6010C 3050B

Analysis Batch: Prep Batch:

200-41484 200-40517 Instrument ID: Lab File ID:

**METICP7** 070712-04.ttx

17.9

17.9

Dilution: Analysis Date:

10 07/07/2012 0910 Initial Weight/Volume: Final Weight/Volume:

5.0

1.26 g 100 mL

Prep Date:

06/18/2012 1920

Analyte DryWt Corrected: Y Result (mg/Kg)

Qualifier

MDL

Zinc

54.7

RL

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 Coid Vapor Technique)

Analysis Method:

7471B 7471B Analysis Batch:

200-41039

Instrument ID:

MEPCV3 II

Prep Method:

Lab File ID:

Dilution:

Prep Batch:

200-41014

062712CC.PRN

1.0

Initial Weight/Volume:

0.34 g

Analysis Date: Prep Date:

06/27/2012 1454 06/26/2012 1500

Final Weight/Volume:

50 mL

Analyte

DryWt Corrected: Y

Result (mg/Kg)

Qualifier

J

MDL

RL

Mercury

0.0033

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

Olicite Matrix.	Cond	70 WOOSCATE	. 54.5		Date	Received. 00/10	0/2012 100
***	continues train	6010C	Metals (ICP)		- (C - P 18)		<u> </u>
Analysis Method:	6010C	Analysis Batch:	200-40876		Instrument ID:	METICP7	
Prep Method:	3050B	Prep Batch:	200-40517		Lab File ID:	062312-01.tt	x
Dilution:	1.0 creaped Roman Exigura	77			Initial Weight/Volume:	1.40 g	10 11
Analysis Date:	06/23/2012 1513				Final Weight/Volume:	100 mL	
Prep Date:	06/18/2012 1920				That troight tolamo.	200	
Analyte	DryWt Corrected: Y	Result (m	g/Kg)	Qualifie	r MDL	RL	2 5 9
Antimony		8.9			0.54	6.6	
Arsenic		30.2		ゴ	0.61	1.1	
Barium		30.5		1	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		アナ	0.12	1.1	
Cobalt		9.3		7	0.089	5.5	
Copper		274		7	0.24	2.7	
Lead		39.5			0.48	1.1	
Magnesium		549 50.8		+ UB	15.4	549	
Manganese		160		44	0.49	1.6	
Nickel		41.8		1	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		1	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.tt	v.
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				Tinal Weight Volume.	100 IIIL	
Analyte	DryWt Corrected: Y	Result (m	g/Kg)	Qualifie	r MDL	ŘL	
Aluminum	1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 19	381	**************************************	dikatiji anaismaaaaiin vood vatanoon on on	18.7	21.9	milintern vermieren erkelen er er en en en en en en en en en en en en en
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.tb	K
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 (m	g/Kg)	Qualifie	r MDL	RL	
Iron		126000		工	143	219	

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

Lab File ID:

Dilution:

Prep Batch:

200-41014

062712CC.PRN

2.0

Initial Weight/Volume:

0.30 g

Analysis Date:

06/27/2012 1533

Final Weight/Volume:

Prep Date:

06/26/2012 1500

50 mL

Analyte Mercury DryWt Corrected: Y

Result (mg/Kg) 3.1

Qualifier

MDL

RL

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

601	100	Motale	(ICP)
ou i	ıvc	MIGRICALS	1 (ILCE)

Analysis Method: Prep Method:

6010C 3050B Analysis Batch: Prep Batch:

200-40876 200-40517

Instrument ID: Lab File ID:

METICP7 062312-01.ttx

Dilution: Analysis Date: 1.0

Initial Weight/Volume:

1.34 g

Prep Date:

06/23/2012 1532 06/18/2012 1920

Final Weight/Volume:

100 mL

Analyte		DryWt Corrected: Y	1 4 10	Result (r	mg/Kg)	Qualifier	and make WDF. □	RL
Antimony			han	0.65	······································	J	0.61	7.5
Arsenic	1		Lt.	18.3		5	0.70	1.2
Barium				99.7	! {	J	0.65	24.9
Beryllium			177	0.73			0.040	0.62
Cadmium				0.79			0.097	0.62
Calcium				2270			63.6	624
Chromium				59.5	17.5	中ナ	0.14	1.2
Cobalt			1	10.5		ゴ	0.10	6.2
Copper				82.7		5	0.27	3.1
Lead				175			0.55	1.2
Magnesium			15.	6700		5	17.5	624
Manganese				792		<b>ゴ</b>	0.56	1.9
Nickel			34	26.3		ت	0.36	5.0
Potassium			T.	3580		ゴ	18.7	624
Selenium			1.	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		3	() ·	40.7		5	0.16	6.2
						-		

Analysis Method: Prep Method: Dilution: Analysis Date:

6010C 3050B 10 07/07/2012 0920

Prep Batch:

200-41484 200-40517

Instrument ID: Lab File ID:

**METICP7** 070712-04.ttx

Analysis Batch:

Initial Weight/Volume: Final Weight/Volume:

1.34 g 100 mL

Prep Date:	06/18/2012	1920
		1000
A		144.0

Analyte	DryWt Corrected: Y	Result
Aluminum	C Supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in the supplies in	20300
Iron		49500
Zinc		248

Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
promise and the second	20300		212	249
	49500	エ	162	249
	248		7.0	24.9

#### 7471B Mercury In Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method: Prep Method:

7471B 7471B Analysis Batch: Prep Batch:

200-41039

Instrument ID: Lab File ID:

MEPCV3 II 062712CC.PRN

Dilution: 1.0 06/27/2012 1459

Analysis Date:

06/26/2012 1500

200-41014

Initial Weight/Volume: Final Weight/Volume: 0.31 g 50 mL

Prep Date:

Analyte Mercury DryWt Corrected: Y

Result (mg/Kg) 1.1

Qualifier

MDL 0.0036 RL 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: Prep Method:

6010C 3050B

Analysis Batch: Prep Batch:

200-41205 200-40836 Instrument ID: Lab File ID:

METICP7 070112-01.ttx

Dilution: Analysis Date: 1.0

07/01/2012 0229

Initial Weight/Volume:

1.26 g

Prep Date:

06/23/2012 0838

Final Weight/Volume:

100 mL

Analyte	DryWt Corrected: Y	all and	Result (mg/Kg	g):(g)	Qualifier	MDL	RL	
Aluminum	*		1530		<i>5</i>	25.2	29.6	*
Antimony	- ,	The state of	30.3	6, 111	7	0.73	8.9	4, **
Arsenic		· E.	49.1	168	1	0.83	1.5	
Barium			33.7		7	0.77	29.6	
Beryllium			0.055		J	0.047	0.74	
Cadmium			1.7			0.12	0.74	
Calcium		700-	4120		7	75.5	740	
Chromium		72.	122		7	0.16	1.5	
Cobalt			48.5		5	0.12	7.4	
Copper			1520		5	0.33	3.7	
Iron		1.	131000		エ	19.3	29.6	
Lead			240		5	0.65	1.5	
Magnesium		C	2430		7	20.7	740	
Manganese		17	80.9		5	0.67	2.2	
Nickel			631		I	0.43	5.9	
Potassium			573	80	J	22.2	740	
Selenium			1.8		J	1.3	5.2	
Silver			1.5		U	0.19	1.5	
Sodium		740	<del>-83.6</del>		-JB-UB	11.1	740	
Thallium			1.6		J	0.61	3.7	
Vanadium			66.7		5	0.19	7.4	
Zinc			770		5	0.83	3.0	

7471B Mercury In Solid or Semisolid Waste	(Manual Cold Vapor Technique)
-------------------------------------------	-------------------------------

Analysis Method: Prep Method:

7471B 7471B Analysis Batch: Prep Batch:

200-41039 200-41014 Instrument ID: Lab File ID:

MEPCV3 II 062712CC.PRN

Dilution: Analysis Date: 1.0

06/27/2012 1502

Initial Weight/Volume: Final Weight/Volume:

0.29 g 50 mL

Prep Date: Analyte

06/26/2012 1500

Result (mg/Kg)

Qualifier

MDL

RL

Mercury

DryWt Corrected: Y

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 Metais (iCP	601	INC	Metal	s (ICP)
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Analysis Method: Prep Method:

6010C 3050B

Analysis Batch:

200-41205

Instrument ID:

METICP7

Dilution:

1.0

Prep Batch:

200-40836

Lab File ID: Initial Weight/Volume: 070112-01.ttx 1.41 g

Analysis Date:

Prep Date:

07/01/2012 0234 06/23/2012 0838 Final Weight/Volume:

100 mL

Analyte	DryWt Correc	ted: Y	Result (mg/	(Kg)	Qualifier	MDL	RL	
Aluminum			21600	5 5 1	5	15.0	17.6	3 2
Antimony		÷	5.3		ULT	0.43	5.3	
Arsenic		****	12.6		T	0.49	0.88	
Barium		12	32.4		T	0.46	17.6	
Beryllium			0.63			0.028	0.44	
Cadmium		1000	0.069		J	0.069	0.44	
Calcium			342		J	44.9	440	
Chromium			39.5		ナ	0.097	0.88	
Cobalt			9.2		5	0.071	4.4	
Copper			19.3		5	0.19	2.2	
Iron			18200		<u> </u>	11.5	17.6	
Lead		8.	10.8		ت	0.39	0.88	
Magnesium			3950		7	12.3	440	
Manganese			104		エ	0.40	1.3	
Nickel			17.9		J_	0.26	3.5	
Potassium			1580		ゴ	13.2	440	
Selenium			0.97		J	0.77	3.1	
Silver		4	0.88		U	0.11	0.88	
Sodium		440	<del>-79.9</del> -		-JB-UB	6.6	440	
Thallium			0.56		J	0.36	2.2	
Vanadium			47.9		J	0.11	4.4	
Zinc			41.4		1	0.49	1.8	

7471R Mercury in	Solid or Samier	alid Wasto (Manual	Cold Vanor 1	Cookniaus)

Analysis Method: Prep Method:

7471B 7471B Analysis Batch: Prep Batch:

200-41039 200-41014

Instrument ID: Lab File ID:

MEPCV3 II 062712CC.PRN

Dilution: Analysis Date: 1.0

06/27/2012 1504

Prep Date:

06/26/2012 1500

Initial Weight/Volume: Final Weight/Volume:

0.32 g 50 mL

Analyte Mercury DryWt Corrected: Y

Result (mg/Kg) 0.023

Qualifier

MDL 0.0026

RL 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)
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Analysis Method: Prep Method:

6010C 3050B

Analysis Batch: Prep Batch:

200-41205 200-40836 Instrument ID: Lab File ID:

**METICP7** 070112-01.ttx

Dilution:

1.0

Initial Weight/Volume:

1.33 g

Analysis Date: Prep Date:

07/01/2012 0254 06/23/2012 0838 Final Weight/Volume:

100 mL

Analyte	DryWt Corrected: Y	ell music	Result (mg/Kg	3)	Qualifier	MDL	RL	
Aluminum			11800		5	14.2	16.7	
Antimony	7		5.0		リグ	0.41	5.0	4
Arsenic		100	1.9		工	0.47	0.84	
Barium		1	90.5	. Si.	J	0.44	16.7	
Beryllium	11.3		0.38		J	0.027	0.42	
Cadmium			0.11		J	0.065	0.42	
Calcium			12400		7	42.7	419	
Chromium		10,	29.2		工	0.092	0.84	
Cobalt		" arg	8.8		J	0.068	4.2	
Copper		₹.	28.9		<b>丁</b>	0.18	2.1	
Iron		7_	20300		J	10.9	16.7	
Lead		Lane.	10		7	0.37	0.84	
Magnesium		100	10700	1	77	11.7	419	
Manganese		F. *	449		2	0.38	1.3	
Nickel		1	19.0		I	0.24	3.3	
Potassium		TE	3760		ゴ	12.6	419	
Selenium			2.9		U	0.73	2.9	
Silver		<i>n</i> ) -	0.84		U	0.11	0.84	
Sodium		419	479-		-UB-UB	6.3	419	
Thallium		,	0.56		J	0.34	2.1	
Vanadium		- 10-1	34.5		7	0.11	4.2	
Zinc		The same of	39.8		ゴ	0.47	1.7	

# 7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:

7471B 7471B Analysis Batch: Prep Batch:

200-41039 200-41014

Instrument ID: Lab File ID:

MEPCV3 II 062712CC.PRN

Prep Method: Dilution: Analysis Date:

1.0

06/27/2012 1506

Prep Date:

06/26/2012 1500

Initial Weight/Volume: Final Weight/Volume:

0.30 g 50 mL

Analyte Mercury DryWt Corrected: Y

Result (mg/Kg) 0.018

Qualifier J

MDL. 0.0025 RL 0.037

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

Analyte	Result	Qual Units MDL	RL [	Dil Method
pН	7.60	HF 5 SU		.0 9045C
	Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1115		DryWt Corrected: N
Corrosivity	7.60	HF J SU	-0.0	1.0 9045C
	Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1115		DryWt Corrected: N
Percent Solids	89.9	% 0.25	0.25	I.0 Moisture
	Analysis Batch: 200-40356	Analysis Date: 06/14/2012 1520		DryWt Corrected: N

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

Analyte	Result	Qual Units MDL	RL [	Dil Method
pH	4.32	HF J SU		I.0 9045C
Day with Plant	Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1116		DryWt Corrected: N
Corrosivity	4.32	HF ブ 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	I.0 Moisture
	Analysis Batch: 200-40356	Analysis Date: 06/14/2012 1520		DryWt Corrected: N

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

Analyte	Result	Qual Units MDL	RL Dil	Method
pH	5.23	HF J SU	1.0	9045C
I HALL I'V ME.	Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1118		DryWt Corrected: N
Corrosivity	5.23	HF 🗲 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

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

Analyte	Result	Qual Units MDL	RL Dif	Method
pH	7.57	HF & SU	1.0	9045C
	Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1119	7 E - 17 III I I III	DryWt Corrected: N
Согтовічіту	7.57	HF 🔰 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	Moisture
	Analysis Batch: 200-40356	Analysis Date: 06/14/2012 1520		DryWt Corrected: N

Job Number: 200-11278-1

Sdg Number: 11278

## **General Chemistry**

Client Sample ID:

SB-03 (4.5-5)

Lab Sample ID:

Client Matrix:

200-11326-1

Solid

Date Sampled: 06/14/2012 1130

Analyte	W F	Result	Qual	Units		MDL	RL	Dif	Method
pH	, " 4	1.22	HF J	SU	T.		***************************************	1.0	9045C
11110014 1111-1	Analysis Batch: 460-1183	339 Analys	sis Date: (	07/02/20	12 1120	11 14	. Com Fr		DryWt Corrected: N
Corrosivity	1 m 4	1.22	HFJ	SU			nin a	1.0	9045C
	Analysis Batch: 460-1183	339 Analy	sis Date: (	07/02/20	12 1120	far The		III II Bioy	DryWt Corrected: N
Percent Solids	iffat kölli 6	60.6		%	(	0.25	0.25	1.0	Moisture
	Analysis Batch: 200-405	18 Analy	sis Date: 0	06/18/20	12 2059			110.18	DryWt Corrected: N

Job Number: 200-11278-1

Sdg Number: 11278

### **General Chemistry**

Client Sample ID:

SB-06 (4-5)

Lab Sample ID:

Client Matrix:

200-11326-2 Solid

Date Sampled: 06/14/2012 1010

Analyte		Result	14,	Qual	Units	. MDL	RL	Dil	Method
pH		5.10		HF J	SU			1.0	9045C
A 14 mileton	Analysis Batch: 46	0-118339	Analysi	s Date:	07/02/20	112 1121	E		DryWt Corrected: N
Corrosivity		5.10		HF J	SU ;	1, 9.7	4 6	1.0	9045C
	Analysis Batch: 46	0-118339	Analysi	s Date:	07/02/20	12 1121		4.7	DryWt Corrected: N
Percent Solids		49.8			%	0.25	0.25	1.0	Moisture
	Analysis Batch: 20	00-40518	Analysi	s Date: (	06/18/20	12 2059	W Maga-III		DryWt Corrected: N

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

Analyte	41	Result	Qual	Units	MDL	RL	Dil	Method
pH		7.45	HF J	SU	A1 42 4		1.0	9045C
Services and Hilliam	Analysis Batch:	460-118339	Analysis Date: (	07/02/20	12 1122			DryWt Corrected: N
Corrosivity		7.45	HF J	SU			1.0	9045C
	Analysis Batch:	460-118339	Analysis Date: (	07/02/20	12 1122		12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to 12 to	DryWt Corrected: N
Percent Solids		88.6		%	0.25	0.25	1.0	Moisture
Ar are saria	Analysis Batch:	200-40518	Analysis Date: (	06/18/20	12 2059			DryWt Corrected: N

Job Number: 200-11278-1

Sdg Number: 11278

### **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

Analyte	Result	Qual Units MDL	name / RL Dil	Method
pH 1. Mor	5.19	HF J SU 7	1.0	9045C
A hero disk (Men)	Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1123		DryWt Corrected: N
Corrosivity	5.19	HF J SU 2 TO 114	1.0	9045C
7 6 6 6 6 7 6 7 7	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

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

Analyte		Result		Qual	Units		MDL		RL	D	il	Method
pH 💆		4.40		HF 5	SU					1	.0	9045C
	Analysis Batch: 46	0-118339	Analysis	s Date:	07/02/20	12 112	1	106[]1				DryWt Corrected: N
Corrosivity		4.40		HFJ	SU					1	.0	9045C
1 1 5 5 7 76 11	Analysis Batch: 466	0-118339	Analysis	s Date:	07/02/20	12 112	1		1		1	DryWt Corrected: N
Percent Solids		76.7			%		0.25	1	0.25	1	.0	Moisture
	Analysis Batch: 20	0-40518	Analysis	s Date:	06/18/20	12 205	9	3 30.	17.35			DryWt Corrected: N

Job Number: 200-11278-1

Sdg Number: 11278

### **General Chemistry**

Client Sample iD:

SB-07 (4.5-5)

Lab Sample ID:

200-11346-2

Client Matrix:

200-11346-Solid Date Sampled: 06/14/2012 1700

Analyte	reg .	Result		Qual U	Inits	MDL	RL	Dil	Method
pH :		6.86	F	ff ブ S	U	historianitalitalitaliin roncominancom	, ,	1.0	9045C
The state of the state of	Analysis Batch: 46	0-118339	Analysis	Date: 07/	02/2012 112	25 🔭 🖰		4 7 1 1 1 1	DryWt Corrected: N
Corrosivity		6.86	F	⊣F∮S	Us 🐧 🕕			1.0	9045C
	Analysis Batch: 46	0-118339	Analysis	Date: 07/	02/2012 112	.5		L. D	DryWt Corrected: N
Percent Solids		86.8		%	6	0.25	0.25	1.0	Moisture
	Analysis Batch: 20	0-40518	Analysis	Date: 06/	18/2012 205	59	· • • •	14.4	DryWt Corrected: N

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

Analyte	Result	Qual Units MDL	RL Dil	Method Web
pH	6.91	HF J SU	1.0	9045C
	Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1126		DryWt Corrected: N
Согтовічіту	6.91	HF <b>∫</b> SU∜ ₹ 10	1.0	9045C
41.00 kg 1. 1. 11 17 c	Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1126	Marie Sall Shirt	DryWt Corrected: N
Percent Solids	86.3	% 0.25	0.25	Moisture
4 4 5 4 7 7 7	Analysis Batch: 200-40518	Analysis Date: 06/18/2012 2059	Company of the second	DryWt Corrected: N

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

Analyte	Liber's	Result	Qual	Units	MDL	RL	Dil	Method
pH .	1 1	7.16	HFJ	SU	15 44		1.0	9045C
TO AN INCIDENT CANADA	Analysis Batch:	460-118339	Analysis Date:	07/02/20	12 1127			DryWt Corrected: N
Corrosivity		7.16	HFJ	SU			1.0	9045C
ment of the con-	Analysis Batch:	460-118339	Analysis Date:	07/02/20	12 1127			DryWt Corrected: N
Percent Solids	0.1	84.8		%	0.25	0.25	1.0	Moisture
	Analysis Batch:	200-40518	Analysis Date:	06/18/20	12 2059			DryWt Corrected: N

Job Number: 200-11278-1

Sdg Number: 11278

#### **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

Analyte	Result	Qual Units	MDL	RL	Dil	Method
pH	7.50	HF か SU	•		1.0	9045C
	Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1	129			DryWt Corrected: N
Corrosivity	7.50	HF J SU			1.0	9045C
	Analysis Batch: 460-118339	Analysis Date: 07/02/2012 1	129			DryWt Corrected: N
Percent Solids	82.9	<b>%</b>	0.25	0.25	1.0	Moisture
	Analysis Batch: 200-40518	Analysis Date: 06/18/2012 2	059			DryWt Corrected: N

Sdg Number: 11278

#### **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

Analyte		Result	Qı	ual L	Jnits		MDL		RL	Dil	Method
Ammonia (as N)-AS	STM Leach	5.7		Z n	ng/L		0.026		0.20	2.0	4500 NH3 H
	Analysis Batch: 4	460-120125	Analysis D	ate: 07	/17/201	2 120	11,	15			DryWt Corrected: N
)	Prep Batch: 460-	-120071	Prep Date:	: 07/17/	2012 06	30					÷
Sulfide		3750		'n	ng/Kg		54.8		148	10	9034
	Analysis Batch: 460-117804			ate: 06/	/21/2012	2 180	10				DryWt Corrected: Y
	Prep Batch: 460-	-117799	Prep Date:	: 06/21/	2012 13	300					
Chloride-Soluble		39.7	J	n	ng/Kg		33.9		170	5.0	9056
	Analysis Batch: 6	680-241232	Analysis D	ate: 06	/21/2012	2 233	5				DryWt Corrected: Y
Nitrate as N-Soluble	•	8.5	U	n	ng/Kg		2.5		8.5	5.0	9056
	Analysis Batch: 6	680-241430	Analysis D	ate: 06	/22/2012	2 190	8				DryWt Corrected: Y
Nitrite as N-Soluble		8.5	Ū	n	ng/Kg		2.5		8.5	5.0	9056
	Analysis Batch: 6	680-241430	Analysis D	ate: 06/	/22/2012	2 190	8				DryWt Corrected: Y
Sulfate-Soluble		2450		n	ng/Kg		33.9		170	5.0	9056
	Analysis Batch: 6	680-241232	Analysis D			2 233	5				DryWt Corrected: Y
Fluoride-Soluble		<del>33.9</del>		-R n			-6.8	-	<del>-33:9</del>	 5.0	9056
	Analysis Batch: 6	580-241232	Analysis D	ate: 06/	/21/2012	2 <b>23</b> 3	5				DryWt Corrected: Y
Percent Solids		58.8		%	•		0.25		0.25	1.0	Moisture
	Analysis Batch: 2	200-40518	Analysis Date: 06/18/2012 2059							DryWt Corrected: N	
Bicarbonate Alkalini CaCO3-Soluble	ty as	34.0	U	n	ng/Kg		34.0		34.0	1.0	SM 2320B
	Analysis Batch: 4	<b>1</b> 60-118089	Analysis D	ate: 06/	/29/2012	2 172	:3				DryWt Corrected: Y
Carbonate Alkalinity CaCO3-Soluble	as as	34.0	U	n	ng/Kg		34.0		34.0	1.0	SM 2320B
	Analysis Batch: 4	<del>1</del> 60-118089	Analysis D	ate: 06/	/29/2012	2 172	:3				DryWt Corrected: Y
Alkalinity-Soluble		34.0	U	m	ng/Kg		34.0		34.0	1.0	SM 2320B
	Analysis Batch: 4	160-118089	Analysis D	ate: 06/	/29/2012	2 172	3				DryWt Corrected: Y
Phosphorus as PO4	1	2150		n	ng/Kg		20.3		51.0	20	SM 4500 P E
	Analysis Batch: 4	160-119560	Analysis D	ate: 07/	/11/2012	2 153	0				DryWt Corrected: Y
	Prep Batch: 460-	119552	Prep Date:	07/11/2	2012 11	38					
Phosphorus as P		702		n	ng/Kg		20.3		51.0	20	SM 4500 P E
	Analysis Batch: 4	160-119560	Analysis D	ate: 07/	/11/2012	2 153	0				DryWt Corrected: Y
	Prep Batch: 460-	119552	Prep Date:	07/11/2	2012 11	38					•

Sdg Number: 11278

### **General Chemistry**

Client Sample ID:

SB-01 (12-13)

Lab Sample ID:

200-11346-7

Client Matrix:

Solid

Date Sampled: 06/15/2012 1405

Analyte		Result	Qual	Units	MDI	L F	!L	Dil	Method
Ammonia (as N)-A	STM Leach	2.1	<b></b>	mg/L	0.01	13 0	.10	1.0	4500 NH3 H
	Analysis Batch:	460-120125	Analysis Date: 07/17/2012 1148						DryWt Corrected: N
	Prep Batch: 46	0-120071	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:	06/21/20	12 1800		4		DryWt Corrected: Y
	Prep Batch: 46	0-117799	Prep Date: 06/	21/2012	1300				
pH		4.14	HFJ	SU				1.0	9045C
	Analysis Batch:	460-119669	Analysis Date:	07/12/20	12 1601				DryWt Corrected: N
Corrosivity		4.14	HF J	SU				1.0	9045C
3, 10	Analysis Batch:	460-119669	Analysis Date:	07/12/20	12 1601				DryWt Corrected: N
Chloride-Soluble		111	U	mg/Kg	22.1	1	11	5.0	9056
	Analysis Batch:	680-241232	Analysis Date:	06/22/20	12 0012				DryWt Corrected: Y
Nitrate as N-Solub	е	5.5	U	mg/Kg	1.7	5	.5	5.0	9056
	Analysis Batch:	680-241430	Analysis Date:	06/22/20	12 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:	06/22/20	12 1924				DryWt Corrected: Y
Sulfate-Soluble		1030		mg/Kg	22.1	1	11	5.0	9056
	Analysis Batch:	680-241232	Analysis Date:	06/22/20	12 0012				DryWt Corrected: Y
Fluoride-Soluble		-22.1	-UR	mg/Kg	4.4-	- 2	2.4	5.0	9056
	Analysis Batch:	680-241232	Analysis Date:	06/22/20	12 0012				DryWt Corrected: Y
Percent Solids		88.9		%	0.25	0	.25	1.0	Moisture
	Analysis Batch:	200-40518	Analysis Date:	06/18/20	12 2059				DryWt Corrected: N
Bicarbonate Alkalir CaCO3-Soluble	ity as	22.5	U	mg/Kg	22.5	5 2	2.5	1.0	SM 2320B
	Analysis Batch:	460-118089	Analysis Date:	06/29/20	12 1705				DryWt Corrected: Y
Carbonate Alkalinit CaCO3-Soluble	y as	22.5	U	mg/Kg	22.5	2	2.5	1.0	SM 2320B
	Analysis Batch:	460-118089	Analysis Date:	06/29/20	12 1705				DryWt Corrected: Y
Alkalinity-Soluble		22.5	U	mg/Kg	22.5	2	2.5	1.0	SM 2320B
	Analysis Batch:	460-118089	Analysis Date:	06/29/20	12 1705				DryWt Corrected: Y
Phosphorus as PO	4	1680		mg/Kg	13.5	3	3.8	20	SM 4500 P E
	Analysis Batch:	460-119560	Analysis Date:	07/11/20	12 1530				DryWt Corrected: Y
	Prep Batch: 460	0-119552	Prep Date: 07/	11/2012 1	1138				
Phosphorus as P		549		mg/Kg	13.5	3	3.8	20	SM 4500 P E
	Analysis Batch:	460-119560	Analysis Date:	07/11/20	12 1530				DryWt Corrected: Y
	Prep Batch: 460	0-119552	Prep Date: 07/						

Sdg Number: 11278

#### **General Chemistry**

Cllent Sample ID:

SB-26 (10-11)

Lab Sample ID:

200-11346-8

Client Matrix:

Solid

% Moisture:

34.9

Date Sampled: 06/14/2012 1530

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: \
	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 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-Solubl	e 7.7	U mg/Kg 2.3	7.7	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	5.0	9056
	Analysis Batch: 680-241430	Analysis Date: 06/22/2012 1939		DryWt Corrected: \
Sulfate-Soluble	47400	mg/Kg 307	1530 50	9056
	Analysis Batch: 680-241855	Analysis Date: 06/28/2012 0010		DryWt Corrected: \
Fluoride-Soluble	<del>-30.7</del> -	→ R mg/Kg _6.1	<del>30.7 ·</del>	9056
	Analysis Batch: 680-241232	Analysis Date: 06/22/2012 0024		DryWt Corrected: \
Percent Solids	65.1	% 0.25	0.25	Moisture
	Analysis Batch: 200-40518	Analysis Date: 06/18/2012 2059		DryWt Corrected: N
Bicarbonate Alkalin CaCO3-Soluble	ity as 30.7	UHJ mg/Kg 30.7	30.7	SM 2320B
	Analysis Batch: 460-118089	Analysis Date: 06/29/2012 1708		DryWt Corrected: Y
Carbonate Alkalinit CaCO3-Soluble	y as 30.7	UH <b>J</b> mg/Kg 30.7	30.7 1.0	SM 2320B
	Analysis Batch: 460-118089	Analysis Date: 06/29/2012 1708		DryWt Corrected: \
Alkalinity-Soluble	30.7	U H <b>J</b> mg/Kg 30.7	30.7 1.0	SM 2320B
	Analysis Batch: 460-118089	Analysis Date: 06/29/2012 1708		DryWt Corrected: \
Phosphorus as PO	4 910	mg/Kg 18.4	46.1	SM 4500 P E
ti-star.	Analysis Batch: 460-118566	Analysis Date: 07/03/2012 1700		DryWt Corrected: \
	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
Jega Jelliel	Analysis Batch: 460-118566 Prep Batch: 460-118565	Analysis Date: 07/03/2012 1700 Prep Date: 07/03/2012 1100		DryWt Corrected: Y
	The Parton 100 110000		4	

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

Cheff Matrix.			uie	+0.2	Date Received: 06/16/2012 1000			
Analyte		Result	Qual	Units	MDL	Lan i RL	Dil	Method
Sulfide	į	44.5		mg/Kg	5.4	14.5	1.0	9034
	Analysis Batch	n: 460-117804	Analysis Date:	06/21/20	12 1800			DryWt Corrected: Y
	Prep Batch: 46	60-117799	Prep Date: 06/2	21/2012 1	1300			
pH		4.73	HF 5	SU	CH3/3 211, 113237		1.0	9045C
	Analysis Batch	n: 460-118339	Analysis Date:					DryWt Corrected: N
Corrosivity		4.73	HF 5	SU			1.0	9045C
	Analysis Batch	ı: 460-118339	Analysis Date:	07/02/20	12 1131			DryWt Corrected: N
Chloride-Soluble		338		mg/Kg	9 33.4	167	5.0	9056
	Analysis Batch	: 680-241232	Analysis Date:	06/22/20	12 0037			DryWt Corrected: Y
Nitrate as N-Soluble	е	8.3	USS	mg/Kg	2.5	8.3	5.0	9056
	Analysis Batch	n: 680-241430	Analysis Date:	06/22/20	12 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:	06/22/20	12 1955			DryWt Corrected: Y
Sulfate-Soluble		4790		mg/Kg	33.4	167	5.0	9056
	Analysis Batch	: 680-241232	Analysis Date:	06/22/20	12 0037			DryWt Corrected: Y
Fluoride-Soluble		<del>-33.4</del> -	UR	mg/Kg	-6.7	-33.4	5.0	9056
	Analysis Batch	: 680-241232	Analysis Date:	06/22/20	12 0037			DryWt Corrected: Y
Percent Solids		59.8		%	0.25	0.25	1.0	Moisture
	Analysis Batch	: 200-40518	Analysis Date:	06/18/20	12 2059			DryWt Corrected: N
Bicarbonate Alkalini CaCO3-Soluble	ity as	33.4	C H U	mg/Kg	33.4	33.4	1.0	SM 2320B
11311414 10021416	Analysis Batch	: 460-118089	Analysis Date:	06/29/20	12 1713		500V 13	DryWt Corrected: Y
Carbonate Alkalinity CaCO3-Soluble	/ as	33.4	UHJ	mg/Kg	33.4	33.4	1.0	SM 2320B
	Analysis Batch	: 460-118089	Analysis Date:	06/29/20	12 1713			DryWt Corrected: Y
Alkalinity-Soluble		33.4	UHJ	mg/Kg	33.4	33.4	1.0	SM 2320B
	Analysis Batch	: 460-118089	Analysis Date:	06/29/20 ⁻	12 1713			DryWt Corrected: Y
Phosphorus as PO	1	2060		mg/Kg	25.0	62.7	25	SM 4500 P E
	Analysis Batch	: 460-118566	Analysis Date:	07/03/20 ⁻	12 1700			DryWt Corrected: Y
	Prep Batch: 46	0-118565	Prep Date: 07/0	03/2012 1	100			
Phosphorus as P		671		mg/Kg	25.0	62.7	25	SM 4500 P E
	Analysis Batch	: 460-118566	Analysis Date:	07/03/20 ⁻	12 1700			DryWt Corrected: Y
	Prep Batch: 46	0-118565	Prep Date: 07/0	03/2012 1	100			

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

Analyte		Result	Qual	Units	MDL	RL	Dil	Method Method
pH		5.17	HF5	SU	ndental had distributed in the following the following the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the	15	1.0	9045C
	Analysis Ba	atch: 460-118709	Analysis Date:	07/05/20	12 1607		S. C. WHAT !	DryWt Corrected: N
Corrosivity		5.17	HFJ	SU			1.0	9045C
九 隐蒙 北	Analysis Ba	atch: 460-118709	Analysis Date:	07/05/20	12 1607			DryWt Corrected: N
Chloride-Soluble		187	* U }	mg/Kg	37.3	1875	5.0	9056
	Analysis Ba	atch: 680-242043	Analysis Date:	06/30/20	12 0419			DryWt Corrected: Y
Nitrate as N-Soluble	е	9.3	US	mg/Kg	2.8	9.3	5.0	9056
	Analysis Ba	atch: 680-241960	Analysis Date:	06/28/20	12 2207			DryWt Corrected: Y
Nitrite as N-Soluble	•	9.3	Unst	mg/Kg	2.8	9.3	5.0	9056
	Analysis Ba	atch: 680-241960	Analysis Date:	06/28/20	12 2207			DryWt Corrected: Y
Sulfate-Soluble		8700		mg/Kg	37.3	-187	5.0	9056
	Analysis Ba	atch: 680-242043	Analysis Date:	06/30/20	12 0419			DryWt Corrected: Y
Fluoride-Soluble		37.3	U	mg/Kg	7.5	37.3	5.0	9056
	Analysis Ba	atch: 680-242043	Analysis Date:	06/30/20	12 0419			DryWt Corrected: Y
Percent Solids		53.6		%	0.25	0.25	1.0	Moisture
	Analysis Ba	atch: 200-40632	Analysis Date:	06/20/20	12 1333	or operation		DryWt Corrected: N
Bicarbonate Alkalin CaCO3-Soluble	ity as	37.3	" <b>U</b>	mg/Kg	37.3	37.3	1.0	SM 2320B
Same and March	Analysis Ba	atch: 460-118089	Analysis Date:	06/29/20	12 1657			DryWt Corrected: Y
Carbonate Alkalinity	y as	37.3			37.3	37.3		SM 2320B
retoristi lililiiti	Analysis Ba	atch: 460-118089	Analysis Date:	06/29/20	12 1657			DryWt Corrected: Y
Alkalinity-Soluble	C 1	37.3	Lyle U	mg/Kg	37.3	37.3		SM 2320B
	Analysis Ba	atch: 460-118089	Analysis Date:					DryWt Corrected: Y
					SHUL	1 8,		
					The all ships	Book State	er e ny later	

Sdg Number: 11278

Check States and

## **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

					Date /16061464. 00/20/2012 1010
Analyte	Result	Qual	Units MDL	RL	Dil Method
A COTALL A			75 3	~~~~~~	

Analyte	14	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia (as N)-AS	STM Leach	3.8		mg/L	0.013	0.10	1.0	4500 NH3 H
	Analysis Batch	: 460-120125	Analysis Date:	07/17/201	2 1149	HI'B THE TO BE	mi grater	DryWt Corrected: N
	Prep Batch: 46	0-120071	Prep Date: 07/	17/2012 0	630	THE Y		
Sulfide		<del>-10:8 -</del>	UHR	mg/Kg	4.0	-10.8	1.0	9034
	Analysis Batch	: 460-121720	Analysis Date:		2 1800			DryWt Corrected: Y
1. C	Prep Batch: 46	0-121719	Prep Date: 07/	28/2012 1	115	130 mile 174		•
ρН		3.88	HF	SU			1.0	9045C
	Analysis Batch	: 460-118709	Analysis Date:		2 1608			DryWt Corrected: N
Corrosivity		3.88	HF J	์su			1.0	9045C
	Analysis Batch	: 460-118709	Analysis Date:	07/05/201	2 1608			DryWt Corrected: N
Chloride-Soluble		122	U	mg/Kg	24.4	122	5.0	9056
	Analysis Batch	: 680-242043	Analysis Date:	06/30/201	2 0432			DryWt Corrected: Y
Nitrate as N-Soluble	е	6.1	U	mg/Kg	1.8	6.1	5.0	9056
	Analysis Batch	: 680-241960	Analysis Date:	06/28/201	2 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:	06/28/201	2 2223			DryWt Corrected: Y
Sulfate-Soluble		2980		mg/Kg	24.4	122	5.0	9056
	Analysis Batch	: 680-242043	Analysis Date:	06/30/201	2 0432			DryWt Corrected: Y
Fluoride-Soluble		24.4	U	mg/Kg	4.9	24.4	5.0	9056
	Analysis Batch	: 680-242043	Analysis Date:	06/30/201	2 0432			DryWt Corrected: Y
Percent Solids		80.5		%	0.25	0.25	1.0	Moisture
	Analysis Batch	: 200-40632	Analysis Date:	06/20/201	2 1333			DryWt Corrected: N
Bicarbonate Alkalin CaCO3-Soluble	ity as	24.8	U	mg/Kg	24.8	24.8	1.0	SM 2320B
	Analysis Batch	: 460-118089	Analysis Date:	06/29/201	2 1701			DryWt Corrected: Y
Carbonate Alkalinity CaCO3-Soluble	/ as	24.8	U	mg/Kg	24.8	24.8	1.0	SM 2320B
	Analysis Batch	: 460-118089	Analysis Date:	06/29/201	2 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:	06/29/201	2 1701			DryWt Corrected: Y
Phosphorus as PO-	4	1140		mg/Kg	14.9	37.3	20	SM 4500 P E
	Analysis Batch	: 460-119560	Analysis Date:	07/11/201	2 1530			DryWt Corrected: Y
	Prep Batch: 46	0-119552	Prep Date: 07/	11/2012 11	138			•
Phosphorus as P		373		mg/Kg	14.9	37.3	20	SM 4500 P E
	Analysis Batch	: 460-119560	Analysis Date:	07/11/201:	2 1530			DryWt Corrected: Y
	Prep Batch: 46	0-119552	Prep Date: 07/	11/2012 11	138			-

Job Number: 200-11278-1

Sdg Number: 11278

### **General Chemistry**

Client Sample ID:

SB-12 (11-12)

Lab Sample ID:

200-11384-3

Date Sampled: 06/16/2012 0025

Lab Sample ID: Client Matrix:		1384-3		Date Sampled: 06/16/2012 0925 Date Received: 06/20/2012 1010				
Analyte posterio		Result	ujud Qu	ual Units	MDL	RL.	Dil	Method
pH ₁₁ of density	1.7	7.38	, HF	J SU		$\hat{I}_{q}^{''}, \gamma_{q,q}^{*}$	1.0	9045C
	Analysis B	atch: 460-118709	Analysis D		012 1611	oints; stak, ii		DryWt Corrected: N
Corrosivity		7.38	HF	SU SU		6 #12. 11	a sisjeri c 1.0	9045C
	Analysis B	atch: 460-118709	Analysis D	ate: 07/05/20	012 1611	* * 14 = 500		DryWt Corrected: N
Percent Solids		89.8			0.25	0.25	1.0	Moisture
	Analysis B	atch: 200-40632	Analysis D		012 1333	4 8100	1 1 1 1 1 1	DryWt Corrected: N
	1/7				100			
			8:39	1,10.12		P 3 867 7		
					7			
						DEDICAL DESIGNATION OF		
		(C#A)						
					medonyane s			
			14.5					
								San Levine
and the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of t								

Job Number: 200-11278-2

Sdg Number: 11278-2

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

Analyte		Result	Qual	Units		MDL		RL		Dil	Method
Cyanide, Total		2.3		mg/Kg		0.060	-2 755-464 Adri-Brythindskinnadrillensersersen ansan e	0.56		1.0	9012A
	Analysis Batch: 460-117617 Prep Batch: 460-117513		Analysis Date: 06/26/2012 1942						148.00	DryWt Corrected: Y	
			Prep Date: 06/26/2012 1030				^				
Cyanide, Free		0.46 0.18	UB-JB	mg/Kg	, N.	0.12		0.46		1.0	9016
	Analysis Batch: 460-117483 Prep Batch: 460-117480		Analysis Date: 06/21/2012 1200 Prep Date: 06/21/2012 0600					ar qui	43.71	DryWt Corrected: Y	
									42C3 C1		

Job Number: 200-11278-2

Sdg Number: 11278-2

**General Chemistry** 

Client Sample ID:

SB-25 (3.5-5)

Lab Sample ID:

000 44070 0

Client Matrix:

200-11278-2

Solid

% Moisture:

31.0

Date Sampled: 06/12/2012 1130

Analyte	Result	Qual	Units	MDL	sillarii 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 103	0			
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 060	0			

Job Number: 200-11278-2

Sdg Number: 11278-2

**General Chemistry** 

Client Sample ID:

DUP-01-06122012

Lab Sample ID:

Client Matrix:

200-11278-3

Solid

% Moisture:

50.7

Date Sampled: 06/12/2012 0000

Analyte	Result	Qual Units MDL	RL Di	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	8 mg/Kg 0.22	0.87	9016
	Analysis Batch: 460-117483	Analysis Date: 06/21/2012 1200		DryWt Corrected: Y
	Prep Batch: 460-117480	Prep Date: 06/21/2012 0600		•

Job Number: 200-11278-2

Sdg Number: 11278-2

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

	70 Moleculos.		<i></i> 00			Date (100e) ved. 00/14/2012 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	2 1943			DryWt Corrected: Y	
	Prep Batch: 460-117513	Prep Date: 06/2	6/2012 10	30				
Cyanide, Free	0,6( 0.45	UB-JB	mg/Kg	0.15	0.61	1.0	9016	
	Analysis Batch: 460-117483	Analysis Date: (	06/21/2012	2 1200			DryWt Corrected: Y	
	Prep Batch: 460-117480	Prep Date: 06/2	1/2012 06	000				

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

)-11326-1

% Moisture:

39.4

Date Sampled: 06/14/2012 1130

Analyte	Res	elt 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			,

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

6-2

% Moisture:

50.2

Date Sampled: 06/14/2012 1010

Result	Qual Units	MDL	RL	* Dil	Method
605	mg/Kg	2.2	20.1	20	9012A
Analysis Batch: 460-117697	Analysis Date: 06/27/2012 15	511			DryWt Corrected: Y
Prep Batch: 460-117649	Prep Date: 06/27/2012 1030				
122	■ Mg/Kg	0.43	1.7	2.0	9016
Aпalysis Batch: 460-117483	Analysis Date: 06/21/2012 1:	200			DryWt Corrected: Y
Prep Batch: 460-117480	Prep Date: 06/21/2012 0600				
	605 Analysis Batch: 460-117697 Prep Batch: 460-117649 122 Analysis Batch: 460-117483	605 mg/Kg Analysis Batch: 460-117697 Analysis Date: 06/27/2012 15 Prep Batch: 460-117649 Prep Date: 06/27/2012 1030 122 prog/Kg Analysis Batch: 460-117483 Analysis Date: 06/21/2012 12	605 mg/kg 2.2  Analysis Batch: 460-117697 Analysis Date: 06/27/2012 1511  Prep Batch: 460-117649 Prep Date: 06/27/2012 1030  122	605 mg/Kg 2.2 20.1  Analysis Batch: 460-117697 Analysis Date: 06/27/2012 1511  Prep Batch: 460-117649 Prep Date: 06/27/2012 1030  122 mg/Kg 0.43 1.7  Analysis Batch: 460-117483 Analysis Date: 06/21/2012 1200	605 mg/Kg 2.2 20.1 20  Analysis Batch: 460-117697 Analysis Date: 06/27/2012 1511  Prep Batch: 460-117649 Prep Date: 06/27/2012 1030  122 Mg/Kg 0.43 1.7 2.0  Analysis Batch: 460-117483 Analysis Date: 06/21/2012 1200

Job Number: 200-11278-2

Sdg Number: 11278-2

Client Sample ID:

SB-11 (5-6)

Lab Sample ID:

` '

Client Matrix:

200-11326-3

Solid

% Moisture:

11.4

Date Sampled: 06/14/2012 0910

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 _18 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	Pren Date: 06/21/2012 0600		•

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

Analyte		Result	Qual	Units	MDL	RL	D	)il	Method
Cyanide, Total	Analysis Batc Prep Batch: 4	0.76 h: 460-117697 l60-117649	J Analysis Date Prep Date: 06			0.77	1.	.0	9012A DryWt Corrected: Y
Cyanide, Free	Analysis Batch: 4	0.46 h: 460-118248 l60-118240	J Analysis Date Prep Date: 06	06/28/201		0.64	1.	.0	9016 DryWt Corrected: Y

Job Number: 200-11278-2

Sdg Number: 11278-2

Client Sample ID:

SB-04 (0-1)

Lab Sample ID:

. . .

Client Matrix:

200-11346-1

Solid

% Moisture:

23.3

Date Sampled: 06/14/2012 1445

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	UBJB 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			

Job Number: 200-11278-2

Sdg Number: 11278-2

**General Chemistry** 

Client Sample ID:

SB-07 (4.5-5)

Lab Sample ID:

Client Matrix:

200-11346-2

Solid

% Moisture:

13.2

Date Sampled: 06/14/2012 1700

							100
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	2 1533			DryWt Corrected: Y
	Prep Batch: 460-117794	Prep Date: 06/	28/2012 06	30			
Cyanide, Free	0.76	UВ	mg/Kg	0.12	0.49	1.0	9016
	Analysis Batch: 460-117483	Analysis Date:	06/21/2012	2 1200	0.76		DryWt Corrected: Y
	Prep Batch: 460-117480	Prep Date: 06/	21/2012 06	800	102.0.00		

Job Number: 200-11278-2

Sdg Number: 11278-2

General	Chemistry
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Client Sample ID:

SB-29 (17-18)

Lab Sample ID:

200-11346-3

Client Matrix:

Solid

0/ 1/ 1

% Moisture: 13.7

Date Sampled: 06/15/2012 0950

			78
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 Correcte
	Prep Batch: 460-117980	Prep Date: 06/29/2012 0630	Quantity of the second
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 Correcte
	Pren Batch: 460-117480	Pren Date: 06/21/2012 0600	

Job Number: 200-11278-2

Sdg Number: 11278-2

General	Chemistry
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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

Analyte	Result	Qual Units MDL	RL Di	Method
Cyanide, Total	0.59	U mg/Kg 0.064	0.59 1.	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 → B mg/Kg 0.13	0.50	9016
	Analysis Batch: 460-117483	Analysis Date: 06/21/2012 1200		DryWt Corrected: Y
	Prep Batch: 460-117480	Prep Date: 06/21/2012 0600		

Job Number: 200-11278-2

Sdg Number: 11278-2

General	Chemistry
---------	-----------

17.1

Client Sample ID:

SB-27 (17.5-18.5)

Lab Sample ID:

200-11346-5

Client Matrix:

200-1134

Solid

% Moisture:

Date Sampled: 06/15/2012 1130

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		r	
Cyanide, Free	0,51 0.20	UB +B 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			•

Job Number: 200-11278-2

Sdg Number: 11278-2

General	Chemistry
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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

			24.0 1.000.001.00,10/20/2 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	COSTILLATION OF THE COST
Cyanide, Free	9.0	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	

Job Number: 200-11278-2

Sdg Number: 11278-2

**General Chemistry** 

11.1

Client Sample ID:

SB-01 (12-13)

Lab Sample ID:

Client Matrix:

200-11346-7

Solid

% Moisture:

Date Sampled: 06/15/2012 1405

Analyte		Result	Qual	Units		MDL	RL	Dil	Method
Cyanide, Total		0.56	,	mg/Kg	* ***********************	0.061	0.56	1.0	9012A
* **.	Analysis Batch: 460-118	3029	Analysis Date:	06/29/20	12 111	5			DryWt Corrected: Y
	Prep Batch: 460-117980		Prep Date: 06/2	29/2012 0	630				
Cyanide, Free	0.46 -	<del>0.18</del>	UBJB	mg/Kg	٠.,	0.12	0.46	1.0	9016
	Analysis Batch: 460-117	7483	Analysis Date:	06/21/20	12-120	0			DryWt Corrected: Y
	Prep Batch: 460-117480	)	Prep Date: 06/2	21/2012 0	600				

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

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/	<b>28/2012 09</b> 3	10			
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 060	00			1

Job Number: 200-11278-2

Sdg Number: 11278-2

General	Chemistry

Client Sample ID:

SB-26 (12-13)

Lab Sample ID:

. . . . . . . . . .

Client Matrix:

200-11346-9

Solid

% Moisture:

40.2

Date Sampled: 06/14/2012 1545

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 174-	1			DryWt Corrected: Y
	Prep Batch: 460-117844	Prep Date: 06/28/2012 0930				
Cyanide, Free	0.71 0.38	UB JB mg/Kg	0.18	0.71	1.0	9016
	Analysis Batch: 460-117483	Analysis Date: 06/21/2012 120	)		u ga il	DryWt Corrected: Y
	Prep Batch: 460-117480	Prep Date: 06/21/2012 0600				

Job Number: 200-11278-2

Sdg Number: 11278-2

**General Chemistry** 

Client Sample iD:

SB-02 (11.5-13.1)

Lab Sample ID:

Client Matrix:

200-11384-1

Solid

% Moisture:

46.4

Date Sampled: 06/15/2012 1600

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 1	130			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 1	200			DryWt Corrected: Y
	Prep Batch: 460-118240	Prep Date: 06/	28/2012 0600				3

Job Number: 200-11278-2

Sdg Number: 11278-2

General	Chemistry
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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

Analyte	Result	Qual	Units	MDL	"III ES III RL	Dil	Method
Cyanide, Total	1.2	Unit	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: 06/2	29/2012 06:	30			
Cyanide, Free	0.70		mg/Kg	0.13	0.52	1.0	9016
	Analysis Batch: 460-118248	Analysis Date:	06/28/2012	1200	4 2 2		DryWt Corrected: Y
	Prep Batch: 460-118240	Prep Date: 06/2	28/2012 06	00			

Job Number: 200-11278-2

Sdg Number: 11278-2

Genera	l Che	mistry
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Client Sample ID:

SB-12 (11-12)

Lab Sample ID:

200-11384-3

Date Sampled: 06/16/2012 0925

Client Matrix:	Solid			% Moist	ture: 10	.2		Date Receiv	ved: 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	Analys	sis Date:	06/29/2012	2 1107			DryWt Corrected: Y
	Prep Batch: 460	-117980	Prep D	Date: 06/	29/2012 06	30			
Cyanide, Free		0.22		J	mg/Kg	0.11	0.46	1.0	9016
1 - 4 - 2 1	Analysis Batch:	460-118248	Analys	is Date:	06/28/2012	2 1200			DryWt Corrected: Y
	Prep Batch: 460	-118240	Prep D	) Date: 06/	28/2012 06	00			,



# **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	Parent		Analysis				
Sample ID	Lab ID	Matrix	Collection Date	Sample	voc	svoc	РСВ	DRO	MET	MISC
TB-06182012	200-11371-1	Water	6/18/2012		Х					
SB-16 (1-1.3')	200-11371-2	Soil	6/18/2012		Х	Χ	Χ		Χ	Χ
SB-09 (4-5')	200-11371-3	Soil	6/18/2012		Х	Χ	Χ		Х	Χ
SB-13 (8.2-9)	200-11382-1	Soil	6/16/2012		Х	Χ	Χ		Χ	Х
SB-13 (12-13)	200-11382-2	Soil	6/16/2012		Х	Х	Χ		Χ	Х
SB-14 (6.5-7.5)	200-11382-3	Soil	6/16/2012		Х	Х	Χ		Χ	Х
SB-14 (17-18)	200-11382-4	Soil	6/16/2012		Х	Х	Χ		Χ	Х
SB-20 (8.5-9.5)	200-11382-5	Soil	6/16/2012		Х	Χ	Χ		Χ	Χ
SB-21 (6-7)	200-11382-6	Soil	6/16/2012		Х	Χ	Χ		Χ	Χ
TB-06162012	200-11382-7	Water	6/16/2012		Х					
DUP-02-06162012	200-11382-8	Soil	6/16/2012	SB-14 (6.5-7.5)	Х	Х	Х		Х	Х
SB-06 (12.2-13.2)	200-11382-10	Soil	6/19/2012		Х	Χ	Χ		Χ	Χ
SB-07 (10.5-12.5)	200-11382-11	Soil	6/19/2012		Х	Χ	Χ		Χ	Χ
SB-07 (16.4-17.4)	200-11382-12	Soil	6/19/2012		Х	Χ	Χ		Χ	Χ
SB-10 (4.2-5)	200-11382-13	Soil	6/19/2012		Х	Χ	Χ		Χ	Χ
TB-06192012	200-11382-14	Water	6/19/2012		Х					
SB-05 (10.9-11.9')	200-11398-1	Soil	6/20/2012		Х	Χ	Χ	Х	Χ	Χ
TB-06202012	200-11398-2	Water	6/20/2012		Х					
SB-04 (10.2-11.4)	200-11417-1	Soil	6/21/2012		Х	Х	Χ		Χ	Χ
SB-04 (17.2-18.2)	200-11417-2	Soil	6/21/2012		Х	Χ	Χ		Χ	Х
SB-03 (10-10.9)	200-11417-3	Soil	6/21/2012		Х	Х	Χ	Х	Х	Х
SB-03 (10.9-11.7)	200-11417-4	Soil	6/21/2012		Х	Х	Х	Х	Х	Х
TB-06212012	200-11417-5	Water	6/21/2012		Х					
DUP-03-06212012	200-11417-6	Soil	6/21/2012	SB-03 (10-10.9)	Х	Х	Х	Х	Х	Х

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.

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

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
3vv-040 0200B	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					
SB-14 (17-18)	1,2,4-Trichlorobenzene Carbon disulfide Chloroform Methylene Chloride Toluene	Detected sample results < RL and < BAL	"UB" at the RL			
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	form ene Chloride				

Sample Location	Analytes	Sample Result	Qualification	
SB-07 (16.4-17.4)	1,2,4-Trichlorobenzene Chloroform			
SB-10 (4.2-5)	Carbon disulfide Chloroform Methylene Chloride Toluene			
SB-05 (10.9-11.9')	Chloroform Methylene Chloride Toluene	Detected sample results < RL and < BAL	"UB" at the RL	
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)		Chloroethane	16.2 %
SB-21 (6-7) SB-06 (12.2-13.2) SB-07 (16.4-17.4) SB-10 (4.2-5)	Initial %RSD	Acetone	19.6 %
SB-05 (10.9-11.9') SB-04 (17.2-18.2) SB-03 (10.9-11.7)		2-Butanone	20.4 %
		Dichlorodifluoromethane	-21.7 % (decrease in sensitivity)
TB-06162012	Continuing %D	Bromomethane	-24.0 % (decrease in sensitivity)
		4-Methyl-2-pentanone	+20.8 % (increase in sensitivity)
TB-06182012		Dichlorodifluoromethane	-35.2 % (decrease in sensitivity)
TB-06192012 TB-06202012	Continuing %D	Chloromethane	-31.1 % (decrease in sensitivity)
TB-06212012		Bromomethane	-57.7 % (decrease in sensitivity)
	Continuing %D	Dichlorodifluoromethane	-24.9 % (decrease in sensitivity)
SB-16 (1-1.3') SB-13 (8.2-9)		Chloromethane	-28.6 % (decrease in sensitivity)
SB-14 (6.5-7.5) DUP-02-06162012		Bromomethane	-53.0 % (decrease in sensitivity)
SB-07 (10.5-12.5)		Acetone	+22.4 % (increase in sensitivity)
		2-Butanone	+20.2 % (increase in sensitivity)
		Dichlorodifluoromethane	-24.5 % (decrease in sensitivity)
SB-09 (4-5') SB-04 (10.2-11.4)	Continuing %D	Chloromethane	-21.6 % (decrease in sensitivity)
SB-03 (10-10.9) DUP-03-06212012	- Cog /02	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)	Continuing %D	Dichlorodifluoromethane	-30.1 % (decrease in sensitivity)
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 70D	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
	RRF < 0.05	Non-detect	R
	KKF < 0.00	Detect	J
Initial and Continuing	RRF < 0.01 ¹	Non-detect	R
Calibration	KKF < 0.01	Detect	J
	RRF > 0.05 or RRF > 0.01 ¹	Non-detect	No Action
	KKF > 0.05 0  KKF > 0.01	Detect	NO Action
Initial Calibration	%RSD > 15% or a	Non-detect	UJ
Initial Calibration	correlation coefficient < 0.99	Detect	J
	%D > 20%	Non-detect	No Action
Continuing Calibration	(increase in sensitivity)	Detect	J
	%D > 20%	Non-detect	UJ
	(decrease in sensitivity)	Detect	J

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
	1,2-Dichloroethane-d₄	AC
SB-20 (8.5-9.5)	1,2-Dichlorobenzene-d ₄ Toluene-d ₈ 4-Bromofluorobenzene	> UL
SB-21 (6-7) SB-06 (12.2-13.2)	1,2-Dichloroethane-d ₄ 1,2-Dichlorobenzene-d ₄	AC
SB-07 (16.4-17.4) SB-10 (4.2-5)	Toluene-d ₈ 4-Bromofluorobenzene	> UL

Sample Locations	Surrogate	Recovery	
	1,2-Dichloroethane-d₄	< LL but > 10%	
SB-03 (10.9-11.7)	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
> OL	Detect	J
< LL but > 10%	Non-detect	UJ
< LL but > 10 %	Detect	J
< 10%	Non-detect	R
< 10%	Detect	J
Surregates diluted below the calibration curve	Non-detect	UJ ¹
Surrogates diluted below the calibration curve	Detect	J 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) Fluorobenzene Chlorobenzene-d ₅		AC	
SB-03 (10.9-11.7)	1,4-Dichlorobenzene-d ₄	< LL but > 25%	
SB-20 (8.5-9.5)	Fluorobenzene	AC	
SB-06 (12.2-13.2) SB-07 (16.4-17.4)	Chlorobenzene-d₅ 1,4-Dichlorobenzene-d₄	< 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 central limit (III.)	Non-detect	No action
> the upper control limit (UL)	Detect	J
the lower central limit (LL) but a 250/	Non-detect	UJ
< the lower control limit (LL) but > 25%	Detect	J
< 25%	Non-detect	R
< 2070	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 central limit (III.)	Non-detect	No Action
> the upper control limit (UL)	Detect	J

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

# 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	Locations Compounds	
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 central limit (LLL)	Non-detect	No Action
> the upper control limit (UL)	Detect	J
the lower central limit (LL) but > 100/	Non-detect	UJ
< the lower control limit (LL) but > 10%	Detect	J
. 100/	Non-detect	R
< 10%	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
	Acetone	4100 J	1800 J	AC
	Benzene	830 J	640 J	AC
SB-14 (6.5-7.5) / DUP-02-06162012	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
561 66 66212012	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		mance ptable	Not
	No	Yes	No	Yes	Required
GAS CHROMATOGRAPHY/MASS SPECTROMETR	Y (GC/MS	)			
Tier II Validation					
Holding times		Х		Х	
Reporting limits (units)		Х		Х	
Blanks					
A. Method blanks		Х	Х		
B. Equipment/Field blanks					Х
C. Trip blanks		Х	Х		
Laboratory Control Sample (LCS) Accuracy (%R)		Х	Х		
Laboratory Control Sample Duplicate (LCSD) %R					Х
LCS/LCSD Precision (RPD)					Х
Matrix Spike (MS) %R		Х	Х		
Matrix Spike Duplicate (MSD) %R		Х	Х		
MS/MSD Precision RPD		Х		Х	
Field/Laboratory Duplicate Sample RPD		Х		Х	
Surrogate Spike %R		Х	Х		
Dilution Factor		Х		Х	
Moisture Content		Х		Х	
Tier III Validation					
System performance and column resolution		Х		Х	
Initial calibration %RSDs		Х	Х		
Continuing calibration RRFs		Х		Х	
Continuing calibration %Ds		Х	Х		
Instrument tune and performance check		Х		Х	
Ion abundance criteria for each instrument used		Х		Х	
Internal standard		Х	Х		
Compound identification and quantitation			ı	.1	
A. Reconstructed ion chromatograms		Х		Х	
B. Quantitation Reports		Х		Х	
C. RT of sample compounds within the established RT windows		Х		х	
D. Quantitation transcriptions/calculations		Х		Х	
E. Reporting limits adjusted for sample dilutions		Х		Х	

%R

Percent recovery
Relative percent difference RPD %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
	KKF < 0.00	Detect	J
	RRF < 0.01 ¹	Non-detect	R
	KKF < 0.01	Detect	J
	RRF > 0.05 or RRF > 0.01 ¹	Non-detect	No Action
	KKF > 0.05 01 KKF > 0.01	Detect	
Initial Calibration	%RSD > 15% or a	Non-detect	UJ
	correlation coefficient < 0.99	Detect	J
Continuing Calibration	%D > 20%	Non-detect	No Action
	(increase in sensitivity)	Detect	J

Initial/Continuing	Criteria	Sample Result	Qualification
	%D > 20%	Non-detect	UJ
	(decrease in sensitivity)	Detect	J

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	О

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
Above and a control limit (LIII)	Non-detect	No Action
> the upper control limit (UL)	Detect	J
the lower central limit (LL) but - 100/	Non-detect	UJ
< the lower control limit (LL) but > 10%	Detect	J
< 10%	Non-detect	R
< 10%	Detect	J
Surrogates diluted below	Non-detect	J ¹
the calibration range	Detect	J

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	
the upper control limit (OL)	Detect	J	
< the lower control limit (LL) but > 10%	Non-detect	UJ	
< the lower control littlit (EL) but > 10%	Detect	J	
< 10%	Non-detect	R	
< 10%	Detect	J	
Parent sample concentration > 4x the	Detect	No Action	
MS/MSD spiking solution concentration.	Non-detect	NO ACTION	

#### 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
	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
SB-14 (6.5-7.5) /	Benzo[k]fluoranthene	2200	550	120.0 %
DUP-02-06162012	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
	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 %
SB-03 (10-10.9) /	Benzo[a]pyrene	2400	2700	11.8 %
DUP-03-06212012	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		orted	Performance Acceptable		Not
	No	Yes	No	Yes	Required
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (	GC/MS)				
Tier II Validation					
Holding Times		Х		Х	
Reporting Limits (units)		Х		Х	
Blanks					
A. Method Blanks		Х		Х	
B. Equipment/Field Blanks					Х
Laboratory Control Sample (LCS) Accuracy (%R)		Х		Х	
Laboratory Control Sample Duplicate (LCSD) %R					Х
LCS/LCSD Precision (RPD)					Х
Matrix Spike (MS) %R		Х	Х		
Matrix Spike Duplicate (MSD) %R		Х	Х		
MS/MSD RPD		Х		Х	
Field/Laboratory Duplicate Sample RPD		Х	Х		
Surrogate Spike %R		Х	Х		
Dilution Factor		Х		Х	
Moisture Content		Х		Х	
Tier III Validation					
System Performance and Column Resolution		Х		Х	
Initial Calibration %RSDs		Х		Х	
Continuing Calibration RRFs		Х		Х	
Continuing Calibration %Ds		Х	Х		
Instrument Tune and Performance Check		Х		Х	
Ion Abundance Criteria for Each Instrument Used		Х		Х	
Internal Standards		Х		Х	
Compound Identification and Quantitation					
A. Reconstructed Ion Chromatograms		Х		Х	
B. Quantitation Reports		Х		Х	
C. RT of Sample Compounds Within the Established RT Windows		Х		Х	
D. Quantitation transcriptions/calculations		Х		Х	
E. Reporting Limits Adjusted for Sample Dilutions		Х		Х	

%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	Soil	14 days from collection to extraction and 40 days from extraction to analysis	Cool to 4±2 °C
SW-846 8015B	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
. 111	Non-detect	No Action
> UL	Detect	J
< LL but > 10%	Non-detect	UJ
< LL but > 10%	Detect	J
< 10%	Non-detect	R
< 10%	Detect	J
D – Surrogates diluted below	Non-detect	₁ 1
the calibration curve	Detect	J

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

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

Percent Difference %D

### 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
40 days from extraction to analys		7 days from collection to extraction and 40 days from extraction to analysis	Cool to 4±2 °C
SW-846 8082A	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	Non-detect	UJ
Illiliai Calibration	correlation coefficient <0.99		J
	%D > 15% (increase in sensitivity)	Non-detect	No Action
Continuing Calibration		Detect	J
	%D > 15%	Non-detect	UJ
	(decrease in sensitivity)	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
	No	Yes	No	Yes	Required
GAS CHROMATOGRAPHY (GC/ECD)					
Tier II Validation					
Holding times		Х		Х	
Reporting limits (units)		Х		Х	
Blanks					
A. Method blanks		Х		Х	
B. Equipment/Field blanks					Х
Laboratory Control Sample (LCS) Accuracy %R		Х		Х	
Laboratory Control Sample Duplicate (LCSD) %R					Х
LCS/LCSD Precision (RPD)					Х
Matrix Spike (MS) %R		Х		Х	
Matrix Spike Duplicate (MSD) %R		Х		Х	
MS/MSD RPD		Х		Х	
Field/Laboratory Duplicate Sample RPD		Х		Х	
Surrogate Spike %R		Х		Х	
Column (%D) (If dual column is performed-not confirmation purposes only)		Х		Х	
Dilution Factor		Х		Х	
Moisture Content		Х		Х	
Tier III Validation					
Initial calibration %RSDs		Х		Х	
Continuing calibration %Ds		Х	Х		
System performance and column resolution		Х		Х	
Compound identification and quantitation					•
A. Quantitation Reports		Х		Х	
B. RT of sample compounds within the established RT windows		Х		Х	
C. Identification/Confirmation		Х		Х	
D. Quantitation transcriptions/calculations		Х		Х	
E. Reporting limits adjusted for sample dilutions		Х		Х	

%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
	Antimony	20 %
	Arsenic	63 %
	Barium	58 %
	Cadmium	74 %
	Chromium	65 %
CD 42 (42 42)	Cobalt	69 %
SB-13 (12-13)	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 200/ to 740/	Non-detect	UJ
MS percent recovery 30% to 74%	Detect	J
MS percent recovery 4 200/	Non-detect	R
MS percent recovery < 30%	Detect	J
MS percent recovery > 1259/	Non-detect	No Action
MS percent recovery > 125%	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
	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 %
SB-14 (6.5-7.5) / DUP-02-06162012	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
	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 %
SB-03 (10-10.9) /	Iron	49400	104000	71.2 %
DUP-03-06212012	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)
	Aluminum	29 %
	Barium	31 %
	Chromium	31 %
	Cobalt	37 %
	Copper	27 %
SD 12 (12 12)	Iron	33 %
SB-13 (12-13)	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
S 111	Non-detect	UJ
> UL	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	Rep	orted	Performance Acceptable		Not
	No	Yes	No	Yes	Required
Inductively Coupled Plasma – Atomic Emission Spect Atomic Absorption – Manual Cold Vapor (CV)	trometry (I	CP)			
Tier II Validation					
Holding Times		Х		Х	
Reporting limits (units)		Х		Х	
Blanks					
A. Instrument Blanks		Х	Х		
B. Method Blanks		Х	Х		
C. Equipment/Field Blanks					Х
Laboratory Control Sample (LCS)		Х		Х	
Matrix Spike (MS) Accuracy (%R)		Х	Х		
Matrix Spike Duplicate (MSD) %R					Х
MS/MSD Precision (RPD)					Х
Field/Laboratory Duplicate Sample RPD		Х	Х		
ICP Serial Dilution		Х	Х		
Dilution Factor		Х		Х	
Moisture Content		Х		Х	
Tier III Validation					
Initial Calibration Verification		Х		Х	
Continuing Calibration Verification		Х		Х	
RL Standard		Х		Х	
ICP Interference Check		Х		Х	
Quantitation transcriptions/calculations		Х		Х	
Reporting limits adjusted to reflect sample dilutions		Х		Х	

[%]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	Water	28 days from collection to analysis	Cool to 4±2 °C; pH of < 2
by SM 4500-NH3-H	Soil	28 days from collection to analysis	Cool to 4±2 °C;
Cyanide by SW-846 9012,	Water	14 days from collection to analysis	Cool to 4±2 °C; pH of > 12.
9016	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	Water	28 days from collection to analysis	Cool to 4±2 °C; pH of < 2
by SM 4500-P-E	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	Water	28 days from collection to analysis	Cool to 4±2 °C; pH of < 2
by SW-846 9056	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)	Corrosivity	> 14 Days	7 Days
SB-03 (10-10.9) DUP-03-06212012	рН	> 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)	Corrosivity	> 14 Days	7 Days
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')	рН	> 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.

	Qualification					
Criteria	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 gualified.

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
WIS/WISD percent recovery 30% to 74%	Detect	J
MS/MSD percent recovery < 30%	Non-detect	R
WIS/WISD percent recovery < 30%	Detect	J
MS/MSD percent recovery > 125%	Non-detect	No Action
ivi3/ivi3D percent recovery > 125%	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
	Corrosivity	5.61	4.87	14.1 %
SB-14 (6.5-7.5) /	рН	5.61	4.87	14.1 %
DUP-02-06162012	Total Cyanide	2720	602	127.5 %
	Free Cyanide	32.2	87.9	92.8 %

Sample ID / Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
	Sulfate	8400	6470	26.0 %
	Corrosivity	4.96	2.43	68.5 %
	рН	4.96	2.43	68.5 %
SB-03 (10-10.9) / DUP-03-06212012	Phosphorus as P	116	274	81.0 %
DOI 00 00212012	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,	Rep	orted		mance ptable	Not
and 4500-P-E	No	Yes	No	Yes	Required
Miscellaneous Instrumentation					
Tier II Validation					
Holding times		Х	Х		
Reporting limits (units)		Х		Х	
Blanks					
A. Method blanks		Х		Х	
B. Equipment blanks					Х
Laboratory Control Sample (LCS) Accuracy (%R)		Х		Х	
Laboratory Control Sample Duplicate (LCSD) %R		Х		Х	
LCS/LCSD Precision (RPD)		Х		Х	
Matrix Spike (MS) %R		Х	Х		
Matrix Spike Duplicate (MSD) %R		Х	Х		
MS/MSD RPD		Х		Х	
Field/Laboratory Duplicate Sample RPD		Х	Х		
Dilution Factor		Х		Х	
Moisture Content		Х		Х	
Tier III Validation					
Initial calibration %RSD or correlation coefficient		Х		Х	
Continuing calibration %R		Х		Х	
Raw Data		Х		Х	
Quantitation transcriptions/calculations		Х		Х	
Reporting limits adjusted for sample dilutions		Х		Х	

[%]RSD – relative standard deviation

[%]R – percent recovery
RPD – relative percent difference
%D – difference

### **SAMPLE COMPLIANCE REPORT**

Sample Delivery							Comp	liancy ¹		•	
Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	voc	svoc	РСВ	DRO	MET	MISC	Noncompliance
	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
200-11371	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							Comp	liancy ¹			
Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	VOC	svoc	РСВ	DRO	MET	MISC	Noncompliance
	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
200-11371	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							Comp	liancy ¹			
Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	voc	svoc	РСВ	DRO	MET	MISC	Noncompliance
	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
200-11371	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							Comp	liancy ¹			
Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	voc	svoc	РСВ	DRO	MET	MISC	Noncompliance
	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
200-11371	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 Bv:	Dennis Dvke

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

CHAIN OF CUSTODY / ANALYSIS REQUEST

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

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T8-06182012	2/12/17	+		^		-						2
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58-09 (4-5)	21/8//2	1245		×	×		1,5	×	-			
									_			
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Massachusetts (M-NJ312), North Carolina (No. 578)

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# **Chain of Custody Record**



Client Information (Sub Contract Lab)	Sampler:		Madison, James W	mes W				Can	Carrier Tracking No(s):	dng No	s):		N 0	COC No: 200-8675.1	
Client Contact: Shipping/Receiving	Phone:	:	E-Mall: jim.madison@testamericainc.com	@testan	nericain	c.com							ק ס	Page: Page 1 of 1	
Company: TestAmerica Laboratories, Inc.					j	Analysis		Requested	sted				N 5	Job #: 200-11371-1	
Address: 777 New Durham Road, ,	Due Date Requested: 7/2/2012										$\neg$		סר כ	β	M - Hexane
City: Edison	TAT Requested (days):					√As							О Ш.	B - NaOH C - Zn Acetate	N - None O - AsNaO2
State, Zip: NJ, 08817						for Bi							mo		P - Na2O4S Q - Na2SO3
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:		o)			nd List							יסי	α.	S - H2SO4 T - TSP Dodecahydrate
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## Chain of Custody Record

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TAL 0018-1 (04/10)

**TestAmerico** 

HE LEADER IN ENVIRONMENTAL TESTING

**CHAIN OF CUSTODY / ANALYSIS REQUEST** 

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

3518 316 LAB USE ONLY 3 Job No: S Project No: Sample Numbers T 1450 Water Metals Filtered (Yes/No)? Other: MASSOR Company Company Company Company ż ANALYSIS REQUESTED ENTER 'X: BELOW TO INDICATE REQUEST hulons Site/Project Identification State (Location of site): חסנלעיונצ BOO 1/302 7,0002.088000 Regulatory Program: 70% 424 for 2) Received by Received by Received by 3201S <u>~</u> 3 ල 500/ 1573 15/10/1/J2S Auths includes Water: Soil: Date / Time Date / Time Date / Time No. of. Samplers Name (Printed Cont. S 7 Ţ N Rush Chrages Authorized For: W 7 7 7/3 Analysis Turnaround Time Matrix 50% 535 5, ' Sarl g /: Standard X Preservation Used: 1 = ICE, 2 = HCI,  $3 = H_2SO_4$ ,  $4 = HNO_3$ , 5 = NaOHR. Bill 2 Week 1 Week Other 1:100 0521 812/91/9 P. O. # Time 1000 1100 (0/0) 5/: 91 6 506-6/16/2012 012/91/9 5/10/0W C/(5/0x 5/15/2012 61161212 5/16/1012 7 = Other ξ Company Company Company ompany State Some 21029190-20-100 Address GSS Think the Sample Identification 212-682-9271 AK 6.5-7.5 8.5-9.5 06162012 17-18 6 = Other 12-131 から Name (for report and invoice) 8.2-New York ARCADIS Special Instructions Relinguished by Relinquished by elinquished by Relinquished by SB-17 M-85 58-20 51-25 M-85 12-85 Company D Phone ෆ

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

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

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Page 5303 of 5335

## Chain of Custody Record

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TAL 0018-1 (04/10)

Testamerica Chain of Custody Record

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Client Contact: Shipping/Receiving	Phone:		E-Mail jim.ma	E-Mail: Jim.madison@testamericainc.com	stamericair	ic.com			Page: Page	Page: Page 1 of 1	
Company. TestAmerica Laboratories, Inc.						Analysis R	Requested		Job #	Job # 200-11371-1	
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State, Zip: NJ, 08817 Client Information (Sub Contract Lab) SB-05 (10.9-11.9') (200-11398-1) roject Name: Krasdale, Hunts Point Bronx, NY 777 New Durham Road, Deliverable Requested: I, II, III, IV, Other (specify) Possible Hazard Identification Sample Identification - Client ID (Lab ID) hone: 732-549-3900(Tel) 732-549-3679(Fax) Shipping/Receiving Empty Kit Relinquished by: l'estAmerica Laboratories, elinquished by: Custody Seal No.: 뒭 98520 Project #: 20003974 ₩O#: РО # Phone: Sampler: Date/Time: SSOW#: TAT Requested (days): Due Date Requested: 7/5/2012 Sate/Igne: Sample Date 6/20/12 Date: Eastern であたべ 10:00 (C=comp, G=grab) | BT-Tissue, A-Ali Sample Preservation Code: Type Company Company Mary Company Matrix Solid Madison, James W im.madison@testamericainc.com ime: Field Filtered Sample (Yes or No) Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Mon Special Instructions/QC Requirements Perform MS/MSD (Yes or No) Received by: Cooler Temperature(s) °C and Other Remarks: Received by: × 9012A_Calc/ (MOD) Copy Analytes × SM4500_NH3_H/SM4500NH3_B × × 9016/9016_ExtPrep Analysis Requested × 9034/9030B × 2320B/DI_LEACH (MOD) Local Method × 4500 P E/SM4500 P B Carrier Tracking No(s): × 8270C/3541 (MOD) Target Compound List for BNAs 9012A/9012A_Prep × Date/Time; TRAS Total Number of containers A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaOH F - MoOH G - Amchlor H - Ascorbic Acid I - loo J - DI Water K - EDTA L - EDA Page: Page 1 of 1 COC No: 200-8745.1 Job #: 200-11371-1 Preservation Codes: Special Instructions/Note: 080 M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2O5S
Q - Na2SSO3
R - Na2SSO3
S - H2SO4
T - TSP Dodecahydrate
U - Accan
V - MCAA
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Other	Lab Contact: Cooc No. 1 4018	Telephone:	Time For list use only	(194/	(N/X)	The Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution of the Solution o	ないない。	X NCXXXX X X X X XXXXXXXXXXXXXXXXXXXXXX	X N & K X X X MAHENING SILLIFE	X & X X X X X X Sulfige Cheille physolite	X X X X X X X X X X X X X Thank Carbon to Bicato	X		X X X X X X X X X X X X X X X X X X X	be assessed if samples are retained longer than I month)	Return to Client TD Disposal By Lab Archive For Months	*506#3	Company: Date Time: IT &	(Abanton; hv. Commun. A	2 8 4 K 6/22/12 1045
Chain of Custody Record	Site Contact:	Telephone: 631-806-8934	Analysis Turnaround Time (in BUS days)	TAT if different from below STE	2 days	Containers & Preservatives	N°OH HCI HCI HCI	×	×	7	*	<i>y</i>		×	Sample Disposal ( A fee may be a	Return to Client	Simples part of #5	1520 Received by:	(6:30	Chr
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TestAmerica Laboratory location: Regulatory program:	Client Project Maniper:	Telephone: 682-0632	Email:	Method of Shipment/Carrier:	Shipping/Tracking No:		Sample Date Sample Time	6/21/12 0900	5180	Jeg/	1030	5				Skin Irritant 🔲 Poison B	Meruny	Company: AlcADJ	TA WYC	Company.
	Name:	Address: 655 3rd flee 12 Fleer	City/State/Zip: $\mathcal{N}$	, ,	W	PO#	Sample Identification	513-04 (10.2-11.4)	53-04(17.3-18.2)	(6.01-01) 50-515	A 513-03 (10.9-11.7)	210 2 1 Z D - 81 533	5	DUP-03-06212012	Possible Hazard Identification	Special Instructions/QC Requirements & Comments:	** The Betils inclubes !	Relinquished by Mark Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Office Of	Reinformed by College Ballows Ballows Ballows Ballows	verniquation by:

TAL 0018-1 (04/10)



Custody Seals Intact: Custody Seal No.: 5989	Relinquished by:	Relinquished by: FCD &X	Relinquished by:	Empty Kit Relinquished by:	Deliverable Requested: I, II, III, IV, Other (specify)	Unconfirmed	Possible Hazard Identification										SB-03 (10-10.9) (200-11417-3)		Sample Identification - Citent ID (Lab ID)	Some to Ligaritination - Client ID (1 ph ID)	Site:	Project Name: Krasdale, Hunts Point Bronx, NY	Email:	Phone: 732-549-3900(Tel) 732-549-3679(Fax)	State, Zip: NJ, 08817	City: Edison	Address: 777 New Durham Road, ,	Company: TestAmerica Laboratories, Inc.	Client Contact: Shipping/Receiving	Client Information (Sub Contract Lab)
63	Date/Time:	Date/Time:	Date/Time: 177112														6/21/12		odilible pate	Sample Date	SSOW#:	Project #: 20003974	WO#:	PO#		TAT Requested (days):	Due Date Requested: 7/5/2012		Phone:	Sampler:
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Client Information (Sub Contract Lab)	Sampler:			Lab PM: Madison, James W	on, Ja	mes \	2					Carrier Tracking No(s):	Trackl	ığ No(	s):			COC No: 200-8725.1		
tact: /Receiving	Phone;			E-Mail: jim.madison@testamericainc	adison	@test	ameri		COM		<u> </u>							Page: Page 1 of 1		
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Safe, Zip: NJ, 08817								for BN											P - Na2O4S Q - Na2SO3	
00(Tel) 732-549-3679(Fax)	PO#				J)			d List	,				iou					3.	K - Na2S2SO3 S - H2SO4 T - TSB Dodecahydrae	
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Project Name: Krasdale, Hunts Point Bronx, NY	Project #: 20003974			120000722	***********	py An		get Co		В			D) LUC				itaine	K-EDTA L-EDA	W - ph 4-5 Z - other (specify)	
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Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp,	Matrix (W=water, S=solid, C=waste/oll, BT=Tissue, A=Alr)	Field Filtered Perform MS/I	9012A_Calc/ (N	9045C 9016/9016_Extl	8270C/3541 (M	9012A/9012A_F	4500_P_E/SM4	9034/9030B	SM4500_NH3_I	2320B/DI_LEAG				Total Number	And the say tracks to be 10 Seconds for the 1	Special Instructions/Note:	5335
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SB-03 (10.9-11.7) (200-11417-4)	6/21/12	10:30 Eastern		Solid		×	×	×	×	×	×	×	×				<u> </u>	en.mgene		<u> </u>
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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

Lab File ID:

lhbad12.d

Dilution:

1.0

Prep Batch:

N/A

Initial Weight/Volume:

5 mL

Analysis Date:

06/27/2012 0215

Final Weight/Volume:

5 mL

06/27/2012 0215

Analyte	Result (ug/L)		Qualifier	MDL	RL
Dichlorodifluoromethane	1.0	0.	リナ	0.090	1.0
Chloromethane	1.0		Uグ	0.12	1.0
Vinyl chloride	1.0		U~ 5	0.090	1.0
Bromomethane	1.0		リーケ	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		Ü	1.1	5.0
Chloroform	1.0		Ū	0.16	1.0
1,1,1-Trichloroethane	1.0		Ū	0.16	1.0
Cyclohexane	1.0		Ū	0.23	1.0
Carbon tetrachloride	1.0		Ū	0.17	1.0
Benzene	1.0		Ū	0.17	1.0
1,2-Dichloroethane	1.0		Ū	0.15	1.0
Trichloroethene	1.0		Ū	0.14	1.0
Methylcyclohexane	1.0	120	U	0.25	1.0
1,2-Dichloropropane	1.0		U	0.17	1.0
Bromodichloromethane	1.0		Ū	0.16	1.0
cis-1,3-Dichloropropene	1.0		Ū	0.16	1.0
4-Methyl-2-pentanone	5.0		Ū	0.90	5.0
Toluene	1.0		Ū	0.17	1.0
trans-1,3-Dichloropropene	1.0		Ū	0.18	1.0
1,1,2-Trichloroethane	1.0		Ü	0.18	1.0
Tetrachloroethene	1.0		Ū	0.18	1.0
2-Hexanone	5.0		Ü	1.1	5.0
Dibromochloromethane	1.0		Ü	0.17	1.0
1.2-Dibromoethane	1.0		Ŭ	0.18	1.0
Chlorobenzene	1.0		Ü	0.10	1.0
Ethylbenzene	1.0		U	0.19	1.0
Xylenes, Total	1.0		Ü	0.10	1.0
Styrene	1.0		U	0.17	1.0
Bromoform	1.0		U	0.17	1.0
Isopropylbenzene	1.0		U	0.17	
1,1,2,2-Tetrachloroethane	1.0		U	0.17	1.0
1,3-Dichlorobenzene	1.0		U	0.17	1.0
1,0-Didilotopenzene	1.0			0.18	1.0

TestAmerica Burlington

1,4-Dichlorobenzene

Page 74 of 5335

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1.0

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

8260R	Volatile	Organic	Compounds	(CC/MS)
020UD	VUIALITE	Oruanic	Compounds	IGCIMIST

Analysis Method:

8260B

Analysis Batch:

200-41005

Instrument ID:

L.i

Prep Method:

5030B

Lab File ID:

Dilution:

Prep Batch:

lhbad12.d

1.0

N/A

Initial Weight/Volume:

5 mL

Analysis Date:

06/27/2012 0215

Prep Date:

06/27/2012 0215

Final Weight/Volume:

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

Surrogate		%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	humannakan kutondaran fusion proporteri dulp demograti musut o utung mendengin adai	, 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: Dilution:

5035

Prep Batch:

Lab File ID:

lhbae17.d

440

200-40680

Initial Weight/Volume:

5.33 g

Analysis Date: Prep Date:

06/27/2012 1802 06/21/2012 0952 Final Weight/Volume:

51000 51000 51000 51000 51000 51000 51000 51000 260000	0 0 0 0 0 0 0 0 0	11000 13000 10000 13000 7700 6700	51000 51000 51000 51000 51000
51000 51000 51000 51000 51000 51000	. n . n . n	10000 13000 7700 6700	51000 51000 51000
51000 51000 51000 51000 51000	UU	13000 7700 6700	51000 51000
51000 51000 51000 51000	. U U U	7700 6700	51000
51000 51000 51000	U U	6700	
51000 51000	U		E4000
51000	-		51000
		11000	51000
260000	U	9200	51000
	U	46000	260000
51000	U	8200	51000
51000	U	11000	51000
51000	U	14000	51000
51000	U	10000	51000
51000	U	9200	51000
51000	U	9200	51000
51000	U e	10000	51000
51000	U	9200	51000
260000	U	44000	260000
51000	U	9800	51000
51000	U	10000	51000
51000	U	10000	51000
51000	U	7700	51000
40000	J	11000	51000
51000	U	8700	51000
51000	U	8700	51000
51000	U	9200	51000
51000	U	9800	51000
51000	U	9800	51000
51000	U	9200	-51000
260000	U	55000	260000
150000		10000	51000
51000	U	8700	51000
51000	U	9800	51000
51000	U		51000
260000	Ü		260000
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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

Lab File ID:

lhbae17.d

Dilution:

Prep Batch:

200-40680

440

Initial Weight/Volume:

5.33 g

Analysis Date:

06/27/2012 1802

Prep Date:

06/21/2012 0952

Final Weight/Volume:

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: Dilution:

5035 8.8

Prep Batch:

200-40680

Lab File ID:

lhbaf20.d

Analysis Date:

06/28/2012 1825

Initial Weight/Volume:

5.91 g

Prep Date:

06/21/2012 0952

Final Weight/Volume:

Analyte	DryWt Corrected: Y	Result (ug/Kg)	,	Qualifier	MDL	RL
Dichlorodifluoromethane	·	1400	*	リブ	300	1400
Chloromethane		1400		リブ	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-trichflu	proethane	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		Ū	290	1400
Cyclohexane		1400		Ū	290	1400
Carbon tetrachloride		1400		Ū	220	1400
Benzene		49000			300	1400
1,2-Dichloroethane		1400		U	240	1400
Trichloroethene		1400		Ü	240	1400
Methylcyclohexane		1400		Ū	260	1400
1,2-Dichloropropane		1400		U	270	1400
Bromodichloromethane		1400		Ü	270	1400
cis-1,3-Dichloropropene		1400		Ü	260	1400
4-Methyl-2-pentanone		7200		Ü	1600	7200
Toluene		120000		ū	290	1400
trans-1,3-Dichloropropene		1400		U	240	1400
1,1,2-Trichloroethane		1400		Ü	270	1400
Tetrachloroethene		1400		Ü	290	1400
2-Hexanone		7200		Ü	1100	7200
Dibromochloromethane		1400		Ü	230	1400
1,2-Dibromoethane		1400		Ü	270	1400
Chlorobenzene		1400		Ü	290	1400
Ethylbenzene		110000		U	290	1400
Xylenes, Total		190000			300	
Styrene		15000			240	1400
Bromoform		1400		U		1400
Isopropylbenzene		6500		Š	240	1400
· · ·					270	1400
1,1,2,2-Tetrachloroethane		1400		U	260	1400
1,3-Dichlorobenzene		1400		U	270	1400
1,4-Dichlorobenzene	(数)	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

Lab File ID:

Dilution:

Prep Batch:

lhbaf20.d

8.8

200-40680

Initial Weight/Volume:

5.91 g

Analysis Date:

06/28/2012 1825

Prep Date:

Final Weight/Volume:

10 mL

06/21/2012 0952

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL		RL
1,2-Dichlorobenzene		1400 -	U	290	4	1400
1,2-Dibromo-3-Chloropropane		1400	U	240		1400
1,2,4-Trichlorobenzene		1400	U	290		1400

%Rec	Qualifier	Acceptance Limits
103	ቀምና የመጀመስ ተመሰጥ ተመመጀመስ የመጀመስ የመጀመስ የመስጥ የመስጥ የመስጥ የመመስ የመጀመስ የመጀመስ የመጀመስ የመጀመስ የመጀመስ የመጀመስ የመጀመስ የመጀመስ የመጀመስ የመ	65 - 155
95		80 - 115
89		80 - 115
103		45 - 145
	103 95 89	103 95 89

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 Voiatile Organic Compounds (GC/MS)

Analysis Method:

8260B

Analysis Batch:

200-41091

Instrument ID:

L.i

Prep Method:

5035

Prep Batch:

Lab File ID:

lhbae19.d

Dilution:

8.8

200-40644

Initial Weight/Volume:

5.42 g

Analysis Date:

06/27/2012 1906

Prep Date:	
------------	--

06/20/2012 1425

Final Weight/Volume:	10	mL

Analyte	DryWt Corrected: Y	Result (ug/Kg)		Qualifier	MDL	RL
Dichlorodifluoromethane	,	1100		リブ・・・	220	- 1100
Chloromethane	9.7	1100	4	UJ	280	1100
Vinyl chloride		1100		U	210	1100
Bromomethane		1100		UI	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-trichfluo	roethane	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		Ū	190	1100
1,1-Dichloroethane		1100		U	210	1100
cis-1,2-Dichloroethene		1100		U	190	1100
2-Butanone		5300		Ū	910	5300
Chloroform		1100		Ū	200	1100
1,1,1-Trichloroethane		1100		Ū	210	1100
Cyclohexane		1100		Ü	210	1100
Carbon tetrachloride		1100		Ü	160	1100
Benzene		1800		· ·	220	1100
1,2-Dichloroethane		1100		U	180	1100
Trichloroethene		1100		Ü	180	1100
Methylcyclohexane		1100		Ü	190	1100
1,2-Dichloropropane		1100		Ü	200	1100
Bromodichloromethane		1100		Ü	200	1100
cis-1,3-Dichloropropene		1100		Ü	190	1100
4-Methyl-2-pentanone		5300		Ü	1100	5300
Toluene		1100		U	210	1100
trans-1,3-Dichloropropene		1100		U	180	1100
1,1,2-Trichloroethane		1100		U	200	
Tetrachioroethene		1100		U		1100
2-Hexanone		5300		U	210	1100
Dibromochloromethane		1100			810	5300
1,2-Dibromoethane		1100		U	170	1100
Chlorobenzene				U	200	1100
		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

Lab File ID:

lhbae19.d

Dilution:

Prep Batch:

200-40644

8.8

Initial Weight/Volume:

5.42 g

Analysis Date:

1,2-Dichlorobenzene-d4

06/27/2012 1906

Prep Date:

06/20/2012 1425

Final Weight/Volume:

45 - 145

10 mL

Analyte	DryWt Corrected: `	Y	Result (ug/Kg)		Qualifier	MDL	RL	
1,2-Dichlorobenzene	P. 25		1100	757	U	210	1100	1 - 15.0
1,2-Dibromo-3-Chloropropane			1100		U	180	1100	
1,2,4-Trichlorobenzene	A P		1100		υ.	210	1100	
		ii on						
Surrogate			%Rec		Qualifier	Acceptance	Limits	
1,2-Dichloroethane-d4	-		88	, , , , , , , , , , , , , , , , , , , ,	dente de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la constitució de la	65 - 155		*****************
Toluene-d8			101			80 - 115		
Bromofluorobenzene			98			80 - 115		

100

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1

Sdg Number: 11371

Cilent 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 Voiatile 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

200-40040

Initial Weight/Volume:

5.57 g

Analysis Date: Prep Date: 06/26/2012 1617 06/20/2012 1430 Final Weight/Volume:

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		5.1	UJ	0.24	5.1
Chloromethane		5.1	υ	0.27	5.1
Vinyl chloride		5.1	U	0.31	5.1
Bromomethane		5.1	UJ	0.76	5.1
Chloroethane		5.1	UĪ	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-trichfluc	proethane	5.1	Ü	0.34	5.1
Acetone		34	5	1.0	5.1
Carbon disulfide	.5	2.0	J UB	0.32	5.1
Methyl acetate		5.1	U	0.64	5.1
Methylene Chloride	Z	71 -3.8	J- 0B	0.56	5.1 5.1
trans-1,2-Dichloroethene	J	5.1	U	0.38	5.1
Methyl t-butyl ether		5.1	ŬJ	0.31	5.1
1,2-Dichloroethene, Total		5.1	U U	0.79	
1,1-Dichloroethane		5.1	_		5.1
cis-1,2-Dichloroethene		5.1	U.3	0.42	5.1
2-Butanone			_	0.43	5.1
Chloroform	e <u></u>	5.1	UJ	1.5	5.1
	5		-JB- UB	0.33	5.1
1,1,1-Trichloroethane		5.1	U _A T	0.72	5.1
Cyclohexane		5.1	U	0.87	5.1
Carbon tetrachloride		5.1	ロエ	0.78	5.1
Benzene		5.1	UJ	0.73	5.1
1,2-Dichloroethane		5.1	U	0.63	5.1
Trichloroethene		5.1	υſ	0.49	5.1
Methylcyclohexane		5.1	U	0.17	5.1
1,2-Dichloropropane		5.1	步	0.30	5.1
Bromodichloromethane		5.1	Uブ	0.21	5.1
cis-1,3-Dichloropropene		5.1	UJ	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	υ	0.50	5.1
Dibromochloromethane		5.1	Ü	0.11	- 5.1
1,2-Dibromoethane		5.1	Ū	0.15	5.1
Chlorobenzene		5.1	Ü	0.078	5.1
Ethylbenzene		5.1	Ü	0.057	5.1
Xylenes, Total		5.1	Ü	0.75	5.1
Styrene		5.1	Ü	0.10	5.1
Bromoform		5.1	Ü	0.20	5.1 5.1
Isopropylbenzene		5.1	Ü	0.079	
1,1,2,2-Tetrachloroethane		5.1	U	0.079	5.1
1,3-Dichlorobenzene		5.1 5.1			5.1
1,4-Dichlorobenzene		5.1	U	0.15	5.1
1,4-DIGHOIODEHZEHE		<b>5.</b> I	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:

Lab File ID:

ngan10.d

Dilution:

200-40646

1.0

Initial Weight/Volume:

5.57 g

Analysis Date:

06/26/2012 1617

Prep Date:

06/20/2012 1430

Final Weight/Volume:

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-	-18 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 5035

Analysis Batch:

200-41091

Instrument ID:

L.i

Prep Method: Dilution:

Prep Batch:

Lab File ID:

lhbae20.d

8.8

200-40644

Initial Weight/Volume:

6.69 g

Analysis Date: Prep Date:

06/27/2012 1938 06/20/2012 1425

Final Weight/Volume:

Analyte DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane	2200	リナ	460	2200
Chloromethane	2200	UIT	580	2200
Vinyl chloride	2200	U	440	2200
Bromomethane	2200	U_T	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	Ü	440	2200
2-Hexanone	11000	U	1700	11000
Dibromochloromethane	2200	Ū	350	2200
1,2-Dibromoethane	2200	Ü	420	2200
Chlorobenzene	2200	Ü	440	2200
Ethylbenzene	2200	Ü	440	2200
Xylenes, Total	1800	Ĵ	460	2200
Styrene	2200	Ŭ	380	2200
Bromoform	2200	Ü	380	2200
sopropylbenzene	2200	Ü	420	2200
1,1,2,2-Tetrachloroethane	2200	Ü	400	2200
1,3-Dichlorobenzene	2200	Ü	420	2200
1.4-Dichlorobenzene	2200	Ŭ -	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

Lab File ID:

Dilution:

Prep Batch:

200-40644

lhbae20.d

8.8

Initial Weight/Volume:

6.69 g

Analysis Date:

06/27/2012 1938

Final Weight/Volume:

Prep Date:

06/20/2012 1425

Analyte	DryWt Corrected: Y		Result (ug/Kg)		Qualifier	MDL	RL	
1,2-Dichlorobenzene	p	*****	2200	* ,	U	440	2200	*
1,2-Dibromo-3-Chloropropane		-	2200		U	380	2200	
1,2,4-Trichlorobenzene	,		2200		U	440	2200	
		1						ı i.
Surrogate			%Rec		Qualifier	Acceptance	Limits	
1,2-Dichloroethane-d4	handi tukuluk elikulukan elikak elekiki saane isabekasan anaman suurisen suurisen elekulus an		88	7		65 - 155	************************	et i Josef Subultubulte Bylleden att bereite et av Albusq
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:

Result (ug/Kg)

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

Lab File ID:

Qualifier

ngan13.d

Dilution:

1.0

Prep Batch:

200-40646

Initial Weight/Volume:

6.1 g

Analysis Date:

06/26/2012 1749

DryWt Corrected: Y

Final Weight/Volume:

MDL

5 mL

RL

Prep Date:

Analyte

06/20/2012 1430

Analyte	Diyvvi Conecica. 1	resuit (ug/ry)	Qualifier	MIDL	RL
Dichlorodifluoromethane		4.7	リング	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-trichfluo	proethane	4.7	U	0.31	4.7
Acetone		26	T	0.94	4.7
Carbon disulfide		4732	F UB	0.29	4.7
Methyl acetate		4.7	U	0.59	4.7
Methylene Chloride		4.73.0	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	Ü	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	Ü	0.80	4.7
Carbon tetrachloride		4.7	Ü	0.71	4.7
Benzene		1.6	j	0.67	4.7
1,2-Dichloroethane		4.7	Ü	0.58	4.7
Trichloroethene		4.7	Ü	0.45	4.7
Methylcyclohexane		4.7	Ü	0.16	4.7
1,2-Dichloropropane		4.7	Ü	0.27	4.7
Bromodichloromethane		4.7	Ü	0.20	4.7
cis-1,3-Dichloropropene		4.7	Ü	0.33	4.7
4-Methyl-2-pentanone		, 4.7	Ü	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	Ü	0.32	4.7
Tetrachloroethene		4.7	ŭ	0.10	4.7
2-Hexanone		4.7	Ü	0.46	4.7
Dibromochloromethane		4.7	Ü	0.10	4.7
1,2-Dibromoethane		4.7	ŭ	0.14	4.7
Chlorobenzene		4.7	Ü	0.071	4.7
Ethylbenzene		4.7	Ü	0.053	4.7
Xylenes, Total		4.7	Ü	0.68	4.7
Styrene		4.7	Ü	0.094	4.7
Bromoform		4.7	Ü	0.19	4.7
Isopropylbenzene		4.7	Ü	0.19	4.7
1,1,2,2-Tetrachloroethane		4.7	U	0.072	4.7
1,3-Dichlorobenzene		4.7	U	0.24	4.7
1,4-Dichlorobenzene		4.7	U	0.14	4.7 4.7
., . Didinologolizolio		7.1	J	0.22	4.1

TestAmerica Burlington

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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 Voiatlie Organic Compounds (GC/MS)

Analysis Method:

8260B

Analysis Batch:

200-41070

Instrument ID:

N.i

Prep Method:

5035

Lab File ID:

Dilution:

Prep Batch:

ngan13.d

1.0

200-40646

Analysis Date:

06/26/2012 1749

Initial Weight/Volume:

6.1 g

Prep Date:

06/20/2012 1430

Final Weight/Volume:

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		41	_ <del>-0.08</del> _	JB UB	0.19	4.7	
		702					
Surrogate		Ton I	%Rec	Qualifier	Accepta	nce Limits	
1,2-Dichloroethane-d4			80	haraaa aa aa aa aa aa aa aa aa aa aa aa a	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

Lab File ID:

ngan14.d

Dilution:

1.0

Prep Batch:

200-40646

Initial Weight/Volume:

5.56 g

Analysis Date:

06/26/2012 1819

Prep Date:
------------

06/20/2012 1430

Final Weight/Volume: 5 mL

Analyte	DryWt Corrected: '	Υ	Result (ug/Kg)		Qualifier	MDL	RL	
Dichlorodifluoromethane		7-1	5.1		リケ	0.23	5.1	
Chloromethane			5.1		U	0.27	5.1	
Vinyl chloride			5.1		U	0.31	5.1	
3romomethane			5.1		UJ	0.76	5.1	
Chloroethane	**************************************		5.1		سكتر ل	0.39	5.1	
Trichlorofluoromethane			5.1		U	0.34	5.1	
1.1-Dichloroethene			5.1		Ū	0.38	5.1	
1,1,2-Trichloro-1,2,2-trichfluo	roethane		5.1		Ü	0.34	5.1	
Acetone			19		Ĭ	1.0	5.1	
Carbon disulfide			7.4	3	UB	0.32		7.4
Methyl acetate			5.1					$\tau_i \gamma$
•					U	0.64	5.1	
Methylene Chloride			4.9		J	0.56	5.1	
rans-1,2-Dichloroethene			5.1		U	0.38	5.1	
Methyl t-butyl ether			5.1		U	0.31	5.1	
,2-Dichloroethene, Total			5.1		U	0.79	5.1	
I,1-Dichloroethane			5.1		U	0.42	5.1	
cis-1,2-Dichloroethene			5.1		U	0.43	5.1	
2-Butanone			5.1		UI	1.5	5.1	
Chloroform		5,1.	0.80	3.8	JB UB	0.33	5.1	
,1,1-Trichloroethane			5.1		U	0.72	5.1	
Cyclohexane			5.1		Ü	0.87	5.1 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	
1-Methyl-2-pentanone			5.1		U	0.61	5.1	
Toluene	(90)	5.1.	0.19		-JB-UB	0.10	5.1	
rans-1,3-Dichloropropene		. 1	5.1		UT	0.13	5.1	
1,1,2-Trichloroethane			5.1		UJ	0.35	5.1	
Tetrachloroethene			5.1		UJ	0.11	5.1	
2-Hexanone			5.1		Ū.S	0.50	5.1	
Dibromochloromethane			5.1		U AT	0.11	5.1	
,2-Dibromoethane			5.1			0.15	5.1	
Chlorobenzene					UT			
			5.1		0 7	0.078	5.1	
Ethylbenzene			5.1		UI	0.057	5.1	
(ylenes, Total			5.1		0 1	0.75	5.1	
Styrene			5.1		US	0.10	5.1	
Bromoform			5.1		UZ	0.20	5.1	
sopropylbenzene			5.1		UJ	0.079	5.1	
,1,2,2-Tetrachloroethane			5.1		UF	0.27	5.1	
,3-Dichlorobenzene			5.1		UF	0.15	5.1	
1,4-Dichlorobenzene			5.1		υŹ	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

Lab File ID:

ngan14.d

Dilution:

Prep Batch:

200-40646

1.0

Initial Weight/Volume:

5.56 g

Analysis Date:

06/26/2012 1819

Final Weight/Volume:

Prep Date:

06/20/2012 1430

Analyte	DryWt Corrected: Y		Result (ug/Kg)	Qualifier	MDL	RL	
1,2-Dichlorobenzene		16	5.1	U	0.22	5.1	
1,2-Dibromo-3-Chloropropane			5.1	UJ	0.93	5.1	
1,2,4-Trichlorobenzene		5.1	12	TE NB	0.20	5.1	
Surrogate			%Rec	Qualifier	Acceptano	ce Limits	
1,2-Dichloroethane-d4			, <b>7</b> 0	referencients, indisprete der betreite deutschrichte deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite deutscheite d	65 - 155	****	
Toluene-d8			138	X	80 - 115		
Bromofluorobenzene			166	X	80 - 115		
1,2-Dichlorobenzene-d4	- T		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)	١
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Analysis Method:

8260B

Analysis Batch:

200-41242

Instrument ID:

N.i

Prep Method: Dilution:

5035

Prep Batch:

200-40646

Lab File ID: Initial Weight/Volume: ngao18.d

Analysis Date:

1.0

Run Type:

RE

5.2 g

06/29/2012 1728

Final Weight/Volume:

0.25

5.5

5 mL

Prep Date: 06/20/	2012 1430	ypo.	I HIGH V	eigiti volume.	3 IIIL
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-trichfluo	proethane	5.5	U /	0.36	5.5
Acetone		26		1.1	5.5
Carbon disulfide		15		0.34	5.5
Methyl acetate	3	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	ν.	0.33	5.5
1,2-Dichloroethene, Total		5.5	/Ū	0.84	5.5
1,1-Dichloroethane		5.5	U	0.45	5.5
cis-1,2-Dichloroethene		5.5	Ü	0.46	5.5
2-Butanone		\$.5	Ü	1.6	5.5
Chloroform		5.5	Ü	0.35	5.5
1,1,1-Trichloroethane	**	5.5	Ü	0.76	5.5
Cyclohexane	.00	5.5	Ü	0.93	5.5
Carbon tetrachloride		5.5	Ü	0.83	5.5
Benzene		5.5	Ü	0.78	5.5
1,2-Dichloroethane		5.5	Ü	0.68	5.5
Trichloroethene		5.5	Ü	0.52	5.5
Methylcyclohexane		0.55	j	0.19	5.5
1,2-Dichloropropane		5.5	Ŭ	0.32	5.5
Bromodichloromethane		5.5	Ü	0.23	5.5
cis-1,3-Dichloropropene	/	5.5	Ŭ	0.38	5.5
4-Methyl-2-pentanone		5.5	\u	0.66	5.5
Toluene		0.37	Ув	0.11	5.5
trans-1,3-Dichloropropene		5.5	Ű	0.14	5.5
1,1,2-Trichloroethane	4	- 5.5	ŭ	0.37	5.5
Tetrachloroethene		5.5	ŭ	0.12	5.5
2-Hexanone		5.5	ŭ	0.54	5.5
Dibromochloromethane	/	5.5	ŭ	0.12	5.5
1,2-Dibromoethane		5.5	ŭ	0.12	5.5 5.5
Chlorobenzene		5.5	Ü	0.10	5.5 5.5
Ethylbenzene		5.5	Ü	0.061	
Xylenes, Total	8 /	5.5	U	0.80	5.5 5.5
Styrene		5.5	U	0.80	5.5 5.5
Bromoform		5.5	U		
Isopropylbenzene		5.5	U	0.22 0.084	5.5 5.5
1,1,2,2-Tetrachloroethane		5.5	U	\	5.5 5.5
1,3-Dichlorobenzene	/	5.5		0.28	5.5
1.4 Dioblershopmen		5.5	U	0.16	5.5

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1,4-Dichlorobenzene

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**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

Analysis Method: 8260B	
Dilution:   1.0	
Analysis Date:         06/29/2012 1728         Run Type:         RE         Final Weight/Volume:         5 mL           Prep Date:         06/20/2012 1430         Run Type:         RE         Final Weight/Volume:         5 mL           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	
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	
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	
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	
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	
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	
1,2,4-Trichlorobenzene 5.5 U 0.22 5.5  Surrogate %Rec Qualifier Acceptance Limits 65 - 155	
Surrogate %Rec Qualifier Acceptance Limits 1,2-Dichloroethane-d4 67 65 - 155	
1,2-Dichloroethane-d4 67 65 - 155	
1,2-Dichloroethane-d4 67 65 - 155	
Toluene-d8 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)

Result (ug/Kg)

Analysis Method:

8260B

Analysis Batch:

200-41070

Instrument ID:

N.i

Prep Method:

5035

Lab File ID:

Qualifier

ngan15.d

Dilution:

1.0

Prep Batch:

200-40646

Initial Weight/Volume:

5.68 g

Analysis Date:

06/26/2012 1850

Final Weight/Volume:

MDL

5 mL

RL

Prep Date:

Analyte

06/20/2012 1430

DryWt Corrected: Y

Chloromethane	. [	Dichlorodifluoromethane	5.9	i = U,J	0.27	5.9
Bromonethane	(	Chloromethane	5.9		0.30	5.9
Bromonethane	١	Vinyl chloride	5.9	·	0.35	5.9
Trichlorofluoromethane	Ė	Bromomethane	5.9	U A	0.87	
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	(	Chloroethane	5.9	UJ	0.45	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         Carbon disulfide       66       J       0.36       5,9         Methyl acetate       5,9       U       0.74       5,9         Methylacethene Chloride       46       J       0.64       5,9         Methyl berg       5,9       U       0.43       5,9         Methyl buyle ther       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         1,2-Dichloroethane       5,9       U       0.48       5,9         1,1-Tichloroethane       5,9       U       0.48       5,9         1,1-Tichloroethane       5,9       U       0.48       5,9         1,1,1-Tichloroethane       5,9       U       0.82       5,9         1,1-Tichloroethane       5,9       U       0.82       5,9         Cyclohexane       5,9       U       0.83       5,9         1,2-Dichloroptopane       5,9       U       0.73	-	Trichlorofluoromethane	5.9	U	0.39	5.9
Acetone	•	1,1-Dichloroethene	5.9	U	0.43	
Methylacetate         5.9         U         0.74         5.9           Methylace Chloride         46         J         0.64         5.9           trans-1,2-Dichloroethene         5.9         U         0.43         5.9           Methyl t-buryl ether         5.9         U         0.35         5.9           1,2-Dichloroethane         5.9         U         0.48         5.9           1,1-Dichloroethane         5.9         U         0.48         5.9           2-Butanone         5.9         U         0.48         5.9           Chloroform         5.9         U         0.82         5.9           Chloroform         5.9         U         0.82         5.9           1,1,1-Trichloroethane         5.9         U         0.82         5.9           1,1,1-Trichloroethane         5.9         U         0.82         5.9           Carbon tetrachloride         5.9         U         0.83         5.9           1,2-Dichloroethane         5.9         U         0.83         5.9           Trichloroethane         5.9         U         0.66         5.9           Methylcyclohexane         5.9         U         0.20         5.9	•	1,1,2-Trichloro-1,2,2-trichfluoroethane	5.9	U	0.39	5.9
Methylacetate         5.9         U         0.74         5.9           Methylace Chloride         46         J         0.64         5.9           trans-1,2-Dichloroethene         5.9         U         0.43         5.9           Methyl t-buryl ether         5.9         U         0.35         5.9           1,2-Dichloroethane         5.9         U         0.48         5.9           1,1-Dichloroethane         5.9         U         0.48         5.9           2-Butanone         5.9         U         0.48         5.9           Chloroform         5.9         U         0.82         5.9           Chloroform         5.9         U         0.82         5.9           1,1,1-Trichloroethane         5.9         U         0.82         5.9           1,1,1-Trichloroethane         5.9         U         0.82         5.9           Carbon tetrachloride         5.9         U         0.83         5.9           1,2-Dichloroethane         5.9         U         0.83         5.9           Trichloroethane         5.9         U         0.66         5.9           Methylcyclohexane         5.9         U         0.20         5.9	-	Acetone	25	5	1.2	
Methylacetate         5.9         U         0.74         5.9           Methylace Chloride         46         J         0.64         5.9           trans-1,2-Dichloroethene         5.9         U         0.43         5.9           Methyl t-buryl ether         5.9         U         0.35         5.9           1,2-Dichloroethane         5.9         U         0.48         5.9           1,1-Dichloroethane         5.9         U         0.48         5.9           2-Butanone         5.9         U         0.48         5.9           Chloroform         5.9         U         0.82         5.9           Chloroform         5.9         U         0.82         5.9           1,1,1-Trichloroethane         5.9         U         0.82         5.9           1,1,1-Trichloroethane         5.9         U         0.82         5.9           Carbon tetrachloride         5.9         U         0.83         5.9           1,2-Dichloroethane         5.9         U         0.83         5.9           Trichloroethane         5.9         U         0.66         5.9           Methylcyclohexane         5.9         U         0.20         5.9	(	Carbon disulfide	66	J	0.36	
Methylene Chloride trans-1,2-Dichloroethene         46         J         0.64         5.9           trans-1,2-Dichloroethene         5.9         U         0.43         5.9           nle-Dichloroethene, Total         5.9         U         0.90         5.9           1,1-Dichloroethane         5.9         U         0.48         5.9           1,1-Dichloroethane         5.9         U         0.48         5.9           2-Butanone         5.9         U         0.48         5.9           2-Butanone         5.9         U         0.49         5.9           2-Butanone         5.9         U         0.82         5.9           Chloroform         5.9         U         0.82         5.9           Chloroform         5.9         U         0.82         5.9           Cyclohexane         5.9         U         0.82         5.9           Cyclohexane         5.9         U         0.83         5.9           1,1-Trichloroethane         5.9         U         0.83         5.9           1,2-Dichloroethane         5.9         U         0.56         5.9           Methylcyclohexane         5.9         U         0.56         5.9	ľ	Methyl acetate	5.9	U	0.74	5.9
trans-12-Dichloroethene         5.9         U         0.43         5.9           Methyl I-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-Butannen         5.9         U         0.49         5.9           Chloroform         5.9         U         0.80         5.9           Chloroform         5.9         U         0.82         5.9           Chlorothane         5.9         U         0.82         5.9           Cyclohexane         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           Trichloroethane         5.9         U         0.56         5.9           Methylcyclohexane         5.9         U         0.56         5.9           Methylcyclohexane         5.9         U         0.20         5.9	1	Methylene Chloride	46	J		
Methyl t-butyl ether         5.9         U         0.35         5.9           1,2-Dichloroethene, Total         5.9         U         0.90         5.9           cis-1,2-Dichloroethene         5.9         U         0.48         5.9           cis-1,2-Dichloroethene         5.9         U         0.49         5.9           2-Butanone         5.9         U         0.49         5.9           2-Butanone         5.9         U         0.82         5.9           1,1,1-Trichloroethane         5.9         U         0.82         5.9           1,1,1-Trichloroethane         5.9         U         0.89         5.9           Cyclohexane         5.9         U         0.89         5.9           Benzene         5.9         U         0.83         5.9           Hethylcyclohexane         5.9         U         0.73         5.9           Hethylcyclohexane         5.9         U         0.20         5.9           Hethylcyclohexane         5.9         U         0.20         5.9           Hethylcyclohexane         5.9         U         0.20         5.9           Hethylcyclohexane         5.9         U         0.25         5.9	t	rans-1,2-Dichloroethene	5.9		0.43	
1,2-Dichloroethane       5.9       U       0.90       5.9         1,1-Dichloroethane       5.9       U       0.48       5.9         is-1,2-Dichloroethene       5.9       U       0.49       5.9         2-Butanone       5.9       U       0.49       5.9         Chloroform       5.9       9.886       JB-UG       0.38       5.9         1,1,1-Trichloroethane       5.9       U       0.82       5.9         1,1,1-Trichloroethane       5.9       U       0.82       5.9         Cyclohexane       5.9       U       0.89       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         Trichloroethane       5.9       U       0.26       5.9         Bromodichloromethane       5.9       U       0.20       5.9         Hyll-Zephtanone       5.9       U       0.25       5.9         Tolluene       5.9       U       0.70       5.9         Tetrash-Indoroethane       5.9       U       0.15       5.9 </td <td></td> <td>Methyl t-butyl ether</td> <td>5.9</td> <td>U</td> <td>0.35</td> <td></td>		Methyl t-butyl ether	5.9	U	0.35	
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       1.8       5.9         Chloroform       5,9       W       0.38       5.9         1,1,1-Trichloroethane       5.9       U       0.82       5.9         Cyclohexane       5.9       U       0.82       5.9         Carbon tetrachloride       5.9       U       0.83       5.9         Benzene       5.9       U       0.83       5.9         1,2-Dichloroethane       5.9       U       0.73       5.9         Trichloroethane       5.9       U       0.73       5.9         Methylcyclohexane       5.9       U       0.20       5.9         1,2-Dichloropropane       5.9       U       0.20       5.9         Bromodichloromethane       5.9       U       0.25       5.9         1,2-Dichloropropene       5.9       U       0.25       5.9         4-Methyl-2-pentanone       5.9       U       0.41       5.9         Toluene       5.9       U       0.15       5.9         Ir	1	1,2-Dichloroethene, Total	5.9	U		
cis-1,2-Dichloroethene       5.9       U       0.49       5.9         2-Butanone       5.9       U       1.8       5.9         Chloroform       5.9       U       0.38       5.9         1,1,1-Trichloroethane       5.9       U       0.82       5.9         Cyclohexane       5.9       U       0.89       5.9         Carbon tetrachloride       5.9       U       0.83       5.9         Benzene       5.9       U       0.83       5.9         1,2-Dichloroethane       5.9       U       0.73       5.9         1,2-Dichloroethene       5.9       U       0.20       5.9         Methylcyclohexane       5.9       U       0.20       5.9         1,2-Dichloropropane       5.9       U       0.20       5.9         1,2-Dichloropropane       5.9       U       0.25       5.9         Bromodichloromethane       5.9       U       0.25       5.9         I-2-Dichloropropene       5.9       U       0.25       5.9         I-3-Dichloropropene       5.9       U       0.15       5.9         I-1,1,2-Trichloroethane       5.9       U       0.15       5.9	1	I,1-Dichloroethane	5.9	U		
2-Butanone Chloroform 5,9 9886 JB U 0,82 5,9 Cyclohexane 5,9 U 0,82 5,9 Cyclohexane 5,9 U 0,89 5,9 Benzene 5,9 U 0,83 5,9 Inchloroethane 5,9 U 0,83 5,9 Inchloroethane 5,9 U 0,73 5,9 Inchloroethane 5,9 U 0,73 5,9 Inchloroethane 5,9 U 0,56 5,9 Methylcyclohexane 5,9 U 0,56 5,9 Methylcyclohexane 5,9 U 0,20 5,9 I,2-Dichloropropane 5,9 U 0,34 5,9 Isomodichloromethane 5,9 U 0,25 5,9 Isomodichloromethane 5,9 U 0,41 5,9 Isomodichloropropene 5,9 U 0,41 5,9 Isomodichloropropene 5,9 U 0,41 5,9 Isomodichloropropene 5,9 U 0,41 5,9 Isomodichloropropene 5,9 U 0,41 5,9 Isomodichloropropene 5,9 U 0,41 5,9 Isomodichloropropene 5,9 U 0,41 5,9 Isomodichloropropene 5,9 U 0,41 5,9 Isomodichloropropene 5,9 U 0,40 5,9 Isomodichloropropene 5,9 U 0,43 5,9 Isomodichloropropene 5,9 U 0,43 5,9 Isomodichloropropene 5,9 U 0,13 5,9 Isomodichloropropene 5,9 U 0,18 5,9 Isomodichloropropene 5,9 U 0,086 5,9 Isopropylbenzene 5,9 U 0,086 5,9 Isopropylbenzene 5,9 U 0,023 5,9 Isopropylbenzene 5,9 U 0,030 5,9 Isopropylbenzene 5,9 U 0,030 5,9 Isopropylbenzene 5,9 U 0,030 5,9 Isopropylbenzene 5,9 U 0,030 5,9 Isopropylbenzene 5,9 U 0,030 5,9 Isopropylbenzene 5,9 U 0,030 5,9 Isopropylbenzene 5,9 U 0,030 5,9 Isopropylbenzene 5,9 U 0,030 5,9 Isopropylbenzene 5,9 U 0,030 5,9 Isopropylbenzene 5,9 U 0,030 5,9 Isopropylbenzene 5,9 U 0,030 5,9	(	zis-1,2-Dichloroethene	5.9	U		
Chloroform 5,9 6,886 JB U3 0,38 5,9 1,1,1-Trichloroethane 5,9 U 0,82 5,9 Cyclohexane 5,9 U 0,889 5,9 Benzene 5,9 U 0,83 5,9 U 0,83 5,9 U 0,83 5,9 U 0,83 5,9 U 0,83 5,9 U 0,83 5,9 U 0,83 5,9 U 0,73 5,9 U 0,73 5,9 U 0,73 5,9 Trichloroethane 5,9 U 0,56 5,9 W 0,56 5,9 W 0,56 5,9 W 0,56 5,9 W 0,56 5,9 W 0,56 5,9 W 0,56 5,9 W 0,56 5,9 W 0,56 5,9 W 0,56 5,9 W 0,56 5,9 W 0,56 5,9 W 0,56 5,9 W 0,56 5,9 W 0,56 5,9 W 0,56 5,9 W 0,56 5,9 W 0,56 5,9 W 0,56 5,9 W 0,56 5,9 W 0,56 5,9 W 0,56 5,9 W 0,56 5,9 W 0,56 5,9 W 0,56 5,9 W 0,56 5,9 W 0,56 5,9 W 0,56 5,9 W 0,56 5,9 W 0,56 5,9 W 0,56 5,9 W 0,56 5,9 W 0,56 5,9 W 0,56 5,9 W 0,56 5,9 W 0,56 5,9 W 0,57 5,9 W 0,56 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9 W 0,57 5,9	2	2-Butanone	5.9	UJ		
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       0.34       5.9         Bromodichloromethane       5.9       U       0.41       5.9         4-Methyl-2-pentanone       5.9       U       0.41       5.9         4-Methyl-2-pentanone       5.9       U       0.70       5.9         Tolluene       5.9       U       0.70       5.9         trans-1,3-Dichloropropene       5.9       U       0.12       5.9         trans-1,3-Dichloropropene       5.9       U       0.15       5.9         1,1,2-Trichloroethane       5.9       U       0.13       5.9 <td>(</td> <td>Chloroform</td> <td>59 8.86</td> <td></td> <td></td> <td></td>	(	Chloroform	59 8.86			
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           Methylcyclohexane         5.9         U         0.34         5.9           Bromodichloropropane         5.9         U         0.25         5.9           Bromodichloromethane         5.9         U         0.25         5.9           Bromodichloromethane         5.9         U         0.41         5.9           4-Methyl-2-pentanone         5.9         U         0.70         5.9           5.9         U         0.70         5.9           9         U         0.70         5.9           1,1,2-Trichloropenpene         5.9         U         0.15         5.9           1,1,2-Trichloroethane         5.9         U         0.13         5.9           2-Hexanone         5.9 <td>1</td> <td>I,1,1-Trichloroethane</td> <td></td> <td></td> <td></td> <td></td>	1	I,1,1-Trichloroethane				
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         Gis-1,3-Dichloropropene       5.9       U       0.41       5.9         4-Methyl-2-pentanone       5.9       U       0.70       5.9         Toluene       5.9       U       0.70       5.9         trans-1,3-Dichloropropene       5.9       U       0.15       5.9         1,1,2-Trichloroethane       5.9       U       0.15       5.9         1,1,2-Trichloroethane       5.9       U       0.13       5.9         2-Hexanone       5.9       U       0.13       5.9         Dibromochloromethane       5.9       U       0.18       5.9         Chlorobenzene       5.9       U       0.086       5.9 </td <td>(</td> <td>Cyclohexane</td> <td>5.9</td> <td>U</td> <td>1.0</td> <td></td>	(	Cyclohexane	5.9	U	1.0	
Benzene	(	Carbon tetrachloride	5.9	U		
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       U       0.70       5.9         trans-1,3-Dichloropropene       5.9       U       0.15       5.9         1,1,2-Trichloroethane       5.9       U       0.15       5.9         1,1,2-Trichloroethane       5.9       U       0.40       5.9         2-Hexanone       5.9       U       0.13       5.9         2-Hexanone       5.9       U       0.13       5.9         Dibromochloromethane       5.9       U       0.13       5.9         1,2-Dibromoethane       5.9       U       0.18       5.9         Ethylbenzene       5.9       U       0.066       5.9 <td>E</td> <td>Benzene</td> <td>5.9</td> <td>U</td> <td>0.83</td> <td></td>	E	Benzene	5.9	U	0.83	
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         U         0.70         5.9           trans-1,3-Dichloropropene         5.9         U         0.15         5.9           1,1,2-Trichloroethane         5.9         U         0.40         5.9           1,1,2-Trichloroethane         5.9         U         0.13         5.9           2-Hexanone         5.9         U         0.13         5.9           2-Hexanone         5.9         U         0.13         5.9           1,2-Dibromoethane         5.9         U         0.13         5.9           1,2-Dibromoethane         5.9         U         0.086         5.9           Styrene         5.9         U         0.066         5.9	1	1,2-Dichloroethane	5.9	U	0.73	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         U         0.70         5.9           trans-1,3-Dichloropropene         5.9         U         0.15         5.9           1,1,2-Trichloroethane         5.9         U         0.15         5.9           1,1,2-Trichloroethane         5.9         U         0.13         5.9           2-Hexanone         5.9         U         0.13         5.9           2-Hexanone         5.9         U         0.13         5.9           Dibromochloromethane         5.9         U         0.13         5.9           1,2-Dibromoethane         5.9         U         0.18         5.9           Chlorobenzene         5.9         U         0.086         5.9           Ethylbenzene         5.9         U         0.066         5.9 <td>٦</td> <td>Frichloroethene</td> <td>5.9</td> <td>U</td> <td>0.56</td> <td></td>	٦	Frichloroethene	5.9	U	0.56	
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       U       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         Tetrachloroethane       5.9       U       0.13       5.9         2-Hexanone       5.9       U       0.13       5.9         2-Hexanone       5.9       U       0.13       5.9         1,2-Dibromoethane       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         Styrene       5.9       U       0.12       5.9         Bromoform       5.9       U       0.23       5.9         Isopropylbenzene       5.9       U       0.090       5.9         1,1,2,2	N	Methylcyclohexane	5.9	U	0.20	
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       U       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         Tetrachloroethane       5.9       U       0.13       5.9         2-Hexanone       5.9       U       0.13       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       0.066       5.9         Styrene       5.9       U       0.12       5.9         Bromoform       5.9       U       0.23       5.9         Isopropylbenzene       5.9       U       0.30       5.9	1	,2-Dichloropropane	5.9	U	0.34	5.9
4-Methyl-2-pentanone       5.9       U       0.70       5.9         Toluene       5.9       U.       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         Tetrachloroethane       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         1,2-Dibromoethane       5.9       U       0.089       5.9         Ethylbenzene       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       0.23       5.9         Isopropylbenzene       5.9       U       0.23       5.9         1,1,2,2-Tetrachloroethane       5.9       U       0.30       5.9         1,3-Dichlorobenzene       5.9       U       0.18       5.9	E	Bromodichloromethane	5.9	U	0.25	
Toluene         50         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           Tetrachloroethane         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         0.30         5.9           1,1,2,2-Tetrachloroethane         5.9         U         0.18         5.9           1,3-Dichlorobenzene         5.9         U         0.18         5.9<	C	sis-1,3-Dichloropropene	5.9	U	0.41	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         1,2-Dibromoethane       5.9       U       0.089       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       0.090       5.9         1,1,2,2-Tetrachloroethane       5.9       U       0.18       5.9         1,3-Dichlorobenzene       5.9       U       0.18       5.9	4	I-Methyl-2-pentanone		U	0.70	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         1,2-Dibromoethane       5.9       U       0.089       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       0.30       5.9         1,1,2,2-Tetrachloroethane       5.9       U       0.18       5.9         1,3-Dichlorobenzene       5.9       U       0.18       5.9	7	Toluene	59 -0.28	JB-UB	0.12	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         1,2-Dibromoethane       5.9       U       0.089       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       0.090       5.9         1,1,2,2-Tetrachloroethane       5.9       U       0.30       5.9         1,3-Dichlorobenzene       5.9       U       0.18       5.9	t	rans-1,3-Dichloropropene	5.9	U	0.15	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         1,2-Dibromoethane       5.9       U       0.089       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       0.090       5.9         1,1,2,2-Tetrachloroethane       5.9       U       0.30       5.9         1,3-Dichlorobenzene       5.9       U       0.18       5.9	1	,1,2-Trichloroethane	5.9	U	0.40	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       0.090       5.9         1,1,2,2-Tetrachloroethane       5.9       U       0.30       5.9         1,3-Dichlorobenzene       5.9       U       0.18       5.9	٦	Tetrachloroethene	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       0.090       5.9         1,1,2,2-Tetrachloroethane       5.9       U       0.30       5.9         1,3-Dichlorobenzene       5.9       U       0.18       5.9	2	2-Hexanone	5.9	U	0.57	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       0.090       5.9         1,1,2,2-Tetrachloroethane       5.9       U       0.30       5.9         1,3-Dichlorobenzene       5.9       U       0.18       5.9			5.9	U	0.13	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       0.090       5.9         1,1,2,2-Tetrachloroethane       5.9       U       0.30       5.9         1,3-Dichlorobenzene       5.9       U       0.18       5.9	1	,2-Dibromoethane	5.9	U	0.18	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       0.090       5.9         1,1,2,2-Tetrachloroethane       5.9       U       0.30       5.9         1,3-Dichlorobenzene       5.9       U       0.18       5.9	(	Chlorobenzene	5.9	U	0.089	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			5.9	U	0.066	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	>	(ylenes, Total	5.9	U	0.86	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	5	Styrene	5.9	U	0.12	5.9
1,1,2,2-Tetrachloroethane       5.9       U	E	Bromoform	5.9		0.23	5.9
1,3-Dichlorobenzene 5.9 U <b>3</b> 0.18 5.9	1:	sopropylbenzene	5.9		0.090	5.9
0.0	1	,1,2,2-Tetrachloroethane	5.9	UJ	0.30	5.9
1,4-Dichlorobenzene 5.9 U <i>J</i> 0.27 5.9	_1	,3-Dichlorobenzene	5.9		0.18	5.9
	1	,4-Dichlorobenzene	5.9	U <b>5</b>	0.27	5.9

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1

Sdg Number: 11371

Ciient Sampie iD:

SB-21 (6-7)

Lab Sample ID:

200-11382-6

Client Matrix:

Solid

% Moisture:

Date Sampled: 06/16/2012 1400

Date Received: 06/20/2012 1010

8260B Voiatile Organic Compounds (GC/MS)

Analysis Method:

8260B

Analysis Batch:

200-41070

24.9

Instrument ID:

N.i

Prep Method:

5035

Lab File ID:

Dilution:

Prep Batch:

200-40646

ngan15.d

1.0

Analysis Date:

Initial Weight/Volume:

5.68 g

06/26/2012 1850

Final Weight/Volume:

Prep Date:

06/20/2012 1430

Analyte	DryWt Corrected: Y		Result (ug/Kg)	Qualifier	MDL		RL
1,2-Dichlorobenzene		7	5.9	U.5	0.26		5.9
1,2-Dibromo-3-Chloropropane			5.9	UJ	1.1		5.9
1,2,4-Trichlorobenzene		59	0.60	AB UB	0.23	20	5.9

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	82	ed endontalité de de Americania en de antimo de deservationes de antipadation de april de de de antipadation de apresentation de antipadation	65 - 155
Toluene-d8	122	×	80 - 115
Bromofluoroberizene	139	×	80 - 115
1,2-Dichlorobenzene-d4	118		45 - 145

ARCADIS U.S. Inc Client

Job Number: 200-11371-1

Sdg Number: 11371

Client Sample ID:

SB-21 (6-7)

Lab Sample ID:

Client Matrix:

200-11382-6

Solid

% Moisture:

24.9

Date Sampled: 06/16/2012 1400 Date Received: 06/20/2012 1010

2260R	Volatile	Organic	Compounds	(CC/MC)
02000	A O I G LI I G	VIUGIIIC	Compounds	(GC/MS)

Analysis Method:

8260B

Analysis Batch:

200-41242

Instrument ID:

N.i

Prep Method: Dilution:

5035

Prep Batch:

200-40646

Lab File ID: Initial Weight/Volume: ngao19.d 5.25 g

Analysis Date:

1.0 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	υ /	0.42	6.3
1,1-Dichloroethene		6.3	υ /	0.47	6.3
1,1,2-Trichloro-1,2,2-trichfluor	roethane	6.3	υ /	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	/ υ	0.47	6.3
Methyl t-butyl ether		6.3	/ Ū	0.38	6.3
1,2-Dichloroethene, Total		6.3	Ū	0.98	6.3
1,1-Dichloroethane		6.3	Ū	0.52	6.3
cis-1,2-Dichloroethene		6.3	Ū	0.53	6.3
2-Butanone		6.3	Ū	1.9	6.3
Chloroform		6.3	Ū	0.41	6.3
1,1,1-Trichloroethane		6.3	Ü	0.89	6.3
Cyclohexane		6.3	Ū	1.1	6.3
Carbon tetrachloride		6.3	\ U	0.96	6.3
Benzene		6.3	Ü	0.90	6.3
1,2-Dichloroethane		6/3	v	0.79	6.3
Trichloroethene		6.3	$\mathcal{L}$	0.61	6.3
Methylcyclohexane		6.3	υ\	0.22	6.3
1,2-Dichloropropane		6.3	U\	0.37	6.3
Bromodichloromethane		6.3	Ŭ \	0.27	6.3
cis-1,3-Dichloropropene	/	6.3	ŭ \	0.44	6.3
4-Methyl-2-pentanone	· /	6.3	Ŭ \	0.76	6.3
Toluene	/	0.44	JB \	0.13	6.3
trans-1,3-Dichloropropene	/	6.3	U	0.16	6.3
1.1.2-Trichloroethane		6.3	Ü	0.43	6.3
Tetrachloroethene		6.3	Ü	0.14	6.3
2-Hexanone		6.3	Ü	0.62	6.3
Dibromochloromethane	/	6.3	Ü	0.14	6.3
1,2-Dibromoethane		6.3	U	0.19	6.3
Chlorobenzene		6.3	Ü	0.096	6.3
Ethylbenzene		6.3	U	0.090	
Xylenes, Total		6.3	U		6.3
Styrene		6.3		0.93	6.3
Bromoform .		6.3	U	0.13	6.3
Isopropylbenzene		6.3	U	0.25	6.3
1,1,2,2-Tetrachloroethane /	/		_	0.098	6.3
1,3-Dichlorobenzene		6.3	U	0.33	6.3
1,4-Dichlorobenzene		6.3	U	0.19	6.3
1,7-DIGHOLODENZENE		6.3	U	0.29	6.3

TestAmerica Burlington

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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 Solid

Client Matrix

Date Sampled: 06/16/2012 1400 Date Received: 46/20/2012 1010

		8260B Volatile Organic	Compounds (GC/N	IS)	
Prep Method: 5 Dilution: 1 Analysis Date: 0	0260B 0035 0.0 06/29/2012 1759 06/20/2012 1430	Prep Batch:	200-41242 200-40646 RE	Instrument ID: Lab File ID: Initial Weight/Volume: Final Weight/Volume:	N.i ngao19.d 5.25 g 5 mL
Analyte	DryWt Corrected:	Y Result (ug/r	(g) Qualifie	er MDL	RL
1,2-Dichlorobenzene		6.3	U	0.28	6.3
1,2-Dibromo-3-Chlorop	oropane	6.3	U	1.2	6.3
1,2,4-Trichlorobenzene		6.3	U	0.25	6.3
Surrogate		%Rec	Qualifie	er Accept	ance Limits
1,2-Dichloroethane-d4	-dudorana, bishor Affandanahiri son sahiranaman menteri di denambungan dan menderama dan menderama dan mendera T	80	**************************************	65 - 15	5
Toluene-d8		137	Х	80 - 11:	5
Bromofluorobenzene		147	X	80 - 11	5
1,2-Dichlorobenzene-d	4	117		45 - 14	5

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: Dilution:

5030B

Prep Batch:

Lab File ID:

lhbab22.d

Analysis Date:

1.0

N/A

Initial Weight/Volume:

5 mL

06/25/2012 2324

Prep Date:

06/25/2012 2324

Final Weight/Volume:

Dichlorodiflucromethane	Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	Dichlorodifluoromethane	1.0	U_5	0.090	1.0
Brommethane	Chloromethane	1.0		0.12	1.0
Chloroethane 1.0 U 0.12 1.0 1,1-Dichloroethane 1.0 U 0.092 1.0 1,1-Dichloroethene 1.0 U 0.18 1.0 1,1.2-Tirchloro-1,2,2-trichfluoroethane 1.0 U 0.18 1.0 Acetone 5.0 U 0.92 5.0 Carbon disulfide 1.8 U 0.15 1.0 Methyl acetate 1.0 U 0.23 1.0 Methyl acetate 1.0 U 0.17 1.0 Methyl there 1.0 U 0.17 1.0 Methyl there 1.0 U 0.17 1.0 Methyl there 1.0 U 0.17 1.0 Methyl there 1.0 U 0.17 1.0 Methyl there 1.0 U 0.17 1.0 Methyl there 1.0 U 0.16 1.0 L2-Dichloroethene 1.0 U 0.16 1.0 L2-Butanone 5.0 U 0.16 1.0 L2-Butanone 5.0 U 1.1 5.0 Cyclohexane 1.0 U 0.16 1.0 Cyclohexane 1.0 U 0.16 1.0 Cyclohexane 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.16 1.0 Cyclohexane 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.18 1.0 Cyclohexane 1.0 U 0.18 1.0 Cyclohexane 1.0 U 0.18 1.0 Cyclohexane 1.0 U 0.18 1.0 Cyclohexane 1.0 U 0.18 1.0 Cyclohexane 1.0 U 0.18 1.0 Cyclohexane 1.0 U 0.18 1.0 Cyclohexane 1.0 U 0.18 1.0 Cyclohexane 1.0 U 0.18 1.0 Cyclohexane 1.0 U 0.18 1.0 Cyclohexane 1.0 U 0.18 1.0 Cyclohexane 1.0 U 0.17 1.0 Cyclohexane 1.0 U 0.18 1.0 Cyclohexane 1.0 U 0.17 1.0 Cyclohexane 1.0 U 0.17 1.0 Cyclohexane 1.0 U 0.17 1.0 Cyclohexane 1.0 U 0.17 1.0 Cyclohexane 1.0 U 0.17 1.0 Cyclohexane 1.0 U 0.17 1.0 Cyclohexane 1.0 U 0.17 1.0 Cyclohexane 1.0 U 0.17 1.0 Cyclohexane 1.0 U 0.17 1.0 Cyclohexane 1.0 U 0.17 1.0 Cyclohexane 1.0 U 0.17 1.0 Cyclohexane 1.0 U 0.18 1.0 Cyclohexan	Vinyl chloride	1.0	U	0.090	1.0
Chloroethane 1.0 U 0.12 1.0 1,1-Dichloroethane 1.0 U 0.092 1.0 1,1-Dichloroethene 1.0 U 0.18 1.0 1,1.2-Tirchloro-1,2,2-trichfluoroethane 1.0 U 0.18 1.0 Acetone 5.0 U 0.92 5.0 Carbon disulfide 1.8 U 0.15 1.0 Methyl acetate 1.0 U 0.23 1.0 Methyl acetate 1.0 U 0.17 1.0 Methyl there 1.0 U 0.17 1.0 Methyl there 1.0 U 0.17 1.0 Methyl there 1.0 U 0.17 1.0 Methyl there 1.0 U 0.17 1.0 Methyl there 1.0 U 0.17 1.0 Methyl there 1.0 U 0.16 1.0 L2-Dichloroethene 1.0 U 0.16 1.0 L2-Butanone 5.0 U 0.16 1.0 L2-Butanone 5.0 U 1.1 5.0 Cyclohexane 1.0 U 0.16 1.0 Cyclohexane 1.0 U 0.16 1.0 Cyclohexane 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.16 1.0 Cyclohexane 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.17 1.0 Benzene 1.0 U 0.18 1.0 Cyclohexane 1.0 U 0.18 1.0 Cyclohexane 1.0 U 0.18 1.0 Cyclohexane 1.0 U 0.18 1.0 Cyclohexane 1.0 U 0.18 1.0 Cyclohexane 1.0 U 0.18 1.0 Cyclohexane 1.0 U 0.18 1.0 Cyclohexane 1.0 U 0.18 1.0 Cyclohexane 1.0 U 0.18 1.0 Cyclohexane 1.0 U 0.18 1.0 Cyclohexane 1.0 U 0.18 1.0 Cyclohexane 1.0 U 0.17 1.0 Cyclohexane 1.0 U 0.18 1.0 Cyclohexane 1.0 U 0.17 1.0 Cyclohexane 1.0 U 0.17 1.0 Cyclohexane 1.0 U 0.17 1.0 Cyclohexane 1.0 U 0.17 1.0 Cyclohexane 1.0 U 0.17 1.0 Cyclohexane 1.0 U 0.17 1.0 Cyclohexane 1.0 U 0.17 1.0 Cyclohexane 1.0 U 0.17 1.0 Cyclohexane 1.0 U 0.17 1.0 Cyclohexane 1.0 U 0.17 1.0 Cyclohexane 1.0 U 0.17 1.0 Cyclohexane 1.0 U 0.18 1.0 Cyclohexan	Bromomethane	1.0	UJ	0.43	1.0
1,1-Dichloroethene         1,0         U         0,18         1,0           1,1,2-Tirchloro-1,2,2-frichfluoroethane         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           Methyle Chloride         0,41         J         0,21         1,0           Methyl Eder         1,0         U         0,17         1,0           Methyl Hubyl 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           1,2-Dichloroethane         1,0         U         0,16         1,0           2-Butanone         5,0         U         1,1         5,0           Chloroform         1,0         U         0,16         1,0           Chloroform         1,0         U         0,16         1,0           Cyclobexane         1,0         U         0,17         1,0           B	Chloroethane	1.0		0.12	1.0
1,1-Dichloroethene	Trichlorofluoromethane	1.0	U	0.092	1.0
Acetone         5.0         U         0.92         5.0           Carbon disulfide         1.8         0.15         1.0           Methylene Chloride         1.0         U         0.23         1.0           Methylene Chloride         0.41         J         0.21         1.0           Irans-1,2-Dichloroethene         1.0         U         0.17         1.0           Methyl t-buly ether         1.0         U         0.17         1.0           Methyl t-buly ether         1.0         U         0.17         1.0           Methyl t-buly ether         1.0         U         0.16         1.0           1,2-Dichloroethene fotal         1.0         U         0.16         1.0           1,1-Dichloroethane         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           1,1-1-Trichloroethane         1.0         U         0.17         1.0           1,2-Dichloroethane         1.0         U         0.17         1.0	1,1-Dichloroethene	1.0	U		
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         0.16         1.0           1,1-Dichloroethene, Total         1.0         U         0.16         1.0           1,1-Dichloroethene, Total         1.0         U         0.16         1.0           1,1-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           Cyclohexane         1.0         U         0.16         1.0           Cyclohexane         1.0         U         0.17         1.0           L2-Dichloroethane         1.0         U         0.17         1.0           Benzene         1.0         U         0.15         1.0	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.18	1.0
Methyla cetate	Acetone	5.0	U	0.92	5.0
Methylene Chloride         0.41         J         0.21         1.0           trans-1,2-Dichloroethene         1.0         U         0.17         1.0           Methyl I-buly either         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           28-Butanone         5.0         U         1.1         5.0           Chloroform         1.0         U         0.16         1.0           Chloroform         1.0         U         0.16         1.0           Cyclohexane         1.0         U         0.16         1.0           Cyclohexane         1.0         U         0.17         1.0           Benzene         1.0         U         0.17         1.0           Hexperie         1.0         U         0.17         1.0           Hethylcybolhexan	Carbon disulfide	1.8		0.15	1.0
trans-1,2-Dichloroethene 1.0 U 0.17 1.0 Methyl ether 1.0 U 0.17 1.0 1.0 1.1 1.0 1.2-Dichloroethene, Total 1.0 U 0.32 1.0 1.1-Dichloroethene, Total 1.0 U 0.32 1.0 1.1-Dichloroethane 1.0 U 0.16 1.0 0.1 0.16 1.0 0.1 0.16 1.0 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	Methyl acetate	1.0	U	0.23	1.0
Methyl I-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           1,1,1-Trichloroethane         1.0         U         0.23         1.0           Cyclohexane         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           Trichloroethane         1.0         U         0.15         1.0           Methylcyclohexane         1.0         U         0.14         1.0           Methylcyclohexane         1.0         U         0.17         1.0           1,2-Dichloropropane         1.0         U         0.17         1.0	Methylene Chloride	0.41	J	0.21	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       0.23       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         Trichloroethane       1.0       U       0.15       1.0         Trichloroethane       1.0       U       0.15       1.0         Trichloroethane       1.0       U       0.17       1.0         Hethylcyclohexane       1.0       U       0.17       1.0         Bromodichloromethane       1.0       U       0.17       1.0         Bromodichloromethane       1.0       U       0.16       1.0	trans-1,2-Dichloroethene	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         2s-Butanone       1.0       U       0.16       1.0         2-Butanone       5.0       U       1.1       5.0         Chloroform       1.0       U       0.16       1.0         L1,1-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         Trichloroethane       1.0       U       0.15       1.0         Methylcyclohexane       1.0       U       0.14       1.0         Methylcyclohexane       1.0       U       0.17       1.0         1,2-Dichloropropane       1.0       U       0.17       1.0         Bromodichloromethane       1.0       U       0.17       1.0         Icis-1,3-Dichloropropene       1.0       U       0.16       1.0	Methyl t-butyl ether	1.0	U	0.17	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           1,2-Dichloroethane         1.0         U         0.14         1.0           Methylcyclohexane         1.0         U         0.14         1.0           Methylcyclohexane         1.0         U         0.17         1.0           1,2-Dichloropropane         1.0         U         0.17         1.0           Bromodichloromethane         1.0         U         0.16         1.0           -1,2-Dichloropropene         1.0         U         0.16         1.0           -1,1,2-Trichloroethane         1.0         U         0.18         1.0	1,2-Dichloroethene, Total	1.0	U	0.32	
2-Butanone       5.0       U       1.1       5.0         Chloroform       1.0       U       0.16       1.0         Cyclohexane       1.0       U       0.23       1.0         Cyclohexane       1.0       U       0.17       1.0         Benzene       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         Trichloroethane       1.0       U       0.14       1.0         Methylcyclohexane       1.0       U       0.14       1.0         Methylcyclohexane       1.0       U       0.17       1.0         Methylcyclohexane       1.0       U       0.16       1.0         Methylcyclohexane       1.0       U       0.16       1.0         Methylcyclohexane       1.0       U       0.16       1.0         Methylcyclohexane <t< td=""><td>1,1-Dichloroethane</td><td>1.0</td><td>U</td><td>0.16</td><td>1.0</td></t<>	1,1-Dichloroethane	1.0	U	0.16	1.0
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           4-Methyl-2-pentanone         5.0         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           trans-1,3-Dichloropropene         1.0         U         0.18         1.0 <td>cis-1,2-Dichloroethene</td> <td>1.0</td> <td>U</td> <td>0.16</td> <td>1.0</td>	cis-1,2-Dichloroethene	1.0	U	0.16	1.0
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           d-Methyl-2-pentanone         5.0         U         0.90         5.0           Toluene         1.0         U         0.17         1.0           t-ans-1,3-Dichloropropene         1.0         U         0.18         1.0           1,2-Tichloroethane         1.0         U         0.18         1.0	2-Butanone	5.0	U	1.1	5.0
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         1,2-Dichloropropene       1.0       U       0.16       1.0         4-Methyl-2-pentanone       5.0       U       0.90       5.0         Tolluene       1.0       U       0.16       1.0         4-Methyl-2-pentanone       1.0       U       0.17       1.0         trans-1,3-Dichloropropene       1.0       U       0.18       1.0         trans-1,3-Dichloropropene       1.0       U       0.18       1.0         2-Hexanone       1.0       U       0.18       1.0	Chloroform	1.0	U	0.16	
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           4-Methyl-2-pentanone         1.0         U         0.16         1.0           4-Methyl-2-pentanone         5.0         U         0.90         5.0           Toluene         1.0         U         0.16         1.0           trans-1,3-Dichloropropene         1.0         U         0.18         1.0           trans-1,3-Dichloropropene         1.0         U         0.18         1.0           trans-1,3-Dichloropropene         1.0         U         0.18         1.0           tetrachloroethane         1.0         U         0.18         1.0           2-Hexanone         5.0         U         0.18 <t< td=""><td>1,1,1-Trichloroethane</td><td>1.0</td><td>U</td><td>0.16</td><td>1.0</td></t<>	1,1,1-Trichloroethane	1.0	U	0.16	1.0
Benzene   1.0	Cyclohexane	1.0	U	0.23	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         1,1,2-Trichloroethane       1.0       U       0.18       1.0         2-Hexanone       1.0       U       0.18       1.0         Dibromochloromethane       1.0       U       0.18       1.0         1,2-Dibromoethane       1.0       U       0.18       1.0         Chlorobenzene       1.0       U       0.18       1.0         Ethylbenzene       1.0       U       0.17       1.0 </td <td>Carbon tetrachloride</td> <td>1.0</td> <td>U</td> <td>0.17</td> <td>1.0</td>	Carbon tetrachloride	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         1,1-2-Trichloroethane       1.0       U       0.18       1.0         2-Hexanone       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       0.17       1.0	Benzene	1.0	U	0.17	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         1-2-Hexanone       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       0.18       1.0         Ethylbenzene       1.0       U       0.18       1.0         Xylenes, Total       1.0       U       0.17       1.0         Bromoform       1.0       U       0.17       1.0         <	1,2-Dichloroethane	1.0	U		
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         Tetrachloroethane       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       0.18       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         Isopropylbenzene       1.0       U       0.17       1.0	Trichloroethene	1.0	U	0.14	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           Tetrachloroethane         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         0.18         1.0           Ethylbenzene         1.0         U         0.18         1.0           Xylenes, Total         1.0         U         0.17         1.0           Bromoform         1.0         U         0.17         1.0           Isopropylbenzene         1.0         U         0.17         1.0	Methylcyclohexane	1.0	U	0.25	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           Tetrachloroethane         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         0.18         1.0           Ethylbenzene         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	1,2-Dichloropropane	1.0	U	0.17	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         Tetrachloroethane       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       0.18       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         1,2,2-Tetrachloroethane       1.0       U       0.17       1.0         1,3-Dichlorobenzene       1.0       U       0.18       1.0	Bromodichloromethane	1.0	U	0.16	
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       0.18       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         1,2,2-Tetrachloroethane       1.0       U       0.17       1.0         1,3-Dichlorobenzene       1.0       U       0.18       1.0	cis-1,3-Dichloropropene	1.0	U	0.16	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       0.18       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	4-Methyl-2-pentanone	5.0	UJ	0.90	5.0
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	Toluene	1.0	U	0.17	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         1,2,2-Tetrachloroethane       1.0       U       0.17       1.0         1,3-Dichlorobenzene       1.0       U       0.18       1.0	trans-1,3-Dichloropropene	1.0	U		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	1,1,2-Trichloroethane	1.0	U	0.18	1.0
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	Tetrachloroethene	1.0	U	0.18	1.0
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	2-Hexanone	5.0	U	1.1	5.0
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	Dibromochloromethane	1.0	U		
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	1,2-Dibromoethane	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	Chlorobenzene	1.0	U	0.19	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	Ethylbenzene	1.0	U	0.18	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	Xylenes, Total	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	Styrene	1.0	U	0.17	
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	Bromoform	1.0	U		
1,1,2,2-Tetrachloroethane       1.0       U       0.17       1.0         1,3-Dichlorobenzene       1.0       U       0.18       1.0	Isopropylbenzene	1.0	U	0.17	
1,3-Dichlorobenzene 1.0 U 0.18 1.0	1,1,2,2-Tetrachloroethane	1.0	U	0.17	
	1,3-Dichlorobenzene	1.0	U	0.18	
in the second second second second second second second second second second second second second second second	1,4-Dichlorobenzene	1.0	U na	0.15	

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1

Sdg Number: 11371

**Client Sample ID:** 

TB-06162012

Lab Sample ID: Client Matrix:

200-11382-7

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:

Lab File ID:

lhbab22.d

N/A

Dilution:

1.0

Initial Weight/Volume:

5 mL

Analysis Date:

06/25/2012 2324

Final Weight/Volume:

5 mL

Prep Date:

Analyte

06/25/2012 2324

Result (ug/L)	Qualifier	MDL	RL	
1.0	U	0.15	1.0	
4.0				

1,2-Dibromo-3-Chloropropane 1,2,4-Trichlorobenzene

1,2-Dichlorobenzene

1.0 1.0 U

0.22 0.18 1.0 1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	91	vid avidida suuraka ahaan ahaan kaatan kaatan kaan ayaa ayaa kayaa ka ku ku ku ku ku ku ku ku ku ku ku ku ku	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

Lab File ID:

lhbae21.d

Dilution:

8.8

Prep Batch:

200-40644

Initial Weight/Volume:

5.76 g

Analysis Date:

06/27/2012 2011

Final Weight/Volume:

10 mL

06/20/2012 1425

Analyte	DryWt Corrected: Y		Result (ug/Kg)		Qualifier	MDL	RL
Dichlorodifluoromethane			1400	:	UJ	300	1400
Chloromethane		3	1400		UJ	380	1400
Vinyl chloride			1400	9.14	U	290	1400
Bromomethane			1400		UJ	360	1400
Chloroethane			1400		U	220	1400
Trichlorofluoromethane			1400		U	190	1400
1,1-Dichloroethene			1400	AIII	U	320	1400
1,1,2-Trichloro-1,2,2-trichflu	oroethane		1400	211	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		Ū	290	1400
Methyl t-butyl ether			1400		Ū	260	1400
1,2-Dichloroethene, Total			1400		Ü	260	1400
1,1-Dichloroethane			1400		Ü	290	1400
cis-1,2-Dichloroethene			1400		Ū	260	1400
2-Butanone			7200		Ū	1200	7200
Chloroform			1400		Ü	270	1400
1,1,1-Trichloroethane			1400		Ü	290	1400
Cyclohexane			1400		Ū	290	1400
Carbon tetrachloride			1400		Ŭ "	220	1400
Benzene			640		J	300	1400
1,2-Dichloroethane			1400		Ü	250	1400
Trichloroethene			1400		Ŭ	250	1400
Methylcyclohexane			1400		Ü	260	1400
1,2-Dichloropropane			1400		Ü	270	1400
Bromodichloromethane			1400		Ü	270	1400
cis-1,3-Dichloropropene			1400		Ü	260	1400
4-Methyl-2-pentanone			7200		Ü	1600	7200
Toluene			460		J	290	1400
rans-1,3-Dichloropropene		20	1400		Ü	250	1400
1.1.2-Trichloroethane			1400		U	270	1400
Tetrachloroethene			1400		U	290	1400
2-Hexanone			7200		U	1100	7200
Dibromochloromethane			1400		U		
1,2-Dibromoethane			1400		U	230 270	1400
Chlorobenzene	à.		1400			-	1400
Ethylbenzene			1400		U	290	1400
Kylenes, Total			1300		U	290	1400
•					J	300	1400
Styrene			1400		U	250	1400
Bromoform			1400		U	250	1400
sopropylbenzene			1400		U	270	1400
1,1,2,2-Tetrachloroethane		0	1400		U	260	1400
1,3-Dichlorobenzene			1400		U	270	1400
1,4-Dichlorobenzene			1400		U	270	1400

**TestAmerica Burlington** 

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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:

Lab File ID:

Ihbae21.d

Dilution:

200-40644

8.8

Initial Weight/Volume:

5.76 g

Analysis Date:

06/27/2012 2011

Prep Date:

Final Weight/Volume:

10 mL

Analyte

06/20/2012 1425

DryWt Corrected: Y

Result (ug/Kg) Qualifier MDL RL 1400 U 290 1400

1,2-Dichlorobenzene 1,2-Dibromo-3-Chloropropane

1400 1400 U U 250 290 1400 1400

Surrogate

1,2,4-Trichlorobenzene

Bromofluorobenzene

%Rec 89 100

Qualifier Acceptance Limits 65 - 155

1,2-Dichloroethane-d4 Toluene-d8

1,2-Dichlorobenzene-d4

99 101 80 - 115 80 - 115 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:

Lab File ID:

ngan16.d

Dilution:

1.0

200-40646

Initial Weight/Volume:

5.24 g

Analysis Date: Prep Date:

06/26/2012 1920

Final Weight/Volume:

5 mL

10

10

10

10

10

10

10

10

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Analyte	
Dichlorodifluoromethane	,
Chloromethane	
Vinyl chloride	
Bromomethane	

06/20/2012 1430

DryWt Corrected: Y

Result (ug/Kg)	Qualifier	MDL	RL
10	UI	0.47	10
10	U	0.53	10
10	U,	0.61	10
10	UJ	1.5	10
10	U_J	0.77	10
10	U	0.67	10
10	11	0.75	10

Chloroethane Trichlorofluoromethane 1,1-Dichloroethene 0.75 JUH JUB 1,1,2-Trichloro-1,2,2-trichfluoroethane 10 0.67 Acetone 140 2.0 Carbon disulfide 75 0.63 Methyl acetate 10 1.3 10-32 Methylene Chloride 1.1 U trans-1,2-Dichloroethene 10 0.75 Methyl t-butyl ether U 10 0.61 1,2-Dichloroethene, Total 10 U 1.6 1,1-Dichloroethane U 10 0.84 cis-1,2-Dichloroethene 10 U 0.86 2-Butanone 33 3.1 Chloroform JB-UB 10-1.6 0.65 1,1,1-Trichloroethane 10 U 1.4 U Cyclohexane 10 1.7 Carbon tetrachloride 10 U 1.5 7 Benzene 90 1.4 1.2-Dichloroethane 10 1.3 Trichloroethene 10 U 0.98 Methylcyclohexane 10 U 0.35 1,2-Dichloropropane 10 U 0.59 Bromodichloromethane 10 U 0.43 cis-1,3-Dichloropropene 10 U 0.71 4-Methyl-2-pentanone 10 U 1.2 Toluene 0.81 JB UB 0.20 trans-1,3-Dichloropropene 10

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UJ 0.26 υĨ 0.69 UI 0.22 UJ 1.0 0.22 UI 0.31 0 4 7 7 0.15 0.11 1.5 7

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0.16

0.53

0.31

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U 5

Page 100 of 5335

Dibromochloromethane 1,2-Dibromoethane Chlorobenzene Ethylbenzene Xylenes, Total

1,1,2-Trichloroethane

Tetrachloroethene

2-Hexanone

Styrene **Bromoform** Isopropylbenzene 1,1,2,2-Tetrachloroethane 1,3-Dichlorobenzene

1,4-Dichlorobenzene TestAmerica Burlington

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

Lab File ID:

Prep Batch:

200-40646

Dilution:

1.0

ngan16.d

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	THE C	10	U 5	0.45	10
1,2-Dibromo-3-Chloropropane		10	UJ	1.9	. 10
1,2,4-Trichlorobenzene		10 <del>-0.77-</del>	-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

8260R	Voiatile	Organic	Compounds	(CC/MS)
02000	<b>VUIAUIC</b>	Organic	Collipoulius	IGCUMO

Analysis Method:

8260B 5035

Analysis Batch:

200-41242

Instrument ID: Lab File ID:

N.i

Prep Methods Dilution:

1.0

Prep Batch:

200-40646

Initial Weight/Volume:

ngao20.d 4.94 g

Prep Date   08/20/2012 1430	Analysis Date: 06/29	9/2012 1829	Run Type: RE		Final Weight/Volume:	4.94 g 5 mj/
Dichlorodiffuoromethane			7,6-1		The strong to to take the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the strong to the stro	
Dichlorodiffuoromethane	Analysis	D-114 O-114 1 V	<b>D W</b> ( <b>M</b> )			
Chloromethane Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl chloride Vinyl c		Dryvvt Corrected: Y				
Vinyl chloride         11         U         0.65         11           Bromomethane         11         U         0.65         11           Chloroethane         11         U         0.82         11           Trichloroethene         11         U         0.67         11           1.1.2-Chricoethene         11         U         0.80         11           1.1.2-Trichloro-1,2,2-trichfluoroethane         11         U         0.71         11           Acetone         110         2.2         11         11           Methyl acetate         11         U         1.4         11           Methyl acetate         11         U         1.4         11           Methyl acetate         11         U         1.4         11           Methyl Evblyl ether         11         U         0.80         11           Methyl Evblyl ether         11         U         0.80         11           Methyl Evblyl ether         11         U         0.80         11           Methyl Evblyl ether         11         U         0.89         11           1.1-Dichloroethane         11         U         0.89         11           1.					,	
Bromomethane					,	
Chloroethane	•	1				
Trichlorofluoromethane 11						
1.1-Dichloroethene						
1.1,2-Trichloro-1,2,2-trichfluoroethane 11						
Acetone 110 2.2 11 Carbon disulfide 70 0.67 11 Methyl acetate 111 U 1.4 11 Methylene Chloride 12.2 J 1.2 11 Itans-1,2-Dichloroethene 11 U 0.80 11 Methyl i-butyl ether 11 U 0.65 11 I.2-Dichloroethene 70tal 11 U 0.89 11 I.3-Dichloroethene 11 U 0.89 11 cis-1,2-Dichloroethene 11 U 0.89 11 cis-1,2-Dichloroethene 11 U 0.91 11 cis-1,2-Dichloroethene 11 U 0.91 11 Cyclohexane 27 3.2 11 Chloroform 11 U 0.69 11 I.1,1-Trichloroethane 11 U 1.8 11 Cyclohexane 11 U 1.8 11 Benzene 150 1.5 11 Benzene 50 1.5 11 Trichloroethene 11 U 1.8 11 Trichloroethene 11 U 1.8 11 Trichloroethene 11 U 1.3 11 Trichloroethene 11 U 1.3 11 Trichloroethene 11 U 1.3 11 Trichloroethene 11 U 1.3 11 Trichloroethene 11 U 1.3 11 Trichloroethene 11 U 1.3 11 Trichloroethene 11 U 1.3 11 Trichloroethene 11 U 1.3 11 Trichloroethene 11 U 1.3 11 Trichloroethene 11 U 1.3 11 Trichloroethene 11 U 0.37 11 Trichloroethene 11 U 0.37 11 Trichloroethene 11 U 0.38 11 Trichloroethene 11 U 0.45 11 Trichloroethene 11 U 0.45 11 Trichloroethene 11 U 0.76 11 Trichloroethene 11 U 0.76 11 Trans-1,3-Dichloropropene 11 U 0.78 11 Trans-1,3-Dichloropropene 11 U 0.28 11 Tetrachloroethene 11 U 0.24 11 Tetrachloroethene 11 U 0.24 11 Tetrachloroethene 11 U 0.32 11 Tetrachloroethene 11 U 0.43 11 Tetrachloroethene 11 U 0.43 11 Tetrachloroethene 11 U 0.43 11 Tetrachloroethene 11 U 0.43 11 Tetrachloroethene 11 U 0.43 11 Tetrachloroethene 11 U 0.43 11 Tetrachloroethene 11 U 0.43 11 Tetrachloroethene 11 U 0.43 11 Tetrachloroethene 11 U 0.43 11 Tetrachloroethene 11 U 0.43 11 Tetrachloroethene 11 U 0.43 11 Tetrachloroethene 11 U 0.43 11 Tetrachloroethene 11 U 0.43 11 Tetrachloroethene 11 U 0.43 11 Tetrachloroethene 11 U 0.43 11 Tetrachloroethene 11 U 0.43 11 Tetrachloroethene 11 U 0.43 11 Tetrachloroethene 11 U 0.43 11 Tetrachloroethene 11 U 0.43 11 Tetrachloroethene 11 U 0.43 11 Tetrachloroethene 11 U 0.43 11 Tetrachloroethene 11 U 0.43 11 Tetrachloroethene 11 U 0.43 11 Tetrachloroethene 11 U 0.43 11 Tetrachloroethene 11 U 0.43 11 Tetrachloroethene 11 U 0.43 11 Tetrachloroethene 11 U 0.43 11	•				/	
Carbon disulfide         70         0.67         11           Methyl acetate         11         U         1.4         11           Methylene Chloride         2.2         J         1.2         11           Irans-1.2-Dichloroethene         11         U         0.80         11           Methyl I-butyl ether         11         U         0.65         11           1.2-Dichloroethene, Total         11         U         0.65         11           1,1-Dichloroethene, Total         11         U         0.89         11           cis-1,2-Dichloroethene         11         U         0.89         11           cis-1,2-Dichloroethene         11         U         0.89         11           Cis-1,1-Tichloroethane         11         U         0.69         11           Cyclohexane         11         U         1.6         11           Cyclohexane         11         U         1.6         11           L,2-Dichloroethane         11         U         1.6         11           Methylyclohexane         11         U         1.6         11           1,2-Dichloropropane         11         U         0.63         11		Joroetnane		U	,	
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         0.65         11           1,1-Dichloroethane         11         U         0.89         11           1,1-Dichloroethane         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           Cyclohexane         11         U         1.8         11           Benzene         50         1.5         11           1,2-Dichloroethane         11         U         1.6         11           1,2-Dichloroethane         11         U         0.37         11           1,2-Dichloroethane         11 <td< td=""><td></td><td></td><td></td><td></td><td>/</td><td></td></td<>					/	
Methylene Chloride         2.2         J         1,2         11           trans-1,2-Dichloroethene         11         U         0.80         11           Methyl E-burly ether         11         U         0.65         11           1,2-Dichloroethene, Total         11         U         0.65         11           1,1-Dichloroethene, Total         11         U         0.89         11           1,1-Dichloroethene         11         U         0.89         11           2-Butanone         27         3.2         11           Chloroform         11         U         0.69         11           1,1,1-Tichloroethane         11         U         1.5         11           Cyclohexane         11         U         1.6         11           Lyclohoroethane         11         U         1.6         11           1,2-Dichloroethane         11         U         1.3         11           1,2-Dichloroethane         11         U         1.0         11           1,2-Dichloropropane         11         U         1.0         11           1,2-Dichloropropane         11         U         0.63         11           1,2-Dichl		^			/	
trans-1.2-Dichloroethene   11	•			/		
Methyl I-butyl ether         11         U         0.65         11           1,2-Dichloroethene, Total         11         U         1.7         11           cis-1,2-Dichloroethene         11         U         0.89         11           cis-1,2-Dichloroethene         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           Cyclohexane         11         U         1.8         11           Benzene         50         1.5         11         1.8         11           1,2-Dichloroethane         11         U         1.3         11         1.3         11           Methyl-zehane         11         U         1.3         11         1.3         11         1.3         11         1.3         11         1.3         11         1.3         11         1.3         11         1.3         11         1.3         11         1.3         11         1.3         11         1.3         11         1.3         1.3         11         1.3			2.7			
1,2-Dichloroethene, Total 1,1-Dichloroethane 11			<b>\</b>	U/		
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       1,6       11         Carbon tetrachloride       11       U       1,6       11         Benzene       50       1,5       11         1,2-Dichloroethane       11       U       1,3       11         Trichloroethane       11       U       1,3       11         Methylcyclohexane       11       U       0,37       11         1,2-Dichloropropane       11       U       0,37       11         Bromodichloromethane       11       U       0,45       11         1,2-Dichloropropene       11       U       0,45       11         4-Methyl-2-pentanone       11       U       0,76       11         4-Methyl-2-pentanone       11       U       0,76       11         4-Methyl-2-pentanone       11       U				<i>y</i> ′		" 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           Cycloekaane         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           1,2-Dichloroethane         11         U         1,3         11           1,2-Dichloropropane         11         U         0,37         11           1,2-Dichloropropane         11         U         0,45         11           1,2-Dichloropropane         11         U         0,76         11           4-Methyl-2-pentanone         11	· · · · · · · · · · · · · · · · · · ·		\	/U		11
2-Butanone	·		Α		0.89	11
Chloroform			\	/ U		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         Iz-Dichloropropane       11       U       0.37       11         Bromodichloromethane       11       U       0.45       11         Bromodichloromethane       11       U       0.76       11         H-Methyl-2-pentanone       11       U       0.76       11         I-Methyl-2-pentanone       11       U       0.28       11         I-L-Indhoroethane       11       U       0.28       11         I-L-Indhoroethane	2-Butanone		27		3.2	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         71         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         0.76         11           4-Methyl-2-pentanone         11         U         0.76         11           4-Methyl-2-pentanone         11         U         0.22         11           1cis-1,3-Dichloropropene         11         U         0.28         11           11,2-Tirchloroethane         11         U         0.28         11           1,1,2-Tirchloroethane         11         U         0.24         11           1,			11 \ /	Ú	0.69	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           Is-3-Jöchloropropene         11         U         0.76         11           4-Methyl-2-pentanone         11         U         0.76         11           11         U         0.76         11         13         11           Toluene         0.70         J B         0.22         11           trans-1,3-Dichloropropene         11         U         0.28         11           1,	1,1,1-Trichloroethane		11	U	1.5	11
Benzene   50	•			U	1.8	11
1,2-Dichloroethane       11       U       1.3       11         Trichloroethene       11       U       1.0       11         Methylcyclohexane       11       U       0.37       11         1,2-Dichloropropane       71       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       0.76       11         Toluene       0.70       JB       0.22       11         trans-1,3-Dichloropropene       11       U       0.28       11         1,1,2-Trichloroethane       11       U       0.73       11         Tetrachloroethane       11       U       0.73       11         Tetrachloroethene       11       U       0.24       11         2-Hexanone       11       U       0.24       11         1,2-Dibromoethane       11       U       0.32       11         1,2-Dibromoethane       11       U       0.16       11         1thylbenzene       11       U       0.12       11         Xylenes, To	Carbon tetrachloride		· 11 / \	\ U	1.6	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         0.76         11           Toluene         0.70         J B         0.22         11           trans-1,3-Dichloropropene         11         U         0.28         11           1,1,2-Trichloroethane         11         U         0.24         11           2-Hexanone         11         U         0.24         11           1,2-Dibromoethane         11         U         0.32         11           1,2-Dibromoethane         11         U         0.18         11 <td>Benzene</td> <td></td> <td>50</td> <td></td> <td>1.5</td> <td>11</td>	Benzene		50		1.5	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         JB         0.22         11           trans-1,3-Dichloropropene         11         U         0.28         11           1,1,2-Trichloroethane         11         U         0.73         11           1,2-Hexanone         11         U         0.24         11           2-Hexanone         11         U         0.24         11           1,2-Dibromoethane         11         U         0.32         11           1,2-Dibromoethane         11         U         0.16         11           2,1-Dibromoethane         11         U         0.16         11           3,1-Dichorobenzene         11         U         0.12         11           4,1-Dichorobenzene         11         U         0.43         11	1,2-Dichloroethane		11 /	\ U	1.3	11
1,2-Dichloropropane       41       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         Tolluene       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       0.73       11         2-Hexanone       11       U       0.24       11         1-Jebromoethane       11       U       0.32       11         1,2-Dibromoethane       11       U       0.32       11         Chlorobenzene       11       U       0.16       11         Stylenes, Total       11       U       0.12       11         Styrene       11       U       0.43       11         Isopropylbenzene       11       U       0.43       11         Isopropylbenzene       11       U       0.32       11         1,2-Dichlorobenzene <td>Trichloroethene</td> <td></td> <td>11 /</td> <td>\ ∪</td> <td>1.0</td> <td>11</td>	Trichloroethene		11 /	\ ∪	1.0	11
Bromodichloromethane	Methylcyclohexane		11/	\u	0.37	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         1,2-Trichloroethane       11       U       0.73       11         Tetrachloroethane       11       U       0.24       11         2-Hexanone       11       U       0.24       11         2-Hexanone       11       U       0.24       11         1,2-Dibromoethane       11       U       0.32       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       0.12       11         Styrene       11       U       0.22       11         Bromoform       11       U       0.43       11         Isopropylbenzene       11       U       0.56       11         1,2-Dichlorobenzene       11	1,2-Dichloropropane		14	þ	0.63	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         Tetrachloroethane       11       U       0.24       11         2-Hexanone       11       U       0.24       11         2-Hexanone       11       U       0.24       11         1,2-Dibromoethane       11       U       0.32       11         1,2-Dibromoethane       11       U       0.32       11         Chlorobenzene       11       U       0.18       11         Ethylbenzene       11       U       0.12       11         Xylenes, Total       11       U       0.12       11         Styrene       11       U       0.22       11         Bromoform       11       U       0.43       11         Isopropylbenzene       11       U       0.56       11         1,2-Dichlorobenzene       11       U       0.56       11         1,4-Dichlorobenzene       11       <	Bromodichloromethane		/11	υ\	0.45	11
Toluene 0.70 J B 0.22 11 trans-1,3-Dichloropropene 11 U 0.28 11 1,1,2-Trichloroethane 11 U 0.28 11 12 1,1,2-Trichloroethane 11 U 0.73 11 12 12 11 12 11 11 11 11 11 11 11 11	cis-1,3-Dichloropropene		/ 11	u \	0.76	11
trans-1,3-Dichloropropene       11       U       0.28       11         1,1,2-Trichloroethane       11       U       0.73       11         Tetrachloroethane       11       U       0.24       11         2-Hexanone       11       U       1.1       11         Dibromochloromethane       11       U       8.24       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       0.12       11         Styrene       11       U       0.22       11         Bromoform       11       U       0.43       11         Isopropylbenzene       11       U       0.56       11         1,2,2-Tetrachloroethane       11       U       0.56       11         1,3-Dichlorobenzene       11       U       0.50       11         1,4-Dichlorobenzene       11       U       0.50       11	4-Methyl-2-pentanone		/ 11	U \	1.3	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       0.32       11         1,2-Dibromoethane       11       U       0.32       11         1,2-Dibromoethane       11       U       0.16       11         Ethylbenzene       11       U       0.12       11         Xylenes, Total       11       U       0.12       11         Styrene       11       U       0.22       11         Bromoform       11       U       0.43       11         Isopropylbenzene       11       U       0.43       11         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	Toluene		0.70	JB \	0.22	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       0.32       11         1,2-Dibromoethane       11       U       0.32       11         1,2-Dibromoethane       11       U       0.16       11         Ethylbenzene       11       U       0.12       11         Xylenes, Total       11       U       0.12       11         Styrene       11       U       0.22       11         Bromoform       11       U       0.43       11         Isopropylbenzene       11       U       0.43       11         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	trans-1,3-Dichloropropene	/	11	U	0.28	11
Tetrachloroethene 11 U 0.24 11 2-Hexanone 11 U 1.1 11 Dibromochloromethane 11 U 0.32 11 1,2-Dibromoethane 11 U 0.32 11 Chlorobenzene 11 U 0.18 11 Ethylbenzene 11 U 0.12 11 Xylenes, Total 11 U 0.22 11 Styrene 11 U 0.22 11 Bromoform 11 U 0.43 11 Isopropylbenzene 11 U 0.43 11 Isopropylbenzene 11 U 0.56 11 1,3-Dichlorobenzene 11 U 0.56 11 1,4-Dichlorobenzene 11 U 0.50 11	1,1,2-Trichloroethane		11		\	11
2-Hexanone       11       U       1.1       11         Dibromochloromethane       11       U       0.24       11         1,2-Dibromoethane       11       U       0.32       11         1,2-Dibromoethane       11       U       0.18       11         11       U       0.18       11         11       U       0.12       11         12       Xylenes, Total       11       U       1.6       11         12       Styrene       11       U       0.22       11         13       Bromoform       11       U       0.43       11         14       Isopropylbenzene       11       U       0.43       11         15       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	Tetrachloroethene		11	U	`	
Dibromochloromethane	2-Hexanone		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         1,2,2-Tetrachloroethane       11       U       0.56       11         1,3-Dichlorobenzene       11       U       0.32       11         1,4-Dichlorobenzene       11       U       0.50       11	Dibromochloromethane		11		`	
Chlorobenzene       11       U       0.1è       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	1,2-Dibromoethane		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	Chlorobenzene		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						
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	Xylenes, Total					
Bromoform 11 U 0.43 11		/			\	
Isopropylbenzene	•	/			\	
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		/				
1,3-Dichlorobenzene       11       U       0.32       11         1,4-Dichlorobenzene       11       U       0.50       11						\
1,4-Dichlorobenzene 11 U 0.50						\ \
	·					\
TestAmerica Burlington Page 102 of 5335				-	2.00	/
	TestAmerica Buriington		Page 102 of	5335		

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 Co	mpounds (GC/MS)			
Analysis Method: 8260B Prep Method: 5035 Dilution: 1.0 Analysis Date: 06/29/2012 1829 Prep Date: 06/20/2012 1430	Analysis Batch: 200-	41242 II 40646 L	nstrument ID: Lab File ID: nitial Weight/Volume: Final Weight/Volume:	N.i ngao20.d 4.94 g 5 mL	
Analyte DryWt Correct	ed: 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	Acceptan	ce Limits	
1,2-Dichloroethane-d4	73		65 - 155	Verticos), n. 100 vij. 1820 (5 vertigin in debute day, n. p. p. p. p. p. p. p. p. p. p. p. p. p.	
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 Voiatlie 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: Analysis Date: 2.0

Initial Weight/Volume:

6.11 g

Prep Date:

06/27/2012 2043 06/20/2012 1425 Final Weight/Volume:

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		220	US	46	220
Chloromethane		220	UI	57	220
Vinyl chloride		220	U	44	220
Bromomethane		220	UI	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-trichfluo	roethane	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
rans-1,2-Dichloroethene		220	U	44	220
Methyl t-butyl ether		220	U	39	220
1,2-Dichloroethene, Total		220	U	39	220
,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-Trichloroethane		220	U	44	220
Cyclohexane		220	U	44	220
Carbon tetrachloride		220	U	33	220
Benzene -		73	J	46	220
,2-Dichloroethane		220	U	37	220
richloroethene		220	U	37	220
Methylcyclohexane		220	U	39	220
,2-Dichloropropane		220	U	42	220
Bromodichloromethane		220	U	42	220
is-1,3-Dichloropropene		220	U	39	220
-Methyl-2-pentanone		1100	U	240	1100
Toluene		63	J	44	220
rans-1,3-Dichloropropene		220	U	37	220
,1,2-Trichloroethane		220	U	42	220
etrachloroethene		220	U	44	220
-Hexanone		1100	U	170	1100
Dibromochloromethane		220	U	35	220
,2-Dibromoethane		220	U	42	220
Chlorobenzene		220	U	44	220
thylbenzene		220	U	44	220
ylenes, Total		160	J	46	220
tyrene		220	Ū	37	220
romoform		220	Ū	37	220
sopropylbenzene		220	Ü	42	220
,1,2,2-Tetrachloroethane		220	Ū	39	220
,3-Dichlorobenzene		220	Ū	42	220
,4-Dichlorobenzene		220	Ü	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:

Client Matrix:

Solid

200-11382-11

% 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

Lab File ID:

lhbae22.d

Dilution:

Prep Batch:

200-40644

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		40	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: Dilution: 5035

Prep Batch:

200-40646

Lab File ID:

ngan17.d

Analysis Date:

1.0

rep Batch: 200-40

Initial Weight/Volume:

5.09 g

Prep Date:

06/26/2012 1951 06/20/2012 1430 Final Weight/Volume:

Analyte	DryWt Correc	ted: Y	Result (ug/Kg)	Local	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ゴ	1.3	8.5	
Chloroethane			8.5		υブ	0.64	8.5	
Trichlorofluoromethane			8.5		U	0.56	8.5	
1,1-Dichloroethene			8.5		Ū	0.63	8.5	
1,1,2-Trichloro-1,2,2-trichfluor	oethane		8.5		Ü	0.56	8.5	
Acetone			220		7	1.7	8.5	
Carbon disulfide			13		ĬΩ	0.52	- <del>8.5</del> 13	
Methyl acetate			8.5		U	1.1	8.5	
Methylene Chloride			8.5		Ŭ	0.93	8.5	
trans-1,2-Dichloroethene			8.5		U	0.63	8.5	
Methyl t-butyl ether		100	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		2	2.5	8.5	
Chloroform		8,5	44-		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		2	1.2	8.5	
1,2-Dichloroethane			8.5		Ū	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	- 5	31U	0.59	8.5	
4-Methyl-2-pentarione			8.5		U	1.0	8.5	
Toluene			5.3		J <b>g</b>	0.17	8.5	
trans-1,3-Dichloropropene			8.5		حر أن	0.22	8.5	
1,1,2-Trichloroethane			8.5		UF	0.58	8.5	
Tetrachloroethene			8.5		Ū 🕤	0.19	8.5	
2-Hexanone			8.5		υゴ	0.83	8.5	
Dibromochloromethane			8.5		UJ	0.19	8.5	
1,2-Dibromoethane			8.5		UJ	0.19		
Chlorobenzene			8.5		07		8.5	
Ethylbenzene						0.13	8.5	
•			1.8		J <b>B</b>	0.095	8.5	
Xylenes, Total			8.4		J	1.2	8.5	
Styrene			8.5		U <b>5</b>	0.17	8.5	
Bromoform			8.5		リゴ	0.34	8.5	
Isopropylbenzene			1.4		J _ =	0.13	8.5	
1,1,2,2-Tetrachloroethane			8.5		UZ	0.44	8.5	
1,3-Dichlorobenzene			8.5		UI	0.25	8.5	
1,4-Dichlorobenzene			8.5		U 5	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

41.9 % Moisture:

Date Sampled: 06/19/2012 1350

Date Received: 06/20/2012 1010

2260B	Volatile	Organic	Compounds	(CC/MC)

Analysis Method:

8260B

Analysis Batch:

200-41070

Instrument ID:

N.i

Prep Method:

5035

Dilution:

1.0

Prep Batch:

200-40646

Lab File ID:

ngan17.d

Initial Weight/Volume:

5.09 g

Analysis Date:

06/26/2012 1951

06/20/2012 1430

Final Weight/Volume:

Prep Date:

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		8.5	U 5	0.37	8.5
1,2-Dibromo-3-Chloropropane		8.5	UJ	1.5	8.5
1,2,4-Trichlorobenzene		85-0.73	JB UB	0.34	8.5

	%Rec		Qualifier	Acceptance Limits
	82		en de alle commente any legen apreparation de contracte any project, que expression any sept service projective	65 - 155
	122		Χ .	80 - 115
	155		X	80 - 115
~ <u>~</u>	107			45 - 145
		82 122 155	82 122 155	82 122 X 155 X

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

	- 8	260B Volatile Organ	nic Compoun	ds (GC/M	S)	8 /	
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	
	012 1900	Run Type:	RE		Final Weight/Volume:	5 mL	
Prep Date: 06/20/2	012 1430						
Analyte	DryWt Corrected: Y	Result (ug	J/Kg)	Qualifie	er MDL	RL	
Dichlorodifluoromethane		8.0		U	0.37	8.0	
Chloromethane		8.0		U	9.42	8.0	
/inyl chloride	50 /	8.0		U	<b>/</b> 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-trichfluor	roethane	8.0		U /	0.53	8.0	
Acetone		300		/	1.6	8.0	
Carbon disulfide		16		1	0.50	8.0	
Methyl acetate		8.0	1	U	1.0	8.0	
Methylene Chloride		1.5	/	J	0.89	8.0	
rans-1,2-Dichloroethene		8.0	/	U	0.60	8.0	
Methyl t-butyl ether		8.0	/	U	0.48	8.0	
,2-Dichloroethene, Total		8.0	/	U	1.2	8.0	
1,1-Dichloroethane		8.0	<i>(</i>	U	0.66	8.0	
sis-1,2-Dichloroethene		8.0		U	0.68	8.0	
2-Butanone		68			2.4	8.0	4
Chloroform		8.0		U	0.51	8.0	1.7
,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	a 8 J	8.0	2	U	1.0	8.0	
Inchloroethene	- /	8.0		d	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		JB	0.16	8.0	
rans-1,3-Dichloropropene		8.0		U	0.21	8.0	
,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	
(ylenes, Total		8.1			1.2	8.0	
Styrene		8.0		U	0.16	8.0	
Bromoform/		8.0		U	0.32	8.0	
sopropylbenzene		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	
,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

	82	260B Volatile Organi	c Compounds (GC	/MS)		
,	012 1900 012 1430	Analysis Batch: Prep Batch: Run Type:	200-41242 200-40646 RE	Instrument ID: Lab File ID: Initial Weight/Volume: Final Weight/Volume:	N.i ngao21.d 5.35 g 5 mL	
Analyte	DryWt Corrected: Y	Result (ug/	kg) Quali	fier MDL	RL	
1,2-Dichlorobenzene		8.0	U	0.35	8.0	
1,2-Dibromo-3-Chloropropand		8.0	U	1.5	8.0	
1,2,4-Trichlorobenzene		8.0	U	0.32	8.0	
Surrogate		%Rec	Quali	fier Accepta	nce Limits	
1,2-Dichloroethane-d4		75	***************************************	65 - 155		
Toluene-d8		125	X	80 - 115		
Bromofluorobenzene		134	X	80-115		
I,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: Dilution:

5035

Prep Batch:

200-40646

Lab File ID:

ngan18.d

Analysis Date:

1.0

Initial Weight/Volume:

6.92 g

Prep Date:

06/26/2012 2021 06/20/2012 1430 Final Weight/Volume:

Analyte DryWt Correct		The	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		5	0.92	4.6	
Carbon disulfide	4.6 1.9		JUB	0.29	4.6	
Methyl acetate	4.6		U	0.58	4.6	
Methylene Chloride	4.6 4.2		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		UJ	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		Ū	0.78	4.6	
Carbon tetrachloride	4.6		Ū	0.70	4.6	
Benzene	4.6		Ü	0.65	4.6	
1.2-Dichloroethane	4.6		Ü	0.57	4.6	
Trichloroethene	4.6		Ü	0.44	4.6	
Methylcyclohexane	4.6		Ü	0.16	4.6	
1,2-Dichloropropane	4.6		Ü	0.27	4.6	
Bromodichloromethane	4.6		Ü	0.19	4.6	
cis-1,3-Dichloropropene	4.6		Ü	0.32	4.6	
4-Methyl-2-pentanone	4.6		Ü	0.55	4.6	
Toluene	4.6-0.44-		JB UB	0.092	4.6	
trans-1,3-Dichloropropene	4.6		U .5	0.092	4.6	
1,1,2-Trichloroethane	4.6			0.31	4.6	
Tetrachloroethene	4.6		u F	0.10		
2-Hexanone	4.6		UJ		4.6	
Dibromochloromethane	4.6		リチ	0.45	4.6	
1.2-Dibromoethane	4.6			0.10	4.6	
Chlorobenzene			リケリン	0.14	4.6	
	4.6			0.070	4.6	
Ethylbenzene Yulanaa Tatal	4.6		UJ	0.051	4.6	
Xylenes, Total	4.6		UZ	0.67	4.6	
Styrene	4.6		U 2	0.092	4.6	
Bromoform	4.6		US	0.18	4.6	
sopropylbenzene	0.57		J	0.071	4.6	
1,1,2,2-Tetrachloroethane	4.6		U <b>J</b>	0.24	4.6	
1,3-Dichlorobenzene	4.6		υĮ	0.14	4.6	
1,4-Dichlorobenzene	4.6		υJ	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

Lab File ID:

Dilution:

Prep Batch:

ngan18.d

1.0

200-40646

Initial Weight/Volume:

6.92 g

Analysis Date:

06/26/2012 2021

Final Weight/Volume:

Prep Date:

06/20/2012 1430

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene	7	4.6	UJ	0.20	4.6
1,2-Dibromo-3-Chloropropane		4.6	リケ	0.84	4.6
1,2,4-Trichlorobenzene		4.6	UJ	0.18	4.6

%Rec	Qualifier	Acceptance Limits
81	***************************************	65 - 155
127	X	80 - 115
147	×	80 - 115
131		45 - 145
	81 127 147	81 127 X 147 X

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1

Sdg Number: 11371

Cliekt Sample ID:

TestAmerica Burlington

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 C	ompounds (GC/MS)			
Analysis Method:	8260B	Analysis Batch: 200	0-41242 Ir	strument ID:	N.i	59
Prep Method:	5035	-	0-40646 L	ab File ID:	ngao22.d	
Dilution:	1.0	£ .		nitial Weight/Volume:	7.77 g	
Analysis Date:	06/29/2012 1930	Run Type: RE		inal Weight/Volume:	5 mL	
Prep Date:	06/20/2012 1430			mu veigni voidine.	O IIIL	
analista.	DryWt Corrected:	V	0 115			
nalyte Dichlorodifluorometh		Y Result (ug/Kg) 4.1	Qualifier U	MDL 0.19	RL	
Chloromethane	arie	4.1		,	4.1	
inyl chloride		4.1	U	0/21 0.25	4.1	
romomethane		4.1	Ü	/	4.1	
hloroethane		4.1	U	0.61 0.31	4.1 4.1	
richlorofluorometha	20	4.1	U	0.31		
,1-Dichloroethene		4.1	U /		4.1	
,1,2-Trichloro-1,2,2-	trichfluoroethane	4.1	U /	0.30 0.27	4.1	
, 1,2-1110110-1,2,2- .cetone	and muorocularic	26	0	0.27	4.1	
arbon disulfide		1.2	1	0.82	4.1 4.1	
lethyl acetate		4.1	/11	0.52	4.1	
lethylene Chloride		1.0	/ J	0.52	4.1	
ans-1,2-Dichloroeth	ene	4.1	/ Ü	0.45	4.1	
lethyl t-butyl ether		4.1	/ U	0.25	4.1	
2-Dichloroethene,	otal	4.1	/ Ü	0,63	4.1	
,1-Dichloroethane	oldi	4.1	Ú	0.34	4.1	
s-1,2-Dichloroethen	e	4.1	Ü	0.34	4.1	
-Butanone		4.1	Ü	1.2	4.1	
hloroform		4.1	Ü	0.26	4.1	
,1,1-Trichloroethane		4.1	Ü	0.57	4.1	
yclohexane		4.1	V	0.70	4.1	
arbon tetrachloride		4/1	\	0.62	4.1	
enzene		4.1	\ ŭ	0.58	4.1	
,2-Dichloroethane		4.1	\ ŭ	- 0.51	4.1	
richloroethene		4.1	\ ŭ	0.39	4.1	
lethylcyclohexane		0.56	J	0.14	4.1	
,2-Dichloropropane		4.1	à	0.24	4.1	
romodichlorometha	ne	4.1	Ū	0.17	4.1	
s-1,3-Dichloroprope		4.1	Ű \	0.29	4.1	
-Methyl-2-pentanon	/	4.1	Ű	0.49	4.1	
oluene		0.37	JB \	0.082	4.1	
ans-1,3-Dichloropro	pene /	4.1	U	0.11	4.1	
,1,2-Trichloroethane		··· 4.1	Ü	0.28	4.1	
etrachloroethene		4.1	Ü	0.090	4.1	
-Hexanone	· / · · · · /	4.1	Ü	0.40	4.1	
ibromochlorometha	ne /	4.1	Ü	0.090	4.1	
2-Dibromoethane		4.1	Ü	0.12	4.1	
hlorobenzene		4.1	Ü	0.062	4.1	
thylberizene		4.1	Ü	0.046	4.1	
ylenes, Total		4.1	Ü	0.60	4.1	
tyrene		4.1	Ü	0.082	4.1	
romoform		4.1	Ü	0.16	4.1	
opropylbenzene	/	4.1	Ü	0.063	4.1	
,1,2,2-Tetrachloroeth	nane	4.1	Ü	0.21	4.1	
,3-Dichlorobenzene		4.1	Ü	0.12	4.1	
,4-Dichlorobenzene		4.1	Ü	0.19	4.1	

Page 112 of 5335

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

Date Sampled: 06/19/2012 1515

Client Matrix: Solid	V	% Moisture: 21	.4	Date	Received: 06/20/2012 101
	8	260B Volatile Organic Com	npounds (GC/MS	)	
Analysis Method: 8260B		Analysis Batch: 200-4	1242	Instrument ID:	N.i . 1 Soft of min Su
Prep Method: 5035		Prep Batch: 200-4	0646	Lab File ID:	ngao22.d
Dilution: 1.0				Initial Weight/Volume:	7.77 g
Analysis Date: 06/29/2012	1930	Run Type: RE	=U1 TP.6 E.	Final Weight/Volume:	5 mL
Prep Date: 06/20/2012	1430				
Analyte D	ryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene	1/10	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	X	0.16	4.1
Surrogate		%Rec	Qualifier	Acceptar	nce Limits
1,2-Dichloroethane-d4	e de construent construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de construent de	· 71		65 - 155	
Toluene-d8		141	X	80 - 115	
Bromofluorobenzene		122	X	80 - 115	
1,2-Dichlorobenzene-d4	/	113		45 145	
					i and the i

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: Dilution: 5030B

Prep Batch:

N/A

Lab File ID:

lhbad14.d

Analysis Date:

1.0

. ...

Initial Weight/Volume:

5 mL

Prep Date:

06/27/2012 0320 06/27/2012 0320 Final Weight/Volume:

Analyte	Result (ug/L)	Q	ualifier	MDL -	RL
Dichlorodifluoromethane	1.0	U	1	0.090	1.0
Chloromethane	1.0	U	7	0.12	1.0
Vinyl chloride	1.0	U	r 5	0.090	1.0
Bromomethane	1.0	. U	r 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	Ū		0.16	1.0
Cyclohexane	1.0	Ū		0.23	1.0
Carbon tetrachloride	1.0	Ū		0.17	1.0
Benzene	1.0	Ū		0.17	1.0
1,2-Dichloroethane	1.0	Ū		0.15	1.0
Trichloroethene	1.0	Ū		0.14	1.0
Methylcyclohexane	1.0	Ū		0.25	1.0
1,2-Dichloropropane	1.0	Ü		0.17	1.0
Bromodichloromethane	1.0	Ū		0.16	1.0
cis-1,3-Dichloropropene	1.0	Ū		0.16	1.0
4-Methyl-2-pentanone	5.0	Ū		0.90	5.0
Toluene	1.0	Ū		0.17	1.0
trans-1,3-Dichloropropene	1.0	Ũ		0.18	1.0
1,1,2-Trichloroethane	1.0	Ū		0.18	1.0
Tetrachloroethene	1.0	Ū		0.18	1.0
2-Hexanone	5.0	Ū		1.1	5.0
Dibromochloromethane	1.0	Ü		0.17	1.0
1.2-Dibromoethane	1.0	Ü		0.17	1.0
Chlorobenzene	1.0	Ü		0.19	1.0
Ethylbenzene	1.0	Ü		0.18	1.0
Xylenes, Total	1.0	Ü		0.17	1.0
Styrene	1.0	U		0.17	1.0
Bromoform	1.0	Ü		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		0.17	
1,4-Dichlorobenzene	1.0	U		0.10	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: Prep Method:

8260B 5030B Analysis Batch:

200-41005

Instrument ID:

L.i

lhbad14.d

Analysis Date:

1.0

Prep Batch:

N/A

Lab File ID: Initial Weight/Volume:

06/27/2012 0320

5 mL

RL 1.0 1.0 1.0

Prep Date:

Dilution:

Final Weight/Volume:

5 mL

06/27/2012 0320

Analyte		,
1,2-Dichlorobenzene	3	
1,2-Dibromo-3-Chlos	горгора	ne
1 2 4-Trichlorobenze	ne.	

Result (ug/L)	Qualifier	MDL
1.0	U	0.15
1.0	U	0.22
1.0	U	0.18

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	. 92	Anni kan kana arawa arawa arawa arawa arawa arawa arawa arawa arawa arawa arawa arawa arawa arawa arawa arawa	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 Voiatile Organic Compounds (GC/MS)

Analysis Method:

8260B

Analysis Batch:

200-41070

Instrument ID:

N.i

Prep Method: Dilution:

5035

Prep Batch:

Lab File ID:

ngan21.d

1.0

200-40798

Initial Weight/Volume:

5.15 g

Analysis Date: Prep Date:

06/26/2012 2153 06/22/2012 1321 Final Weight/Volume:

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dichlorodifluoromethane		5.2	ULT	0.24	5.2
Chloromethane		5.2	U	0.27	5.2
Vinyl chloride		5.2	U	0.31	5.2
Bromomethane		5.2	UJ	0.77	5.2
Chloroethane		5.2	UJ	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-trichfluor	roethane	5.2	U	0.34	5.2
Acetone		7.9	ゴ	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	219	J UB	0.57	5.2
trans-1,2-Dichloroethene	<b>-</b> ,	5.2	U	0.38	5.2
Methyl t-butyl ether		5.2	U	0.31	5.2
1,2-Dichloroethene, Total		5.2	Έ U	0.80	5.2
1,1-Dichloroethane		5.2	U	0.42	5.2
cis-1,2-Dichloroethene		5.2	Ü	0.44	5.2
2-Butanone		5.2	ŪJ	1.6	5.2
Chloroform	.5.	2 <del>0.55</del>	JB UB	0.33	5.2
1,1,1-Trichloroethane		5.2	U 013	0.73	5.2
Cyclohexane		5.2	Ū	0.88	5.2
Carbon tetrachloride		5.2	Ū	0.79	5.2
Benzene		5.2	Ū	0.74	5.2
1,2-Dichloroethane		5.2	Ū	0.64	5.2
Trichloroethene		5.2	Ü	0.50	5.2
Methylcyclohexane		5.2	Ü	0.18	5.2
1,2-Dichloropropane		5.2	Ü	0.30	5.2
Bromodichloromethane		5.2	Ü	0.22	5.2
cis-1,3-Dichloropropene		5.2	Ü	0.36	5.2
4-Methyl-2-pentanone		5.2	Ū	0.62	5.2
Toluene	5	2 0.14-	-JB-UB	0.10	5.2
trans-1,3-Dichloropropene	٠,	5.2	U	0.13	5.2
1,1,2-Trichloroethane		5.2	Ü	0.35	5.2
Tetrachloroethene		5.2	Ü	0.11	5.2
2-Hexanone		5.2	Ü	0.11	5.2
Dibromochloromethane		5.2	Ü	0.11	5.2 5.2
1.2-Dibromoethane		5.2	U	0.11	
Chlorobenzene		5.2	U	0.16	5.2
Ethylbenzene		5.2	U		5.2
Xylenes, Total		5.2	U	0.058	5.2
Styrene		5.2	U	0.76 0.10	5.2
Bromoform		5.2	U	0.10	5.2
Isopropylbenzene		5.2	U		5.2
				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:

Lab File ID:

Dilution:

200-40798

ngan21.d

1.0

Initial Weight/Volume:

5.15 g

Analysis Date:

06/26/2012 2153

06/22/2012 1321

Final Weight/Volume:

5 mL

Prep Date:

Analyte

DryWt Corrected: Y Result (ug/Kg) Qualifier MDL 1,2-Dichlorobenzene 5.2 U 0.23

1,2-Dibromo-3-Chloropropane 1,2,4-Trichlorobenzene

1,2-Dichlorobenzene-d4

5.2 5.2 U U

0.94 0.21

45 - 145

5.2 5.2 5.2

RL

Surrogate %Rec Qualifier Acceptance Limits 1,2-Dichloroethane-d4 76 65 - 155 Toluene-d8 89 80 - 115 Bromofluorobenzene 100 80 - 115

97

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: Dilution:

5030B

Prep Batch:

1.0

1.0

1.0

1.0

1.0

1.0

1.0

5.0

1.0

1.0

1.0

1.0

5.0

1.0

1.0

1.0

1.0

1.0

1.0

1.0

1.0

1.0

1.0

1.0

N/A

Lab File ID:

lhbad13.d

RL

1.0

Analysis Date

Benzene

Toluene

1,2-Dichloroethane

Methylcyclohexane

1,2-Dichloropropane

Bromodichloromethane

cis-1,3-Dichloropropene

trans-1,3-Dichloropropene

4-Methyl-2-pentanone

1,1,2-Trichloroethane

Dibromochloromethane

Tetrachloroethene

1,2-Dibromoethane

Chlorobenzene

Ethylbenzene

Xylenes, Total

Isopropylbenzene

1,3-Dichlorobenzene

1,4-Dichlorobenzene

Styrene

**Bromoform** 

2-Hexanone

Trichloroethene

1.0

06/27/2012 0248

Initial Weight/Volume:

MDL

0.090

5 mL

Final Weight/Volume:

5 mL

Analysis Date:	00/2//2012 0248			
Prep Date:	06/27/2012 0248			
Analyte		Result (ug/L)		Qua
Dichlorodifluorome	thane	1.0		U.
Chloromethane		1.0		Ų
Vinyl chloride		1.0		U×
Bromomethane		1.0		U
Chloroethane		1.0		U
Trichlorofluorometh	ane	1.0		U
1,1-Dichloroethene	• 1	1.0		U
1,1,2-Trichloro-1,2,	2-trichfluoroethane	1.0	-, -	U
Acetone		5.0	-	U
Carbon disulfide		1.0		U
Methyl acetate		1.0		U
Methylene Chloride	•	1.0		Ų
trans-1,2-Dichloroe	thene	1.0		U
Methyl t-butyl ether		1.0		U
1,2-Dichloroethene	, Total	1.0		U
1,1-Dichloroethane		1.0		U
cis-1,2-Dichloroeth	ene	1.0		U
2-Butanone		5.0		U
Chloroform		1.0		U
1,1,1-Trichloroetha	ne	1.0		U
Cyclohexane		1.0		U
Carbon tetrachlorid	e	1.0		U

Result (ug/L)	Qua	lifier
1.0	 U S	2
1.0	U	5

US	0.12	1.0
リーブ	0.090	1.0
リーグ	0.43	1.0
U	0.12	1.0
U	0.092	1.0
U	0.18	1.0
U	0.18	1.0
U	0.92	5.0
. U	0.15	1.0
U,	0.23	1.0
U	0.21	1.0
U	0.17	1.0
U	0.17	1.0
U	0.32	1.0
U	0.16	1.0
U	0.16	1.0
U	1.1	5.0
U	0.16	1.0
U	0.16	1.0
U	0.23	1.0
U	0.17	1.0
U	0.17	1.0
U	0.15	1.0
U	0.14	1.0
U	0.25	1.0
U	0.17	1.0
U	0.16	1.0
U	0.16	1.0
U	0.90	5.0
U	0.17	1.0
U	0.18	1.0
U	0.18	1.0
U	0.18	1.0
U	1.1	5.0
U	0.17	1.0
U	0.18	1.0
U	0.19	1.0
U	0.18	1.0
U	0.17	1.0
U	0.17	1.0
U :	0.17	1.0
U	0.17	1.0
U	0.17	1.0
U	0.18	1.0
U	0.15	1.0

TestAmerica Burlington

1,1,2,2-Tetrachloroethane

Page 118 of 5335

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

9260B	Volatile	Organia	Compound	In (CCIME)
820UB	voiatile	Organic	Compound	IS (GC/MS)

Analysis Method:

8260B

Analysis Batch:

200-41005

Instrument ID:

L.i

Prep Method:

5030B

Lab File ID:

Dilution:

Prep Batch:

N/A

lhbad13.d

1.0

Initial Weight/Volume:

5 mL

Analysis Date:

06/27/2012 0248

Prep Date:

Final Weight/Volume:

5 mL

06/27/2012 0248

Analyte		Result (ug/L)	Qua	lifier MDL	RL
1,2-Dichlorobenzene	**************************************	1.0	U	0.15	. 1.0
1,2-Dibromo-3-Chloropropane	1.	1.0	U	0.22	1.0
1,2,4-Trichlorobenzene	7 - 7	1.0	υ	0.18	1.0

Surrogate		%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4		. 88		80 - 115	*
Toluene-d8		100		80 - 115	
Bromofluorobenzene	III .	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: Dilution:

5035

Prep Batch:

200-40873

Lab File ID:

lhbaf22.d

Analysis Date:

7.3

Initial Weight/Volume:

6.19 g

06/28/2012 1929

Final Weight/Volume:

160

820

Prep Date:

06/25/2012 0936

10 mL

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	リブ	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-trichfluc	proethane	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	Ū	160	820
Methyl t-butyl ether		820	Ū	150	820
1,2-Dichloroethene, Total		820	U	150	820
1,1-Dichloroethane		820	U	160	820
cis-1,2-Dichloroethene		820	Ū	150	820
2-Butanone		4100	Ū	710	4100
Chloroform		820	Ū	160	820
1,1,1-Trichloroethane		820	Ū	160	820
Cyclohexane		820	Ū	160	820
Carbon tetrachloride		820	Ū	120	820
Benzene		390	J	170	820
1,2-Dichloroethane		820	Ū	140	820
Trichloroethene		820	Ū	140	820
Methylcyclohexane		820	Ū	150	820
1,2-Dichloropropane		820	Ü	160	820
Bromodichloromethane		820	Ū	160	820
cis-1,3-Dichloropropene		820	Ū	150	820
4-Methyl-2-pentanone		4100	Ū	890	4100
Toluene		380	J	160	820
trans-1,3-Dichloropropene		820	U	140	820
1,1,2-Trichloroethane		820	Ū	160	820
Tetrachloroethene		820	U	160	820
2-Hexanone		4100	Ü	630	4100
Dibromochloromethane		820	Ū	130	820
1.2-Dibromoethane		820	Ü	160	820
Chlorobenzene		820	Ü	160	820
Ethylbenzene		820	Ū	160	820
Xylenes, Total		850	199	170	820
Styrene		820	U	140	820
Bromoform		820	Ü	140	820
Isopropylbenzene		820	U	160	820
1,1,2,2-Tetrachloroethane		820	U	150	820
1,3-Dichlorobenzene		820	U	160	
1,0 DIGNOTODENZENE		020	U	100	820

1,4-Dichlorobenzene

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 Voiatile Organic Compounds (GC/MS)

Analysis Method:

8260B

Analysis Batch:

200-41116

Instrument ID:

L.i

Acceptance Limits

Prep Method:

5035

Lab File ID:

Prep Batch:

lhbaf22.d

Dilution:

7.3

200-40873

Initial Weight/Volume:

6.19 g

Analysis Date:

06/28/2012 1929

Prep Date:

06/25/2012 0936

Final Weight/Volume:

MDL

10 mL

Analyte

DryWt Corrected: Y

Result (ug/Kg) 820 820

820

160 140 160

Qualifier

Qualifier

U

U

U

1,2,4-Trichlorobenzene

1,2-Dibromo-3-Chloropropane

1,2-Dichlorobenzene

Surrogate %Rec 1,2-Dichloroethane-d4 89 Toluene-d8 102 Bromofluorobenzene 100 1,2-Dichlorobenzene-d4 102

65 - 155 80 - 115 80 - 115

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: Dilution:

5035

Prep Batch:

Lab File ID:

ngap06.d

1.0

200-40874

Initial Weight/Volume:

5.07 g

Analysis Date:

07/02/2012 1135

Prep Date:

06/25/2012 0944

Final Weight/Volume: 5 mL

Analyte	DryWt Corrected: Y	Result (ug/Kg	) Qualifier	MDL	RL
Dichlorodifluoromethane		8.5	UI	0.39	8.5
Chloromethane		8.5	U	0.44	8.5
Vinyl chloride		8.5	U.	0.51	8.5
Bromomethane		8.5	Ü	1.3	8.5
Chloroethane		8.5	antic U 🗸	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-trichfluc	proethane	8.5	Ü	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	0.	8.5	U	1.1	8.5
Methylene Chloride	8	574		0.94	8.5
trans-1,2-Dichloroethene	3	8.5	J- UB	0.63	8.5
Methyl t-butyl ether		8.5	Ü	0.51	
1,2-Dichloroethene, Total		8.5	U	1.3	8.5
1,1-Dichloroethane		8.5	U		8.5
cis-1,2-Dichloroethene		111		0.70	8.5
as-1,2-dichloroethene 2-Butanone		8.5	J	0.72	8.5
		23		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.	5-8.49	JB-UB	0.17	8.5
trans-1,3-Dichloropropene	0.0	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-Hexanorie		8.5	Ü	0.83	8.5
Dibromochloromethane		8.5	Ü	0.19	8.5
1.2-Dibromoethane		8.5	Ü	0.26	8.5
Chlorobenzene		8.5	Ü	0.13	8.5
Ethylbenzene		8.5	Ü	0.095	· ·
Xylenes, Total		8.5	U	1.2	· 8.5
Styrene		8.5	U		8.5
Styrene Bromoform				0.17	8.5
		8.5	U	0.34	8.5
sopropylbenzene		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 Voiatile Organic Compounds (GC/MS)

Analysis Method:

8260B

Analysis Batch:

200-41307

Instrument ID:

N.i

Prep Method:

5035

Lab File ID:

ngap06.d

Dilution:

Prep Batch:

200-40874

1.0

Initial Weight/Volume:

5.07 g

Analysis Date:

07/02/2012 1135

Final Weight/Volume:

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		8.5.0.40	JB UB	0.34	8.5

Surrogate		%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	Allen Markinski Prima Arman Arman Arman	77		65 - 155
Toluene-d8		95		80 - 115
Bromofluorobenzene		104	10	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

200-40873

Lab File ID:

lhbaf13.d

Dilution:

17.6

Prep Batch:

Qualifier

Initial Weight/Volume:

6.13 g

Analysis Date:

Result (ug/Kg)

06/28/2012 1441

Final Weight/Volume:

MDL

10 mL

RL

Prep Date:

Analyte

06/25/2012	0936	

DryWt Corrected: Y

	2.,	ricount (ug/rig)		Qualifici	MIDE	NL
Dichlorodifluoromethane	L. C. C. C. C. C. C. C. C. C. C. C. C. C.	2900		U A	600	2900
Chloromethane		2900		リゴ	750	2900
Vinyl chloride		2900	,	U	580	2900
Bromomethane		2900		UJ	720	2900
Chloroethane		2900		U	430	2900
Trichlorofluoromethane		2900		U	370	2900
1,1-Dichloroethene	The second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second secon	2900		U	630	2900
1,1,2-Trichloro-1,2,2-trichflu	uoroethane	2900		U	520	2900
Acetone	ii ii	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		Ū	580	2900
trans-1,3-Dichloropropene		2900		Ū	490	2900
1,1,2-Trichloroethane		2900		U	550	2900
Tetrachloroethene		2900		Ü	580	2900
2-Hexanone		14000		Ü	2200	14000
Dibromochloromethane		2900		Ū	460	2900
1,2-Dibromoethane		2900		Ü	550	2900
Chlorobenzene		2900		Ü	580	2900
Ethylbenzene		2900		Ü	580	2900
Xylenes, Total		920		J	600	2900
Styrene		2900		Ŭ	490	2900
Bromoform		2900		Ü	490	2900
isopropylbenzene		2900		Ü	550	2900
1,1,2,2-Tetrachloroethane		2900		U	520	2900
1,3-Dichlorobenzene		2900		Ü	550	2900
		2000		<del>-</del>	550	2300

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 Voiatile Organic Compounds (GC/MS)

Analysis Method:

8260B

Analysis Batch:

200-41116

Instrument ID: .

L.i

Prep Method:

5035

Lab File ID:

Dilution:

Prep Batch:

200-40873

lhbaf13.d

17.6

Initial Weight/Volume:

6.13 g

Analysis Date:

06/28/2012 1441

Prep Date:

Final Weight/Volume:

10 mL

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	. 100	2900	U	580	2900

Surrogate		%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	101	The second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second secon	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

Cilent Sample ID:

SB-03 (10.9-11.7)

Lab Sample ID:

200-11417-4

Client Matrix:

Solid

% Moisture:

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

47.9

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 25/2012 0944 Final Weight/Volume:

Prep Date:	06/2

Analyte	DryWt Corrected: Y		Result (ug/Kg)		Qualifier	MDL	RL
Dichlorodifluoromethane		The or	9.2	-	UJ	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		υļ	0.70	9.2
Trichlorofluoromethane			9.2		υ	0.61	9.2
1,1-Dichloroethene			9.2		U L	0.68	9.2
1,1,2-Trichloro-1,2,2-trichfluo	roethane		9.2		11 87	0.61	9.2
Acetone			180		447	1.8	9.2
Carbon disulfide			110		T	0.57	9.2
Methyl acetate			2.3		J	1.2	9.2
Methylene Chloride		9,2	L <del>-1.7</del>		- UB	1.0	9.2
trans-1,2-Dichloroethene		1,0	9.2		UJ	0.68	9.2
Methyl t-butyl ether			9.2		Uí	0.55	9.2
1,2-Dichloroethene, Total			9.2		ŭ	1.4	9.2
1,1-Dichloroethane			9.2		ŭ	0.76	9.2
cis-1,2-Dichloroethene			9.2		U ,	0.77	9.2
2-Butanone			35		7	2.8	9.2
Chloroform		9.2			+B-UB	0.59	9.2
1,1,1-Trichloroethane		1.0	9.2		UJ	1.3	9.2
Cyclohexane			9.2		UÍ	1.6	9.2
Carbon tetrachloride			9.2		UJ	1.4	9.2
Benzene			330		5	1.4	9.2
1.2-Dichloroethane			9.2		U.S		
Trichloroethene			9.2			1.1	9.2
			9.2		U	0.88	9.2
Methylcyclohexane		•				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		a.	9.2		UN	1.1	9.2
Toluene		9.2	6.0		JB-UB	0.18	9.2
trans-1,3-Dichloropropene			9.2		UJ	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		υŢ	0.14	9.2
Ethylbenzene			9.2		U 🔻	0.10	9.2
Xylenes, Total			1.4		J	1.3	9.2
Styrene			9.2		UJ	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

47.9 % Moisture:

Date Sampled: 06/21/2012 1030

Date Received: 06/22/2012 1045

8260R Volatile	Organic Compound	e (GC/MS)
OZOUD VUIALIIE	Organic Compound	8 (UC/ING)

Analysis Method:

8260B

Analysis Batch:

200-41070

Instrument ID:

N.i

Prep Method:

5035

Lab File ID:

Dilution:

1.0

Prep Batch:

200-40874

ngan23.d

Initial Weight/Volume:

5.21 g

Analysis Date:

06/26/2012 2254

Prep Date:

06/25/2012 0944

Final Weight/Volume:

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-Chloropropa	ne	9.2	U	1.7	9.2
1,2,4-Trichlorobenzene		9.2	= u <del>}</del>	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

1	8260B Volatile Organic Compo	unds (GC/N	MS)	-	
Analysis Method:\ 8260B	Analysis Batch: 200-413	07	Instrument ID:	N.i /	
Prep Method: 5035	Prep Batch: 200-408	74	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			paper of /		
Analyte RryWt Corrected	: Y Result (ug/Kg)	Qualifi	er MDL	RL	
Dichlorodifluoromethane	8.5	U	0,39	8.5	
Chloromethane	8.5	U	ø.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	0.0
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	<b>½</b> 90		1.2	8.5	
1,2-Dichloroethane	8.5	\ U	1.0	8.5	
Trichloroethene	8.5	Ų	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	JB	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	
Dibromochtoromethane /	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 Date Sampled: 06/21/2012 1030 Client Matrix: Solid % Moisture: 47.9 Date Received: 06/22/2012 1045 8260B Volatile Organic Compounds (GCHMS) Analysis Method: 8260B 200-41307 Analysis Batch: 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: ŔE Final Weight/Volume: 5 mL 06/25/2012 0944 Prep Date: Result (ug/Kg) Analyte DryWt Corrected: Y Qualifier MDL RL 1,2-Dichlorobenzene 8.5 Ū 0.37 8.5 1,2-Dibromo-3-Chloropropane 8.5 U 1.5 8.5 1,2,4-Trichlorobenzene 0.37 0.34 ĮΒ 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 1.0

Lab File ID:

lhbad10.d

Dilution:

Prep Batch:

N/A

Initial Weight/Volume:

5 mL

Analysis Date:

06/27/2012 0111

Prep Date:

06/27/2012 0111

Final Weight/Volume:

Analyte	Result (ug/L	•	MDL	RL
Dichlorodifluoromethane	1.0	V .5	0.090	1.0
Chloromethane	1.0	U	0.12	1.0
/inyl chloride	1.0	リーブ	0.090	1.0
Bromomethane	1.0	UPJ	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
rans-1,2-Dichloroethene	1.0	U	0.17	1.0
Methyl t-butyl ether	1.0	Ū	0.17	1.0
1,2-Dichloroethene, Total	1.0	Ū	0.32	1.0
I,1-Dichloroethane	1.0	Ü	0.16	1.0
cis-1,2-Dichloroethene	1.0	Ü	0.16	1.0
2-Butanone	5.0	Ü	1.1	5.0
Chloroform	1.0	Ü	0.16	1.0
,1,1-Trichloroethane	1.0	Ü	0.16	1.0
Cyclohexane	1.0	Ü	0.23	1.0
Carbon tetrachloride	1.0	Ü	0.23	1.0
Senzene	1.0	Ü	0.17	1.0
,2-Dichloroethane	1.0	Ü	0.17	1.0
Frichloroethene	1.0	Ü	0.13	1.0
Methylcyclohexane	1.0	Ü	0.14	
,2-Dichloropropane	1.0	U		1.0
Bromodichloromethane	1.0	U	0.17	1.0
sis-1,3-Dichloropropene	1.0	U *	0.16	1.0
-Methyl-2-pentanone		_	0.16	1.0
- 02	5.0	U	0.90	5.0
oluene	1.0	U	0.17	1.0
rans-1,3-Dichloropropene	1.0	U	0.18	1.0
,1,2-Trichloroethane	1.0	U	0.18	1.0
etrachloroethene	1.0	U	0.18	1.0
-Hexanone	5.0	U	1.1	5.0
Dibromochloromethane	1.0	U	0.17	1.0
,2-Dibromoethane	1.0	U	0.18	1.0
Chlorobenzene	1.0	U	0.19	1.0
thylbenzene	1.0	U	0.18	1.0
(ylenes, Total	1.0	U	0.17	1.0
Styrene	1.0	U	0.17	1.0
Bromoform	1.0	U	0.17	1.0
sopropylbenzene	1.0	U	0.17	1.0
,1,2,2-Tetrachloroethane	1.0	U	0.17	1.0
,3-Dichlorobenzene	1.0	U	0.18	1.0
1,4-Dichlorobenzene	1.0	AT 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

8	260B	Volatile	Organic	Compounds	(GC/MS)
-			4.94	poulled	(

Analysis Method:

8260B

Analysis Batch:

200-41005

Instrument ID:

L.i

Prep Method:

5030B

Prep Batch:

Lab File ID:

lhbad10.d

Dilution:

1.0

N/A

Initial Weight/Volume:

5 mL

Analysis Date:

06/27/2012 0111

Prep Date:

06/27/2012 0111

Final Weight/Volume:

Analyte	11 72.	41.5	Result (ug/L)	Qualifier	MDL	RL
1,2-Dichlorobenzene	4	d .	1.0	U	0.15	1.0
1,2-Dibromo-3-Chloropropane			1.0	U	0.22	1.0
1,2,4-Trichlorobenzene		.3.	1.0	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limi	its
1,2-Dichloroethane-d4	*86	######################################	80 - 115	
Toluene-d8	102		80 - 115	1 . T
Bromofluorobenzene	103		85 - 120	5",
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 Voiatile Organic Compounds (GC/MS)

Analysis Method:

8260B

Analysis Batch:

200-41116

Instrument ID:

L.i

Prep Method: Dilution:

5035 17.6

Prep Batch:

200-40873

Lab File ID: Initial Weight/Volume: lhbaf14.d

Analysis Date:

6.62 g

Prep Date:

06/28/2012 1513 06/25/2012 0936 Final Weight/Volume:

Analyte	DryWt Corrected: Y	Result (ug/Kg)	,	Qualifier	MDL	RL 🗎 🖆
Dichlorodifluoromethane	·	3000	111	<b>U</b> ⊅	630	3000
Chloromethane		3000		UA	. 790	3000
Vinyl chloride		3000		U	600	3000
Bromomethane		3000		US	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-trichflu	oroethane	3000		Ū	540	3000
Acetone		15000		Ü	2700	15000
Carbon disulfide		300000			480	3000
Methyl acetate		3000		U	630	3000
Methylene Chloride		3000		Ü	820	3000
trans-1,2-Dichloroethene		3000		Ü	600	
Methyl t-butyl ether		3000		Ü	540	3000
1,2-Dichloroethene, Total		3000		U		3000
1,1-Dichloroethane					540	3000
		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		Ü	510	3000
1,1,2-Trichloroethane		3000		Ū	570	3000
Tetrachloroethene		3000		Ü	600	3000
2-Hexanone		15000		Ü	2300	15000
Dibromochloromethane		3000		U	480	
1,2-Dibromoethane		3000		-		3000
Chlorobenzene				U	570	3000
		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

Lab File ID:

lhbaf14.d

Dilution:

Prep Batch:

200-40873

17.6

Result (ug/Kg)

Initial Weight/Volume:

6.62 g

Analysis Date:

DryWt Corrected: Y

Prep Date:

06/28/2012 1513.

Final Weight/Volume:

10 mL

Analyte

06/25/2012 0936

Qualifier U

RL 3000

1,2-Dichlorobenzene 1,2-Dibromo-3-Chloropropane 1,2,4-Trichlorobenzene

3000 3000 3000

U U

510 600

MDL

600

3000 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 25 1325
Prep Date:	06/26/2012 1230			Injection Volume:	1 uL

Analyte	DryWt Correct	ed: Y	Result (ug/	(Kg)	Qualifier	MDL	RL
Phenol		14. 14.	38000	7.1	UJ	5100	38000
2-Chlorophenol			38000		U,	5000	38000
2-Methylphenol			38000		U	6500	38000
2-Nitrophenol		4. ÷	38000		υl	4300	38000
3 & 4 Methylphenol			38000		U /	6500	38000
2,4-Dimethylphenol			38000		U /	9400	38000
2,4-Dichlorophenol		1	38000	A.	υl	5600	38000
4-Chloro-3-methylphenol	3.7.7	44.	38000		υ	5800	38000
2,4,6-Trichlorophenol		7	38000		U	4500	38000
2,4,5-Trichlorophenol			38000		U	4900	38000
2,4-Dinitrophenol			120000		u l	22000	120000
4-Nitrophenol		Q 4:	120000		Ü	25000	120000
4,6-Dinitro-2-methylphenol		1 25	120000		Ü	10000	120000
Pentachlorophenol			120000		υl	11000	120000
Bis(2-chloroethyl)ether			3800		ŭ	520	3800
1,3-Dichlorobenzene			38000		ŭ l	3500	38000
Benzoic acid			38000		U	38000	38000
1,4-Dichlorobenzene		\$ 11	38000	,	ŭ	4300	38000
1,2-Dichlorobenzene	S - 1000		38000		Ü	4400	38000
N-Nitrosodi-n-propylamine			3800		Ü	640	3800
Hexachloroethane			3800		Ü	430	3800
Nitrobenzene			3800		Ü	540	3800
Isophorone			38000		Ü	4600	
Bis(2-chloroethoxy)methane			38000		Ü		38000
1,2,4-Trichlorobenzene			3800		U	4900	38000
Naphthalene			770000		-	430	3800
4-Chloroaniline					ロゴ	4400	38000
			38000		U-7	10000	38000
Hexachlorobutadiene			7800			930	7800
2-Methylnaphthalene			260000		D.J.	4900	38000
Hexachlorocyclopentadiene			38000		UJ	4500	38000
2-Chloronaphthalene			38000		U	4300	38000
2-Nitroaniline			78000		υŢ	16000	78000
Dimethyl phthalate			38000		U <b>7</b>	4500	38000
Acenaphthylene			29000		JD	4500	38000
2,6-Dinitrotoluene			7800		كتر	1200	7800
3-Nitroaniline			78000		ロゴ	14000	78000
Acenaphthene			58000		DI	5600	38000
Dibenzofuran			27000		JD	4500	38000
2,4-Dinitrotoluene			7800		UI	1300	7800
Diethyl phthalate			38000		UJ	4600	38000
4-Chlorophenyl phenyl ether			38000		UI	4500	38000
Fluorene			130000		DS	4900	38000
4-Nitroaniline			78000		UJ	12000	78000
N-Nitrosodiphenylamine	17		38000		บโ	3800	38000
4-Bromophenyl phenyl ether			38000		U	3800	38000
Hexachlorobenzene			3800		u t)	520	3800

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1

Sdg Number: 11371

Cilent 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 07/06/2012 1241 Analysis Date: DL Final Weight/Volume: Run Type: 1 mL Prep Date: 06/26/2012 1230 Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg	)	Qualifier	MDL	RL
Phenanthrene		480000		DJ	4900	38000
Anthracene	Your	88000		DJ	4700	38000
Carbazole		15000		JD	4500	38000
Di-n-butyl phthalate		38000		UJ	4700	38000
Fluoranthene		190000		DJ	5100	38000
Pyrene		270000		DJ	3200	38000
Butyl benzyl phthalate		38000		UJ	3500	38000
3,3'-Dichlorobenzidine		78000		UI	13000	78000
Benzo[a]anthracene		120000		DJ	270	3800
Chrysene		130000		DJ	4500	38000
Bis(2-ethylhexyl) phthalate		38000		υ´ケ	13000	38000
Di-n-octyl phthalate		38000		UJ	2400	38000
Benzo[b]fluoranthene		94000		D J	240	3800
Benzo[k]fluoranthene		31000		DI	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		υJ	4200	38000
1008						
Surrogate		%Rec		Qualifier	Acceptance	Limits
Nitrobenzene-d5	1/-0	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	3.	0		D	37 - 125	
2-Fluorobiphenyl		0		D	40 - 109	
N SECTION						

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 ut

Analyte	18	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol	<b>1</b> 21		10000	UJ	1400	10000
2-Chloropheno	of I		10000	U i	1400	10000
2-Methylpheno	of inc		10000	υl	1800	10000
2-Nitrophenol			10000	υļ	1200	10000
3 & 4 Methylph	nenol		10000	U	1800	10000
2,4-Dimethylph	nenol		10000	U	2600	10000
2,4-Dichloroph	enol		10000	U	1500	10000
4-Chloro-3-me	thylphenol		10000	U	1600	10000
2,4,6-Trichloro	phenol		10000	U	1200	10000
2,4,5-Trichloro	phenol		10000	U	1400	10000
2,4-Dinitropher	nol	7	32000	υİ	6000	32000
4-Nitrophenol			32000	U /	6700	32000
4,6-Dinitro-2-m	ethylphenol		32000	U	2900	32000
Pentachloroph	enol		32000	υl	3100	32000
Bis(2-chloroeth	nyl)ether		1000	υİ	140	1000
1,3-Dichlorobe	nzene		10000	U	950	10000
Benzoic acid			10000	υl	10000	10000
1,4-Dichlorobe	nzene		10000	U	1200	10000
1,2-Dichlorobe	nzene :		10000	υ	1200	10000
N-Nitrosodi-n-p	propylamine		1000	U	170	1000
-lexachloroeth	ane		1000	υl	120	1000
Vitrobenzene			1000	U	150	1000
sophorone			10000	υl	1300	10000
Bis(2-chloroeth	noxy)methane		10000	υ\	1400	10000
,2,4-Trichlorol	benzene		1000	∪ •	120	1000
Naphthalene			120000	DJ	1200	10000
4-Chloroaniline			10000	UJ	2800	10000
-lexachlorobut	adiene		2100	UJ	260	2100
2-Methylnaphtl	nalene		18000	DJ	1300	10000
Hexachlorocyc	lopentadiene		10000	UIT	1200	10000
2-Chloronaphtl	nalene		10000	1 U	1200	10000
2-Nitroaniline			21000	U	4400	21000
Dimethyl phtha	late		10000	U 🖠	1200	10000
cenaphthylen	e		9900	JD	1200	10000
2,6-Dinitrotolue	ene		2100	UJ	320	2100
8-Nitroaniline			21000	Uゴ	3700	21000
Acenaphthene			6200	JD	1500	10000
Dibenzofuran			8600	JD	1200	10000
2,4-Dinitrotolue	ene 🖺		2100	UJ	350	2100
Diethyl phthala	te		10000	UJ	1200	10000
-Chloropheny			10000	ロチ	1200	10000
luorene	•		11000	05	1300	10000
I-Nitroaniline			21000	U	3300	21000
N-Nitrosodiphe	nylamine		10000	υĺ	1000	10000
I-Bromopheny	•		10000	Ü	1000	10000
Hexachloroben			1000	ŭ 🗲	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:

Prep Date:

200-11071

06/26/2012 1230

Solid

% Moisture:

36.9

Date Sampled: 06/18/2012 1245

Date Received: 06/19/2012 1100

BNAMS10

p31684.d

8270C Semivolatile Or	ianic Compounds (	GC/MS
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Analysis Method: 8270C Analysis Batch: 460-119065 Instrument ID: Prep Method: 3541 Prep Batch: 460-117517 Lab File ID: Dilution: 20 Initial Weight/Volume: 07/08/2012 1729 Analysis Date: DL Run Type:

Initial Weight/Volume: 15.00 g
Final Weight/Volume: 1 mL
Injection Volume: 1 uL

40 - 109

Analyte DryWt Corrected: Y Result (ug/Kg) Qualifier MDL RL DJ Phenanthrene 27000 1300 10000 Anthracene 6700 JĎ 10000 1300 Carbazole 12000 DJ 1200 10000 ロゴ Di-n-butyl phthalate 10000 1300 10000 Fluoranthene 20000 Dブ 1400 10000 Pyrene 20000 DJ 880 10000 Butyl benzyl phthalate UJ 10000 960 10000 3,3'-Dichlorobenzidine UJ 21000 3700 21000 Benzo[a]anthracene 17000 DJ 73 1000 DI Chrysene 15000 1200 10000 UJ Bis(2-ethylhexyl) phthalate 10000 3500 10000 UJ Di-n-octyl phthalate 10000 670 10000 DJ Benzo[b]fluoranthene 17000 66 1000 Benzo[k]fluoranthene 8500 D 80 1000 D Benzo[a]pyrene 17000 74 1000 Indeno[1,2,3-cd]pyrene 10000 D 190 1000 2300 Dibenz(a,h)anthracene D 130 1000 9400 Benzo[g,h,i]perylene 780 J D 10000 UI 10000 2,2'-oxybis[1-chloropropane] 1200 10000 Acceptance Limits Surrogate %Rec Qualifier 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

D

0

2-Fluorobiphenyl

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1

Sdg Number: 11371

Ciient Sampie 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: Dilution:

3541

Prep Batch:

Lab File ID:

uu77593.d

5.0

460-117691

Initial Weight/Volume:

15.00 g

Analysis Date: Prep Date:

06/21/2012 0846 06/19/2012 1507

Final Weight/Volume: Injection Volume:

1 mL 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		Ū	180	2000
Benzoic acid		2000		Ū	2000	2000
1,4-Dichlorobenzene		2000		Ū	220	2000
1,2-Dichlorobenzene		2000		Ū	230	2000
N-Nitrosodi-n-propylamine		200		Ū	33	200
Hexachloroethane		200		Ū	22	200
Nitrobenzene		200		Ü	28	200
Isophorone		2000		Ŭ	240	2000
Bis(2-chloroethoxy)methane		2000		Ü	260	2000
1,2,4-Trichlorobenzene		200		Ü	22	200
Naphthalene		41000		Ū	230	2000
4-Chloroaniline		2000		U	520	2000
Hexachlorobutadiene		400		Ü	48	400
2-Methylnaphthalene		4800		Ü	250	2000
Hexachlorocyclopentadiene		2000		U	230	2000
2-Chloronaphthalene		2000		U	230	2000
2-Nitroaniline		4000		U	830	4000
Dimethyl phthalate		2000		Ü	230	
Acenaphthylene		960		J		2000
2,6-Dinitrotoluene		400			230	2000
2,8-Dimitotoluerie 3-Nitroaniline				U	60	400
		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

Lab File ID:

uu77593.d

Dilution:

5.0

Prep Batch:

460-117691

Initial Weight/Volume:

41 - 118

16 - 151

10 - 120

37 - 125

40 - 109

15.00 g

Analysis Date:

Final Weight/Volume:

Prep Date:

Phenol-d5

Terphenyl-d14

2-Fluorophenol

2-Fluorobiphenyl

2,4,6-Tribromophenol

06/21/2012 0846 06/19/2012 1507

Injection Volume:

1 mL 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	e Limits
Nitrobenzene-d5		63	70	38 - 105	

68

94

40

64

64

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

Lab File ID:

uu77544.d

Dilution:

1.0

Prep Batch:

460-117691

Initial Weight/Volume:

15.02 g

Analysis Date: Prep Date:

06/20/2012 0401 06/19/2012 1507 Final Weight/Volume: Injection Volume:

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		380	U	50	380
2-Chlorophenol	100	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_	#R	-210	<del>1100</del>
4-Nitrophenol		1100	U	240	1100
4,6-Dinitro-2-methylphenol		<del>-1100-</del>	th 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		<del>-380</del> -	-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	Ū	55	380
Dibenzofuran		380	U	44	380
2,4-Dinitrotoluene		76	Ü	12	76
Diethyl phthalate		380	Ü	45	380
4-Chlorophenyl phenyl ether		380	Ū	44	380
Fluorene		380	Ŭ	48	380
4-Nitroaniline		760	Ŭ	120	760
N-Nitrosodiphenylamine		380	Ū	37	380
4-Bromophenyl phenyl ether		380	Ü	37	380
Hexachlorobenzene		38	Ŭ	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 Compound	s (GC/MS)
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Analysis Method:

8270C

Analysis Batch:

460-116828

Instrument ID:

BNAMS4

Prep Method: Dilution:

3541

Prep Batch:

Lab File ID:

uu77544.d

1.0

460-117691

Initial Weight/Volume: Final Weight/Volume:

15.02 g

Analysis Date: Prep Date:

06/20/2012 0401 06/19/2012 1507

Injection Volume:

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	8		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		5)	380		U	130	380
Di-n-octyl phthalate			380		U	24	380
Benzo[b]fluoranthene			38	4-11-6	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		3. T	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:

200-11002

06/19/2012 1507

Solid

% Moisture:

58.6

Date Sampled: 06/16/2012 1045 Date Received: 06/20/2012 1010

#### 8270C Semivolatile Organic Compounds (GC/MS)

8270C

Analysis Batch:

460-117392

Instrument ID:

BNAMS4

Prep Method: Dilution: 3541 10 Prep Batch:

460-117691

Lab File ID: Initial Weight/Volume: uu77684.d 15.03 g

Dilution: Analysis Date: 10 06/24/2012 1158

Run Type:

DL

Final Weight/Volume: Injection Volume:

1 mL 1 uL

8000

16000

8000

8000

800

Prep Date	:
Analyte	
Phenol	

Analyte	DryWt Correct	ted: Y	Result (ug/Kg)	*	Qualifier	MDL
Phenol	0		8000	2 .	U <b>5</b>	1100
2-Chlorophenol		*	8000		UÍ	1000
2-Methylphenol			8000		υ	1400
2-Nitrophenol		7	8000		υl	890
3 & 4 Methylphenol			8000		U .	1400
2,4-Dimethylphenol	100		8000		U	2000
2,4-Dichlorophenol		1	8000		U	1200
4-Chloro-3-methylphenol			8000		υļ	1200
2,4,6-Trichlorophenol			8000		υ	930
2,4,5-Trichlorophenol			8000		U	1000
2,4-Dinitrophenol		•	24000		υl	4500
4-Nitrophenol		12.	24000	1	υĺ	5100
4,6-Dinitro-2-methylphenol			24000		U	2200
Pentachlorophenol			24000		υ	2400
Bis(2-chloroethyl)ether			800		Ū	110
1,3-Dichlorobenzene		1.	8000	* *	υl	720
Benzoic acid		2	8000		υl	8000
1,4-Dichlorobenzene	4.7		8000		υl	900
1,2-Dichlorobenzene			8000		υl	930
N-Nitrosodi-n-propylamine			800		Ü	130
Hexachloroethane			800		U	89
Nitrobenzene			800		υĺ	110
Isophorone			8000		Ü	970
Bis(2-chloroethoxy)methane			8000		U	1000
1,2,4-Trichlorobenzene			800		Ű 🕈	90
Naphthalene			150000		DI	920
4-Chloroaniline			8000		U.S	2100
Hexachlorobutadiene			1600		UI	190
2-Methylnaphthalene			16000		DJ	1000
Hexachlorocyclopentadiene			8000		UT	940
2-Chloronaphthalene			8000		υĺ	890
2-Nitroaniline			16000		Ü	3300
Dimethyl phthalate			8000		u 🔻	950
Acenaphthylene			1600		JD.	940
2,6-Dinitrotoluene			1600		0 7	240
3-Nitroaniline			16000		UF	2800
Acenaphthene			8000		u 5	1200
Dibenzofuran			4200		JD _	940
2,4-Dinitrotoluene			1600		על נו	9 <del>4</del> 0 260
Diethyl phthalate			8000		U F	
4-Chlorophenyl phenyl ether			8000		u 5	950
Fluorene			7100		•	940
riuorene			7 100		JD	1000

Hexachlorobenzene

N-Nitrosodiphenylamine

4-Bromophenyl phenyl ether

4-Nitroaniline

16000

8000

8000

800

UJ

2500

790

790

110

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)
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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 06/24/2012 1158 Analysis Date: DL Final Weight/Volume: Run Type: 1 mL 06/19/2012 1507 Prep Date: Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)		Qualifier	MDL	RL
Phenanthrene		12000		DJ	1000	8000
Anthracene		2800		JD	970	8000
Carbazole		8000		UJ	940	8000
Di-n-butyl phthalate		8000		UJ	980	8000
Fluoranthene		6000		JD	1100	8000
Pyrene		10000		DJ	670	8000
Butyl benzyl phthalate		8000		UT	730	8000
3,3'-Dichlorobenzidine		16000		U 🔰	2800	16000
Benzo[a]anthracene		9800		DI	56	800
Chrysene		12000		DJ	930	8000
Bis(2-ethylhexyl) phthalate		8000		υJ	2700	8000
Di-n-octyl phthalate		8000		UJ	510	8000
Benzo[b]fluoranthene		5600		DJ	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 of	100	800
Benzo[g,h,i]perylene		4700		JD	590	8000
2,2'-oxybis[1-chloropropane]		8000		ロゴ	880	8000
	WIL		, -			
Surrogate	80 Appellin	%Rec		Qualifier	Acceptance I	Limits
Nitrobenzene-d5	***************************************	0 .	drift-copy-space style-dependentials	D	38 - 105	tingsaatiinnoondinka oosaaqoonaapaapaapaabadada kingoraajistakkeelee konseqoraasiinggraagi V
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	en tulini
2-Fluorobiphenyl		0		D	40 - 109	

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1

Sdg Number: 11371

Ciient Sample iD:

SB-14 (17-18)

Lab Sample ID:

200-11382-4

Client Matrix:

Solid

% Moisture:

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

12.6

Instrument ID:

**BNAMS4** 

Prep Method:

3541

Lab File ID:

uu77545.d

Dilution:

1.0

Prep Batch:

460-117691

Initial Weight/Volume:

15.00 g

Analysis Date:

06/20/2012 0421

Final Weight/Volume:

1 mL 1 uL

Prep Date:

06/19/2012 1507

Injection Volume:

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 H 240 1100 4,6-Dinitro-2-methylphenol 1100 H 100 1100 Pentachlorophenol 1100 11 110 1100 Bis(2-chloroethyl)ether 38 H 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

TestAmerica Burlington

Hexachlorobenzene

N-Nitrosodiphenylamine

2,4-Dinitrotoluene

Diethyl phthalate

Fluorene

4-Nitroaniline

4-Chlorophenyl phenyl ether

4-Bromophenyl phenyl ether

Page 144 of 5335

U

U

U

U

U

U

U

12

45

44

48

120

37

38

5.2

77

380

380

380

770

380

380

38

77

380

380

380

770

380

380

38

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1

Sdg Number: 11371

Cilent Sample ID:

SB-14 (17-18)

Lab Sample ID:

200-11382-4

Client Matrix:

06/19/2012 1507

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

Lab File ID:

uu77545.d

Dilution:

Prep Batch:

Initial Weight/Volume:

Analysis Date:

1.0

460-117691

15.00 g

Prep Date:

Phenol-d5

Terphenyl-d14

2-Fluorophenol

2-Fluorobiphenyl

2,4,6-Tribromophenol

06/20/2012 0421

Final Weight/Volume: Injection Volume:

41 - 118

16 - 151

10 - 120

37 - 125

40 - 109

1 mL 1 uL

Analyte	DryWt Corrected: Y	Re	sult (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	- 9	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	73	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		%F	lec		Qualifier	Acceptance	Limits
Nitrobenzene-d5		60			****	38 - 105	

98

106

99

89

60

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: Dilution:

3541

Prep Batch:

460-117691

Lab File ID: Initial Weight/Volume: uu77559.d 15.05 g

1.0

06/20/2012 1024

Final Weight/Volume:

1 mL

370

370

370

37

37

37

370

370

37

370

370

76

370

370

370

760

370

370

76

760

370

370

Analysis Date: Pren Date:

Benzoic acid

06/19/2012 1507

Prep Date: 00/19/2012 150/			Injection Volume:			
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	
0.40 *** 11						

2,4-Dimethylphenol		370		Ų	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	16	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

370

1,4-Dichlorobenzene	370	
1,2-Dichlorobenzene	370	
N-Nitrosodi-n-propylamine	37	
Hexachloroethane	37	
Nitrobenzene	37	
Isophorone	370	
Bis(2-chloroethoxy)methane	370	
1,2,4-Trichlorobenzene	37	

Bis(2-chloroethoxy)methane	370
1,2,4-Trichlorobenzene	37
Naphthalene	700
4-Chloroaniline	370
Hexachlorobutadiene	76
2-Methylnaphthalene	610
Hexachlorocyclopentadiene	370
2-Chloronaphthalene	370
2-Nitroaniline	760
Dimethyl phthalate	370

Acenaphthylene	720
2,6-Dinitrotoluene	76
3-Nitroaniline	760
Acenaphthene	190
Dibenzofuran	210
2,4-Dinitrotoluene	76
Diethyl phthalate	370
4-Chlorophenyl phenyl ether	370
Fluorene	460
4-Nitroaniline	760
N-Nitrosodiphenylamine	370

U U U U U U U U J J U U U U U 370 U 37 U

U

U

U

U

U

U

U

U

U

44

48

37

37

5.1

120

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Hexachiorobenzene

4-Bromophenyl phenyl ether

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:

Final Weight/Volume:

1 mL

Prep Date:

06/20/2012 1024 06/19/2012 1507

Injection Volume:

1 uL

Analyte	DryWt Corrected: Y	Result (ug	/Kg)	Qualifier	MDL	RL
Phenanthrene		6000	1137		48	370
Anthracene		1400			46	370
Carbazole		290		្យ	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	A 111	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	Accept	ance Limits
Nitrobenzene-d5		66			38 - 10	

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

Lab File ID:

uu77557.d

Dilution:

1.0

Prep Batch:

460-117691

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
I-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
I-Nitrophenol		1300	U	280	1300
l,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
,4-Dichlorobenzene		440	U	50	440
,2-Dichlorobenzene		440	U	51	440
l-Nitrosodi-n-propylamine		44	U	7.4	44
lexachloroethane		44	U	4.9	44
litrobenzene		44	U	6.3	44
sophorone		440	U	53	440
is(2-chloroethoxy)methane		440	U	57	440
,2,4-Trichlorobenzene		44	U	5.0	44
laphthalene		440	Ü	51	440
-Chloroaniline		440	U	120	440
fexachlorobutadiene		89	U	11	89
-Methylnaphthalene		440	U	57	440
lexachlorocyclopentadiene		440	U	52	440
-Chloronaphthalene		440	U	49	440
-Nitroaniline		890	U	180	890
Dimethyl phthalate		440	U	52	440
cenaphthylene		440	U	52	440
,6-Dinitrotoluene		89	U	13	89
-Nitroaniline		890	U	160	890
cenaphthene		440	U	64	440
ibenzofuran		440	U	52	440
,4-Dinitrotoluene		89	U	15	89
ethyl phthalate		440	U	52	440
-Chlorophenyl phenyl ether		440	U	52	440
luorene		440	Ü	56	440
-Nitroaniline		890	Ü	140	890
I-Nitrosodiphenylamine		440	Ū *	43	440
-Bromophenyl phenyl ether		440	Ū	44	440
lexachlorobenzene		44	Ü	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

Lab File ID:

uu77557.d

Dilution:

Prep Batch:

460-117691

Analysis Date:

1.0

Initial Weight/Volume: Final Weight/Volume: 15.00 g

Prep Date:

06/20/2012 0944 06/19/2012 1507

Injection Volume:

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

%Rec	Qualifier	Acceptance Limits
57		38 - 105
74		41 - 118
104		16 - 151
64		10 - 120
72		37 - 125
60		40 - 109
	57 74 104 64 72	57 74 104 64 72

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:

06/19/2012 1507

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

Lab File ID:

uu77683.d

Dilution:

5.0

Prep Batch:

460-117691

Initial Weight/Volume:

15.02 g

Analysis Date: Prep Date:

06/24/2012 1138

Final Weight/Volume: Injection Volume:

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		Ū	300	2600	
2,4,5-Trichlorophenol		2600		Ü	330	2600	
2,4-Dinitrophenol		7800		UJ	1500	7800	
4-Nitrophenol		7800		Ü	1700	7800	
4,6-Dinitro-2-methylphenol		7800		Ü	710	7800	
Pentachlorophenol		7800		U	770	7800	
Bis(2-chloroethyl)ether		260		U	35		
1,3-Dichlorobenzene		2600				260	1058
Benzoic acid				U	230	2600	
		2600		U.55	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		7	300	2600	
4-Chloroaniline		2600		U	690	2600	
Hexachlorobutadiene		520		J L	63	520	
2-Methylnaphthalene		2600		J	330	2600	
Hexachlorocyclopentadiene		2600		υø	300	2600	
2-Chloronaphthalene		2600		U	290	2600	
2-Nitroaniline		5200		U	1100	5200	
Dimethyl phthalate		2600		Ü	310	2600	
Acenaphthylene		570		j	310	2600	
2,6-Dinitrotoluene		520		Ŭ	78	520	
3-Nitroaniline		5200		Ü	920	5200	
Acenaphthene		390		J	380	2600	
Dibenzofuran		4700		3	300		
2,4-Dinitrotoluene						2600	
· ·		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)	
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Analysis Method:

8270C

Analysis Batch:

460-117392

Instrument ID:

**BNAMS4** 

Prep Method:

3541

Prep Batch:

Lab File ID:

Dilution:

uu77683.d

5.0

460-117691

Initial Weight/Volume:

15.02 g

Analysis Date:

Final Weight/Volume:

Prep Date:

06/24/2012 1138 06/19/2012 1507

Injection Volume:

Analyte	DryWt Corrected: Y	Result (ug/K	(g)	Qualifier	MDL	RL
Phenanthrene		15000	phot		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		I	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		工	16	260
Benzo[k]fluoranthene		550		7	20	260
Benzo[a]pyrene		1100		7	18	260
Indeno[1,2,3-cd]pyrene		440		ゴ	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	¥11016	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	980	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: Dilution:

3541

Lab File ID:

p31561.d

1.0

Prep Batch:

460-117514

Initial Weight/Volume:

15.00 g

Analysis Date: Prep Date:

07/02/2012 1848 06/26/2012 1227

Final Weight/Volume: Injection Volume:

Analyte	DryWt Corrected: Y	Result (ug/Kg)		Qualifier	MDL	RL
Phenol		700	35	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		UJ	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	(8)	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: Prep Method:

8270C 3541

Analysis Batch:

460-118466

Instrument ID: Lab File ID:

BNAMS10 p31561.d

Dilution:

1.0

Prep Batch: 460-117514

Initial Weight/Volume: Final Weight/Volume: 15.00 g

Analysis Date: Prep Date:

07/02/2012 1848 06/26/2012 1227

Injection Volume:

Analyte	DryWt Corrected: Y	Result (ug/Kg)		Qualifier	MDL	RL
Phenanthrene	* of	700	I JOI	U	90	700
Anthracene		700		U	86	700
Carbazole		700		U	84	700
Di-n-butyl phthalate		700		Ų	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: Prep Method:

8270C 3541

Analysis Batch:

460-118685

Instrument ID:

BNAMS10 p31608.d

Dilution:

1.0

Prep Batch:

460-117514

Lab File ID: Initial Weight/Volume:

15.03 g

Analysis Date:

Prep Date:

07/04/2012 0643 06/26/2012 1227 Final Weight/Volume: Injection Volume:

Analyte	DryWt Corrected: Y	Result (ug/l	<b>(</b> g)	Qualifier	MDL	RL	
Phenoi		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		Ū	47	400	
2,4,5-Trichlorophenol		400		Ū	52	400	
2,4-Dinitrophenol		1200		Ü	230	1200	
4-Nitrophenol		1200		Ü	260	1200	
4,6-Dinitro-2-methylphenol		1200		Ü	110	1200	
Pentachlorophenol		1200		Ü	120	1200	
Bis(2-chloroethyl)ether		40		Ü	5.5	40	
1,3-Dichlorobenzene		400		Ŭ	36	400	
Benzoic acid		400		Ü	400	400	
1,4-Dichlorobenzene		400		Ü	45	400	
1,2-Dichlorobenzene		400		U	46	400	
N-Nitrosodi-n-propylamine		40		U	6.7	400	
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		400		U	4.5	400	
Naphthalene		3300		O .	4.5 46		
4-Chloroaniline		400		U		400	
Hexachlorobutadiene		81		U	110	400	
2-Methylnaphthalene		590		U	9.8	81	
					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)
02/00	Jennivolaule	Organic	Compounds	(CCHIO)

Analysis Method:

8270C

Analysis Batch:

460-118685

Instrument ID:

BNAMS10

Prep Method:

3541

460-117514

Lab File ID:

p31608.d

Dilution:

Prep Batch:

Initial Weight/Volume:

15.03 g

Analysis Date: Prep Date:

1.0

07/04/2012 0643 06/26/2012 1227 Final Weight/Volume: Injection Volume:

							14
Analyte		DryWt Corrected: Y	Result (ug/Kg)		Qualifier	MDL	RL
Phenanthrene	NI D		2900	1117		51	400
Anthracene			1100			49	400
Carbazole			280		J	47	400
Di-n-butyl phtha	alate		400		U	49	400
Fluoranthene			2000			53	400
Pyrene			2200			33	400
Butyl benzyl ph	thalate		400		U	37	400
3,3'-Dichlorobe	nzidine		810		U	140	810
Benzo[a]anthra	cene		1000			2.8	40
Chrysene			1100			47	400
Bis(2-ethylhexy	l) phthalate		400		U	130	400
Di-n-octyl phtha	alate	1	400		U	26	400
Benzo[b]fluorar	thene		920			2.5	40
Benzo[k]fluorar	thene		340			3.0	40
Benzo[a]pyrene	Sm ²		990			2.8	40
Indeno[1,2,3-cd	]pyrene		570			7.4	40
Dibenz(a,h)anth	nracene		130		20	5.0	40
Benzo[g,h,i]pen	ylene		650			30	400
2,2'-oxybis[1-ch			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: Dilution:

3541

Prep Batch:

Lab File ID:

p31566.d

1.0

460-117514

Initial Weight/Volume:

15.00 g

Analysis Date: Prep Date:

07/02/2012 2045 06/26/2012 1227

Final Weight/Volume: Injection Volume:

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	UJ	570	570
1,4-Dichlorobenzene		570	U	64	570
1,2-Dichlorobenzene		570	Ū	66	570
N-Nitrosodi-n-propylamine		57	Ū	9.5	57
Hexachloroethane		57	U	6.3	57
Nitrobenzene		57	un Ü	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	Ü	14	120
2-Methylnaphthalene		400	j	73	570
Hexachlorocyclopentadiene		570	Ū	67	570
2-Chloronaphthalene		570	Ū	64	570
2-Nitroaniline		1200	Ū	240	1200
Dimethyl phthalate		570	Ü	68	570
Acenaphthylene		580		67	570
2.6-Dinitrotoluene		120	U	17	120
3-Nitroaniline		1200	Ū.	200	1200
Acenaphthene		650		83	570
Dibenzofuran		570	U	67	570
2,4-Dinitrotoluene		120	Ü	19	120
Diethyl phthalate		570	Ū	68	570
4-Chlorophenyl phenyl ether		570	ŭ	67	570
Fluorene		430	j	73	570
4-Nitroaniline		1200	U	180	1200
N-Nitrosodiphenylamine		570	Ü	56	570
4-Bromophenyl phenyl ether		570	Ü	56	570 570
Hexachlorobenzene		57	Ü	7.8	570 57
		01	0	7.0	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

06/26/2012 1227

Client Matrix:

Solid

% Moisture:

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

41.9

Lab File ID:

p31566.d

Dilution:

Prep Batch:

460-117514

Initial Weight/Volume:

15.00 g

Analysis Date: Prep Date:

1.0

07/02/2012 2045

Final Weight/Volume: Injection Volume:

Analyte	DryWt Corrected: Y	Result (ug/K	g)	Qualifier	MDL	RL
Phenanthrene		2400		-	72	570
Anthracene		990			69	570
Carbazole		100	14-	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 meanA
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		Ü	240	1300
4-Nitrophenol	16 8 0	1300		Ü	270	1300
4,6-Dinitro-2-methylphenol		1300		Ü	110	1300
Pentachlorophenol		1300		Ū	130	1300
Bis(2-chloroethyl)ether		42		Ü	5.7	42
1,3-Dichlorobenzene		420		Ü	38	420
Benzoic acid		420		Ü	420	420
1,4-Dichlorobenzene		420		Ü	47	420
1,2-Dichlorobenzene		420		Ü	49	420
N-Nitrosodi-n-propylamine		42		Ü	7.0	420
Hexachloroethane		42		U	4.7	42
Nitrobenzene		42		U	6.0	
Isophorone		420		U		42
Bis(2-chloroethoxy)methane		420		U	51	420
1,2,4-Trichlorobenzene		420		U	54 4.8	420
Naphthalene		51				42
4-Chloroaniline		420		J	49	420
Hexachlorobutadiene		85		U	110	420
				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: Prep Method:

8270C

Analysis Batch:

460-118685

Instrument ID:

BNAMS10

Dilution:

3541 1.0

Prep Batch:

460-117514

Lab File ID:

p31610.d

Initial Weight/Volume:

15.02 g

Analysis Date: Prep Date:

07/04/2012 0730

06/26/2012 1227

Final Weight/Volume: Injection Volume:

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL MDL	RL
Phenanthrene	1187	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

			1-1011111111111111111111111111111111111
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

07/02/2012 1328

Client Matrix:

200 1100

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: Dilution: 3541 1.0 Prep Batch:

460-118325

Lab File ID:

u78063.d

Analysis Date: Prep Date: 1.0 07/08/2012 0240

460-118325

Initial Weight/Volume: Final Weight/Volume:

15.00 g

Injection Volume:

Analyte	DryWt Corrected: Y	Result (ug/Kg)		Qualifier	MDL	RL
Phenol		350	DIE.	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		Ū	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	r	350		U	41	350
Fluorene	8	350		U	45	350
4-Nitroaniline		720		Ü	110	720
N-Nitrosodiphenylamine		350		Ü	35	350
	**************************************					
4-Bromophenyl phenyl ether	Г	350		U	35	350

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:

Date Sampled: 06/20/2012 1000

Date Received: 06/21/2012 1040

8270C Semivolatile	Organic	Compounde	(CC/MS)
82/UC Semivolatile	Urganic	Compounds	IGC/MIS)

6.3

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	350	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	110000	
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

06/28/2012 1551

% 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: Dilution:

3541

Lab File ID:

u77,948.d

Analysis Date:

1.0

Prep Batch: 460-117875

Initial Weight/Volume:

15.04 g

Prep Date:

07/02/2012 1627

Final Weight/Volume: 1 mL 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 Л 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 5.6 41

TestAmerica Burlington

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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

Lab File ID:

Dilution:

1.0

Prep Batch:

460-117875

u77948.d

Analysis Date:

Initial Weight/Volume: Final Weight/Volume:

41 - 118

16 - 151

10 - 120

37 - 125

40 - 109

15.04 g

Prep Date:

Phenol-d5

Terphenyl-d14

2-Fluorophenol

2-Fluorobiphenyl

2,4,6-Tribromophenol

07/02/2012 1627 06/28/2012 1551

Injection Volume:

1 mL 1 uL

Analyte	DryWt Corrected: Y	Result (ug/	Kg)	Qualifier	MDL	RL
Phenanthrene		370	5/4	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	Acceptan	ice Limits
Nitrobenzene-d5		67			38 - 105	

84

126

85

62

75

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: Prep Method:

8270C 3541

Analysis Batch:

460-118475

Instrument ID:

BNAMS4 u77977.d

Dilution:

1.0

Prep Batch:

460-117875

Lab File ID: Initial Weight/Volume:

15.00 g

Analysis Date: Prep Date:

07/03/2012 1111 06/28/2012 1551

Final Weight/Volume: Injection Volume:

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	· 1	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 Semivoiatile	Organia	Compoundo	(CC/MC)
82/UC Semivolatile	Organic	Compounds	(GC/MS)

Analysis Method: Prep Method:

8270C 3541

Analysis Batch:

460-118475

Instrument ID:

**BNAMS4** 

Dilution:

1.0

Prep Batch:

460-117875 Lab File ID: u77977.d

Initial Weight/Volume:

15.00 g

Analysis Date: Prep Date:

07/03/2012 1111 06/28/2012 1551 Final Weight/Volume: Injection Volume:

Analyte	DryWt Corrected: Y	Result (ug/Kg)		Qualifier	MDL	RL
Phenanthrene		200	5111	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 3541

Analysis Batch:

460-118282

Instrument ID:

BNAMS4

Prep Method:

Prep Batch:

Lab File ID:

u77941.d

Dilution:

5.0

460-117875

Initial Weight/Volume:

15.02 g

Analysis Date: Prep Date:

07/02/2012 1406 06/28/2012 1551

Final Weight/Volume: Injection Volume:

Analyte	DryWt Corrected: Y	Result (ug/Kg)		Qualifier	MDL	RL
Phenol		2700		U	360	2700
-Chlorophenol		2700		U	350	2700
-Methylphenol		2700		U	460	2700
-Nitrophenol		2700		U	300	2700
& 4 Methylphenol		2700		U	460	2700
2,4-Dimethylphenol		2700		U	660	2700
2,4-Dichlorophenol		2700		U	390	2700
I-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
I-Nitrophenol		8100		Ū	1700	8100
,6-Dinitro-2-methylphenol		8100		Ū	730	8100
Pentachlorophenol		8100		Ü	800	8100
Bis(2-chloroethyl)ether		270		Ü	37	270
1,3-Dichlorobenzene		2700		Ü	240	2700
Benzoic acid		2700		Ü	2700	2700
1,4-Dichlorobenzene		2700		Ü	300	2700
,2-Dichlorobenzene		2700		Ü	310	2700
N-Nitrosodi-n-propylamine		270		Ü	45	2700
lexachloroethane		270		ŭ	30	270
litrobenzene		270		Ŭ	38	270
sophorone		2700		Ü	320	2700
Bis(2-chloroethoxy)methane		2700		Ü	350	2700
,2,4-Trichlorobenzene		270		Ŭ	30	270
laphthalene		28000			310	2700
-Chloroaniline		2700		U .	710	2700
lexachlorobutadiene		540		Ü	65	540
2-Methylnaphthalene		3000		Ŭ	340	2700
		2700	•	U	320	2700
2-Chloronaphthalene		2700		Ŭ	300	2700
2-Nitroaniline		5400		U	1100	5400
Dimethyl phthalate		2700		U	320	2700
Acenaphthylene		1500		J	320	2700
:,6-Dinitrotoluene		540		U	320 81	540
-Nitroaniline		5400		U	950	
cenaphthene		430		j	950 390	5400
Dibenzofuran		6900		J		2700
,4-Dinitrotoluene		540		U	310	2700
iethyl phthalate		2700			88	540
				U	320	2700
-Chlorophenyl phenyl ether luorene		2700		U	310	2700
		11000			340	2700
-Nitroaniline		5400		U	830	5400
I-Nitrosodiphenylamine		2700		U	260	2700
-Bromophenyl phenyl ether		2700		U	270	2700
lexachlorobenzene		270		U	37	270

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1

Sdg Number: 11371

Cilent 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	<b>Organic</b>	Compounds	(GC/MS)
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Analysis Method:

8270C

Analysis Batch:

460-118282

Instrument ID:

BNAMS4

Prep Method:

Lab File ID:

u77941.d

Dilution:

3541

Prep Batch:

460-117875

Initial Weight/Volume:

Analysis Date:

5.0

Final Weight/Volume:

10 - 120

37 - 125

40 - 109

15.02 g

Prep Date:

07/02/2012 1406 06/28/2012 1551

Injection Volume:

1 mL 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
Butyi benzyi 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	22	J	200	2700
2,2'-oxybis[1-chloropropane]		2700		U	300	2700
Surrogate		%Rec		Qualifier	Acceptanc	e Limits
Nitrobenzene-d5		 64			38 - 105	
Phenol-d5		66			41 - 118	
Terphenyl-d14		93			16 - 151	

71

59

62

2,4,6-Tribromophenol

2-Fluorophenol

2-Fluorobiphenyl

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

Lab File ID:

u77945.d

Dilution:

1.0

Prep Batch:

460-117875

Initial Weight/Volume:

Analysis Date:

Final Weight/Volume:

14.99 g

Prep Date:

07/02/2012 1527 06/28/2012 1551

Injection Volume:

Analyte	19	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol			630	U	85	630
2-Chloroph	enol		630	U	84	630
2-Methylph	enol		630	U	110	630
2-Nitropher	nol		630	U	71	630
3 & 4 Methy	ylphenol		180	J	110	630
2,4-Dimethy	ylphenol		310	J	160	630
2,4-Dichloro	ophenol		630	U	93	630
4-Chloro-3-	methylphenol		630	U	96	630
2,4,6-Trichle	orophenol		630	U	74	630
2,4,5-Trichle	orophenol		630	U	82	630
2,4-Dinitrop	henol		1900	U	360	1900
4-Nitropher			1900	U	410	1900
4,6-Dinitro-	2-methylphenol		1900	U	170	1900
Pentachloro	phenol		1900	U	190	1900
Bis(2-chlore	ethyl)ether		63	U	8.7	63
1,3-Dichlore	benzene		630	U	58	630
Benzoic aci	d		630	U	630	630
1,4-Dichloro	benzene		630	U	72	630
1,2-Dichloro	benzene		630	U	74	630
N-Nitrosodi	-n-propylamine		63	U	11	63
Hexachloro	ethane		63	U	7.1	63
Nitrobenzer	ne		63	U	9.0	63
Isophorone			630	U	<b>7</b> 7	630
Bis(2-chlore	ethoxy)methane		630	U	82	630
1,2,4-Trichle	orobenzene		63	U	7.2	63
Naphthalen	е		1400		74	630
4-Chloroani	line		630	U	170	630
Hexachloro	butadiene		130	U	16	130
2-Methylna	phthalene		630	U	82	630
Hexachloro	cyclopentadiene		630	U	75	630
2-Chlorona	ohthalene		630	U	71	630
2-Nitroanilir	ne		1300	U	270	1300
Dimethyl ph	thalate		630	U	75	630
Acenaphthy	lene		630	U	75	630
2,6-Dinitroto			130	Ū	19	130
3-Nitroanilin	ne		1300	U	220	1300
Acenaphthe	ene		630	U	93	630
Dibenzofura			630	U	75	630
2,4-Dinitroto	oluene		130	Ü	21	130
Diethyl phth			630	Ü	76	630
	enyl phenyl ether		630	Ü	75	630
luorene	, , ,		110	j	81	630
1-Nitroanilin	ie -		1300	Ů	200	1300
	phenylamine		630	Ü	63	630
	enyl phenyl ether		630	Ü	63	630
	benzene		63	Ü	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: Dilution:

3541 1.0

Prep Batch:

460-117875

Lab File ID: Initial Weight/Volume: u77945.d 14.99 g

Analysis Date:

Prep Date:

07/02/2012 1527 06/28/2012 1551

Final Weight/Volume: Injection Volume:

Analyte	DryWt Corrected: Y	Result (ug/Kg	)	Qualifier	MDL	RL
Phenanthrene	103	260		J	81	630
Anthracene		630		U	<b>77</b> =	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	1/2	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	The T	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)

S4
6.d
g

Analyte	48.4	DryWt Corrected: Y	Result (ug/Kg)		Qualifier	MDL	RL
Phenol	, p = 1		2900	***************************************	U	390	2900
2-Chlorophe	enol		2900		U	380	2900
2-Methylphe	enol 😘 -		2900		U	500	2900
2-Nitrophen	ol.		2900		U	330	2900
3 & 4 Methy	Iphenol		2900	-1 2	U	500	2900
2,4-Dimethy	Iphenol		2900		U	720	2900
2,4-Dichloro	phenol		2900		U .	430	2900
4-Chloro-3-r	methylphenol		2900		U	440	2900
2,4,6-Trichlo	rophenol		2900		U	340	2900
2,4,5-Trichlo	prophenol		2900		U	380	2900
2,4-Dinitropl	henol		8800		Ū	1700	8800
4-Nitrophen			8800		Ū	1900	8800
•	2-methylphenol		8800		Ū	800	8800
Pentachloro			8800		Ü	870	8800
Bis(2-chloro	•		290		ŭ	40	290
1,3-Dichloro			2900		Ü	270	2900
Benzoic acid			2900	,	Ü	2900	2900
1,4-Dichloro			2900	. 4	Ü	330	2900
1,2-Dichloro			2900		Ü	340	2900
	n-propylamine		290		U	49	2900
Hexachloroe			290		U	33	290
Nitrobenzen			290		Ü	42	
Isophorone			2900		Ü		290
•	othova/mothano		2900		_	350	2900
1,2,4-Trichle	ethoxy)methane		2900		U	380	2900
					U	33	290
Naphthalene			26000	-E-		340	2900
4-Chloroanil Hexachlorob			2900	. 13%	U	770	2900
			590		U	71	590
2-Methylnap			3400			380	2900
	cyclopentadiene		2900		U	340	2900
2-Chloronap		ra ra	2900		U	330	2900
2-Nitroanilin			5900		U	1200	5900
Dimethyl phi			2900		U	350	2900
Acenaphthyl			500		J	350	2900
2,6-Dinitroto			590		U	88	590
3-Nitroanilin			5900		U	1000	5900
Acenaphthe			2900		U	430	2900
Dibenzofura			6000			340	2900
2,4-Dinitroto	luene		590		U	96	590
Diethyl phtha	alate		2900		U	350	2900
	nyl phenyl ether		2900		U	340	2900
Fluorene			9800			370	2900
4-Nitroanilin	е		5900		U	910	5900
N-Nitrosodip	henylamine		2900		U	290	2900
4-Bromophe	nyl phenyl ether		2900		U	290	2900
	enzene		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: Dilution:

3541

Prep Batch:

460-117875

Lab File ID:

u77976.d

Analysis Date:

5.0

Initial Weight/Volume:

15.00 g

Prep Date:

07/03/2012 1051 06/28/2012 1551

Final Weight/Volume: Injection Volume:

Analyte	DryWt Corrected: Y	Result (ug/k	(g)	Qualifier	MDL	RL
Phenanthrene	Tax .	12000			370	2900
Anthracene 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	ESTA V	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

Ciient 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

Initial Weight/Volume:

Dilution:

200-40766

30.43 g

1.0

Prep Batch:

Final Weight/Volume:

Analysis Date:

2000 uL

Prep Date:

06/28/2012 0325 06/22/2012 1046

Injection Volume: Result Type:

2 uL **PRIMARY** 

Analyte

DryWt Corrected: Y

Result (mg/Kg)

Qualifier

MDL 1.1

RL 7.1

Diesel Range Organics [C10-C28]

<del>-5.0</del>-

7.1

JB UB

Surrogate o-Terphenyl %Rec

Qualifier

Acceptance Limits

74

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:

Initial Weight/Volume:

29.77 g

Dilution:

20

200-41124

Final Weight/Volume:

2000 uL

Analysis Date:

07/03/2012 1039

Injection Volume: Result Type:

2 uL

Prep Date:

Analyte

06/29/2012 0832

DryWt Corrected: Y

Result (mg/Kg)

Qualifier

MDL

**PRIMARY** RL

Diesel Range Organics [C10-C28]

870

33

220

Surrogate

%Rec

Qualifier

Acceptance Limits

o-Terphenyl

0

X

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 3550B Analysis Batch:

200-41102

Instrument ID:

3012.i

Prep Method: Dilution:

Prep Batch:

Analysis Date:

5.0

200-40929

Initial Weight/Volume: Final Weight/Volume:

29.86 g 2000 uL

06/28/2012 1237

Injection Volume: Result Type:

2 uL

06/26/2012 0914

Qualifier

MDL

**PRIMARY** 

Analyte Diesel Range Organics [C10-C28]

Prep Date:

DryWt Corrected: Y

Result (mg/Kg) 190

B

9.6

RL 65

Surrogate o-Terphenyl %Rec

Qualifier

Acceptance Limits

99

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

Initial Weight/Volume:

Dilution:

29.66 g

10

Prep Batch:

200-40929

Final Weight/Volume:

2000 uL

Analysis Date: Prep Date:

06/28/2012 1427 06/26/2012 0914

Injection Volume:

2 uL

Result Type:

**PRIMARY** 

Analyte Diesel Range Organics [C10-C28]

DryWt Corrected: Y

Result (mg/Kg) 620

Qualifier 85

MDL 18

RL 120

Surrogate

%Rec

Qualifier

Acceptance Limits

o-Terphenyl

0

Х

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 Pol	vchlorinated	Binhenvis	(PCBs)	by Gas	Chromatography
00027101	y Citioi illated	DIDITIONALS	ILL CD31	DY Gas	CIII OIII atoul abii v

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 06/27/2012 1828 Analysis Date: 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	17-16	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 Blphenyls (PCBs) by Gas Chromatography

Analysis Method:

8082A

Analysis Batch:

200-41144

Instrument ID:

3283.i

Prep Method:

3541

Initial Weight/Volume:

Dilution:

Prep Batch:

Qualifier

15.06 g

1.0

200-40596

Analysis Date:

Final Weight/Volume:

5000 uL 1 uL

Prep Date:

06/27/2012 1828 06/20/2012 0815 Injection Volume: Result Type:

**SECONDARY** 

Surrogate Tetrachloro-m-xylene DCB Decachlorobiphenyl

37 51

%Rec

30 - 130 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:

DCB Decachlorobiphenyl

3541

Prep Batch:

200-40596

Initial Weight/Volume:

45 - 125

15.02 g

Dilution:

10

Final Weight/Volume:

5000 uL

Analysis Date:

06/27/2012 1927

Injection Volume:

Prep Date:

06/20/2012 0815

Result Type:

1 uL **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	Accepta	ance Limits
Tetrachloro-m-xyl	ene	54	р	30 - 130	)

102

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 Polychiorinated Biphenyis (PCBs) by Gas Chromatography

Analysis Method:

8082A

Analysis Batch:

200-41144

Instrument ID:

3283.i

Prep Method:

3541

Prep Batch:

Initial Weight/Volume:

15.02 g

Dilution:

10

200-40596

Final Weight/Volume:

5000 uL

Analysis Date:

06/27/2012 1927

Injection Volume: Result Type:

1 uL **SECONDARY** 

Prep Date:

06/20/2012 0815

%Rec

Qualifier

Acceptance Limits

Surrogate Tetrachloro-m-xylene DCB Decachlorobiphenyl

105 125

30 - 130 45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1

Sdg Number: 11371

**Client Sample ID:** 

DCB Decachlorobiphenyl

SB-13 (8.2-9)

Lab Sample ID:

200-11382-1

Client Matrix:

Solid

% Moisture:

45 - 125

Date Sampled: 06/16/2012 1000

Date Received: 06/20/2012 1010

16.4

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 06/22/2012 2212 Analysis Date: Injection Volume: 1 uL Prep Date: 06/20/2012 1403 **PRIMARY** Result Type:

71

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL	
PCB-1016	TIEL OF MILES	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	Accepta	ance Limits	
Tetrachloro-m-xylene	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	73	######################################	30 - 130	O .	, ,

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

Initial Weight/Volume:

Dilution:

Prep Batch:

%Rec

92

82

200-40636

14.83 g

1.0

Final Weight/Volume:

5000 uL

Analysis Date: Prep Date:

06/22/2012 2212 06/20/2012 1403

Injection Volume:

1 uL

Result Type:

SECONDARY

Surrogate Tetrachloro-m-xylene

DCB Decachlorobiphenyl

Qualifier

**Acceptance Limits** 30 - 130

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:	
Prep Method:	
Dilution:	

8082A 3541

Analysis Batch: Prep Batch:

200-40902 200-40636

Instrument ID: Initial Weight/Volume:

3283.i 15.08 g

Analysis Date:

Prep Date:

1.0 06/22/2012 2242 06/20/2012 1403 Final Weight/Volume: Injection Volume:

Result Type:

5000 uL 1 uL **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	emment annual Public man a menualam u emmenten emmenten emmenten emmenten emmenten emmenten emmenten emmenten e	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

Initial Weight/Volume:

Dilution:

1.0

Prep Batch:

200-40636

15.08 g

Qualifier

Final Weight/Volume:

5000 uL

Analysis Date:

06/22/2012 2242

Injection Volume:

1 uL

06/20/2012 1403 Prep Date:

Result Type:

**SECONDARY** 

Surrogate

%Rec 94

30 - 130

Acceptance Limits

Tetrachloro-m-xylene 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

80824 Poh	chlorinated	Rinhanyle /	(PCRe) hy	Gae C	hromatography
OUDEA PUL	y cilioi illateu	DIDLIGHAL	(LCD2) DA	Gas C	mromatourabny

Analysis Method: Prep Method: Dilution:

Analysis Date:

Prep Date:

8082A 3541

1.0

06/23/2012 0011

06/20/2012 1403

Analysis Batch: Prep Batch:

200-40902 200-40636

Instrument ID:

3283.i 15.27 g

Initial Weight/Volume: Final Weight/Volume:

5000 uL

goodao roidi
Result Type:

Injection Volume: 1 uL **PRIMARY** 

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL.
PCB-1016	9.**	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	Acce	ptance Limits

Surrogate	%Rec	Qualifier	Acceptance Limit
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 Polychiorinated Biphenyis (PCBs) by Gas Chromatography

Analysis Method:

8082A

Analysis Batch:

200-40902

Instrument ID:

3283.i

Prep Method:

3541

200-40636

Initial Weight/Volume:

Dilution:

1.0

Prep Batch:

15.27 g

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 Tetrachloro-m-xylene DCB Decachlorobiphenyl

53 41

%Rec

Х

Qualifier

30 - 130 45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1

Sdg Number: 11371

Client Sample ID:

DCB Decachlorobiphenyl

SB-14 (17-18)

Lab Sample ID:

200-11382-4

Client Matrix:

Solid

% Moisture: 12.6 Date Sampled: 06/16/2012 1100

45 - 125

Date Received: 06/20/2012 1010

8082A Polychiorinated Biphenvis (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** 

69

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	Accepta	nce Limits	
Tetrachloro-m-xylene		68	######################################	30 - 130		

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

200-40636

Initial Weight/Volume:

Dilution:

1.0

Prep Batch:

15.21 g

Final Weight/Volume:

5000 uL

Analysis Date:

06/23/2012 0041

Injection Volume: Result Type:

1 uL SECONDARY

Prep Date:

06/20/2012 1403

%Rec

Qualifier Acceptance Limits

Surrogate Tetrachloro-m-xylene

DCB Decachlorobiphenyl

69 70 30 - 130 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

SOS2A Pob	chlorinated	Rinhanyla	(PCRe) by G	as Chromatography
OUGAA FUI	y Cillol Illateu	DIDITORIA	ILCOSI DA G	as Chroniatourabily

Analysis Method: Prep Method: Dilution:

8082A 3541

1.0

Analysis Batch:

200-40902

Instrument ID:

3283.i 15.48 g

Prep Batch: 200-40636

Initial Weight/Volume: Final Weight/Volume:

1.5

5000 uL

19

Analysis Date: Prep Date:

PCB-1268

06/23/2012 0111 06/20/2012 1403

1 uL

U

Injection Volume: Result Type: **PRIMARY** 

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		19	U	6.2	19
PCB-1221		19	Pa 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

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	52		30 - 130
DCB Decachlorobiphenyl	46		45 - 125

19

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

Initial Weight/Volume:

Dilution:

Prep Batch:

200-40636

15.48 g

1.0

49

Final Weight/Volume:

5000 uL

Analysis Date:

06/23/2012 0111

Injection Volume:

1 uL

Prep Date:

06/20/2012 1403

Result Type:

Qualifier

SECONDARY

Surrogate Tetrachloro-m-xylene

DCB Decachlorobiphenyl

%Rec 55

30 - 130 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

06/20/2012 1403

Client Matrix:

Solid

% Moisture:

24.9

Date Sampled: 06/16/2012 1400

Date Received: 06/20/2012 1010

Analysis Method:

8082A

Analysis Batch:

200-40902

Instrument ID:

3283.i

Prep Method:

3541

Prep Batch:

Initial Weight/Volume:

15.55 g

Dilution:

06/23/2012 0141

200-40636

Analysis Date: Prep Date:

1.0

Final Weight/Volume:

5000 uL

Result Type:

Injection Volume: 1 uL **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	Accepta	nce Limits
Tetrachloro-m-xylene	OPEICH THE STANDARD CONTROL OF CONTROL AND THE STANDARD AND THE STANDARD CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONT	69	PAMARANMEDA 1918 (1954) Special CAP mile representamentamentamentamentamentamentamentam	30 - 130	SA-VARANA SA-PANANIAN ANG ANG SA-PARANINAN SA-SA-SA-SA-SA-SA-SA-SA-SA-SA-SA-SA-SA-S
DCB Decachlorobiphe	nyl	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

Dilution:

DCB Decachlorobiphenyl

Prep Batch:

200-40636

Initial Weight/Volume:

15.55 g

1.0

Qualifier

Analysis Date:

Final Weight/Volume:

5000 uL

Prep Date:

06/23/2012 0141 06/20/2012 1403

Injection Volume: Result Type:

1 uL **SECONDARY** 

Surrogate

Tetrachloro-m-xylene

%Rec 73 67

30 - 130

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: Dilution: 3541 1.0 Prep Batch: 2

200-40636

Initial Weight/Volume: Final Weight/Volume:

15.25 g 5000 uL

Analysis Date: 06/2 Prep Date: 06/2

06/23/2012 0240 06/20/2012 1403 Injection Volume: Result Type:

1 uL 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:

Initial Weight/Volume:

Dilution:

1.0

15.25 g

200-40636

Analysis Date:

Qualifier

Final Weight/Volume: Injection Volume:

5000 uL 1 uL

Prep Date:

06/23/2012 0240 06/20/2012 1403

Result Type:

**SECONDARY** 

Surrogate Tetrachloro-m-xylene DCB Decachlorobiphenyl

%Rec 86 58

30 - 130 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 POIVENIOFINATED BIDDENVIS (PCBS) by Gas Chromatograpi	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 06/23/2012 0339 Analysis Date: Injection Volume: 1 uL 06/20/2012 1403 Prep Date: **PRIMARY** Result Type: 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 Polychiorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:

8082A

Analysis Batch:

200-40902

Instrument ID:

3283.i

1 uL

Prep Method:

3541

Prep Batch:

200-40636

Initial Weight/Volume:

15.27 g

Dilution:

Qualifier

Analysis Date:

1.0

Final Weight/Volume: Injection Volume:

5000 uL

Prep Date:

06/23/2012 0339 06/20/2012 1403

Result Type:

**SECONDARY** 

Surrogate

Tetrachloro-m-xylene DCB Decachlorobiphenyl

%Rec 41 52

30 - 130 45 - 125

Acceptance Limits

**TestAmerica Burlington** 

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:

Surrogate

Tetrachloro-m-xylene

DCB Decachlorobiphenyl

Solid

% Moisture:

17.4

Date Sampled: 06/19/2012 1330

Acceptance Limits

30 - 130

45 - 125

Date Received: 06/20/2012 1010

	S	hlorinated Blphenyls (PCBs) by	000 01110	atograpmy		
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)	Qualifie	r MDL	RL	SE .
PCB-1016		20	U	6.7	20	0.50
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	

Qualifier

%Rec

62

59

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:

Initial Weight/Volume:

15.10 g

Dilution:

1.0

%Rec

66

59

200-40636

Analysis Date:

Final Weight/Volume:

5000 uL

06/23/2012 0409

Injection Volume:

1 uL

Prep Date:

06/20/2012 1403

Result Type:

**SECONDARY** 

Surrogate Tetrachloro-m-xylene

DCB Decachlorobiphenyl

30 - 130

Qualifier

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:

PCB-1262

PCB-1268

Solid

% Moisture:

41.9

U

U

2.6

2.4

Date Sampled: 06/19/2012 1350

30

30

Date Received: 06/20/2012 1010

8082A Polychlorinated	Biphenyls (PCBs) by Gas Chromatography

				,,	
Analysis Method:	8082A	Analysis Batch: 200-40902	2	Instrument ID:	3283.i
Prep Method:	3541	Prep Batch: 200-40636	3	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)	Qualifie	er MDL	RL DE
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
_					

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	65		30 - 130
DCB Decachlorobiphenyl	72		45 - 125

30

30

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 Polychiorinated Biphenyis (PCBs) by Gas Chromatography

Analysis Method:

8082A

Analysis Batch:

200-40902

Instrument ID:

3283.i

Prep Method:

3541

Initial Weight/Volume:

Dilution:

DCB Decachlorobiphenyl

Prep Batch:

200-40636

14.82 g

1.0

Final Weight/Volume:

5000 uL

Analysis Date:

06/23/2012 0438

Injection Volume:

Qualifier

1 uL

Prep Date:

06/20/2012 1403

Result Type:

**SECONDARY** 

Surrogate Tetrachloro-m-xylene

%Rec 68 72

30 - 130

Acceptance Limits

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	<b>Biphenyls</b>	(PCBs) b	y Gas	Chromatography
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Analysis Method: Prep Method: 8082A 3541 Analysis Batch:

200-40902

Instrument ID:

3283.i 15.15 g

Dilution:

1.0

Prep Batch: 200-40636

Initial Weight/Volume: Final Weight/Volume:

15.15 g 5000 uL

Analysis Date:
Prep Date:

06/23/2012 0508 06/20/2012 1403

Injection Volume:

1 uL PRIMARY

Trop Date.	00/20/2012 1400		Rest	ait 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	Accepta	ince Limits
Tetrachloro-m-xylen	e	64	The same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the sa	30 - 130	
DCB Decachlorobipl	henyl	45		45 - 125	5

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

Dilution:

1.0

Initial Weight/Volume:

15.15 g

Final Weight/Volume:

5000 uL

Analysis Date: Prep Date:

06/23/2012 0508 06/20/2012 1403

Injection Volume: Result Type:

1 uL SECONDARY

Surrogate

%Rec 72

Qualifier Acceptance Limits

30 - 130

Tetrachloro-m-xylene DCB Decachlorobiphenyl

49

45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1

Sdg Number: 11371

Client Sample ID:

DCB Decachlorobiphenyl

SB-05 (10.9-11.9')

Lab Sample ID:

200-11398-1

Client Matrix:

Solid

% Moisture:

6.3

Date Sampled: 06/20/2012 1000

45 - 125

Date Received: 06/21/2012 1040

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)	Qualifie	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		Qualifie	Accepta	nce Limits	
Tetrachloro-m-xyler		83	neellestandendingstammenterstammenterstammenterstammenterstammenterstammenterstammenterstammenterstammenterstam		30 - 130	i in internitation (internitation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the foliation of the	

87

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

Initial Weight/Volume:

Prep Batch:

200-40763

15.09 g

Dilution:

1.0

Final Weight/Volume:

5000 uL 1 uL

Analysis Date: Prep Date:

06/28/2012 0518

Injection Volume: Result Type:

**SECONDARY** 

Surrogate

06/22/2012 1020

%Rec

Qualifier

Acceptance Limits

Tetrachloro-m-xylene DCB Decachlorobiphenyl

84 91 30 - 130 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:

200-114

Solid

% Moisture:

19.5

Date Sampled: 06/21/2012 0900

Date Received: 06/22/2012 1045

8082A Polychlorinated	Biphenyls (PC	3s) by Gas Ch	romatography
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Analysis Method: Prep Method: 8082A 3541 Analysis Batch:

200-41296

Instrument ID:

5253.i 14.93 g

Dilution:
Analysis Date:

1.0

Prep Batch: 200-40879

Initial Weight/Volume: Final Weight/Volume:

5000 uL

Prep Date:

06/29/2012 1011 06/25/2012 1030

Injection Volume: Result Type:

1 uL 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	Accepta	ince Limits	
Tetrachloro-m-xylene		94	V-Angli (10 A-46 to 10 A-Athelm termination and continue a conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation and conservation an	30 - 130		www.com.com.com.com.com.com.com.com.com.com
DCB Decachlorobiphenyl		37	Х	45 - 125	5	

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

Initial Weight/Volume:

Prep Batch:

200-40879

14.93 g

Dilution:

44

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 Tetrachloro-m-xylene

DCB Decachlorobiphenyl

%Rec 96

Х

Qualifier

30 - 130

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

06/29/2012 1035

06/25/2012 1030

Client Matrix:

Solid

% Moisture:

42.1

Date Sampled: 06/21/2012 0915

Date Received: 06/22/2012 1045

Analysis Method: Prep Method: Dilution:

Analysis Date:

Prep Date:

8082A 3541 1.0

Analysis Batch: Prep Batch:

200-41296 200-40879 Instrument ID:

5253.i 14.72 g Initial Weight/Volume:

Final Weight/Volume: Injection Volume:

5000 uL

Result Type:

1 uL **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	Acce	ptance Limits
Tetrachloro-m-x	ylene	85	ikkiri dalah intalagi dan dan dalah tasa una dan ar-kasa anya dan ar-ar-ar-ar-ar-ar-ar-ar-ar-ar-ar-ar-ar-a	30 - 1	130
DCB Decachlor	obiphenyl	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:

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

42.1

Instrument ID:

5253.i

Prep Method:

3541

Initial Weight/Volume:

1.0

Prep Batch:

Qualifier

14.72 g

Dilution:

200-40879

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 Tetrachloro-m-xylene

DCB Decachlorobiphenyl

%Rec 88 62

30 - 130 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

80824 Polychlorinated	Biphenvis (PCBs) by Gas	Chromatography
OUOZA PUIVCIIIUI III aleu	DIDITIONS (PUDS) DV GAS	Chromatography

Analysis Method: Prep Method:

8082A

Analysis Batch:

200-41135

Instrument ID:

7227.i

Dilution:

3541 1.0

Prep Batch:

200-41065

Initial Weight/Volume: Final Weight/Volume:

15.19 g 5000 uL

Analysis Date:

Injection Volume: Result Type:

1 uL **PRIMARY** 

Prep Date:

06/29/2012 1008 06/28/2012 1021

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
	Diyve Conected. 1		Qualifier	MUL	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

Initial Weight/Volume:

15.19 g

Prep Batch:

200-41065

Dilution:

1.0

Final Weight/Volume:

5000 uL

Analysis Date:

Injection Volume:

1 uL

Prep Date:

06/29/2012 1008 06/28/2012 1021

Result Type:

SECONDARY

Surrogate Tetrachloro-m-xylene DCB Decachlorobiphenyl

59 43

%Rec

Χ

Qualifier

30 - 130 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 Poly	chlorinated Biphe	nvis (PCBs	) by Gas	Chromatography

Analysis Batch: Analysis Method: 8082A 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 06/25/2012 1030 Prep Date: 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	öltemistellikkikki valoitikken että työtei kaisila mila minniania sionalaaka vapaanaakaan nopakuu, vuon. toopeekka vuon.	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

Initial Weight/Volume:

DCB Decachlorobiphenyl

Prep Batch:

1.0

14.92 g

Dilution:

200-40879

Final Weight/Volume:

5000 uL

Analysis Date:

06/29/2012 1059

Qualifier

1 uL

Prep Date:

06/25/2012 1030

Injection Volume: Result Type:

**SECONDARY** 

Surrogate Tetrachloro-m-xylene %Rec

Acceptance Limits 30 - 130

75 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:

Date Sampled: 06/21/2012 0000

Date Received: 06/22/2012 1045

8082A Polychiorinated Bipher	yls (PCBs) by	Gas Chromatography
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Analysis Method:

8082A 3541

Analysis Batch:

200-41316

43.4

Instrument ID:

5253.i

Prep Method: Dilution:

1.0

Prep Batch:

200-40879

Initial Weight/Volume: Final Weight/Volume:

14.90 g 5000 uL

Analysis Date: Prep Date:

07/03/2012 0230 06/25/2012 1030

Injection Volume: Result Type:

1 uL **PRIMARY** 

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL	
PCB-1016		30	U	10	30	-11-11
PCB-1221		30	U	7.6	30	
PCB-1232		30	U	5.9	30	
PCB-1242		30	U	12	30	
PCB-1248		30	UI	3.6	30	
PCB-1254		30	Uブ	5.0	30	
PCB-1260		30	US	4.3	30	
PCB-1262		30	Uグ	2.7	30	
PCB-1268		30	UJ	2.5	30	
Surrogate		%Rec	Qualifier	Acceptan	ce Limits	
Tetrachloro-m-xylene		50	000000000000000000000000000000000000000	30 - 130	thronishmine contembritation and make the contemporary appropriate conservative paper.	MARANTANY-TON-TABANANTANANANANANANANANANANANANANANANAN
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 Polychiorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:

8082A

Analysis Batch:

200-41316

Instrument ID:

5253.i

Prep Method:

3541

Prep Batch:

Initial Weight/Volume:

14.90 g

Dilution:

1.0

200-40879

Final Weight/Volume:

5000 uL

Analysis Date:

07/03/2012 0230

Injection Volume:

1 uL

06/25/2012 1030 Prep Date:

DCB Decachlorobiphenyl

Result Type:

Qualifier

SECONDARY

Surrogate

Tetrachloro-m-xylene

%Rec 53 70

30 - 130 45 - 125

Acceptance Limits

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 3050B

Analysis Batch:

200-41205

Instrument ID:

METICP7

Prep Method: Dilution:

1.0

Prep Batch:

200-40836

Lab File ID: Initial Weight/Volume: 070112-01.ttx

Analysis Date:

07/01/2012 0047

1.46 g

Prep Date:

06/23/2012 0838

Final Weight/Volume:

100 mL

Analyte		DryWt Corrected: Y		Result (mg/Kg	)	Qualifier	MDL		RL	
Aluminum	***************************************			920			13.5	***************************************	15.9	***************************************
Antimony				4.8		UIT	0.39		4.8	
Arsenic				1.9		7	0.44		0.79	
Barium				20.6		J	0.41		15.9	
Beryllium			- 1	0.38		Ĵ	0.025		0.40	1111, 19.1
Cadmium				0.40		UJ	0.062	,	0.40	
Calcium				352		J	40.5		397	
Chromium			. :	2.9		5	0.087		0.79	
Cobalt				3.0		J	0.064		4.0	
Copper				10.6		5	0.17		2.0	
lron				2920		<u> </u>	10.3		15.9	
Lead				22.0			0.35		0.79	
Magnesium	100			166		J	11.1		397	
Manganese				14.5		ナ	0.36		1.2	
Nickel				14.9		T	0.23		3.2	
Potassium				219		J	11.9		397	
Selenium				0.87		J	0.69		2.8	
Silver		. 170		0.79		UJ	0.10		0.79	
Sodium		39		<del>180 -</del>		JB-UB	6.0		397	
Thallium		21		2.0		U	0.33		2.0	
Vanadium				35.1		7	0.10		4.0	
Zinc				14.1		7	0.44		1.6	

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vanor Ter	la malana a A

Analysis Method:

7471B

7471B

Analysis Batch:

200-41039

Instrument ID: Lab File ID:

MEPCV3 II

Prep Method: Dilution:

1.0

Prep Batch:

200-41014

Initial Weight/Volume:

062712CC.PRN 0.31 g

Analysis Date: Prep Date:

06/27/2012 1519 06/26/2012 1500

Final Weight/Volume:

50 mL

Analyte

DryWt Corrected: Y

Result (mg/Kg)

Qualifier

MDL

RL

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

COA	2	Metals	· //CD\
DU I	w	METAIS	HUGEI

Analysis Method: Prep Method:

6010C 3050B

Analysis Batch:

200-41205

Instrument ID:

METICP7

Dilution:

1.0

Prep Batch:

200-40836

Lab File ID: Initial Weight/Volume: 070112-01.ttx 1.26 g

Analysis Date: Prep Date:

07/01/2012 0052 06/23/2012 0838 Final Weight/Volume:

100 mL

Analyte			DryWt Correcte	ed: Y	Result (mg/	Kg)	Qualifier	MDL	RL
Aluminum	*	tik tikata na kayan titayan alija la lagu sa kati		**************************************	11200	1 ,1	5	21.4	25.1
Antimony				74	0.73	1	J ·	0.62	7.5
Arsenic				*	28.4		5	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		ナ	0.14	1.3
Cobalt					4.8		J	0.10	6.3
Copper					49.1		ゴ	0.28	3.1
Iron					11700			16.3	25.1
Lead				· 6.	33.2		5	0.55	1.3
Magnesium					3550		444	17.6	629
Manganese					262		1	0.57	1.9
Nickel				42.50	15.5		ナ	0.36	5.0
Potassium					1600		5	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				8,6-	1.3		J	0.52	3.1
Vanadium					25.7		7	0.16	6.3

Analysis Method: Prep Method: Dilution:

Analysis Date:

Zinc

6010C 3050B

2.0

07/02/2012 1556

06/23/2012 0838

Prep Batch:

Analysis Batch:

152

200-41285 200-40836 Instrument ID: Lab File ID:

METICP7 070212-01.ttx

2.5

Initial Weight/Volume:

0.70

1.26 g

Final Weight/Volume:

100 mL

Analyte Calcium

Prep Date:

DryWt Corrected: Y

Result (mg/Kg) 110000

Qualifier

MDL 128

RL 1260

### 7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method: Prep Method:

7471B 7471B

Analysis Batch: Prep Batch:

200-41039 200-41014 Instrument ID: Lab File ID:

MEPCV3 II 062712CC.PRN

Dilution: 1.0 06/27/2012 1521 Analysis Date: 06/26/2012 1500

Initial Weight/Volume:

0.33 g

Final Weight/Volume:

50 mL

Analyte

Prep Date:

Result (mg/Kg)

Qualifier

MDL

Mercury

DryWt Corrected: Y

1.5

0.0032

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)

6010C 3050B

Analysis Batch:

200-41205

Instrument ID:

METICP7 070112-01.ttx

Prep Method: Dilution:

1.0

Prep Batch:

200-40836

Lab File ID: Initial Weight/Volume: Final Weight/Volume:

1.48 g 100 mL

Analysis Date:

07/01/2012 0058

Prep Date:

06/23/2012 0838

Analyte	DryWt Corrected:	Υ	Result (mg/	Kg)	Qualifier	MDL	RL .	
Aluminum	'		14100	*	<i></i>	13.7	16.2	nin
Antimony			0.44	. 1	J	0.40	4.9	
Arsenic			4.5		ゴ	0.45	0.81	
Barium			52.3		5	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		7	0.089	0.81	
Cobalt			6.8		444	0.065	4.0	
Copper			36.5		5	0.18	2.0	
Iron			24300		ケ	10.5	16.2	
Lead			22.0			0.36	0.81	
Magnesium			3340		J	11.3	404	
Manganese			211		ゴ	0.36	1.2	
Nickel			20.4		ナ	0.23	3.2	
Potassium			2000		<i>J</i>	12.1	404	
Selenium			0.84		J	0.70	2.8	
Silver			0.81		UJ	0.11	0.81	
Sodium		404	268		-JB-UB	6.1	404	
Thallium			0.69		J	0.33	2.0	
Vanadium			36.2		5	0.11	4.0	
Zinc			50.9		1	0.45	1.6	

#### 7471B Mercury in Solid or Semisoild Waste (Manual Cold Vapor Technique)

Analysis Method: Prep Method:

7471B 7471B

Analysis Batch: Prep Batch:

200-41074 200-41036 Instrument ID: Lab File ID:

MEPCV3 II 062812CC.PRN

Dilution: Analysis Date: 1.0

06/28/2012 1108 06/26/2012 1630 Initial Weight/Volume: Final Weight/Volume:

0.33 g 50 mL

Prep Date:

Analyte

Mercury

DryWt Corrected: Y

Result (mg/Kg) 0.11

Qualifier **∕B**−

MDL 0.0024

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

601	ഹ	Metals	(ICP)

Analysis Method: Prep Method:

6010C 3050B Analysis Batch:

200-41205

Instrument ID:

**METICP7** 070112-01.ttx

Dilution:

1.0

Prep Batch:

200-40836

Lab File ID:

Analysis Date:

Initial Weight/Volume:

1.42 g

Prep Date:

07/01/2012 0102 06/23/2012 0838

Final Weight/Volume:

100 mL

7.									
Analyte		DryWt Corrected: Y ~		Result (mg	/Kg)	Qualifier	MDL	RL .	
Aluminum	ł.			15500	1 7	<i></i>	13.6	16.0	
Antimony				0.44		J	0.39	4.8	-
Arsenic				1.4		TT	0.45	0.80	
Barium				157		5	0.42	16.0	
Beryllium				0.46			0.026	0.40	
Cadmium				0.40		リグ	0.063	0.40	
Calcium				922			40.9	401	
Chromium				30.5		4	0.088	0.80	
Cobalt				9.9		5	0.065	4.0	
Copper				37.4		1	0.18	2.0	
Iron				23500		J	10.4	16.0	
Lead				6.8			0.35	0.80	
Magnesium				5340		7	11.2	401	
Manganese				326		5	0.36	1.2	
Nickel				22.9		J	0.23	3.2	
Potassium				5760		J	12.0	401	
Selenium				2.8		UJ	0.70	2.8	
Silver				0.80		ロブ	0.10	0.80	
Sodium			401	-141		-JB-UB	6.0	401	
Thallium				0.66		J	0.33	2.0	
Vanadium				38.0		7	0.10	4.0	
Zinc				44.0		7	0.45	1.6	

# 7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method: Prep Method:

7471B 7471B Analysis Batch: Prep Batch:

0.038

200-41074 200-41036 Instrument ID: Lab File ID:

MEPCV3 II 062812CC.PRN

Dilution: Analysis Date: 1.0 06/28/2012 1111 06/26/2012 1630

Initial Weight/Volume: Final Weight/Volume:

0.30 g 50 mL

Prep Date: Analyte Mercury

DryWt Corrected: Y

Result (mg/Kg) 0.011

Qualifier JB UB MDL 0.0025

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1

Sdg Number: 11371

Ciient 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: Prep Method:

6010C 3050B

Analysis Batch:

200-41205

Instrument ID:

**METICP7** 

Dilution:

1.0

Prep Batch:

8380

8.5

37.5

51.1

0.58

0.89

202

14.6

644

95200

36200

Result (mg/Kg)

200-40836

Qualifier

工

ェ

J

リケ

4444

7

5

J

Lab File ID: Initial Weight/Volume: 070112-01.tbx 1.36 g

Analysis Date:

Prep Date:

07/01/2012 0128 06/23/2012 0838 Final Weight/Volume:

MDL

30.2

0.87

1.0

0.92

0.057

0.14

90.7

0.20

0.14

0.39

23.1

0.78

24.9

0.80

0.52

26.7

1.5

0.23

13.3

0.73

0.23

1.0

100 mL

RL

35.6

10.7

1.8

35.6

0.89

0.89

889

1.8

8.9

4.4

1.8

889

2.7

7.1

889

6.2

1.8 889-961

4.4

8.9

3.6

35.6

Analyte	DryWt Corrected: Y
Aluminum	T. P. S. S. S. S. S. S. S. S. S. S. S. S. S.
Antimony	

Antimony	
Arsenic	
Barium	
Beryllium	
Cadmium	
Calcium	
Chromium	
Cobalt	
Conner	

Copper Iron Lead Magnesium Manganese Nickel

Potassium Selenium Silver Sodium Thallium Vanadium Zinc

7471B

7471B

06/28/2012 1118

1.0

116 817 347 121 885 2.9 1.8

Analysis Batch:

Prep Batch:

UJ 961 VB. 4.4 U 7 61.4 342

7471B Mercury in Soild or Semisolid Waste (Manuai Coid Vapor Technique)

200-41074

200-41036

Instrument ID: Lab File ID:

MEPCV3 II 062812CC.PRN

Initial Weight/Volume:

0.30 g 50 mL

Final Weight/Volume:

Prep Date: 06/26/2012 1630

Analysis Method:

Prep Method:

Analysis Date:

Dilution:

Analyte Mercury DryWt Corrected: Y

Result (mg/Kg) 0.24

Qualifier B

MDL 0.0053

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1

Sdg Number: 11371

Cilent 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

604	nc	Metais	(ICD)
9U I	v	metais	UCEI

Analysis Method:

6010C

Analysis Batch:

200-41205

Instrument ID: Lab File ID:

**METICP7** 070112-01.ttx

Prep Method: Dilution:

3050B 1.0

Prep Batch:

200-40836

Initial Weight/Volume:

1.32 g

Analysis Date: Prep Date:

07/01/2012 0148 06/23/2012 0838 Final Weight/Volume:

100 mL

Analyte		DryWt Corrected: Y		Result (mg/Kg)		Qualifier	MDL	RL
Aluminum	*		1	7590	MOVEO	7	14.7	17.3
Antimony				5.2		Ũ5	0.42	5.2
Arsenic				1.1		5	0.49	0.87
Barium				58.2		<b>ブ</b>	0.45	17.3
Beryllium		THE TOTAL CO.		0.26		Ĵ	0.028	0.43
Cadmium				0.43		Uz	0.068	0.43
Calcium				478			44.2	433
Chromium				15.8		5	0.095	0.87
Cobalt				4.3		5	0.070	4.3
Copper			1	14.2		5	0.19	2.2
Iron				13900		I	11.3	17.3
Lead				3.9			0.38	0.87
Magnesium				2220		5	12.1	433
Manganese				85.5		7	0.39	1.3
Nickel				8.5		I	0.25	3.5
Potassium				2140		1	13.0	433
Selenium				3.0		UJ	0.75	3.0
Silver			E or	0.87		U 5	0.11	0.87
Sodium			433	<del>-85.3</del>		JB-UB	6.5	433
Thallium			1//	2.2		U	0.36	2.2
Vanadium				19.5		I	0.11	4.3
Zinc				19.9		5	0.49	1.7

## 7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method: Prep Method:

7471B 7471B

Analysis Batch:

200-41074

Instrument ID: Lab File ID:

MEPCV3 II 062812CC.PRN

Dilution:

1.0

Prep Batch:

200-41036

Initial Weight/Volume: Final Weight/Volume:

0.30 g 50 mL

Analysis Date: Prep Date:

06/28/2012 1120 06/26/2012 1630

Analyte Mercury DryWt Corrected: Y

Result (mg/Kg) 0.038-0.0040

Qualifier JB UB

MDL 0.0025

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 (IC
------------------

Analysis Method: Prep Method:

6010C 3050B

Analysis Batch: Prep Batch:

200-41205

Instrument ID: Lab File ID:

METICP7 070112-01.ttx

Dilution:

1.0

200-40836

Initial Weight/Volume:

1.49 g

Analysis Date: Prep Date:

07/01/2012 0153 06/23/2012 0838 Final Weight/Volume:

100 mL

Analyte		DryWt Corrected	Υ.	Result (mg/	/Kg)	Qualifier	MDL	RL	All Total
Aluminum	. +		Ĭ.	8010	WENTON AND MAINTANA AND AND AND AND AND AND AND AND AND	***************************************	13.0	15.2	
Antimony			C 1	1.1		J	0.37	4.6	
Arsenic				8.8		5	0.43	0.76	
Barium				117		J	0.40	15.2	
Beryllium				0.52			0.024	0.38	. 14
Cadmium				0.13		J	0.059	0.38	
Calcium				17000			38.9	381	1
Chromium				19.3	4 5	5	0.084	0.76	
Cobalt				5.9		T T	0.062	3.8	
Copper				49.3	G	<b>ブ</b>	0.17	1.9	
Iron				48400		<b>ブ</b>	9.9	15.2	
Lead				202			0.34	0.76	
Magnesium				6720		エ	10.7	381	
Manganese				326		5	0.34	1.1	
Nickel				16.7		44	0.22	3.0	
Potassium				1700		5	11.4	381	
Selenium				2.7		ロケ	0.66	2.7	
Silver				0.76		UI	0.099	0.76	
Sodium				788	U	В	5.7	- <del>381</del> - 7	288
Thallium				0.49	100	J	0.31	1.9	71117
Vanadium				33.6		5	0.099	3.8	
Zinc				139		5	0.43	1.5	

# 7471B Mercury in Solid or Semisolid Waste (Manuai Cold Vapor Technique)

Analysis Method: Prep Method:

7471B 7471B

Analysis Batch: Prep Batch:

200-41074 200-41036 Instrument ID: Lab File ID:

MEPCV3 II 062812CC.PRN

Dilution: Analysis Date: 1.0

06/28/2012 1123 06/26/2012 1630 Initial Weight/Volume: Final Weight/Volume:

0.30 g 50 mL

Prep Date: Analyte

Mercury

DryWt Corrected: Y

Result (mg/Kg) 0.50

Qualifier B

MDL 0.0025

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: Prep Method:

6010C 3050B

Analysis Batch:

200-41205

Instrument ID: Lab File ID:

METICP7 070112-01.ttx

Dilution:

1.0

Prep Batch:

200-40836

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		-E	4300	7	15.1	17.8	19
Antimony			5.3	Ū ブ	0.43	5.3	
Arsenic			2.1	5	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	T	0.098	0.89	
Cobalt			3.0	J	0.072	4.4	
Copper			24.7	5	0.20	2.2	
Iron			8280	7	11.5	17.8	
Lead			99.2		0.39	0.89	
Magnesium			1630	7	12.4	444	
Manganese			87.5	44	0.40	1.3	
Nickel			8.1	チ	0.26	3.6	
Potassium			2110	7	13.3	444	
Selenium			3.1	U.J	0.77	3.1	
Silver			0.89	UJ	0.12	0.89	
Sodium		444	381-	JB UB	6.7	444	
Thallium		,,,	0.44	J	0.36	2.2	I, I i
Vanadium			13.7	<b></b>	0.12	4.4	
Zinc			65.1	J	0.50	1.8	

7471B Mercury in Sol	ld or Semisolid Waste (Manua	I Coid Vapor Technique)

Analysis Method: Prep Method:

7471B 7471B Analysis Batch: Prep Batch:

200-41074 200-41036 Instrument ID: Lab File ID:

MEPCV3 II 062812CC.PRN

Dilution: Analysis Date: Prep Date:

1.0

06/28/2012 1130 06/26/2012 1630 Initial Weight/Volume: Final Weight/Volume:

0.31 g 50 mL

Analyte Mercury

DryWt Corrected: Y

Result (mg/Kg) 0.34

Qualifier 8

MDL 0.0028

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

604	20	Metals	(ICD)
9U I	U	Merais	IICEL

Analysis Method: Prep Method:

6010C 3050B

Analysis Batch:

200-41205

Instrument ID:

METICP7

Dilution:

Prep Batch:

Lab File ID:

070112-01.ttx

1.0

200-40836

Initial Weight/Volume:

1.25 g

Analysis Date: Prep Date:

07/01/2012 0203 06/23/2012 0838 Final Weight/Volume:

100 mL

Analyte	DryWt Corrected: \	Y	Result (mg/Kg	<b>J</b> )	Qualifier	MDL	RL	
Aluminum	***************************************		2840		5	21.3	25.1	
Antimony			11.1		丁	0.61	7.5	
Arsenic			35.2		J	0.70	1.3	
Barium			36.2		ナ	0.65	25.1	
Beryllium			0.14		J	0.040	0.63	
Cadmium			0.63		UJ	0.098	0.63	
Calcium			22400			64.0	627	
Chromium			299		1	0.14	1.3	
Cobalt	9		11.5		5	0.10	6.3	
Copper			397		エ	0.28	3.1	
Lead			71.6			0.55	1.3	
Magnesium			60.2		J	17.6	627	
Manganese			272		丁	0.56	1.9	
Nickel			96.0		T	0.36	5.0	
Potassium			597		J	18.8	627	
Selenium			4.4		Uブ	1.1	4.4	
Silver			1.3		Uゴ	0.16	1.3	
Sodium			702		<b>)</b> В	9.4	<del>-627</del> 70	2
Thallium			1.5		J	0.51	3.1	
Vanadium			41.1		7	0.16	6.3	
Zinc			319		5	0.70	2.5	

Analysis Method: Prep Method: Dilution:

6010C 3050B 100

Analysis Batch: Prep Batch:

200-41285 200-40836 Instrument ID: Lab File ID:

METICP7 070212-01.ttx 1.25 g

Analysis Date: Prep Date:

07/02/2012 1606 06/23/2012 0838 Initial Weight/Volume: Final Weight/Volume:

100 mL

Analyte Iron

DryWt Corrected: Y

Result (mg/Kg) 208000

Qualifier

I

MDL RL 1630 2510

#### 7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method: Prep Method:

7471B 7471B Analysis Batch:

200-41074

Instrument ID: Lab File ID:

MEPCV3 II 062812CC.PRN

Dilution:

1.0 06/28/2012 1134 Prep Batch:

200-41036

Initial Weight/Volume:

0.34 g

Analysis Date: Prep Date:

06/26/2012 1630

Final Weight/Volume:

50 mL

Analyte Mercury

DryWt Corrected: Y

Result (mg/Kg) 0.53

Qualifier B

MDL 0.0030

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

601	0C	Metals	(ICP)

Analysis Method:

6010C 3050B

Analysis Batch:

200-41205

Instrument ID:

**METICP7** 

Prep Method: Dilution:

1.0

Prep Batch:

200-40836

Lab File ID: Initial Weight/Volume: 070112-01.ttx

RL

32.1

9.6

1.6

32.1

0.80

0.80

803

1.6

8.0

4.0

32.1

Analysis Date:

07/01/2012 0208

DryWt Corrected: Y

Final Weight/Volume:

MDL

27.3

0.79

0.90

0.83

0.051

0.13

81.9

0.18

0.13

0.35

1.33 g 100 mL

Prep Date:

Analyte

Aluminum

Antimony

Arsenic

Barium

Beryllium

Cadmium

Chromium

Magnesium

Manganese

Potassium

Selenium

Calcium

Cobalt

Copper

Iron

Lead

Nickel

Silver

Sodium

Thallium

Zinc

Vanadium

06/23/2012 0838

Result (mg/Kg) Qualifier 13800 J UJ 9.6 7.8

J 28.1 0.72 J 0.20 1480 25.7

7.9 10.1 44000 10.7 5270 369

20.9 0.71 44 44 A4 22.5 0.72 0.47

24.1 1.4 0.21 12.0 0.66

0.21

0.90

1.6 803 2.4 6.4 803 5.6 1.6 803 4.0

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method: Prep Method:

7471B 7471B

1.0

Analysis Batch: Prep Batch:

0.068

17.9

2960

5.6

1.6

-596

4.0

39.7

61.0

200-41074 200-41036

Instrument ID: Lab File ID:

MEPCV3 II 062812CC.PRN

8.0

3.2

Dilution: Analysis Date:

Prep Date:

06/28/2012 1136 06/26/2012 1630 Initial Weight/Volume: Final Weight/Volume:

0.31 g 50 mL

Analyte Mercury DryWt Corrected: Y

Result (mg/Kg) 0.050

Qualifier JB UB

MDL 0.0045

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: Prep Method:

6010C 3050B

Analysis Batch:

200-41205

Instrument ID:

METICP7 070112-01.ttx

Dilution:

1.0

Prep Batch:

200-40836

Lab File ID: Initial Weight/Volume:

1.21 g

Analysis Date:

07/01/2012 0213

Prep Date:

06/23/2012 0838

Final Weight/Volume:

100 mL

Analyte		DryWt Corrected: Y		Result (mg/Kg)		Qualifier	MDL	RL
Aluminum			5	15200	THE	<i>I</i>	17.0	20.0
Antimony				0.77		J	0.49	6.0
Arsenic	71 187			3.1		5	0.56	1.0
Barium				95.4		5	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		<b>ブ</b>	0.11	1.0
Cobalt				10.0		77	0.081	5.0
Copper				67.9		J	0.22	2.5
Iron				28700		7	13.0	20.0
Lead				21.9			0.44	1.0
Magnesium		HH F		11600		<i>J</i>	14.0	501
Manganese				285		75	0.45	1.5
Nickel				41.7		5	0.29	4.0
Selenium				3.5		UJ	0.87	3.5
Silver				1.0		ロブ	0.13	1.0
Sodium		5	01	110		JR UB	7.5	501
Thallium		10 m		1.9		J	0.41	2.5
Vanadium				75.3		1	0.13	5.0
Zinc				115		J	0.56	2.0

Analysis Method: Prep Method: Dilution:

Analysis Date:

6010C 3050B 5.0

07/02/2012 1611

06/23/2012 0838

Analysis Batch: Prep Batch:

200-41285 200-40836

Instrument ID: Lab File ID:

METICP7 070212-01.ttx 1.21 g

Initial Weight/Volume: Final Weight/Volume:

75.1

100 mL

Prep Date: Analyte

Potassium

DryWt Corrected: Y

Result (mg/Kg) 14100

Qualifier I

MDL

RL

2500

#### 7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method: Prep Method:

7471B 7471B 1.0

Analysis Batch: Prep Batch:

200-41074 200-41036 Instrument ID: Lab File ID:

MEPCV3 II 062812CC.PRN

Initial Weight/Volume: Final Weight/Volume:

0.30 g 50 mL

Analysis Date: 06/28/2012 1139 06/26/2012 1630 Prep Date:

Analyte

DryWt Corrected: Y

Result (mg/Kg)

Qualifier

MDL

RL

Mercury

Dilution:

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

3050B

Analysis Batch:

200-41205

Instrument ID: Lab File ID:

**METICP7** 070112-01.ttx

Prep Method: Dilution:

1.0

Prep Batch: 200-40836

Initial Weight/Volume:

1.20 g

Analysis Date:

07/01/2012 0218

Prep Date:

06/23/2012 0838

Final Weight/Volume:

100 mL

Analyte		DryWt Correcte	d: Y	Result (mg/	Kg)	Qualifier	MDL	RL
Aluminum	Title		The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	18000	District	7	24.4	28.7
Antimony				8.6		Ū.J	0.70	8.6
Arsenic				10.5		5	0.80	1.4
Barium				63.8		7	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		7	0.16	1.4
Cobalt				10.9		77	0.12	7.2
Copper				32.5		J	0.32	3.6
Iron				42500		ナ	18.7	28.7
Lead				103			0.63	1.4
Magnesium				6820		1	20.1	717
Manganese				945		777	0.65	2.2
Nickel				25.1		ブ	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			*111	0.64		J	0.59	3.6
Vanadium			T	47.3		7	0.19	7.2
Zinc				97.4		5	0.80	2.9

# 7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method: Prep Method:

7471B 7471B

2.0

Analysis Batch: Prep Batch:

200-41074 200-41036

Instrument ID: Lab File ID:

MEPCV3 II 062812CC.PRN

Dilution: Analysis Date: Prep Date:

06/28/2012 1201 06/26/2012 1630 Initial Weight/Volume: Final Weight/Volume:

0.32 g 50 mL

Analyte Mercury DryWt Corrected: Y

Result (mg/Kg) 3.2

Qualifier B

MDL 0.0071

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: Prep Method:

6010C 3050B

Analysis Batch:

200-41205

Instrument ID:

METICP7

Dilution:

Prep Batch:

200-40836

Lab File ID: Initial Weight/Volume: 070112-01.ttx

Analysis Date:

1.0

07/01/2012 0223

Final Weight/Volume:

1.44 g 100 mL

Prep Date:

06/23/2012 0838

Analyte		DryWt Corrected: Y	Result (mg/Kg)	4 5	Qualifier	MDL	RL	
Aluminum	Administratives and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second	######################################	4490	······································	<i>J</i>	15.0	17.7	retoriantos
Antimony			0.60		J	0.43	5.3	
Arsenic			26.5		5	0.49	0.88	
Barium			71.5		I	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		工	0.097	0.88	
Cobalt			5.6		<b>ゴ</b>	0.072	4.4	
Copper			43.0		44	0.19	2.2	
Iron			19300		ゴ	11.5	17.7	
Lead			59.0			0.39	0.88	
Magnesium			2030		J	12.4	442	
Manganese			607		7	0.40	1.3	
Nickel	1.1		25.3		ナ	0.26	3.5	
Potassium			715		ナ	13.3	442	
Selenium			0.83		J	0.77	3.1	
Silver			0.88		UJ	0.11	0.88	
Sodium		100	442- <del>126</del>		AB UB	6.6	442	
Thallium			2.2	9	U	0.36	2.2	
Vanadium			59.0		5	0.11	4.4	

#### 7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method: Prep Method:

7471B 7471B Analysis Batch: Prep Batch:

118

200-41074 200-41036 Instrument ID: Lab File ID:

MEPCV3 II 062812CC.PRN

1.8

Dilution: Analysis Date:

Zinc

1.0

06/28/2012 1144 06/26/2012 1630 Initial Weight/Volume: Final Weight/Volume:

0.49

0.30 g 50 mL

Prep Date: Analyte

Mercury

DryWt Corrected: Y

Result (mg/Kg) 0.60

Qualifier B

3

MDL. 0.0028

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 3050B

Analysis Batch:

200-41473

Instrument ID:

METICP7

Prep Method: Dilution:

1.0

Prep Batch:

200-40979

Lab File ID:

070712-01.ttx

Initial Weight/Volume:

1.48 g

Analysis Date:

07/06/2012 2114

Prep Date:

06/26/2012 1708

Final Weight/Volume:

100 mL

Analyte		DryWt Corrected: Y	Result (mg/Kg)		Qualifier	MDL	RL	
Aluminum	- 70		1390	100		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	
ron			42000			9.4	14.4	
_ead			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	
otassium			2120			10.8	361	
Selenium			2.5		リブ	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	
/anadium			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 7471B

Analysis Batch:

200-41238

Instrument ID: Lab File ID:

MEPCV3 II 070212AA.PRN

Prep Method: Dilution:

1.0

Prep Batch:

200-41224

Initial Weight/Volume: Final Weight/Volume:

0.32 g 50 mL

Analysis Date: Prep Date:

07/02/2012 1250 06/28/2012 1600

Result (mg/Kg)

Qualifier

Analyte Mercury DryWt Corrected: Y

0.0028

MDL 0.0022

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

	Metals	

Analysis Method: Prep Method:

6010C 3050B

Analysis Batch:

200-41473

Instrument ID: Lab File ID:

METICP7

Dilution:

1.0

Prep Batch:

200-40979

Initial Weight/Volume:

070712-01.ttx 1.41 g

Analysis Date: Prep Date:

07/06/2012 2130 06/26/2012 1708 Final Weight/Volume:

100 mL

Analyte		DryWt Corrected: Y	Result (mg/K	(g)	Qualifier	MDL	RL
Aluminum	P		16700	looder Kunnon anningananuklaanakeenneen		15.0	17.6
Antimony			0.93		J	0.43	5.3
Arsenic			2.7	4		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		UJ	0.77	3.1
Silver			0.88		ບ້	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: Prep Method: Dilution: Analysis Date:

6010C 3050B 1.0

07/11/2012 1006

06/26/2012 1708

Analysis Batch: Prep Batch:

200-41689 200-40979 Instrument ID: Lab File ID: Initial Weight/Volume: METICP7 071112-01.ttx

1.41 g Final Weight/Volume: 100 mL

Prep Date: Analyte

Thallium

DryWt Corrected: Y

Result (mg/Kg) 2.2

Qualifier U

MDL 0.36

RL 2.2

# 7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method: Prep Method:

7471B 7471B Analysis Batch: Prep Batch:

200-41238 200-41224 Instrument ID: Lab File ID:

MEPCV3 II 070212AA.PRN

Dilution: Analysis Date: 1.0 07/02/2012 1253 Initial Weight/Volume: Final Weight/Volume: 0.30 g 50 mL

Prep Date:

06/28/2012 1600

DryWt Corrected: Y

Result (mg/Kg)

Qualifier

MDL

Analyte Mercury

0.20

0.0027

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1

Sdg Number: 11371

Cilent 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

6010C Metais (ICP)

Analysis Method: Prep Method:

6010C 3050B Analysis Batch:

% Moisture:

200-41473

42.1

Instrument ID:

**METICP7** 

Dilution:

1.0

Prep Batch:

200-40979

Lab File ID: Initial Weight/Volume: 070712-01.ttx

Analysis Date:

07/06/2012 2135

Final Weight/Volume:

1.24 g 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	25		0.61	1.4	
Magnesium		6240			19.5	697	
Manganese	- X	484			0.63	2.1	
Nickel		23.4			0.40	5.6	
Potassium		3390			20.9	697	
Selenium		4.9		U T	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	

7474R Morcust in	Solid or Samisalid	Waste (Manual Cold Vapo	Toobniauo
141 ID MICICUIA III	Julia di Jelliisulia	Trasic IIIIanuai Colu Vadu	r reconnumer

Analysis Method: Prep Method:

7471B 7471B

Analysis Batch: Prep Batch:

200-41238

Instrument ID: Lab File ID:

MEPCV3 II 070212AA.PRN

Dilution: Analysis Date: 1.0

07/02/2012 1255

Prep Date:

06/28/2012 1600

200-41224

Initial Weight/Volume: Final Weight/Volume:

0.31 g 50 mL

Analyte Mercury DryWt Corrected: Y

Result (mg/Kg) 1.4

Qualifier

MDL 0.0037

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 Metais (	ICP)
----------------	------

Analysis Method: Prep Method:

6010C 3050B

Analysis Batch:

200-41474

Instrument ID: Lab File ID:

**METICP7** 070712-02.ttx

Dilution:

1.0

Prep Batch:

200-41175

Initial Weight/Volume:

1.28 g

Analysis Date: Prep Date:

07/07/2012 0147 06/29/2012 1430 Final Weight/Volume:

100 mL

Analyte		DryWt Corrected: Y	Result (r	mg/Kg)	Qualifier	MDL	RL	
Aluminum	T. E.		271	12011111		21.5	25.3	1 94 Tall
Antimony			17.6			0.62	7.6	
Arsenic			36.9			0.71	1.3	
Barium			11.5	9 1717	J	0.66	25.3	
Beryllium			0.63		U	0.041	0.63	
Cadmium			2.8			0.099	0.63	
Calcium			548	2.00	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		υJ	0.52	3.2	
Vanadium			90.0			0.16	6.3	
Zinc			99.5			0.71	2.5	

## 7471B Mercury in Solid or Semisoild Waste (Manual Cold Vapor Technique)

Analysis Method: Prep Method:

7471B 7471B

1.0

Analysis Batch: Prep Batch:

200-41330 200-41294 Instrument ID: Lab File ID:

MEPCV3 II 070312FF.PRN

Analysis Date: Prep Date:

Dilution:

07/03/2012 1531 07/03/2012 1000 Initial Weight/Volume: Final Weight/Volume:

0.31 g 50 mL

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r	<b>7</b> 1	ıa	ıy	fG	
M	win	-	America.	-	-
A	Λ,	25	~	101	

DryWt Corrected: Y

Result (mg/Kg) 0.36

Qualifier 1

MDL 0.0035

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:

Date Sampled: 06/21/2012 1030

Date Received: 06/22/2012 1045

6010C Metals (ICP)

Analysis Method:

6010C

Analysis Batch:

200-41473

47.9

Instrument ID:

**METICP7** 

Prep Method: Dilution:

3050B 1.0

Prep Batch:

200-40979

Lab File ID: Initial Weight/Volume: 070712-01.ttx

Analysis Date:

07/06/2012 2140

Final Weight/Volume:

1.45 g 100 mL

Prep Date:

06/26/2012 1708

Analyte	DryWt Corrected: Y	Result (mg/K	(g)	Qualifier	MDL	RL
Aluminum	Els	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		UJ	1.2	4.6
Silver		0.39		J	0.17	1.3
Sodium		203		J	9.9	662
Thallium	71.0	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: Prep Method:

7471B 7471B Analysis Batch:

200-41238

Instrument ID: Lab File ID:

MEPCV3 II 070212AA.PRN

Dilution:

1.0

Prep Batch:

200-41224

Initial Weight/Volume: Final Weight/Volume:

0.32 g 50 mL

Analysis Date: Prep Date:

07/02/2012 1257 06/28/2012 1600

Result (mg/Kg)

Qualifier

MDL 0.0040 RL 0.059

Analyte Mercury DryWt Corrected: Y

0.52

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1

Sdg Number: 11371

Cilent 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 Metais (ICP)

Analysis Method: Prep Method:

6010C 3050B

Analysis Batch:

200-41473

Instrument ID: Lab File ID:

METICP7

Dilution:

1.0

Prep Batch:

200-40979

Initial Weight/Volume:

070712-01.ttx

Analysis Date:

07/06/2012 2145

1.36 g

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	*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	. 8
Selenium		4.5	U	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	

7474D Moroupe	n Calid on Caminalid	Wests (Menual C	ald Manage Tacked
14/10 Mercury I	n sona or semisona	i waste (Manuai C	oid Vapor Technique)

Analysis Method: Prep Method:

7471B 7471B Analysis Batch: Prep Batch:

200-41238 200-41224 Instrument ID: Lab File ID:

MEPCV3 II 070212AA.PRN

Dilution: Analysis Date: Prep Date:

1.0

07/02/2012 1300 06/28/2012 1600

Initial Weight/Volume: Final Weight/Volume:

0.33 g 50 mL

Analyte Mercury DryWt Corrected: Y

Result (mg/Kg) 2.4

Qualifier I

MDL 0.0035

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

Analyte	Result	Qual Units MD	L RL	Dil	Method
рН	7.32	NF J SU		1.0	9045C
	Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1603			DryWt Corrected: N
Corrosivity	7.32	AF J SU		1.0	9045C
	Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1603			DryWt Corrected: N
Percent Solids	86.3	% 0.2	5 0.25	1.0	Moisture
	Analysis Batch: 200-40570	Analysis Date: 06/19/2012 1545			DryWt Corrected: N

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

Analyte	Result	Qual Units MDL	RL	Dil	Method
рН	7.65	HF J SU		1.0	9045C
	Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1604			DryWt Corrected: N
Согтовічіту	7.65	HE 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

Job Number: 200-11371-1

Sdg Number: 11371

#### **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

Analyte		Result	Qual	Units	MDL		RL		Dil	Method 7 : 14
Ammonia (as N)-AS	TM Leach	3.5		mg/L	0.013		0.10		1.0	4500 NH3 H
	Analysis Batch	1: 460-120125	Analysis Date	e: 07/17/20	12 1151			21103		DryWt Corrected: N
	Prep Batch: 46	60-120071	Prep Date: 07	7/17/2012 (	0630	711				
Sulfide		<del>-10.4 -</del>	Ruh	mg/Kg	3.9		10.4	- 2	1.0	9034
a [ 91	Analysis Batch	: 460-121720	Analysis Date	e: 07/28/20	12 1800					DryWt Corrected: Y
F	Prep Batch: 46	60-121719	Prep Date: 07	7/28/2012	1115		1 1 7			
рH		5.85	HE 7	SU					1.0	9045C
	Analysis Batch	n: 460-118709	Analysis Date	e: 07/05/20	12 1550					DryWt Corrected: N
Corrosivity		5.85	AF.J	SU					1.0	9045C
	Analysis Batch	n: 460-118709	Analysis Date	e: 07/05/20	12 1550					DryWt Corrected: N
Chloride-Soluble		152		mg/Kg	23.6		118		5.0	9056
	Analysis Batch	: 680-242043	Analysis Date	e: 06/30/20	12 0305					DryWt Corrected: Y
Nitrate as N-Soluble	<b>9</b> 11	5.9	U	mg/Kg	1.8		5.9		5.0	9056
	Analysis Batch	: 680-241960	Analysis Date	e: 06/28/20	12 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	e: 06/28/20	12 2035					DryWt Corrected: Y
Sulfate-Soluble		1830		mg/Kg	23.6		118		5.0	9056
	Analysis Batch	: 680-242043	Analysis Date	e: 06/30/20	12 0305					DryWt Corrected: Y
Fluoride-Soluble		6.1	J	mg/Kg	4.7		23.6		5.0	9056
	Analysis Batch	: 680-242043	Analysis Date	e: 06/30/20	12 0305					DryWt Corrected: Y
Percent Solids		83.6		%	0.25		0.25		1.0	Moisture
	Analysis Batch	: 200-40632	Analysis Date	e: 06/20/20	12 1333					DryWt Corrected: N
Bicarbonate Alkalini CaCO3-Soluble	ty as	23.9	U	mg/Kg	23.9		23.9		1.0	SM 2320B
	Analysis Batch	: 460-118089	Analysis Date	e: 06/29/20	12 1646		46			DryWt Corrected: Y
Carbonate Alkalinity CaCO3-Soluble	as	23.9	U	mg/Kg	23.9		23.9		1.0	SM 2320B
	Analysis Batch	: 460-118089	Analysis Date	e: 06/29/20	12 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	e: 06/29/20	12 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	e: 07/11/20	12 1530				7	DryWt Corrected: Y
	Prep Batch: 46	0-119552	Prep Date: 07	7/11/2012 1	1138					
Phosphorus as P		218		mg/Kg	7.2		18.0		10	SM 4500 PE
	Analysis Batch	: 460-119560	Analysis Date	e: 07/11/20	12 1530					DryWt Corrected: Y
	Prep Batch: 46	60-119552	Prep Date: 07	7/11/2012 1	1138					

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

Analyte		Result	Qual	Units	MDL	RL .	Dil	Method
Ammonia (as N)-A		0.79		mg/L	0.013	0.10	1.0	4500 NH3 H
	Analysis Batch		Analysis Date:	07/17/20	12 1131	et for her man		DryWt Corrected: N
	Prep Batch: 46	0-120071	Prep Date: 07/	17/2012 0	630			(145) 11
Sulfide		-9.9	Rum	mg/Kg	-3.7	-9.9	1.0	9034
the Links	Analysis Batch	: 460-121720	Analysis Date:	07/28/20	12 1800			DryWt Corrected: Y
	Prep Batch: 46	0-121719	Prep Date: 07/	28/2012 1	115			
pН		6.20	HEJ	∩su			1.0	9045C
	Analysis Batch	: 460-118709	Analysis Date:	07/05/20	12 1552			DryWt Corrected: N
Corrosivity		6.20	HEI	SU			1.0	9045C
	Analysis Batch	: 460-118709	Analysis Date:	07/05/20	12 1552			DryWt Corrected: N
Chloride-Soluble		43.5	J	mg/Kg	23.0	115	5.0	9056
	Analysis Batch	: 680-242043	Analysis Date:	06/30/201	12 0317			DryWt Corrected: Y
Nitrate as N-Solubl	e	5.7	U	mg/Kg	1.7	5.7	5.0	9056
	Analysis Batch	: 680-241960	Analysis Date:	06/28/201	12 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:	06/28/201	12 2050			DryWt Corrected: Y
Sulfate-Soluble		111	J	mg/Kg	23.0	115	5.0	9056
	Analysis Batch	: 680-242043	Analysis Date:	06/30/20	12 0317			DryWt Corrected: Y
Fluoride-Soluble		23.0	U	mg/Kg	4.6	23.0	5.0	9056
	Analysis Batch	: 680-242043	Analysis Date:	06/30/201	12 0317			DryWt Corrected: Y
Percent Solids		87.8		%	0.25	0.25	1.0	Moisture
	Analysis Batch	: 200-40632	Analysis Date:	06/20/201	12 1333			DryWt Corrected: N
Bicarbonate Alkalin CaCO3-Soluble	ity as	22.8	U	mg/Kg	22.8	22.8	1.0	SM 2320B
	Analysis Batch	: 460-118089	Analysis Date:	06/29/201	12 1641			DryWt Corrected: Y
Carbonate Alkalinit	y as	22.8	U	mg/Kg	22.8	22.8	1.0	SM 2320B
	Analysis Batch	: 460-118089	Analysis Date:	06/29/201	12 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:	06/29/201	2 1641			DryWt Corrected: Y
Phosphorus as PO	4	1170		mg/Kg	13.6	34.2	20	SM 4500 P E
	Analysis Batch	: 460-119560	Analysis Date:	07/11/201	2 1530			DryWt Corrected: Y
	Prep Batch: 46	0-119552	Prep Date: 07/	11/2012 1	138			
Phosphorus as P		380		mg/Kg	13.6	34.2	20	SM 4500 P E
5	Analysis Batch	: 460-119560	Analysis Date:		2 1530			DryWt Corrected: Y
	Prep Batch: 46	0-119552	Prep Date: 07/	11/2012 1 ⁻	138	9		•

Client: ARCADIS U.S. Inc

Job Number: 200-11371-1

Sdg Number: 11371

#### **General Chemistry**

Cilent Sample ID:

SB-14 (6.5-7.5)

Lab Sample ID:

200-11382-3

Client Matrix:

Solid

Date Sampled: 06/16/2012 1045

Result	Qual Units MDL	RL Dil	Method
5.61	NEJ SU	1.0	9045C
Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1553		DryWt Corrected: N
5.61	NET SU	1.0	9045C
Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1553		DryWt Corrected: N
41.4	% 0.25	0.25	Moisture
Analysis Batch: 200-40632	Analysis Date: 06/20/2012 1333		DryWt Corrected: N
	5.61 Analysis Batch: 460-118709 5.61 Analysis Batch: 460-118709 41.4	5.61 Analysis Batch: 460-118709 Analysis Date: 07/05/2012 1553  Analysis Batch: 460-118709 Analysis Date: 07/05/2012 1553  41.4 % 0.25	5.61 NF J SU 1.0  Analysis Batch: 460-118709 Analysis Date: 07/05/2012 1553 5.61 NF J SU 1.0  Analysis Batch: 460-118709 Analysis Date: 07/05/2012 1553 41.4 % 0.25 0.25 1.0

Job Number: 200-11371-1

Sdg Number: 11371

#### **General Chemistry**

Cilent Sample ID:

SB-14 (17-18)

Lab Sample ID:

--- ..... .

Client Matrix:

200-11382-4

Solid

Date Sampled: 06/16/2012 1100

Analyte	Result	Qual Units MDL	RL	Dil	Method
pH	3.65	HE J SU		1.0	9045C
	Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1554			DryWt Corrected: N
Corrosivity	3.65	HE J SU		1.0	9045C
	Aпalysis 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
	Analysis Daton. 200-40032	Analysis Date. 00/20/2012 1333			Dryvvi Corrected:

Job Number: 200-11371-1

Sdg Number: 11371

#### **General Chemistry**

Cilent Sample ID:

SB-20 (8.5-9.5)

Lab Sample ID:

200-11382-5

Client Matrix:

Solid

Date Sampled: 06/16/2012 1230

Analyte		Result	Qual	Units	MDL	RL	Dil	Method
Ammonia (as N)-AS	STM Leach	0.10	ゴ	mg/L	0.013	0.10	1.0	4500 NH3 H
	Analysis Batch	: 460-120125	Analysis Date:	07/17/20	12 1152			DryWt Corrected: N
	Prep Batch: 46	0-120071	Prep Date: 07/		630			
Sulfide		-9.9-	RUH	mg/Kg	-3.7	-9.9	1.0	9034
	Analysis Batch	: 460-121720	Analysis Date:	07/28/20	12 1800			DryWt Corrected: Y
	Prep Batch: 46	0-121719	Prep Date: 07/	28/2012 1	115			
pH		8.21	HEJ	SU			1.0	9045C
	Analysis Batch:	: 460-118709	Analysis Date:	07/05/20	12 1555			DryWt Corrected: N
Corrosivity		8.21	AF.J	SU			1.0	9045C
	Analysis Batch:	: 460-118709	Analysis Date:	07/05/20	12 1555			DryWt Corrected: N
Chloride-Soluble		1130		mg/Kg	22.7	114	5.0	9056
	Analysis Batch	: 680-242043	Analysis Date:	06/30/20	12 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:	06/28/20	12 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:	06/28/20	12 2152			DryWt Corrected: Y
Sulfate-Soluble		970		mg/Kg	22.7	114	5.0	9056
	Analysis Batch:	: 680-242043	Analysis Date:	06/30/20	12 0407			DryWt Corrected: Y
Fluoride-Soluble		22.7	U	mg/Kg	4.5	22.7	5.0	9056
	Analysis Batch:	: 680-242043	Analysis Date:	06/30/20	12 0407			DryWt Corrected: Y
Percent Solids		88.0		%	0.25	0.25	1.0	Moisture
	Analysis Batch:	: 200-40632	Analysis Date:	06/20/20	12 1333			DryWt Corrected: N
Bicarbonate Alkalini CaCO3-Soluble	ity as	24.7		mg/Kg	22.7	22.7	1.0	SM 2320B
	Analysis Batch:	: 460-118089	Analysis Date:	06/29/20	12 1652			DryWt Corrected: Y
Carbonate Alkalinity CaCO3-Soluble	as as	22.7	U	mg/Kg	22.7	22.7	1.0	SM 2320B
	Analysis Batch:	: 460-118089	Analysis Date:	06/29/20	12 1652			DryWt Corrected: Y
Alkalinity-Soluble		24.7		mg/Kg	22.7	22.7	1.0	SM 2320B
	Analysis Batch:	: 460-118089	Analysis Date:	06/29/20	12 1652			DryWt Corrected: Y
Phosphorus as PO4	4	503		mg/Kg	6.8	17.0	10	SM 4500 P E
	Analysis Batch:	: 460-119560	Analysis Date:	07/11/201	12 1530			DryWt Corrected: Y
	Prep Batch: 46	0-119552	Prep Date: 07/	11/2012 1	138 🍦			
Phosphorus as P		164		mg/Kg	6.8	17.0	10	SM 4500 P E
	Analysis Batch:	: 460-119560	Analysis Date:	07/11/201	12 1530		1	DryWt Corrected: Y
	Prep Batch: 46	0-119552	Prep Date: 07/	11/2012 1	138			

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

Analyte	Result	Qual Units MDL	RL	Dil Method
pH	11.7	HE T SU		1.0 9045C
	Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1556		DryWt Corrected: N
Corrosivity	11.7	HE 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

Analyte	Result	Qual Units MDL	RL Dil	Method
рН	4.87	HE I SU	1.0	9045C
10.75	Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1557		DryWt Corrected: N
Corrosivity	4.87	HE I 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

Analyte	Result	Qual Units MDL	RL Dil	Method
pH	3.75	HE T SU	1.0	9045C
	Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1559		DryWt Corrected: N
Corrosivity	3.75	HE J SU	1.0	9045C
	Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1559		DryWt Corrected: N
Percent Solids	46.8	% av 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	Qua	l Units	MDL	RL	Dil	Method
pH		6.41	HE.	T SU			1.0	9045C
	Analysis Bat	ch: 460-118709	Analysis Dat	e: 07/05/201	2 1600			DryWt Corrected: N
Corrosivity		6.41	HF.	J SU			1.0	9045C
	Analysis Bat	ch: 460-118709	Analysis Dat	e: 07/05/201	2 1600			DryWt Corrected: N
Percent Solids		82.6		%	0.25	0.25	1.0	Moisture
	Analysis Bat	ch: 200-40632	Analysis Dat	e: 06/20/201	2 1333			DryWt Corrected: N

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

Analyte	Result	Qual Units MDL RL	Dil	Method
pH	3.88	HE J SU	1.0	9045C
	Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1601		DryWt Corrected: N
Corrosivity	3.88	HE 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

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

Analyte	Result	Qual Units MDL	RL	Dil	Method
pH	7.62	HE 3 SU		1.0	9045C
	Analysis Batch: 460-118709	Analysis Date: 07/05/2012 1602			DryWt Corrected: N
Corrosivity	7.62	HE 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

Job Number: 200-11371-1

Sdg Number: 11371

#### **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

Analyte	131	Result	Qual	Units	MD	L tomby R	L Dil	Method
Ammonia (as N)-AS		0.57		mg/L	0.0	13 0	.10 1.0	4500 NH3 H
	Analysis Batch:	460-120125	Analysis Date:	07/17/20	12 1159			DryWt Corrected: N
	Prep Batch: 460	0-120071	Prep Date: 07/		0630			
Sulfide		9.3	R-UH-	mg/Kg	-3.4		3- 1.0	9034
	Analysis Batch:	460-121720	Analysis Date:	07/28/20	12 1800			DryWt Corrected: Y
	Prep Batch: 460	0-121719	Prep Date: 07/	28/2012	1115			
pΗ		3.80	HE J	SU			1.0	9045C
	Analysis Batch:	460-118709	Analysis Date:		12 1612			DryWt Corrected: N
Corrosivity		3.80	NF J	SU			1.0	9045C
	Analysis Batch:	460-118709	Analysis Date:	07/05/20	12 1612			DryWt Corrected: N
Chloride-Soluble		107	U	mg/Kg	21.	5 10	07 5.0	
	Analysis Batch:	680-242969	Analysis Date:	07/11/20	12 1147			DryWt Corrected: Y
Nitrate as N-Soluble	9	5.4	U	mg/Kg	1.6	5.	.4 5.0	
	Analysis Batch:	680-243196	Analysis Date:	07/12/20	12 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:	07/12/20	12 0349			DryWt Corrected: Y
Sulfate-Soluble		699		mg/Kg	21.	5 10	07 5.0	
	Analysis Batch:	680-242969	Analysis Date:	07/11/20	12 1147			DryWt Corrected: Y
Fluoride-Soluble		21.5	UJ	mg/Kg	4.3	2	1.5 5.0	9056
	Analysis Batch:	680-242969	Analysis Date:	07/11/20	12 1147			DryWt Corrected: Y
Percent Solids		93.7		%	0.25	5 0.	.25 1.0	Moisture
	Analysis Batch:	200-40724	Analysis Date:	06/21/20	12 1625			DryWt Corrected: N
Bicarbonate Alkalini CaCO3-Soluble	ty as	21.3	U	mg/Kg	21.3	3 2	1.3 1.0	SM 2320B
	Analysis Batch:	460-118518	Analysis Date:	07/03/20	12 1727			DryWt Corrected: Y
Carbonate Alkalinity CaCO3-Soluble	as	21.3	U	mg/Kg	21.3	3 2	1.3 1.0	-
	Analysis Batch:	460-118518	Analysis Date:	07/03/20	12 1727			DryWt Corrected: Y
Alkalinity-Soluble		21.3	U	mg/Kg	21.3	3 2·	1.3 1.0	SM 2320B
	Analysis Batch:	460-118518	Analysis Date:	07/03/20	12 1727			DryWt Corrected: Y
Phosphorus as PO	1	302		mg/Kg	3.2	- 8.	0 5.0	
	Analysis Batch:	460-119560	Analysis Date:	07/11/20	12 1530			DryWt Corrected: Y
	Prep Batch: 460	)-119552	Prep Date: 07/	11/2012 1	1138			
Phosphorus as P	·	98.6		mg/Kg	3.2	8.	.0 5.0	SM 4500 P E
	Analysis Batch:		Analysis Date:	0 0		0.	0.0	DryWt Corrected: Y
	Prep Batch: 460		Prep Date: 07/					

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

Analyte	Result	Qual Units MDL	RL	Dil	Method
pH	5.44	AF SU	•	1.0	9045C
	Analysis Batch: 460-119669	Analysis Date: 07/12/2012 1602			DryWt Corrected: N
Corrosivity	5.44	HEJ SU		1.0	9045C
	Analysis Batch: 460-119669	Analysis Date: 07/12/2012 1602	1-1-1-1-1		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

Job Number: 200-11371-1

Sdg Number: 11371

#### **General Chemistry**

Client Sample ID:

SB-04 (17.2-18.2)

Lab Sample ID:

Client Matrix:

200-11417-2

Solid

Date Sampled: 06/21/2012 0915

Date Received: 06/22/2012 1045

Analida	Decul	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
Analyte	Result	Qual Units MDL	RL	Dil Method
pH	4.27	HE 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

party delication was secure

Job Number: 200-11371-1

Sdg Number: 11371

# **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

Analyte		Result	Qual	Units		MDL	RL	Dil	Method
рН		4.96	₩Ĵ	SU				1.0	9045C
	Analysis Batch:	460-119669	Analysis Date:	07/12/20	12 1605	7 . 1			DryWt Corrected: N
Corrosivity		4.96	NFゴ	SU				1.0	9045C
	Analysis Batch:	460-119669	Analysis Date:	07/12/20	12 1605	11-11-			DryWt Corrected: N
Chloride-Soluble		159	U	mg/Kg		31.8	159	5.0	9056
	Analysis Batch:	680-242409	Analysis Date:	07/04/20	12 0822				DryWt Corrected: Y
Nitrate as N-Solubl	е	8.0	U	mg/Kg		2.4	8.0	5.0	9056
	Analysis Batch:	680-242406	Analysis Date:	07/04/20	12 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:	07/04/20	12 0640				DryWt Corrected: Y
Sulfate-Soluble		8400		mg/Kg		63.6	318	10	9056
	Analysis Batch:	680-242525	Analysis Date:	07/05/20	12 2319				DryWt Corrected: Y
Fluoride-Soluble		63.6	U	mg/Kg		12.7	63.6	10	9056
	Analysis Batch:	680-242525	Analysis Date:	07/05/20	12 2319				DryWt Corrected: Y
Percent Solids		61.6		%		0.25	0.25	1.0	Moisture
	Analysis Batch:	200-41101	Analysis Date:	06/28/20	12 1543				DryWt Corrected: N
Bicarbonate Alkalin CaCO3-Soluble	ity as	32.4	U	mg/Kg		32.4	32.4	1.0	SM 2320B
	Analysis Batch:	460-118518	Analysis Date:	07/03/20	12 1735				DryWt Corrected: Y
Carbonate Alkalinit CaCO3-Soluble	y as	32.4	U	mg/Kg		32.4	32.4	1.0	SM 2320B
	Analysis Batch:	460-118518	Analysis Date:	07/03/20	12 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:	07/03/20	12 1735				DryWt Corrected: Y
Phosphorus as PO	4	354		mg/Kg		9.7	24.3	10	SM 4500 P E
	Analysis Batch:	460-119560	Analysis Date:	07/11/201	12 1530				DryWt Corrected: Y
	Prep Batch: 460	0-119552	Prep Date: 07/	11/2012 1	138				
Phosphorus as P		116		mg/Kg		9.7	24.3	10	SM 4500 P E
	Analysis Batch:	460-119560	Analysis Date:	07/11/201	12 1530				DryWt Corrected: Y
	Prep Batch: 460	0-119552	Prep Date: 07/	11/2012 1	138				

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

Analyte		Result	Qual	Units	MDL	RL	Dil	Method
Chloride-Soluble		171	J	mg/Kg	37.9	189	5.0	9056
	Analysis Batch	n: 680-242043	Analysis Date:	06/30/2012	0444			DryWt Corrected: Y
Nitrate as N-Soluble	9	9.5	U	mg/Kg	2.8	9.5	5.0	9056
E-S II-D I ST	Analysis Batch	ı: 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 Alkalin CaCO3-Soluble	ity as	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 CaCO3-Soluble	/ as	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 PO-	1	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: 46	0-119552	Prep Date: 07/	11/2012 113	8			
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: 46	0-119552	Prep Date: 07/	11/2012 113	8			

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

							2.			. 1 9/1
Analyte		and the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contra	Qual		. MDL	* * * * * * * * * * * * * * * * * * * *	RL		Dil	Method
рН		2.43	HE 7	SU					1.0	9045C
	Analysis Batch:	: 460-119669	Analysis Date		12 1606					DryWt Corrected: N
Corrosivity	1	2.43	HE	SU					1.0	9045C
	Analysis Batch:	: 460-119669	Analysis Date	: 07/12/20	12 1606			- '		DryWt Corrected: N
Chloride-Soluble		178	. U	mg/Kg	35.6		178		5.0	9056
* 1511	Analysis Batch:	: 680-242043	Analysis Date	: 06/30/20	12 0456					DryWt Corrected: Y
Nitrate as N-Solub	le	8.9	U. U	mg/Kg	2.7		8.9		5.0	9056
	Analysis Batch:	: 680-241960	Analysis Date	: 06/28/20	12 2253					DryWt Corrected: Y
Nitrite as N-Soluble	e	8.9	U	mg/Kg	2.7		8.9		5.0	9056
	Analysis Batch:	: 680-241960	Analysis Date	: 06/28/20	12 2253		11 14			DryWt Corrected: Y
Sulfate-Soluble		6470		mg/Kg	35.6		178		5.0	9056
	Analysis Batch:	: 680-242043	Analysis Date	: 06/30/20	12 0456					DryWt Corrected: Y
Fluoride-Soluble		35.6	U	mg/Kg	7.1		35.6		5.0	9056
	Analysis Batch:	: 680-242043	Analysis Date	: 06/30/20	12 0456		4			DryWt Corrected: Y
Percent Solids	·	56.6		%	0.25		0.25		1.0	Moisture
	Analysis Batch:	: 200-40897	Analysis Date	: 06/25/20	12 1331	4				DryWt Corrected: N
Phosphorus as PC	)4	840	•	mg/Kg	10.6		26.5		10	SM 4500 P E
1000	Analysis Batch:	: 460-119560	Analysis Date							DryWt Corrected: Y
	Prep Batch: 46		Prep Date: 07							Marie electric
Phosphorus as P		274		mg/Kg	10.6		26.5		10	SM 4500 P E
	Analysis Batch:		Analysis Date				20.0		.0	DryWt Corrected: Y
1.0	Prep Batch: 46		Prep Date: 07							Diyth Concoled. 1
	r rep baten. 40	0-11000Z	r rep Date. 07	111/2012 1	130					

Job Number: 200-11371-2

Sdg Number: 11371-2

General	Chemistry
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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

								100		
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	Analys	sis Date:	07/02/2012	1517			DryWt Corrected: Y	
	Prep Batch: 460	)-118311	Prep [	Date: 07/	02/2012 10:	30				
Cyanide, Free		1.8			mg/Kg	0.12	0.50	1.0	9016	
	Analysis Batch:	460-118248	Analys	sis Date:	06/28/2012	1200			DryWt Corrected: Y	
	Prep Batch: 460	-118240	Prep [	Date: 06/	28/2012 06	00				

Job Number: 200-11371-2

Sdg Number: 11371-2

**General Chemistry** 

Client Sample ID:

SB-09 (4-5')

Lab Sample ID:

200-11371-3

Client Matrix:

Solid

3

% Moisture: 36.9

Date Sampled: 06/18/2012 1245

			©
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	

Job Number: 200-11371-2

Sdg Number: 11371-2

General	Chemistry
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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

Analyte		Result	Qua	l Units	MDL	RL	Dil	Method
Cyanide, Total		2.0	gincili sintaccio co cigili se constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte constitui de sinte c	mg/Kg	0.065	0.60	1.0	9012A
	Analysis Batcl	h: 460-118081	Analysis Dat	e: 06/29/2012	1519			DryWt Corrected: Y
	Prep Batch: 4	60-118019	Prep Date: 0	6/29/2012 093	0			
Cyanide, Free		0.89	25.13	mg/Kg	0.13	0.52	1.0	9016
	Analysis Batcl	h: 460-118248	Analysis Dat	e: 06/28/2012	1200			DryWt Corrected: Y
	Prep Batch: 4	60-118240	Prep Date: 0	6/28/2012 060	0		•	•

Job Number: 200-11371-2

Sdg Number: 11371-2

General	Chem	istry
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**Client Sample ID:** 

SB-13 (12-13)

Lab Sample ID:

Client Matrix:

200-11382-2

Solid

% Moisture: 12.2 Date Sampled: 06/16/2012 1010

Analyte	Result	Qual Units MDL	RL	Dil	Method
Cyanide, Total	0.71	mg/Kg 0.061	0.57	1.0	9012A
a latter and the	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
	Aпalysis Batch: 460-118248	Analysis Date: 06/28/2012 1200			DryWt Corrected: Y
	Prep Batch: 460-118240	Prep Date: 06/28/2012 0600	The Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Part of the Pa		

Job Number: 200-11371-2

Sdg Number: 11371-2

General Chemistry	7
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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

Analyte	Resu	t Qual Unit	s MDL	RL	Dil Method
Cyanide, Total	2720	<b>ゴ</b> 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: 06/29/201	12 0930		
Cyanide, Free	32.2	mg/	Kg 0.25	1.0	1.0 9016
	Analysis Batch: 460-118248	Analysis Date: 06/28	Analysis Date: 06/28/2012 1200		DryWt Corrected: Y
	Prep Batch: 460-118240	Prep Date: 06/28/2012 0600			

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

-4

% Moisture: 12.6

Date Sampled: 06/16/2012 1100

Analyte	Result	Qual Units	MDL	RL	Dil	Method
Cyanide, Total	4.7 Analysis Batch: 460-118081 Prep Batch: 460-118019	Analysis Date: 06/29/2012 1534	0.062 1	0.57	1.0	9012A DryWt Corrected: Y
Cyanide, Free	0.17 Analysis Batch: 460-118248	Analysis Date: 06/28/2012 1200	0.12 )	0.49	1.0	9016 DryWt Corrected: Y
	Analysis Batch: 460-118248 Prep Batch: 460-118240	Analysis Date: 06/28/2012 1200 Prep Date: 06/28/2012 0600	)			

Job Number: 200-11371-2

Sdg Number: 11371-2

General	Chemistry

Client Sample ID:

SB-20 (8.5-9.5)

Lab Sample ID:

Client Matrix:

200-11382-5

% Moisture:

Date Sampled: 06/16/2012 1230

Client Matrix: Solid			% Moisture: 12.0				Date Receiv	Date Received: 06/20/2012 1010		
Analyte		Result	Qua	l Units	MDL	RL	Dil	Method =		
Cyanide, Total	**	4.8	- , *	mg/Kg	0.061	0.57	1.0	9012A		
	Analysis Bat	tch: 460-118081	Analysis Dat	e: 06/29/20	12 1525			DryWt Corrected: Y		
	Prep Batch:	460-118019	Prep Date: 0	6/29/2012 0	930		To.			
Cyanide, Free		0.24	■ J	mg/Kg	0.12	0.49	1.0	9016		
	Analysis Bat	tch: 460-118248	Analysis Dat	e: 06/28/20 ⁴	12 1200	4, 14,		DryWt Corrected: Y		
	Prep Batch:	460-118240	Prep Date: 0	6/28/2012 0	0600			. •		

Job Number: 200-11371-2

Sdg Number: 11371-2

General	Chemistry
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24.0

Client Sample ID:

SB-21 (6-7)

Lab Sample ID:

200-11382-6

Client Matrix:

Solid

O/ Mainture:

Date Sampled: 06/16/2012 1400

Client Matrix. Solid			% Moisture: 24.9					Date Received: 06/20/2012 1010		
Analyte		Result	Qual	Units		MDL	•	RL	Dil	Method
Cyanide, Total		4.4	A	mg/Kg	- Anger-se-Aberti-Annonesbased	0.072		0.67	1.0	9012A
	Analysis Batch: 460	-118081	Analysis Date:	06/29/20	12 15	26				DryWt Corrected: Y
	Prep Batch: 460-118	3019	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:	06/28/20	12 12	00				DryWt Corrected: Y
	Prep Batch: 460-118	3240	Prep Date: 06/	28/2012 (	0600					•

Job Number: 200-11371-2

Sdg Number: 11371-2

Genera	I Chemistry
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Client Sample ID:

DUP-02-06162012

Lab Sample ID:

200-11382-8

Client Matrix:

Solid

% Moisture:

36.2

Date Sampled: 06/16/2012 0000

Analyte		Result	Qual	Units	MDL	RL.		Dil	Method
Cyanide, Total		602	7	mg/Kg	4.2	39.2	5	50	9012A
	Analysis Batch: 460-118	3081 A	nalysis Date:	06/29/2012	1535				DryWt Corrected: Y
	Prep Batch: 460-118019	) P	rep Date: 06/	29/2012 093	30				
Cyanide, Free		87.9		mg/Kg	0.67	2.7	4	4.0	9016
	Analysis Batch: 460-118	3248 A	nalysis Date:	06/28/2012	1200				DryWt Corrected: Y
	Prep Batch: 460-118240	) P.	rep Date: 06/	28/2012 060	00				•

Job Number: 200-11371-2

Sdg Number: 11371-2

General	Chemistry
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Client Sample ID:

SB-06 (12.2-13.2)

Lab Sample ID:

Client Matrix:

200-11382-10

Solid

% Moisture:

53.2

Date Sampled: 06/19/2012 1230

	332	70 Woldfale. 00.2	Date Neceived. 00/20/2012 10		
Analyte	Resul	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		•	

Job Number: 200-11371-2

Sdg Number: 11371-2

Generai	Chemistry
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Client Sample iD:

SB-07 (10.5-12.5)

Lab Sample ID:

Client Matrix:

200-11382-11

Solid

% Moisture:

17.4

Date Sampled: 06/19/2012 1330

Analyte	Result	Qual Units MDL	RL Di	I 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
2011_101	Analysis Batch: 460-118248	Analysis Date: 06/28/2012 1200		DryWt Corrected: Y
	Prep Batch: 460-118240	Prep Date: 06/28/2012 0600		,

Job Number: 200-11371-2

Sdg Number: 11371-2

**General Chemistry** 

Client Sample ID:

SB-07 (16.4-17.4)

Lab Sample ID:

_____

Client Matrix:

200-11382-12

Solid

% Moisture:

e: 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 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 0.18 0.71 mg/Kg 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

Job Number: 200-11371-2

Sdg Number: 11371-2

General Chemistry	mistry
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Client Sample ID:

SB-10 (4.2-5)

Lab Sample ID: N

Client Matrix:

200-11382-13

Solid

% Moisture:

21.4

Date Sampled: 06/19/2012 1515

Analyte	Result	Qual Units	MDL	RL	Dil	Method
Cyanide, Total	3.2	mg/Kg	0.069	0.64	1.0	9012A
1000	Analysis Batch: 460-118346	Analysis Date: 07/02/2012 1	500	and I have been		DryWt Corrected: Y
	Prep Batch: 460-118311	Prep Date: 07/02/2012 1030	THE ST			170
Cyanide, Free	2.1	mg/Kg	0.14	0.54	1.0	9016
	Analysis Batch: 460-118248	Analysis Date: 06/28/2012 1	200			DryWt Corrected: Y
	Prep Batch: 460-118240	Prep Date: 06/28/2012 0600	A Vy. St.			-

Job Number: 200-11371-2

Sdg Number: 11371-2

General Chei	mistry
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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

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	

Job Number: 200-11371-2

Sdg Number: 11371-2

Client Sample ID:

SB-04 (10.2-11.4)

Lab Sample ID:

Client Matrix:

200-11417-1

Solid

% Moisture:

19.5

Date Sampled: 06/21/2012 0900

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		-11 - 3

Job Number: 200-11371-2

Sdg Number: 11371-2

**General Chemistry** 

42.1

Client Sample ID:

SB-04 (17.2-18.2)

Lab Sample ID:

200-11417-2

Client Matrix:

Solid

% Moisture:

Date Sampled: 06/21/2012 0915

Analyte	in the	Result	Qual	Units	MDL		RL	Dil	Method
Cyanide, Total		0.46	, J	mg/Kg	0.093	ratio for transmissibilities transmiss transmiss transmiss.	0.86	1.0	9012A
	Analysis Batch	: 460-118512	Analysis Date:	07/03/2012	1551				DryWt Corrected: Y
	Prep Batch: 46	0-118476	Prep Date: 07/	03/2012 110	0				
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: 46	60-118240	Prep Date: 06/	28/2012 060	0				

Job Number: 200-11371-2

Sdg Number: 11371-2

General (	Chemistry
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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

Analyte	Result	Qual Units MDL	RL	Dil Method
Cyanide, Total	. 2080	→ mg/Kg 8.8	81.1	100 9012A
Marie V	Analysis Batch: 460-118512	Analysis Date: 07/03/2012 1606		DryWt Corrected: Y
	Prep Batch: 460-118476	Prep Date: 07/03/2012 1100		ar a market in the contract of
Cyanide, Free	35.8	<b>丁 mg/Kg 0.17</b>	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		

Job Number: 200-11371-2

Sdg Number: 11371-2

General	Chemistry
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Client Sample ID:

SB-03 (10.9-11.7)

Lab Sample ID:

Client Matrix:

200-11417-4

Solid

% Moisture:

47.9

Date Sampled: 06/21/2012 1030

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	21.5		mg/Kg	0.10	0.96	1.0	9012A
4 - 10 - 4	Analysis Batch: 460-118512	Analysis Date:	07/03/2012	1608			DryWt Corrected: Y
	Prep Batch: 460-118476	Prep Date: 07/	03/2012 110	0			
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 060	00			

Job Number: 200-11371-2

Sdg Number: 11371-2

		General Chemistry				
Client Sample ID:	DUP-03-06212012					
Lab Sample ID:	200-11417-6				Date Sample	ed: 06/21/2012 0000
Client Matrix:	Solid	% Moisture: 43.4	100	Date Receiv	red: 06/22/2012 1045	
					1 - 4	
Analyte	Resu	lt Qual Units	MDL	RL	Dil	Method
Cyanide, Total	· 149	mg/Kg	0.48	4.4	5.0	9012A
	Analysis Batch: 460-118512	Analysis Date: 07/03/2012 160	03			DryWt Corrected: Y
	Prep Batch: 460-118476	Prep Date: 07/03/2012 1100				, E- , A , .
Cyanide, Free	11.4	J mg/Kg	0.19	0.74	1.0	9016
100	Analysis Batch: 460-118248	Analysis Date: 06/28/2012 120	00			DryWt Corrected: Y
	Prep Batch: 460-118240	Prep Date: 06/28/2012 0600				



# **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	Parent	Analysis					
Sample ID	Lab ID	Matrix	Collection Date	Sample	voc	svoc	РСВ	DRO	MET	MISC
OF-1	200-11392-1	Water	6/20/2012		Х	Х	Х	Х	Х	Х
I-120	200-11392-2	Water	6/20/2012		Χ	Χ	Χ	Χ	Χ	Х
I-111	200-11392-3	Water	6/20/2012		Χ	Χ	Χ	Χ	Χ	Х
I-112	200-11392-4	Water	6/20/2012		Χ	Χ	Χ	Χ	Χ	Х
TB-SW-06202012	200-11392-5	Water	6/20/2012		Х					
DUP-SW-01- 06202012	200-11392-6	Water	6/20/2012	OF-1	Х	Х	Х	Х	Х	Х

# **ANALYTICAL DATA PACKAGE DOCUMENTATION**

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

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

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		Dichlorodifluoromethane	-24.9 % (decrease in sensitivity)
	Continuing %D	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
	RRF < 0.05	Non-detect	R
Initial and Continuing Calibration	KKF < 0.05	Detect	J
	RRF < 0.01 ¹	Non-detect	R
	KKF < 0.01	Detect	J
	RRF > 0.05 or RRF > 0.01 ¹	Non-detect	No Action
	KKF > 0.05 01 KKF > 0.01	Detect	NO ACTION
Initial Calibration	%RSD > 15% or a	Non-detect	UJ
	correlation coefficient < 0.99	Detect	J

Initial/Continuing	Criteria	Sample Result	Qualification
	%D > 20%	Non-detect	No Action
Continuing Calibration	(increase in sensitivity)	Detect	J
	%D > 20%	Non-detect	UJ
	(decrease in sensitivity)	Detect	J

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 central limit (III.)	Non-detect	No Action
> the upper control limit (UL)	Detect	J
the lower central limit (LL) but a 100/	Non-detect	UJ
< the lower control limit (LL) but > 10%	Detect	J
< 10%	Non-detect	R
< 10%	Detect	J
Parent sample concentration > 4x the	Detect	No Action
MS/MSD spiking solution concentration.	Non-detect	INO ACTION

# 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 /	Carbon disulfide	33000	30000	9.5 %
DUP-SW-01-06202012	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		orted		mance ptable	Not	
	No	Yes	No	Yes	Required	
GAS CHROMATOGRAPHY/MASS SPECTROMETR	Y (GC/MS	)				
Tier II Validation						
Holding times		Х		Х		
Reporting limits (units)		Х		Х		
Blanks						
A. Method blanks		Х		Х		
B. Equipment/Field blanks					Х	
C. Trip blanks		Х	Х			
Laboratory Control Sample (LCS) Accuracy (%R)		Х		Х		
Laboratory Control Sample Duplicate (LCSD) %R					Х	
LCS/LCSD Precision (RPD)					Х	
Matrix Spike (MS) %R		Х	Х			
Matrix Spike Duplicate (MSD) %R		Х	Х			
MS/MSD Precision RPD		Х		Х		
Field/Laboratory Duplicate Sample RPD		Х		Х		
Surrogate Spike %R		Х		Х		
Dilution Factor		Х		Х		
Moisture Content						
Tier III Validation						
System performance and column resolution		Х		Х		
Initial calibration %RSDs		Х		Х		
Continuing calibration RRFs		Х		Х		
Continuing calibration %Ds		Х	Х			
Instrument tune and performance check		Х		Х		
Ion abundance criteria for each instrument used		Х		Х		
Internal standard		Х		Х		
Compound identification and quantitation					1	
A. Reconstructed ion chromatograms		Х		Х		
B. Quantitation Reports		Х		Х		
C. RT of sample compounds within the established RT windows		Х		Х		
D. Quantitation transcriptions/calculations		Х		Х		
E. Reporting limits adjusted for sample dilutions		Х		Х		

%R

Percent recovery
Relative percent difference RPD %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
	Water	7 days from collection to extraction and 40 days from extraction to analysis	Cool to 4±2 °C
SW-846 8270C	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	
	KKF < 0.05	Detect	J	
	RRF < 0.01 ¹	Non-detect	R	
	KKF < 0.01	Detect	J	
	RRF > 0.05 or RRF > 0.01 ¹	Non-detect	No Action	
	KKF > 0.00 01 KKF > 0.01	Detect		
Initial Calibration	%RSD > 15% or a	Non-detect	UJ	
	correlation coefficient < 0.99	Detect	J	
Continuing Calibration	%D > 20%	Non-detect	No Action	
	(increase in sensitivity)	Detect	J	
	%D > 20%	Non-detect	UJ	
	(decrease in sensitivity)	Detect	J	

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
	2-Fluorophenol 2-Fluorobiphenyl	> UL
OF-1	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 central limit (III)	Non-detect	No Action
> the upper control limit (UL)	Detect	J
the lower central limit (LL) but a 100/	Non-detect	UJ
< the lower control limit (LL) but > 10%	Detect	J
. 400/	Non-detect	R
< 10%	Detect	J
Surrogates diluted below	Non-detect	J ¹
the calibration range (D)	Detect	J

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 central limit (III.)	Non-detect	No Action
> the upper control limit (UL)	Detect	J
the lower central limit (LL) but > 400/	Non-detect	UJ
< the lower control limit (LL) but > 10%	Detect	J
Compounds diluted below	Non-detect	UJ
the calibration range (D)	Detect	J
< 10%	Non-detect	R
< 10%	Detect	J
Parent sample concentration > 4x the	Detect	No Action
MS/MSD spiking solution concentration.	Non-detect	INO ACTION

# 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 central limit (III.)	Non-detect	No Action
> the upper control limit (UL)	Detect	J
the lower central limit (LL) but > 100/	Non-detect	UJ
< the lower control limit (LL) but > 10%	Detect	J
< 10%	Non-detect	R
< 1070	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
	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
OF-1 / DUP-SW-01-06202012	Dibenzofuran	22 J	16 J	AC
DOI OW 01 00202012	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

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.

J Estimated (result is < RL)

U Not detected

# **DATA VALIDATION CHECKLIST FOR SVOCs**

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

%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	Soil	14 days from collection to extraction and 40 days from extraction to analysis	Cool to 4±2 °C
SW-846 8015B	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
> UL	Detect	J
< LL but > 10%	Non-detect	UJ
< LL Dut > 10%	Detect	J
< 10%	Non-detect	R
< 1070	Detect	J
D – Surrogates diluted below	Non-detect	.11
the calibration curve	Detect	J

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 central limit (III.)	Non-detect	No Action
> the upper control limit (UL)	Detect	J
the lower central limit (LL) but > 100/	Non-detect	UJ
< the lower control limit (LL) but > 10%	Detect	J
< 10%	Non-detect	R
< 10%	Detect	J
Parent sample concentration > 4x the	Detect	No Action
MS/MSD spiking solution concentration.	Non-detect	INO ACTION

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

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

Percent Difference %D

# 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
3VV-040 6U6ZA	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 central limit (III.)	Non-detect	No Action
> the upper control limit (UL)	Detect	J
the lower central limit (LL) but > 100/	Non-detect	UJ
< the lower control limit (LL) but > 10%	Detect	J
< 10%	Non-detect	R
< 10%	Detect	J
One surrogate exhibiting recovery	Non-detect	No Action
outside the control limits but > 10%	Detect	NO ACTION
Surrogates diluted below	Non-detect	.]1
the calibration curve	Detect	J

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
> the upper control limit (OL)	Detect	J
the lower central limit (LL) but > 100/	Non-detect	UJ
< the lower control limit (LL) but > 10%	Detect	J
< 10%	Non-detect	R
< 10%	Detect	J
Parent sample concentration > 4x the	Detect	No Action
MS/MSD spiking solution concentration (D).	Non-detect	INO ACTION

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
> UL	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	υ	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**

		Reported		Performance Acceptable	
		Yes	No	Yes	Required
GAS CHROMATOGRAPHY (GC/ECD)					
Tier II Validation					
Holding times		Х		Х	
Reporting limits (units)		Х		Х	
Blanks					
A. Method blanks		Х		Х	
B. Equipment/Field blanks					Х
Laboratory Control Sample (LCS) Accuracy %R		Х		Х	
Laboratory Control Sample Duplicate (LCSD) %R					Х
LCS/LCSD Precision (RPD)					Х
Matrix Spike (MS) %R		Х	Х		
Matrix Spike Duplicate (MSD) %R		Х	Х		
MS/MSD RPD		Х	Х		
Field/Laboratory Duplicate Sample RPD		Х		Х	
Surrogate Spike %R		Х	Х		
Column (%D) (If dual column is performed-not confirmation purposes only)		Х		Х	
Dilution Factor		Х		Х	
Moisture Content					Х
Tier III Validation					
Initial calibration %RSDs		Х		Х	
Continuing calibration %Ds		Х	Х		
System performance and column resolution		Х		Х	
Compound identification and quantitation		•		1	•
A. Quantitation Reports		Х		Х	
B. RT of sample compounds within the established RT windows		Х		Х	
C. Identification/Confirmation		Х		Х	
D. Quantitation transcriptions/calculations		Х		Х	
E. Reporting limits adjusted for sample dilutions		Х		Х	

%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 %
1-120	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 paraget recovery 200/ to 740/	Non-detect	UJ
MS percent recovery 30% to 74%	Detect	J
MS percent recovery < 30%	Non-detect	R
M3 percent recovery < 30%	Detect	J

Control limit	Sample Result	Qualification	
MS percent recovery > 1259/	Non-detect	No Action	
MS percent recovery > 125%	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
	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
OF-1 / DUP-SW-01-06202012	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
	Magnesium	28700	28500	0.7 %
	Manganese	5070	5130	1.2 %
	Nickel	119	120	0.8 %
OF-1 / DUP-SW-01-06202012	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	Rep	Reported		mance ptable	Not Required
		Yes	No	Yes	
Inductively Coupled Plasma – Atomic Emission Spect Atomic Absorption – Manual Cold Vapor (CV)	rometry (I	CP)			
Tier II Validation					
Holding Times		Х		Х	
Reporting limits (units)		Х		Х	
Blanks					
A. Instrument Blanks		Х	Х		
B. Method Blanks		Х	Х		
C. Equipment/Field Blanks					Х
Laboratory Control Sample (LCS)		Х		Х	
Matrix Spike (MS) Accuracy (%R)		Х	Х		
Matrix Spike Duplicate (MSD) %R					Х
MS/MSD Precision (RPD)					Х
Field/Laboratory Duplicate Sample RPD		Х		Х	
ICP Serial Dilution		Х		Х	
Dilution Factor		Х		Х	
Moisture Content					Х
Tier III Validation					
Initial Calibration Verification		Х		Х	
Continuing Calibration Verification		Х		Х	
RL Standard		Х		Х	
ICP Interference Check		Х		Х	
Quantitation transcriptions/calculations		Х		Х	
Reporting limits adjusted to reflect sample dilutions		Х		Х	

[%]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	Water	28 days from collection to analysis	Cool to 4±2 °C; pH of < 2
by SM 4500-NH3-H	Soil	28 days from collection to analysis	Cool to 4±2 °C;
Cyanide by SW-846 9012,	Water	14 days from collection to analysis	Cool to 4±2 °C; pH of > 12.
9016	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	Water	28 days from collection to analysis	Cool to 4±2 °C; pH of < 2
by SM 4500-P-E	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	Water	28 days from collection to analysis	Cool to 4±2 °C; pH of < 2
by SW-846 9056 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	рН	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.

	Qualification		
Criteria	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 %
1-120	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 200/ to 740/	Non-detect	UJ
MS/MSD percent recovery 30% to 74%	Detect	J
MS/MSD percent recovery < 30%	Non-detect	R
W3/W3D percent recovery < 30%	Detect	J
MS/MSD percent recovery > 1259/	Non-detect	No Action
MS/MSD percent recovery > 125%	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
	Chloride	69.9	70.6	1.0 %
	Sulfate	7540	7510	0.4 %
	Ammonia (as N)	93.3	82.6	12.2 %
OF-1 / DUP-SW-01-06202012	рН	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,	Rep	orted		mance ptable	Not
and 4500-P-E	No	Yes	No	Yes	Required
Miscellaneous Instrumentation					
Tier II Validation					
Holding times		Х	Х		
Reporting limits (units)		Х		Х	
Blanks					
A. Method blanks		Х		Х	
B. Equipment blanks					Х
Laboratory Control Sample (LCS) Accuracy (%R)		Х		Х	
Laboratory Control Sample Duplicate (LCSD) %R		Х		Х	
LCS/LCSD Precision (RPD)		Х		Х	
Matrix Spike (MS) %R		Х	Х		
Matrix Spike Duplicate (MSD) %R		Х	Х		
MS/MSD RPD		Х		Х	
Field/Laboratory Duplicate Sample RPD		Х		Х	
Dilution Factor		Х		Х	
Moisture Content					Х
Tier III Validation					
Initial calibration %RSD or correlation coefficient		Х		Х	
Continuing calibration %R		Х		Х	
Raw Data		Х		Х	
Quantitation transcriptions/calculations		Х		Х	
Reporting limits adjusted for sample dilutions		Х		Х	

[%]RSD – relative standard deviation

[%]R – percent recovery
RPD – relative percent difference
%D – difference

# **SAMPLE COMPLIANCE REPORT**

Sample Delivery							Comp	liancy ¹			
Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	VOC	svoc	РСВ	DRO	MET	MISC	Noncompliance
	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
200-11392	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	
validation renormed by.	Delliis Dyke	

Signature:

Date: _August 31, 2012

Peer Review: Dennis Capria

Date: September 11, 2012

# CHAIN OF CUSTODY / CORRECTED SAMPLE ANALYSIS DATA SHEETS

*<u><b>FestAmerica</u>* 

THE LEADER IN ENVIRONMENTAL TESTING

TA FIN: Jim Mudison

777 New Durham Road Edison, New Jersey 08817 Phone: (732) 549-3500 Fax: (732) 549-3679

CHAIN OF CUSTODY / ANALYSIS REQUEST

LAB USE ONLY Project No: Sample Numbers Job No: Other: ER - Kuskell Z ≥ State (Location of site): NJ: ANALYSIS REQUESTED IENTER X: BELOW TO INDICATE REQUEST) Site/Project Identification P.O.#

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**TestAmerica** 

THE LEADER IN ENVIRONMENTAL TESTING

TA PMO JIM MEDISON

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

CHAIN OF CUSTODY / ANALYSIS REQUEST

THE LEADER IN ENVIRONMENTAL TESTING	<b>}</b>	, ,	)			j	<u>{</u> }	׆ ֡֞֞֝	7				) +0 / Oct	
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aboration, Cartifications: Now Jorgan (19000)	*** / 10000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 1000 / 10			

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)

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HE LEADER IN ENVIRONMENTAL TESTING

TA M. Jim Madison

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

Page of

CHAIN OF CUSTODY / ANALYSIS REQUEST

LAB USE ONLY Project No: Sample Numbers Job No: Fluer Water Metals Filtered (Yes/No)? Other: 3 Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s Company Company Company Company M ANALYSIS REQUESTED IENTER X: RECOW TO INDICATE REQUEST! State (Location of site): NJ: Site/Project Identification Regulatory Program: 10 1 Salfall Received by Received by Received by Received by B30-1337 2,3902. 080804 をプラクサン  $\mathcal{V}$ 7 2 3 S. E. 06911211600 Date / Time Date / Time Date / Time Water: Date / Time No. of. Cont. Samplers Name (Printed Soil: Nitite M Rush Chrages Authorized For: Analysis Turnaround Time Standard 🔀 Authur Matrix Preservation Used: 1 = ICE, 2 = HCI,  $3 = H_2SO_4$ ,  $4 = HNO_3$ , 5 = NaOHOther 2 Week 1 Week Time 10 4100 P. O. # 6/20/12 900 0021 11/02/9 6/20112/1500 COHI 21/02/9 J. 20112 ARCHOLY Date M< Will. 7 = Other Sompany Company Sompany イクス State 21020250-10-MIS-JAS Special Instructions Antons Sample Identification Think Mercille th Fax ARCADIN イスであって「かかり 6 = Other Name (for report and invoice 1426-289-212 (B) Relinquished by Relinquished by Relinquished by Relinquished by クローサ 011 三二 -40 Company Address Ċijţ

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

TAL - 0016 (0408)

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

2260R	Volatila	Organic	Compou	ade (i	CCIMICA

Analysis Method:

8260B

Analysis Batch:

200-41091

Instrument ID:

L.i

Prep Method:

5030B

Prep Batch:

N/A

Lab File ID: Initial Weight/Volume: lhbae07.d

Dilution:

2200

5 mL

Analysis Date: Prep Date:

06/27/2012 1241 06/27/2012 1241 Final Weight/Volume:

5 mL

Analyte	Result (ug/L)	Qualifier	MDL	, RL
Dichlorodifluoromethane	2200	UJ	200	2200
Chloromethane	2200	UJ	260	2200
Vinyl chloride	2200	U	200	2200
Bromomethane	2200	UJ	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	Ü	350	2200
cis-1,2-Dichloroethene	2200	U	350	2200
2-Butanone	11000	Ü	2400	11000
Chloroform	2200	Ü	350	2200
1,1,1-Trichloroethane	2200	Ü	350	2200
Cyclohexane	2200	Ü	510	2200
Carbon tetrachloride	2200	Ü	370	2200
Benzene	2200	Ü	370	2200
1,2-Dichloroethane	2200	Ü	330	2200
Trichloroethene	2200	ŭ	310	2200
Methylcyclohexane	2200	Ü	550	2200
1,2-Dichloropropane	2200	U	370	2200
Bromodichloromethane	2200	Ü	350	2200
cis-1,3-Dichloropropene	2200	Ü	350	2200
4-Methyl-2-pentanone	11000	Ü	2000	11000
Toluene	2200	Ü	370	2200
trans-1,3-Dichloropropene	2200	Ü	400	
1,1,2-Trichloroethane	2200	Ü	400	2200 2200
Tetrachloroethene	2200	Ü	400	
2-Hexanone	11000	U	2400	2200 11000
Dibromochloromethane	2200	U		
1,2-Dibromoethane			370	2200
Chlorobenzene	2200 2200	U	400	2200
		U	420	2200
Ethylbenzene Yylones Total	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

Dilution:

2200

Lab File ID:

lhbae07.d

Analysis Date:

Initial Weight/Volume:

5 mL

06/27/2012 1241

Prep Date:

06/27/2012 1241

Final Weight/Volume:

5 mL

Analyte
1,2-Dichlorobenzene
1,2-Dibromo-3-Chloropropane
1,2,4-Trichlorobenzene

2200
2200
2200

Result (ug/L)

U U U

Qualifier

330 480 400

MDL

2200 2200 2200

RL

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

Ciient Sample ID:

1-120

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: Dilution:

5030B

Prep Batch:

N/A

Lab File ID:

lhbae08.d 5 mL

Analysis Date:

2200

Initial Weight/Volume:

Prep Date:

06/27/2012 1313 06/27/2012 1313

Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL -	RL
Dichlorodifluoromethane	2200	UJ	200	2200
Chloromethane	2200	U 5	260	2200
Vinyl chloride	2200	5	200	2200
Bromomethane	2200	U <b>5</b>	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	ゴ	330	2200
Methyl acetate	2200	U	510	2200
Methylene Chloride	2200	U	460	2200
trans-1,2-Dichloroetherie	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	Ü	400	2200
1,1,2-Trichloroethane	2200	Ū	400	2200
Tetrachloroethene	2200	Ü	400	2200
2-Hexanone	11000	Ü	2400	11000
Dibromochloromethane	2200	Ü	370	2200
1,2-Dibromoethane	2200	^{ss} ŭ	400	2200
Chlorobenzene	2200	Ü	420	2200
Ethylbenzene	2200	Ü	400	2200
Xylenes, Total	2200	Ü	370	2200
Styrene	2200	Ü	370	2200
Bromoform	2200	U C	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	
1,4-DIGROTODETZETIE	2200	U	330	2200

Page 34 of 1440

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:

lhbae08.d

Analysis Date:

N/A

Lab File ID:

Dilution:

2200

Initial Weight/Volume:

5 mL

06/27/2012 1313

Final Weight/Volume:

Prep Date:

06/27/2012 1313

5 mL

Analyte		Result (ug/L)	Qualifier	MDL	RL
1,2-Dichlorobenzene	e *** ** *,	2200	U	330	 2200
1,2-Dibromo-3-Chloropropane	4y	2200	U	480	2200
1,2,4-Trichlorobenzene		2200	U	400	2200

Surrogate		%Rec		Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	**************************************	100		iki keruntuk unan kerentuan asali dan bahar di kelangulunun nggapayan un	80 - 115
Toluene-d8		101			80 - 115
Bromofluorobenzene		103			85 - 120
1,2-Dichlorobenzene-d4	1	102	A .	(pat)	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: Dilution:

5030B 2200

Prep Batch:

N/A

Lab File ID: Initial Weight/Volume: lhbae11.d 5 mL

Analysis Date:

Prep Date:

06/27/2012 1450 06/27/2012 1450 Final Weight/Volume:

5 mL

Prep Date: 00/2/12	012 1450				
Analyte		Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane		2200	<b>ر</b> ۷	200	2200
Chloromethane		2200	U 5	260	2200
Vinyl chloride		2200	U	200	2200
Bromomethane		2200	U 🚁	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-trichfluor		2200	U	400	2200
Acetone	11000	3300-	JUB	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	121	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	Ü	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	Ü	370	2200
Isopropylbenzene		2200	Ū	370	2200
4 4 0 0 T-4		0000			2200

TestAmerica Burlington

1,1,2,2-Tetrachloroethane

1,3-Dichlorobenzene

1,4-Dichlorobenzene

Page 36 of 1440

U

U

U

370

400

330

2200

2200

2200

2200

2200

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

8260R	Volatila	Organic	Compounds	(CC/MS)

Analysis Method:

8260B

Analysis Batch:

200-41091

Instrument ID:

L.i

Prep Method:

5030B

Prep Batch:

Lab File ID:

Dilution:

lhbae11.d

2200

N/A

Initial Weight/Volume:

5 mL

Analysis Date:

06/27/2012 1450

Prep Date:

Final Weight/Volume:

5 mL

06/27/2012 1450

Analyte	ne in S	Result (ug/L)	Qualifier	MDL	RL
1,2-Dichlorobenzene	T 4.	2200	U	330	2200
1,2-Dibromo-3-Chloropropane	in the second	1300	J	480	2200
1,2,4-Trichlorobenzene		1200	J	400	2200

Surrogate	%Re	c 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:

Prep Method: Dilution:

5030B 628.6

Prep Batch:

N/A

Lab File ID: Initial Weight/Volume: lhbae12.d 5 mL

Analysis Date:

Final Weight/Volume:

5 mL

Prep Date:

06/27/2012 1522

06/27/2012 1522

Analyte		Result (ug/L)	 Qualifier	MDL	RL = =
Dichlorodifluoromethane		630	UJ .	57	630
Chloromethane		630	کر ں	75	630
Vinyl chloride		630	U	57	630
Bromomethane		630	Uグ	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	-7 <del>60</del> -	J- 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	Ū	110	630
Methyl t-butyl ether		630	Ü	110	630
1,2-Dichloroethene, Total		630	Ü.	200	630
1,1-Dichloroethane		630	Ü	100	630
cis-1,2-Dichloroethene		630	Ü	100	630
2-Butanone		3100	Ü	690	3100
Chloroform		630	Ü	100	630
1,1,1-Trichloroethane		630	U	100	630
Cyclohexane		630	Ü	140	630
Carbon tetrachloride		630	U	110	
Benzene		130			630
1.2-Dichloroethane		630	J.	110	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	Ū	110	630
1.3-Dichlorobenzene		630	Ū	110	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

5030B 628.6

Prep Method: Dilution:

Analysis Date: Prep Date:

06/27/2012 1522

06/27/2012 1522

Analysis Batch: Prep Batch:

200-41091

N/A

Instrument ID:

L.i

Lab File ID:

lhbae12.d

Initial Weight/Volume:

5 mL

Final Weight/Volume:

5 mL

Analyte		Result (ug/L)	Qualifier	MDL	RL
1,2-Dichlorobenzene	13	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:

Lab File ID:

lhbae13.d

Dilution:

1.0

N/A

Initial Weight/Volume:

5 mL

Analysis Date:

06/27/2012 1554

Prep Date:

06/27/2012 1554

Final	Weight/Volume:	
-------	----------------	--

5 mL

, rop bate.								
Analyte		Result (ug/L)		Qualifier	MDL	RL .		
Dichlorodifluoromethane		1.0		UJ	0. <b>0</b> 90	1.0		
Chloromethane		1.0		UJ '	0.12	1.0		
Vinyl chloride		1.0		U	0.090	1.0		
Bromomethane		1.0		リング	0.43	1.0		
Chloroethane		1.0		U	0.12	1.0		
Trichlorofluoromethane	#7	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		Ū	0.32	1.0		
1,1-Dichloroethane		1.0		Ū	0.16	1.0		
cis-1,2-Dichloroethene		1.0		Ū	0.16	1.0		
2-Butanone		5.0		Ū	1.1	5.0		
Chloroform		1.0		Ū	0.16	1.0		
1,1,1-Trichloroethane		1.0		Ü	0.16	1.0		
Cyclohexane		1.0		Ü	0.23	1.0		
Carbon tetrachloride		1.0		Ü	0.17	1.0		
Benzene		1.0		Ü	0.17	1.0		
1,2-Dichloroethane		1.0		Ü	0.15	1.0		
Trichloroethene		1.0		Ü	0.14	1.0		
Methylcyclohexane		1.0		Ü	0.25	1.0		
1,2-Dichloropropane		1.0		Ü	0.17	1.0		
Bromodichloromethane		1.0		Ü	0.16	1.0		
cis-1,3-Dichloropropene		1.0		Ü	0.16	1.0		
4-Methyl-2-pentanone		5.0		Ü	0.90	5.0		
Toluene		1.0		U	0.17	1.0		
trans-1,3-Dichloropropene		1.0		Ü	0.18	1.0		
1,1,2-Trichloroethane		1.0		Ü	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			
1,2-Dibromoethane		1.0		U	0.17	1.0 1.0		
Chlorobenzene		1.0		U				
Ethylbenzene		1.0		U	0.19	1.0		
•					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		

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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 V	/olatile	Organic	Compounds	(GC/MS)
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Analysis Method:

8260B

Analysis Batch:

200-41091

Instrument ID:

L.i

Prep Method:

5030B

Lab File ID:

Dilution:

Prep Batch:

N/A

lhbae13.d

5 mL

Analysis Date:

1.0

Initial Weight/Volume:

06/27/2012 1554

Final Weight/Volume:

5 mL

Prep Date:

06/27/2012 1554

Analyte		1.	Result (ug/L)		Qualifier	MDL	RL
1,2-Dichlorobenzene		₹	1.0		U	0.15	1.0
1,2-Dibromo-3-Chloropropane	,	1 - 1	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	**************************************	######################################	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: Dilution:

5030B

Prep Batch:

N/A

Lab File ID:

lhbae14.d

Analysis Date:

2200

Initial Weight/Volume:

5 mL

Prep Date:

06/27/2012 1626 06/27/2012 1626 Final Weight/Volume:

5 mL

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.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	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		Ü	510	2200
Carbon tetrachloride	2200		Ū	370	2200
Benzene	2200		Ü	370	2200
1,2-Dichloroethane	2200		Ü .	330	2200
Trichloroethene	2200		Ü	310	2200
Methylcyclohexane	2200		U	550	2200
1,2-Dichloropropane	2200		U	370	2200
Bromodichloromethane	2200		Ū	350	2200
cis-1,3-Dichloropropene	2200		Ü	350	2200
4-Methyl-2-pentanone	11000		Ü	2000	11000
Toluene	2200		Ü	370	2200
trans-1,3-Dichloropropene	2200	5	Ü	400	2200
1,1,2-Trichloroethane	2200		Ü	400	2200
Tetrachloroethene	2200		U	400	2200
2-Hexanone	11000		Ü	2400	11000
Dibromochloromethane	2200		Ü	370	2200
1.2-Dibromoethane	2200		U	400	2200
Chlorobenzene	2200		U	420	
Ethylbenzene	2200		Ü	400	2200
Xylenes, Total	2200		U	1.7	2200
				370	2200
Styrene Bromoform	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

TestAmerica Burlington

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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:

Prep Method:

5030B

Lab File ID:

lhbae14.d

Dilution:

2200

Prep Batch:

N/A

Initial Weight/Volume:

Analysis Date:

06/27/2012 1626

5 mL

Prep Date:

06/27/2012 1626

Final Weight/Volume:

5 mL

Analyte-
1,2-Dichlorobenzene
1,2-Dibromo-3-Chloropropane
1.2.4-Trichlorobenzene

Result (ug/L) 2200 2200

Qualifier U U U

330 480 400

MDL

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	98 :	ĸŶĸĬĬĸŶŶŶŶĸĸĬĸĬĸĬĸĬĸĬĸĬĸĸĸĸĬĸĸĸĬĸĸĸĬĸĸĸ	80 - 115
Toluene-d8	100		80 - 115
Bromofluorobenzene	100		85 - 120
1,2-Dichlorobenzene-d4	99		80 - 115

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

8270C	Samiyo	latile Organ	nic Compoun	de (CC/MS)
02/04	. semivo	iauie Orgai	HC COMBOUN	IOS IGC/M31

			-	· ·	
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

Trep Date.	1020			njectori volume.			
Analyte	in all all all all all all all all all al	Result (ug/L)		Qualifier	MDL	RL	
Phenol		14		JD	4.1	50	
2-Chlorophenol		50		U	11 =	50	
2-Methylphenol		16		JD	9.0	50	
3 & 4 Methylphenol		50		U	8.0	50	
2-Nitrophenol		50		U	12	50	
2,4-Dimethylphenol		24		JD	17	50	
2,4-Dichlorophenol		50		U	13	50	
4-Chloro-3-methylphenol		50		U sees	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		-Um R	_250	250	
Bis(2-chloroethyl)ether		5.0		U	1.4	5.0	
1,3-Dichlorobenzene		50		Ü	12	50	
1,4-Dichlorobenzene		50		Ü	13	50	
1,2-Dichlorobenzene		50		Ü	13	50	
N-Nitrosodi-n-propylamine		5.0		Ü	1.3	5.0	
Hexachloroethane		5.0		Ü	1.3	5.0	
Nitrobenzene		5.0		Ü	1.5	5.0	
Isophorone		50		Ü	14	50	
Bis(2-chloroethoxy)methane		50		Ü	13	50	
1,2,4-Trichlorobenzene		5.0		Ū	1.3	5.0	
Naphthalene		660		D	14	50	
4-Chloroaniline		50		Ü	10	50	
Hexachlorobutadiene		10		Ü	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	727	U	25	100	
Dimethyl phthalate		50		U	14	50	
Acenaphthylene		50		U	14	50 50	
2,6-Dinitrotoluene		10		U	3.1	10	
3-Nitroaniline		100		U	25	100	
Acenaphthene		50		υ U			
Dibenzofuran				-	14	50	
		22 10		JD	14	50	
2,4-Dinitrotoluene				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

Analysis Method: 8270C	•		-117383		Instrument ID:	BNAMS5	
Prep Method: 3510C	Prep B	atch: 460	-117190		Lab File ID:	x27456.d	
Dilution: 5.0					Initial Weight/Volume:	1000 mL	
Analysis Date: 06/25/2012 1329	Run Ty	pe: DL			Final Weight/Volume:	2 mL	
Prep Date: 06/22/2012 1520					Injection Volume:	1 uL	
Analyte		Result (ug/L)		Qualifie	r MDL	RL	
Phenanthrene		18		JD	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'-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	1.1	5.0		U	1.3	5.0	
Benzo[a]pyrene		5.0		U	0.70	5.0	
ndeno[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	Acceptan	ce Limits	
litrobenzene-d5		104		D	56 - 112	Panilinensodalinenanninarrennraspanjanjanjasjasjasjasjasjasjasjasjasjasjasjasjasj	Antonia manananananananananananananananananana
Phenol-d5		48		D	10 - 48		
erphenyl-d14		108		D	50 - 122		
,4,6-Tribromophenol	7	90		D .	46 - 122		
-Fluorophenol	1.	74		D X	10 - 65		
-Fluorobiphenyl		122		DX	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:

Analysis Date:

Prep Date:

Water

Date Sampled: 06/20/2012 1200

Date Received: 06/21/2012 1020

#### 8270C Semivoiatile Organic Compounds (GC/MS)

DL

Analysis Method: 8270C Prep Method: 3510C Dilution:

10

06/25/2012 1354 06/22/2012 1520 Analysis Batch: 460-117383 Prep Batch:

Run Type:

460-117190

Instrument ID:

Lab File ID: Initial Weight/Volume: BNAMS5 x27457.d 1000 mL

Final Weight/Volume: Injection Volume:

2 mL 1 uL

ггер Date. 00/22/2012 1320			1 UL			
Analyte		Result (ug/L)		Qualifier	MDL	RL
Phenol		18		JD	8.1	100
2-Chlorophenol		100		UJ	22	100
2-Methylphenol		24		JD	18	100
3 & 4 Methylphenol		100		<i>T U</i>	16	100
2-Nitrophenol		100		リゴ	24	100
2,4-Dimethylphenol		38		JD	34	100
2,4-Dichlorophenol		100		リケ	26	100
4-Chloro-3-methylphenol		100		U	25	100
2,4,6-Trichlorophenol		100		U   -	24	100
2,4,5-Trichlorophenol		100		υl	26	100
2,4-Dinitrophenol		300		υl	54	300
4-Nitrophenol		300		υĺ	67	300
4,6-Dinitro-2-methylphenol		300		υĺ	47	300
Pentachlorophenol		300		u 🕇	53	300
Benzoic acid		-500-		-U*- R	<del>-500</del>	500
Bis(2-chloroethyl)ether		10		U ブー	2.8	10
1,3-Dichlorobenzene		100		U i'	24	100
1,4-Dichlorobenzene		100		ŭ	25	100
1,2-Dichlorobenzene		100		Ü	25	100
N-Nitrosodi-n-propylamine		10		ŭ	2.5	10
Hexachloroethane		10		ŭ	2.5	10
Nitrobenzene		10		Ü	3.0	10
Isophorone		100		υl	27	100
Bis(2-chloroethoxy)methane		100		ŭΙ	26	100
1,2,4-Trichlorobenzene		10		Ŭ 🕏	2.6	10
Naphthalene		1100		D	27	100
4-Chloroaniline		100		U. <b>3</b>	20	100
Hexachlorobutadiene		20		U <b>5</b>	5.7	20
2-Methylnaphthalene		67		JD	30	100
Hexachlorocyclopentadiene		100		U <b>5</b>	30 17	100
2-Chloronaphthalene		100			27	
2-Nitroaniline		200		U		100
		100		U	49	200
Dimethyl phthalate				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		JD	28	100
2,4-Dinitrotoluene		20		UJ	4.7	20
Diethyl phthalate		100		UJ	29	100
4-Chlorophenyl phenyl ether		100		リブ	25	100
Fluorene		45		J D	28	100
4-Nitroaniline		200		υſ	58	200
N-Nitrosodiphenylamine		100		υj	29	100
4-Bromophenyl phenyl ether		100	20	U	25	100
Hexachlorobenzene		10		υÞ	2.9	10

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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

53 - 108

Date Received: 06/21/2012 1020

	8270C Semivolatile Or			
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 (u	g/L) Qualifie	er MDL	RL
Phenanthrene	100	U 5	31	100
Anthracene	100	U P	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	_a U	2.7	10
Chrysene	100	i di 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
ndeno[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	η 🕯	20	100
Surrogate	%Rec	Qualifie	r Accep	tance Limits
Nitrobenzene-d5	0	D	56 - 11	12
Phenol-d5	0	D	10 - 48	3
Terphenyl-d14	0	D	50 - 12	22
2,4,6-Tribromophenol	0	D	46 - 12	22
?-Fluorophenol	0	- D	10 - 65	

0

2-Fluorobiphenyl

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 MILE	Final Weight/Volume:	2 mL
Prep Date:	06/22/2012 1520			Injection Volume:	1 uL

Trep Bate.			i uL		
Analyte		Result (ug/L)	Qualifier	MDL	RL
Phenol		18	JD	8.1	100
2-Chlorophenol		100	UJ	22	100
2-Methylphenol		25	ΊĎ	18	100
3 & 4 Methylphenol		100	US	16	100
2-Nitrophenol		100	UJ	24	100
2,4-Dimethylphenol		43	JD	34	100
2,4-Dichlorophenol		100	UJ	26	100
4-Chloro-3-methylphenol		100	υĺι	25	100
2,4,6-Trichlorophenol		100	υĺ	24	100
2,4,5-Trichlorophenol		100	υĺ	26	100
2,4-Dinitrophenol		300	υİ	54	300
4-Nitrophenol		300	U	67	300
4,6-Dinitro-2-methylphenol		300	U	47	300
Pentachlorophenol		300	υŧ	53	300
Benzoic acid		<del>- 500</del> -	-U-R	<del>-500</del>	500
Bis(2-chloroethyl)ether		10	U.J.	2.8	10
1,3-Dichlorobenzene		100	UI	24	100
1,4-Dichlorobenzene		100	ŭΙ	25	100
1,2-Dichlorobenzene		100	υĺ	25	100
N-Nitrosodi-n-propylamine		100	ŭ	2.5	10
Hexachloroethane		10	ŭ	2.5	10
Nitrobenzene		10	ŭΙ	3.0	10
Isophorone		100	Ü	27	100
Bis(2-chloroethoxy)methane		100	U	26	100
1,2,4-Trichlorobenzene		100	u ₩	2.6	100
Naphthalene		1200	0.5	27	100
4-Chloroaniline	0421	100	UF	20	100
Hexachlorobutadiene		20	UF	5.7	
		72	JD	30	20
2-Methylnaphthalene					100
Hexachlorocyclopentadiene		100	UJ	17	100
2-Chloronaphthalene		100		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	JD_	28	100
2,4-Dinitrotoluene		20	UJ	4.7	20
Diethyl phthalate		100	US	29	100
4-Chlorophenyl phenyl ether		100	リブ	25	100
Fluorene		48	JD	28	100
4-Nitroaniline		200	UJ	58	200
N-Nitrosodiphenylamine	18	100	υŢ	29	100
4-Bromophenyl phenyl ether		100	U	25	100
Hexachlorobenzene		10	Ub	2.9	10

Page 48 of 1440

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1

Sdg Number: 11392

Client Sample ID:

1-111

Lab Sample ID:

200-11392-3

Client Matrix:

Water

Date Sampled: 06/20/2012 1400 Date Received: 06/21/2012 1020

		8270C Sen	nivolatile Organic	Compou	ın <b>ds</b> (GC	/MS)	
Analysis Method: 8270C		•		0-117383		Instrument ID:	BNAMS5
Prep Method: 3510C		Ргер	Batch: 46	0-117190		Lab File ID:	x27462.d
Dilution: 10						Initial Weight/Volume:	1000 mL
Analysis Date: 06/25/2012	2 1601	Run 1	ype: DL			Final Weight/Volume:	2 mL
Prep Date: 06/22/2012	2 1520					Injection Volume:	1 uL
Analyte			Result (ug/L)	2	Qualifie	r MDL	RL
Phenanthrene			100	abhanni ennennanananan ennenne	UI	31	100
Anthracene			100		U	28	100
Carbazole		010	100		υ	32	100
Di-n-butyl phthalate			100		υj	29	100
Fluoranthene			100		U	32	100
Pyrene			100		υl	29	100
Butyl benzyl phthalate			100		υĺ	25	100
3,3'-Dichlorobenzidine			200		υl	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		7.	10		U	1.5	10
Dibenz(a,h)anthracene			10		U	0.90	10
Benzo[g,h,i]perylene			100		υl	20	100
2,2'-oxybis[1-chloropropane]			100		υ <b>1</b>	20	100
Surrogate			%Rec		Qualifie	r Acceptai	nce Limits
Nitrobenzene-d5			0		D	56 - 112	
Phenol-d5			0		D	10 - 48	
Terphenyl-d14			0		D	50 - 122	
2,4,6-Tribromophenol		4	0		D	46 - 122	
2-Fluorophenol		10.11	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

82/0C Semivolatile Organic Compounds (GC/MS)								
Analysis Method:	8270C		Analysi	s Batch:	460-117383		Instrument ID:	BNAMS5
Prep Method:	3510C		Prep Ba	atch:	460-117190		Lab File ID:	x27464.d
Dilution:	20						Initial Weight/Volume:	1000 mL
Analysis Date:	06/25/2012 1650		Run Ty	pe:	DL		Final Weight/Volume:	2 mL
Prep Date:	06/22/2012 1520		- 93				Injection Volume:	1 uL
Analyte				Result (ug/	L)	Qualifie	r MDL	RL
Phenol		. ,	100	17	\$ . 4 £	JD	.16	200
2-Chlorophenol				200		U.J	44	200
2-Methylphenol				200		U	36	200

Analyte	. ,	, ,	Result (ug/L)	Qualifier	MDL	RL :
Phenol		1	17	1 D	16	200
2-Chlorophenol			200	U_T	44	200
2-Methylphenol			200	U t	36 .	200
3 & 4 Methylpheno	ol .		200	U	32	200
2-Nitrophenol	r		200	U	48	200
2,4-Dimethylpheno	ol		200	U	68	200
2,4-Dichloropheno	ol .		200	U	52	200
4-Chloro-3-methyl	phenol		200	U	50	200
2,4,6-Trichlorophe	nol		200	U	48	200
2,4,5-Trichlorophe	nol		200	U	52	200
2,4-Dinitrophenol			600	U/	110	600
4-Nitrophenol			600	U∫	130	600
4,6-Dinitro-2-methy	ylphenol	, .	600	U	94	600
Pentachloropheno	1		600	U 🕏	110	600
Benzoic acid			-1000	-UR	1000	1000
Bis(2-chloroethyl)e	ether		20	UJ.	5.6	20
1,3-Dichlorobenze	ne		200	U	48	200
1,4-Dichlorobenze	ne		200	U	50	200
1,2-Dichlorobenze	ne	î	200	U )	50	200
N-Nitrosodi-n-prop	ylamine		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	r)methane		200	U	52	200
1,2,4-Trichloroben	zene		20	υŤ	5.2	20
Naphthalene	\$1 M		1700	DJ	54	200
4-Chloroaniline			200	UJ	40	200
Hexachlorobutadie	ene		40	UF	11	40
2-Methylnaphthale	ene		86	JD	60	200
Hexachlorocyclope	entadiene		200	UJ	34	200
2-Chloronaphthale	ne		200	U	54	200
2-Nitroaniline			400	U	98	400
Dimethyl phthalate	)	400	200	U (	56	200
Acenaphthylene			200	υl	54	200
2,6-Dinitrotoluene			40	U	12	40
3-Nitroaniline			400	U .	100	400
Acenaphthene			200	υĺ	54	200
Dibenzofuran			200	υ	56	200
2,4-Dinitrotoluene	k.		40	υl	9.4	40
Diethyl phthalate			200	U	58	200
4-Chlorophenyl ph	enyl ether		200	υb	50	200
Fluorene	-		70	J D	56	200
4-Nitroaniline			400	UJ	120	400
N-Nitrosodiphenyla	amine		200	Ū	58	200
4-Bromophenyl ph			200	Ü	50	200
Hexachlorobenzen			20	Ū 🕏	5.8	20

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1

Sdg Number: 11392

Client Sample ID:

1-112

Lab Sample ID:

200-11392-4

Client Matrix:

Water

Date Sampled: 06/20/2012 1500 Date Received: 06/21/2012 1020

		8270C Semivolatile Or	ganic Compounds (G	China)	
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: 06/25/2	2012 1650	Run Type:	DL	Final Weight/Volume:	2 mL
Prep Date: 06/22/2	2012 1520			Injection Volume:	1 uL
Analyte		Result (ug	g/L) Qualifi	er MDL	RL
Phenanthrene		200	U.J	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	υl	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
ndeno[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	n 🕴	40	200
Surrogate		%Rec	Qualific	er Accepta	ance Limits
Nitrobenzene-d5		• 0	D	56 - 112	
Phenol-d5		, 0	. D	10 - 48	
Terphenyl-d14		0	D	50 - 122	2 - 1 - 1 - 1 - 1
2,4,6-Tribromophenol		0	D	46 - 122	2
2-Fluorophenol		- 0	.D.	10 - 65	· · · · · · · · · · · · · · · · · · ·
2-Fluorobiphenyl		0	D	53 - 108	3

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)

			•	•	ŕ	
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		6	16	J	4.5	56
2-Chlorophenol			56	U	12	56
2-Methylphenol			13	J g	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	UJ	37	170
4,6-Dinitro-2-methylphenol			170	U	26	170
Pentachlorophenol			170	U	29	170
Benzoic acid			<del>-280 -</del>	-4*-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		1	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	2		510		- 15	56
4-Chloroaniline			56	U	11	56
Hexachlorobutadiene			11	U	3.2	11
2-Methylnaphthalene			31	J	17	56
Hexachlorocyclopentadiene			56	Ū	9.4	56
2-Chloronaphthalene			56	Ū	15	56
2-Nitroaniline			110	U	27	110
Dimethyl phthalate			56	U	16	56
Acenaphthylene			56	Ü	15	56
2,6-Dinitrotoluene			11	Ū	3.4	11
3-Nitroaniline			110	Ū	28	110
Acenaphthene			56	Ŭ 6	15	56
Dibenzofuran			16	J	16	56
2.4-Dinitrotoluene			- 11	Ŭ	2.6	11
Diethyl phthalate			56	Ü	16	56
4-Chlorophenyl phenyl ether			56	Ü	14	56
Fluorene			24	J	16	56
4-Nitroaniline			110	Ü	32	110
N-Nitrosodiphenylamine			56	Ü	16	56
4-Bromophenyl phenyl ether			56	Ü	14	56
Hexachlorobenzene			5.6	U	1.6	5.6
FIGAGOROTODETIZETIE			J.0	U	0.1	a.c

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

		827	OC Semivolatile Org	anic Compou	nds (GC	/MS)		
Prep Method: Dilution: Analysis Date:	8270C 3510C 5.0 06/26/2012 06/22/2012		Analysis Batch: Prep Batch:	460-117497 460-117190		Instrument ID: Lab File ID: Initial Weight/Volume: Final Weight/Volume: Injection Volume:	BNAMS5 x27482.d 450 mL 1 mL 1 uL	
Analyte			Result (ug	/L)	Qualifie	r 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	
^o yrene			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) phth	alate		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	
ndeno[1,2,3-cd]pyren	e		5.6		U	0.83	5.6	
Dibenz(a,h)anthracen	e		5.6		U	0.50	5.6	
Benzo[g,h,i]perylene			56		U	11	56	
2,2'-oxybis[1-chloropro	opane]		<b>56</b>		U	11	56	
Surrogate			%Rec		Qualifier	r Acceptar	nce Limits	
Nitrobenzene-d5			69	*		56 - 112		hild foldinderhisserres ergreer reveesverssessaaspess
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: Prep Method:

8015B

3510C 10

Dilution: Analysis Date: Prep Date:

06/28/2012 0515

06/21/2012 2103

Analysis Batch: Prep Batch:

200-41066

200-40738

Instrument ID:

Initial Weight/Volume:

3012.i 675 mL

Final Weight/Volume:

1000 uL

Injection Volume: Result Type:

2 uL PRIMARY

Analyte

Result (mg/L)

Qualifier

MDL

RL 1.5

Diesel Range Organics [C10-C28]

4.4

85

0.44

Surrogate o-Terphenyl %Rec

Qualifier X

Acceptance Limits 15 - 150

0

Client: ARCADIS U.S. Inc.

Job Number: 200-11392-1

Date Received: 06/21/2012 1020

Sdg Number: 11392

Client Sample ID:

I-120

Lab Sample ID:

200-11392-2

Client Matrix:

Water

Date Sampled: 06/20/2012 1200

8015B	Diesel	Range	<b>Organics</b>	(DRO)	(GC)

Analysis Method:

8015B

Analysis Batch:

200-41066

Instrument ID:

3012.i

Prep Method:

3510C

Prep Batch:

Initial Weight/Volume:

Dilution:

10

200-40738

1060 mL

Diesel Range Organics [C10-C28]

Analysis Date:

Final Weight/Volume:

1000 uL

06/28/2012 0552

l

Injection Volume: Result Type:

2 uL **PRIMARY** 

Prep Date:

Analyte

06/21/2012 2103

Result (mg/L) 4.3

Qualifier -BIJ

MDL 0.28

RL0.94

Surrogate

%Rec

Qualifier

Acceptance Limits

o-Terphenyl

0

Χ

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1

Sdg Number: 11392

Ciient 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: Prep Method:

8015B

3510C

10

Analysis Date: Prep Date:

06/28/2012 0819 06/21/2012 2103 Analysis Batch: Prep Batch:

200-41066

200-40738

Instrument ID:

3012.i

Initial Weight/Volume: Final Weight/Volume:

1060 mL 1000 uL

Injection Volume:

2 uL

Result Type:

**PRIMARY** 

Analyte

Dilution:

Diesel Range Organics [C10-C28]

Result (mg/L) 4.0

Qualifier 85

MDL 0.28

RL 0.94

Surrogate

%Rec

Qualifier

**Acceptance Limits** 

o-Terphenyl

0

Х

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

Initial Weight/Volume:

Dilution:

Prep Batch:

200-40738

10

1060 mL

Analysis Date:

Final Weight/Volume:

1000 uL

Prep Date:

06/28/2012 0856 06/21/2012 2103 Injection Volume: Result Type:

2 uL **PRIMARY** 

Analyte

Diesel Range Organics [C10-C28]

Result (mg/L)

Qualifier & J

MDL 0.28 RL 0.94

Surrogate

%Rec

Qualifier

Acceptance Limits

o-Terphenyl

0

4.1

Х

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

Initial Weight/Volume:

5.0

Prep Batch:

305 mL

Dilution:

200-40738

Final Weight/Volume:

1000 uL

Analysis Date:

06/28/2012 0932

Injection Volume: Result Type:

2 uL

Prep Date:

06/21/2012 2103

Result (mg/L)

Qualifier

MDL 0.49 **PRIMARY** RL

1.6

Analyte

Diesel Range Organics [C10-C28]

4.3

AJ

Surrogate o-Terphenyl %Rec 72

Qualifier

Acceptance Limits

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1

Sdg Number: 11392

Client Sample ID:

OF-1

Lab Sample ID:

DCB Decachlorobiphenyl

200-11392-1

Client Matrix:

Water

Date Sampled: 06/20/2012 0900 Date Received: 06/21/2012 1020

30 - 150

	8082A Poly	chlorinated Blpheny	rls (PCBs) by	Gas Chro	matography		
Analysis Method: Prep Method: Dilution: Analysis Date: Prep Date:	8082A 3510C 1.0 06/22/2012 1757 06/21/2012 2110	Analysis Batch: Prep Batch:	200-40875 200-40739		Instrument ID: Initial Weight/Volume: Final Weight/Volume: Injection Volume: Result Type:	7227.i 510 mL 10000 uL 1 uL PRIMARY	
Analyte		Result (ug	ı/L)	Qualifie	r MDL	RL	
PCB-1016		0.98	e - Andreadern A. A. Andreader Manadaland and Andreader Andreader Andreader Andreader Andreader Andreader Andreader	U	0.051	0.98	†
PCB-1221		0.98		U	0.084	0.98	
PCB-1232		0.98	7	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		Qualifie	r Acceptan	ce Limits	
Tetrachloro-m-xylen			franklinen (n. 1961) and diskning frankline (frankline frankline	55 - 120		***************************************	

36

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

Initial Weight/Volume:

Dilution:

Prep Batch:

510 mL

1.0

200-40739

Final Weight/Volume:

10000 uL

Analysis Date:

06/22/2012 1757

Injection Volume: Result Type:

1 uL **SECONDARY** 

Prep Date:

06/21/2012 2110

%Rec

Qualifier Acceptance Limits

Surrogate Tetrachloro-m-xylene DCB Decachlorobiphenyl

103 39

55 - 120 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:

PCB-1260

PCB-1262

PCB-1268

Water

Date Sampled: 06/20/2012 1200

0.47

0.47

0.47

Date Received: 06/21/2012 1020

0.031

0.042

0.020

8082A Poly	chiorinated Biphenyls (Pe	CBs) by Gas Chro	omatography	
Analysis Method:       8082A         Prep Method:       3510C         Dilution:       1.0         Analysis Date:       06/22/2012 1824         Prep Date:       06/21/2012 2110	•	-40875 -40739	Instrument ID: Initial Weight/Volume: Final Weight/Volume: Injection Volume: Result Type:	7227.i 1060 mL 10000 uL 1 uL PRIMARY
Analyte	Result (ug/L)	Qualifie	er MDL	RL
PCB-1016	0.47	U.T.	0.025	0.47
PCB-1221	0.47	υĺ	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	ر تر ۱	0.055	0.47
PCB-1254	0.47	U	0.019	0.47

U

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	48	X	55 - 120
DCB Decachlorobiphenyl	29	X	30 - 150

0.47

0.47

0.47

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 Polychiorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:

8082A

Analysis Batch:

200-40875

Instrument ID:

7227.i

Prep Method:

3510C

Initial Weight/Volume:

1060 mL

Dilution:

Prep Batch: 200-40739

1.0

Final Weight/Volume:

10000 uL

Analysis Date:

Injection Volume:

Qualifier

1 uL

Prep Date:

06/22/2012 1824 06/21/2012 2110

Result Type:

**SECONDARY** 

Surrogate	
Tetrachloro-n	n-xylene
DCR Decach	Inrohinhenvl

55 30

%Rec

55 - 120 30 - 150

Acceptance Limits

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1

Sdg Number: 11392

Ciient 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 Polychiorinated	Biphenyis (PCBs)	by Gas Chromatography
-----------------------	------------------	-----------------------

Analysis Method: Prep Method: Dilution: Analysis Date: Prep Date:	8082A 3510C 1.0 06/22/2012 1946 06/21/2012 2110	Analysis Batch: Prep Batch:	200-40875 200-40739		Instrument ID: Initial Weight/Volume: Final Weight/Volume: Injection Volume: Result Type:	7227.i 1060 mL 10000 uL 1 uL PRIMARY
Analyte	L. Weiller	Result (ug	1/L)	Qualifie	r MDL	RL
PCB-1016		0.47		U	0.025	0.47
PCB-1221		0.47		Ū	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		Ü	0.020	0.47
Surrogate		%Rec		Qualifie	r Acceptar	nce Limits
Tetrachloro-m-xylene		74 .	**************************************	on a artin material and analysis of the second	55 - 120	**C. v. Strekkelen ***********************************
DCB Decachlorobiph	enyl	25		Х	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

Initial Weight/Volume:

1060 mL

Dilution:

Prep Batch:

200-40739

1.0

Final Weight/Volume:

10000 uL

Analysis Date:

06/22/2012 1946

Injection Volume:

1 uL SECONDARY

Prep Date:

06/21/2012 2110

Result Type:

Acceptance Limits

Surrogate Tetrachloro-m-xylene DCB Decachlorobiphenyl

93 27

%Rec

Х

Qualifier

55 - 120 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

Analysis Method: 8082A  Prep Method: 3510C  Dilution: 1.0  Analysis Date: 06/22/2012 2013  Prep Date: 06/21/2012 2110	Analysis Batch: 200-4087 Prep Batch: 200-4077	39 Inii Fir Inji	strument ID: tial Weight/Volume: nal Weight/Volume: ection Volume: esult Type:	7227.i 1060 mL 10000 uL 1 uL 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	Accepta	nce 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:

7227.1

Prep Method:

3510C

Prep Batch:

Initial Weight/Volume:

1060 mL

Dilution:

1.0

200-40739

Final Weight/Volume:

10000 uL 1 uL

Analysis Date: Prep Date:

06/22/2012 2013 06/21/2012 2110

Injection Volume: Result Type:

SECONDARY

Surrogate Tetrachloro-m-xylene DCB Decachlorobiphenyl

95 27

%Rec

Х

Qualifier

55 - 120 30 - 150

Acceptance Limits

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

Analysis Method:	8082A	Analysis Databy	000 40075		t		
•		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)	Qualifie	r 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		Qualifie	Acceptar	nce Limits	
Tetrachloro-m-xylen	le	84	frida' ribing hil deribing sik () kil denganak-anno sanno kuh sibag	PERFORMANT PERFORMANT AND AND AND AND AND AND AND AND AND AND	55 - 120	TEBRICHERHERMONNER VOCAN BET AND VINNERSESTACETS SABORROSSESS ABBRICANS	
DCB Decachlorobip	henyi	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 Polychiorinated 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: Result Type:

1 uL **SECONDARY** 

Prep Date:

06/21/2012 2110

Qualifier

Acceptance Limits

Surrogate Tetrachloro-m-xylene

%Rec 100 35

55 - 120 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

601	nc.	Metals	(ICP)

Analysis Method: Prep Method:

6010C 3010A

Analysis Batch: Prep Batch:

200-41285

Instrument ID: Lab File ID:

METICP7 070212-01.ttx

Dilution:

2.0

200-40904

Initial Weight/Volume:

100 mL

Analysis Date: Prep Date:

07/02/2012 1455 06/25/2012 1434 Final Weight/Volume:

100 mL

Analyte			Result (ug/L)	i, II - IE	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	
Соррег			9.4		J	3.2	50.0	
ron			1410000			78.0	400	
_ead			64.0			10.8	20.0	
Magnesium			28700			128	10000	
Manganese			5070			3.8	30.0	
Vickel			119			3.6	80.0	
otassium			18600			360	10000	
Selenium			70.0		UT	12.2	70.0	
Silver		-	<del>-20.0 -</del>		-UL-R	4.2	<del>-20:0</del>	
Sodium			46300		B	102	10000	
Thallium			18.3		J	5.2	50.0	
/anadium			28.1		J	3.2	100	
Zinc			2630			1.5	40.0	

#### 7470A Mercury (CVAA)

Analysis Method: Prep Method:

7470A 7470A 1.0

Analysis Batch: Prep Batch:

200-41178 200-41166 Instrument ID: Lab File ID:

MEPCV3 II 062912EE.PRN

Dilution: Analysis Date: Prep Date:

06/29/2012 1533 06/28/2012 1200 Initial Weight/Volume: Final Weight/Volume:

50 mL 50 mL

Analyte Mercury Result (ug/L) 0.075

Qualifier J

MDL 0.060

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

CO4	00	Metals	(ICD)

Analysis Method:
Prep Method:

6010C 3010A

Analysis Batch: Prep Batch:

200-41285

Instrument ID: Lab File ID:

**METICP7** 070212-01.ttx

Dilution:

2.0

200-40904

Initial Weight/Volume:

MDL

78.0

8.2

8.8

100 mL

RL

400

120

20.0

Analysis Date: Prep Date:

07/02/2012 1500 06/25/2012 1434

Final Weight/Volume:

100 mL

Analyte			Result (ug/L)
Aluminum	3	-	73100
Antimony			22.6
Arsenic			13.8
Barium			21.2
Beryllium			7.0
Cadmium			10.0
Calcium			341000
Chromium			2220
Cobalt			14.0
Copper			9.6
Iron			1440000
Lead			65.2
Magnesium			29100
Manganese			5140
Nickel			121
Potassium			19200
Selenium			70.0

21.2		J	10.4		400	
7.0		J	0.58		10.0	
10.0		U	0.90		10.0	
341000			240		10000	
2220			1.1		20.0	
14.0		J	1.8		1100	
9.6		J	3.2		50.0	
1440000			78.0		400	
65.2			10.8		20.0	
29100			128		10000	
5140			3.8		30.0	
121			3.6		80.0	
19200			360		10000	
70.0		UJ	12.2		70.0	
<del>-20.0</del> -	* = 1	WE-R	4.2		20.0	
47200		B	102		10000	
22.4		J	5.2		50.0	
28.6		J	3.2	000	100	
2690			1.5		40.0	

Qualifier

J

J

#### 7470A Mercury (CVAA)

Analysis Method: Prep Method:

7470A 7470A 1.0

Analysis Batch: Prep Batch:

200-41178 200-41166 Instrument ID: Lab File ID:

MEPCV3 II 062912EE.PRN

Analysis Date: Prep Date:

06/29/2012 1535 06/28/2012 1200 Initial Weight/Volume: Final Weight/Volume:

50 mL 50 mL

Analyte Mercury

Dilution:

Silver Sodium Thallium Vanadium Zinc

> Result (ug/L) 0.20

Qualifier U

MDL 0.060

Client: ARCADIS U.S. Inc

Job Number: 200-11392-1

Sdg Number: 11392

Client Sample ID:

1-111

Lab Sample ID:

200-11392-3

Client Matrix:

Water

Date Sampled: 06/20/2012 1400 Date Received: 06/21/2012 1020

601	nc	Me	tale	(ICP)	

Analysis Method:

6010C 3010A Analysis Batch:

200-41285

Instrument ID:

METICP7

Prep Method: Dilution:

2.0

Prep Batch:

200-40904

Lab File ID: Initial Weight/Volume: 070212-01.ttx 100 mL

Analysis Date:

07/02/2012 1525

Prep Date:

06/25/2012 1434

Final Weight/Volume:

100 mL

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	U5	12.2	70.0	
Silver		_20.0-	W-R	4.2-	20.0	
Sodium		47300	₽-	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: Prep Method:

7470A 7470A 1.0

Analysis Batch: Prep Batch:

200-41178 200-41166

Instrument ID: Lab File ID:

MEPCV3 II 062912EE.PRN

Dilution: Analysis Date: Prep Date:

06/29/2012 1542 06/28/2012 1200 Initial Weight/Volume: Final Weight/Volume:

50 mL 50 mL

Analyte Mercury Result (ug/L) 0.20

Qualifier U

MDL 0.060

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

6010	0	Motale	/ICP\

Analysis Method: Prep Method:

6010C 3010A Analysis Batch: Prep Batch:

200-41285

Instrument ID: Lab File ID:

METICP7

Dilution:

2.0

Initial Weight/Volume:

070212-01.ttx

Analysis Date:

200-40904

100 mL

Prep Date:

07/02/2012 1530 06/25/2012 1434 Final Weight/Volume:

100 mL

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			<b>7</b> .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	ĻJ	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	US	12.2	<b>7</b> 0.0
Silver		1 - 1	-20.0-	- <del>U</del> L-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: Prep Method:

7470A 7470A 1.0

Analysis Batch: Prep Batch:

200-41178 200-41166 Instrument ID: Lab File ID:

MEPCV3 II 062912EE.PRN

Dilution: Analysis Date:

Prep Date:

06/29/2012 1544 06/28/2012 1200 Initial Weight/Volume: Final Weight/Volume:

50 mL 50 mL

Analyte Mercury Result (ug/L) 0.20

Qualifier

MDL 0.060

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: Prep Method:

6010C 3010A

Analysis Batch: Prep Batch:

200-41285

Instrument ID: Lab File ID:

METICP7

Dilution:

2.0

200-40904

Initial Weight/Volume:

070212-01.ttx 100 mL

Analysis Date:

07/02/2012 1551

Final Weight/Volume:

100 mL

Prep Date:

06/25/2012 1434

					100				
Analyte			Result (ug/L)	Qualifier		MDL		RL	
Aluminum			72400		* *	78.0		400	
Antimony			24.2	Sur J		8.2		120	4
Arsenic			20.1			8.8		20.0	
Barium			13.6	X J	Pin .	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	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	9 0		18900			360		10000	
Selenium			70.0	UJ		12.2		70.0	
Silver			<del>-20.0</del>	-UL-R		4.2-	100	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: Prep Method:

7470A 7470A 1.0

Analysis Batch: Prep Batch:

200-41178 200-41166

Instrument ID: Lab File ID:

MEPCV3 II 062912EE.PRN

Dilution: Analysis Date: Prep Date:

06/29/2012 1546 06/28/2012 1200 Initial Weight/Volume: Final Weight/Volume:

50 mL 50 mL

Analyte Mercury Result (ug/L) 0.20

Qualifier U

MDL 0.060 RL 0.20

Job Number: 200-11392-1

Sdg Number: 11392

		Gen	eral Chen	nistry				
Client Sample ID:	OF-1							
Lab Sample ID:	200-11392-1					Date Sampled	06/20/2012 0900	
Client Matrix:	Water					Date Received	06/21/2012 1020	
Analyte	Result	Qual	Units	MDL	RL	Dil	Method	
Ammonia (as N)	93.3	leaght-ris Annahit nor An shi bhanladhanthnail rinneasanailteaghar daolannaidh seòlainnaidh	mg/L	0.65	5.0	5.0	4500 NH3 H	
	Analysis Batch: 460-120359	Analysis Date:	07/18/20 ⁻	12 1418				
	Prep Batch: 460-120294	Prep Date: 07/		630				
pН	1.38	HFJ	SU			1.0	9040B	
	Analysis Batch: 460-118714	Analysis Date:	07/05/201	12 1625				
Chloride	69.9		mg/L	4.0	20.0	20	9056	
	Analysis Batch: 680-241660	Analysis Date:	06/26/201	12 1240				
Nitrate as N	0.25	U <b>)</b> ⊬(	mg/L	0.075	0.25	5.0	9056	
	Analysis Batch: 680-241426	Analysis Date:	06/22/20	12 1225				
Nitrite as N	-0.25-	R-UH-	mg/L	-0:075	-0.25	5.0	9056	
	Analysis Batch: 680-241426	Analysis Date:	06/22/20	12 1225				
Sulfate	7540		mg/L	104	200	200	9056	
	Analysis Batch: 680-241660	Analysis Date:	06/26/201	12 1252				
Fluoride	4.0	U	mg/L	0.80	4.0	20	9056	
	Analysis Batch: 680-241660	Analysis Date:	06/26/20	12 1240				
Bicarbonate Alkalin	ity as CaCO3 5.0	U	mg/L	5.0	5.0	1.0	SM 2320B	
	Analysis Batch: 460-118497	Analysis Date:	07/03/201	12 1457				
Carbonate Alkalinit	y as CaCO3 5.0	U	mg/L	5.0	5.0	1.0	SM 2320B	
	Analysis Batch: 460-118497	Analysis Date:	07/03/20	12 1457				
Alkalinity	5.0	U	mg/L	5.0	5.0	1.0	SM 2320B	
	Analysis Batch: 460-118497	Analysis Date:		12 1457				
Phosphorus as PO	4 51.7	Eu Î	mg/L	0.25	1.5	50	SM 4500 P E	
	Analysis Batch: 460-120487	Analysis Date:	-	12 1730		-		
	Prep Batch: 460-120484	Prep Date: 07/						
Phosphorus as P	16.8	•	mg/L	0.25	1.5	50	SM 4500 P E	

Analysis Date: 07/18/2012 1730

mg/L

0.63

1.0

1.0

SM 4500 S2 E

Prep Date: 07/18/2012 1130

Analysis Date: 06/27/2012 2000

J

Sulfide

Analysis Batch: 460-120487

Analysis Batch: 460-118363

0.71

Prep Batch: 460-120484

Job Number: 200-11392-1

Sdg Number: 11392

#### **General Chemistry**

Cilent 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

Client Matrix:	lient Matrix: Water						187	Date Receive	Date Received: 06/21/2012 1020		
Analyte		Result	Qual	Units	MDL	2	RL	Dil	Method		
Ammonia (as N)	4	83.1	**************************************	mg/L	0.65		5.0	5.0	4500 NH3 H		
	Analysis Batch:	460-120359	Analysis Date:	07/18/2012	2 1421						
	Prep Batch: 460	-120294	Prep Date: 07/	18/2012 06	30						
pН		1.39	HF	SU				1.0	9040B		
	Analysis Batch:	460-118714	Analysis Date:	07/05/2012	2 1623						
Chloride		71.9		mg/L	4.0		20.0	20	9056		
	Analysis Batch:	680-241660	Analysis Date:	06/26/2012	2 1304						
Nitrate as N		0.25	U	mg/L	0.075		0.25	5.0	9056		
	Analysis Batch:	680-241426	Analysis Date:		2 1006						
Nitrite as N		-0.25	-4R	mg/L	-0.075	- 5	<del>0:25</del>	- 5.0	9056		
	Analysis Batch:	680-241426	Analysis Date:	06/22/2012	2 1006						
Sulfate		7620		mg/L	104		200	200	9056		
	Analysis Batch:	680-241660	Analysis Date:	06/26/2012	2 1317						
Fluoride		4.0	U	mg/L	0.80		4.0	20	9056		
	Analysis Batch:	680-241660	Analysis Date:	06/26/2012	2 1304						
Bicarbonate Alkalir	nity as CaCO3	5.0	U	mg/L	5.0		5.0	. 1.0	SM 2320B		
	Analysis Batch:	460-117871	Analysis Date:	06/27/2012	2 2111						
Carbonate Alkalinit	ty as CaCO3	5.0	U	mg/L	5.0		5.0	1.0	SM 2320B		
	Analysis Batch:	460-117871	Analysis Date:	06/27/2012	2 2111						
Alkalinity	- 12	5.0	U	mg/L	5.0		5.0	1.0	SM 2320B		
	Analysis Batch:	460-117871	Analysis Date:	06/27/2012	2 2111						
Phosphorus as PC	)4	50.8		mg/L	0.25		1.5	50	SM 4500 P E		
	Analysis Batch:	460-120487	Analysis Date:	07/18/2012	2 1730						
	Prep Batch: 460	-120484	Prep Date: 07/	18/2012 11:	30						
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	2 1730						
	Prep Batch: 460	-120484	Prep Date: 07/	18/2012 11:	30						
Sulfide		9.6	#	mg/L	0.63		1.0	1.0	SM 4500 S2 E		
	Analysis Batch:	460-118363	Analysis Date:	06/27/2012	2 2000						

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	1: 460-120359	Analysis Date:	07/18/2012	2 1433			
	Prep Batch: 46	60-120294	Prep Date: 07/	18/2012 06	30	图1.17 作。c		
ρΗ		1.38	HF_	SU			1.0	9040B
	Analysis Batch	ı: 460-118714	Analysis Date:	07/05/2012	1626	٠.		ч.
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:			urati ta		
Nitrite as N		-0.25	JU-R	mg/L	-0.075	-0.25	5.0	9056
	Analysis Batch	: 680-241426	Analysis Date:					
Sulfate		7600		mg/L	104	200	200	9056
	Analysis Batch	: 680-241660	Analysis Date:	06/26/2012	2 1834			
Fluoride		4.0	U	mg/L	0.80	4.0	20	9056
	Analysis Batch	: 680-241660	Analysis Date:					
Bicarbonate Alkaliı	nity 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 Alkalini	ty 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 PC	)4	51.4		mg/L	0.25	1.5	50	SM 4500 P E
	Analysis Batch	: 460-120487	Analysis Date:	07/18/2012	2 1730			
	Prep Batch: 46	0-120484	Prep Date: 07/	18/2012 11	30			
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	2 1730			
	Prep Batch: 46	0-120484	Prep Date: 07/	18/2012 11	30			
Sulfide		1.5	1	mg/L	0.63	1.0	1.0	SM 4500 S2 E
Samac	Analysis Batch	460-118363	Analysis Date:	•			1111 12 1111	0

Job Number: 200-11392-1

Sdg Number: 11392

## **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

	42						
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:	07/18/201	2 1436			
	Prep Batch: 460-120294	Prep Date: 07/	18/2012 06	30			
рH	1.44	HF	-SU			1.0	9040B
	Analysis Batch: 460-118714	Analysis Date:	07/05/201	2 1627			
Chloride	76.6		mg/L	4.0	20.0	20	9056
	Analysis Batch: 680-241660	- Analysis Date:	06/26/201	2 1858			
Nitrate as N	0.25	U	mg/L	0.075	0.25	5.0	9056
	Analysis Batch: 680-241426	Analysis Date:	06/22/201				
Nitrite as N	<del>-0.25-</del>	-UR	mg/L	₹0:075	0.25	5.0	9056
	Analysis Batch: 680-241426	Analysis Date:	06/22/201	2 1108			
Sulfate	7080		mg/L	104	200	200	9056
	Analysis Batch: 680-241660	Analysis Date:	06/26/201	2 1911			
Fluoride	4.0	U	mg/L	0.80	4.0	20	9056
	Analysis Batch: 680-241660	Analysis Date:	06/26/201	2 1858			
Bicarbonate Alkalin	nity as CaCO3 5.0	U	mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 460-117871	Analysis Date:	06/27/201	2 2122			
Carbonate Alkalinit	y as CaCO3 5.0	U	mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 460-117871	Analysis Date:	06/27/201:	2 2122			
Alkalinity	5.0	U	mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch: 460-117871	Analysis Date:	06/27/201	2 2122			
Phosphorus as PO	71.3		mg/L	0.50	3.0	100	SM 4500 P E
	Analysis Batch: 460-120487	Analysis Date:	07/18/201	2 1730			
	Prep Batch: 460-120484	Prep Date: 07/	18/2012 11	30			
Phosphorus as P	23.3		mg/L	0.50	3.0	100	SM 4500 P E
	Analysis Batch: 460-120487	Analysis Date:	07/18/201:	2 1730			
	Prep Batch: 460-120484	Prep Date: 07/	18/2012 11	30			
Sulfide	3.3	7	mg/L	0.63	1.0	1.0	SM 4500 S2 E
	Analysis Batch: 460-118363	Analysis Date:	-		= 144		,ott 02 L

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
----------------	-----------------

Olient Matrix.	vate.						ale Neceive	u. 00/21/2012 102
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: 46	0-120294	Prep Date: 07/	_	30			
pH		1.38	HF_J	_ิร∪			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:		1923			
Nitrate as N		0.25	υχ	mg/L	0.075	0.25	5.0	9056
	Ánalysis Batch		Analysis Date:					
Nitrite as N		<del>- 0.25</del> -	RUH	mg/L	-0.075	-0.25	5.0	9056
	Analysis Batch		Analysis Date:	06/22/2012	1210			
Sulfate		7510		mg/L	104	200	200	9056
	Analysis Batch		Analysis Date:		1936			
Fluoride		4.0	U	mg/L	0.80	4.0	20	9056
	Analysis Batch		Analysis Date:					
Bicarbonate Alkali	•	5.0	U	mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch		Analysis Date:					
Carbonate Alkalini	-	5.0	U	mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch		Analysis Date:					
Alkalinity		5.0	U	mg/L	5.0	5.0	1.0	SM 2320B
	Analysis Batch		Analysis Date:					
Phosphorus as PC		51.0		mg/L	0.25	1.5	50	SM 4500 P E
	Analysis Batch		Analysis Date:					
	Prep Batch: 46		Prep Date: 07/					
Phosphorus as P		16.6		mg/L	0.25	1.5	50	SM 4500 P E
	Analysis Batch		Analysis Date:					
	Prep Batch: 46		Prep Date: 07/	-				
Sulfide	Andreis D. (1)	1.5		mg/L	0.63	1.0	1.0	SM 4500 S2 E
	Analysis Batch	: 460-118363	Analysis Date:	06/27/2012	2000			

Job Number: 200-11392-2

Sdg Number: 11392-2

#### **General Chemistry**

Client Sample ID: OF-1

Client: ARCADIS U.S. Inc

Lab Sample ID: 200-11392-1 Date Sampled: 06/20/2012 0900 Client Matrix: Water

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 060						

Job Number: 200-11392-2

Sdg Number: 11392-2

#### **General Chemistry**

Client Sample ID: I-120

Prep Batch: 460-118292

Client: ARCADIS U.S. Inc

Lab Sample ID: 200-11392-2 Date Sampled: 06/20/2012 1200

Client Matrix: Water Date Received: 06/21/2012 1020

RL Analyte MDL Dil Result Qual Units 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 Date: 06/29/2012 0600

Job Number: 200-11392-2

Sdg Number: 11392-2

#### **General Chemistry**

Client Sample ID: I-111

Prep Batch: 460-118292

Client: ARCADIS U.S. Inc

Lab Sample ID: 200-11392-3 Date Sampled: 06/20/2012 1400 Client Matrix:

Water Date Received: 06/21/2012 1020

RL Analyte Dil Result Qual Units MDL 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 Date: 06/29/2012 0600

Job Number: 200-11392-2

Sdg Number: 11392-2

#### **General Chemistry**

Client Sample ID: I-112

Prep Batch: 460-118292

Client: ARCADIS U.S. Inc

Lab Sample ID: 200-11392-4 Date Sampled: 06/20/2012 1500

Client Matrix: Water Date Received: 06/21/2012 1020

Analyte RLDil Result Qual Units MDL 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 Date: 06/29/2012 0600

Job Number: 200-11392-2

Sdg Number: 11392-2

#### **General Chemistry**

Client Sample ID: DUP-SW-01-06202012

Client: ARCADIS U.S. Inc

Lab Sample ID: 200-11392-6 Date Sampled: 06/20/2012 0000 Client Matrix: Date Received: 06/21/2012 1020 Water

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	•						
	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 060					



# **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	Parent			Ana	lysis		
Sample ID	Lab ID	Matrix	Collection Date	Sample	voc	svoc	РСВ	DRO	MET	MISC
SB-18 (3-3.5)	200-11441-1	Soil	6/22/2012		Х	Х	Χ		Х	Χ
SB-17 (4-5)	200-11441-2	Soil	6/22/2012		Χ	Χ	Χ		Χ	Χ
SB-28A (8.7-9.7)	200-11441-3	Soil	6/22/2012		Χ	Χ	Χ		Χ	Χ
SB-15 (5.5-6.5)	200-11441-4	Soil	6/22/2012		Х	Х	Χ		Х	Χ
SB-10 (5-6)	200-11441-5	Soil	6/22/2012		Χ	Χ	Χ		Χ	Х
SB-10 (7.4-8.4)	200-11441-6	Soil	6/22/2012		Х	Х	Χ		Х	Х
SB-16 (7.9-8.9)	200-11441-7	Soil	6/22/2012		Χ	Χ	Χ		Χ	Χ
SB-09 (8-8.9)	200-11441-8	Soil	6/22/2012		Х	Х	Χ		Х	Χ
SB-08 (13.9-14.5)	200-11441-9	Soil	6/19/2012		Х	Х	Χ		Х	Х
SB-08 (12.8-13.9)	200-11441-10	Soil	6/19/2012		Х	Χ	Χ		Х	Χ
TB-06212012	200-11441-11	Water	6/22/2012		Х					
SB-22 (5.7-6.7)	200-11460-1	Soil	6/23/2012		Х	Χ	Χ		Х	Χ
SB-23 (5-6)	200-11460-2	Soil	6/23/2012		Х	Х	Χ		Х	Χ
SB-24 (5.5-6.5)	200-11460-3	Soil	6/23/2012		Х	Х	Χ		Х	Χ
SB-17 (10-10.7)	200-11460-4	Soil	6/25/2012		Х	Χ	Χ		Х	Χ
SB-17 (11.2-12.2)	200-11460-5	Soil	6/25/2012		Х	Χ	Χ		Х	Χ
SB-18 (11.1-11.7)	200-11460-6	Soil	6/25/2012		Х	Χ	Χ		Х	Χ
TB-06252012	200-11460-7	Water	6/25/2012		Х					
DUP-04-06252012	200-11460-8	Soil	6/25/2012	SB-17 (10-10.7)	Х	Х	Х		Х	Х

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.

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

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 946 9260B	Soil	48 hours from collection to extraction and 14 days from collection to analysis	Cool to 4±2 °C
SW-846 8260B	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) SB-23 (5-6.5) 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		
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	Detected sample results < RL and < BAL	"UB" at the RL
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)		Bromomethane	24.9 %	
TB-06252012 DUP-04-06252012	Initial %RSD	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)		Chloroethane	16.2 %	
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)	Initial %RSD	Acetone	19.6 %	
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)		2-Butanone	20.4 %	
		Dichlorodifluoromethane	-35.2 % (decrease in sensitivity)	
TB-06212012	Continuing %D	Chloromethane -31.1 % (decrease in sens		
		Bromomethane	-57.7 % (decrease in sensitivity)	
		Dichlorodifluoromethane	-24.5 % (decrease in sensitivity)	
25 40 (5 0)	0 11 1 11 11	Chloromothano	-21.6 % (decrease in sensitivity)	
SB-10 (5-6)	Continuing %D	Bromomethane	-37.8 % (decrease in sensitivity)	
		Acetone	+20.5 % (increase in sensitivity)	
SB-17 (10-10.7)	0 11 1 015	Dichlorodifluoromethane	+38.3 % (increase in sensitivity)	
TB-06252012 DUP-04-06252012	Continuing %D	Vinyl chloride	+26.0 % (increase in sensitivity)	
		Dichlorodifluoromethane	-26.7 % (decrease in sensitivity)	
SB-22 (5.7-6.7)		Methyl acetate	+23.9 % (increase in sensitivity)	
SB-22 (5.7-6.7)RE	Continuing %D	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)		Dichlorodifluoromethane	-34.3 % (decrease in sensitivity)
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	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
	RRF < 0.05	Non-detect R	
	KKF < 0.00	Detect	
Initial and Continuing	RRF < 0.01 ¹	Non-detect	R
Calibration	KKF < 0.01	Detect	R J R J No Action UJ J No Action J UJ UJ
	RRF > 0.05 or RRF > 0.01 ¹	Non-detect	No Action
	KKF > 0.00 01 KKF > 0.01	Detect	
Initial Calibration	%RSD > 15% or a	Non-detect	UJ
Initial Calibration	correlation coefficient < 0.99	Detect	J
	%D > 20%	Non-detect	No Action
Continuing Calibration	(increase in sensitivity)	Detect	J
Continuing Calibration	%D > 20%	Non-detect	UJ
	(decrease in sensitivity)	Detect	J

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
	1,2-Dichloroethane-d ₄	AC
SB-23 (5-6)	1,2-Dichlorobenzene-d ₄ Toluene-d ₈ 4-Bromofluorobenzene	> UL
SD 22 (5.7.6.7)	1,2-Dichloroethane-d ₄ 1,2-Dichlorobenzene-d ₄	AC
SB-22 (5.7-6.7)	Toluene-d ₈ 4-Bromofluorobenzene	> UL
SB-18 (3-3.5) SB-17 (4-5) SB-28A (8.7-9.7)	1,2-Dichloroethane-d ₄ Toluene-d ₈ 1,2-Dichlorobenzene-d ₄	AC
SB-24 (5.5-6.5) SB-17 (11.2-12.2)	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
> OL	Detect	J
< LL but > 10%	Non-detect	UJ
< LL Dut > 10%	Detect	J
< 10%	Non-detect	R
< 10%	Detect	J
Surregates diluted below the calibration curve	Non-detect	UJ ¹
Surrogates diluted below the calibration curve	Detect	J 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)	Fluorobenzene Chlorobenzene-d ₅	AC
SB-28A (8.7-9.7) SB-18 (11.1-11.7)	1,4-Dichlorobenzene-d ₄	< LL but > 25%
	Fluorobenzene	AC < LL but > 25%
SB-22 (5.7-6.7)	Chlorobenzene-d₅ 1,4-Dichlorobenzene-d₄	
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 central limit (LIL)	Non-detect	No action
> the upper control limit (UL)	Detect	J
the lower central limit (LL) but > 259/	Non-detect	UJ
< the lower control limit (LL) but > 25%	Detect	J
< 25%	Non-detect	R
< 2376	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-d₄) 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
	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%
SB-17 (11.2-12.2)	Methylene Chloride Methyl t-butyl ether cis-1,2-Dichloroethene trans-1,3-Dichloropropene	< LL but > 10%  AC	AC
	1,1,2-Trichloro-1,2,2-trichfluoroethane Carbon disulfide Methylcyclohexane Tetrachloroethene		< 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
s the appel control limit (OL)	Detect	J
the lower central limit (LL) but > 100/	Non-detect	UJ
< the lower control limit (LL) but > 10%	Detect	J
< 10%	Non-detect	R
< 10%	Detect	J
Parent sample concentration > 4x the	Detect	No Action
MS/MSD spiking solution concentration.	Non-detect	NO ACTION

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
> UL	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 central limit (III.)	Non-detect	No Action
> the upper control limit (UL)	Detect	J
the lower central limit (LL) but > 109/	Non-detect	UJ
< the lower control limit (LL) but > 10%	Detect	J
< 10%	Non-detect	R
< 10%	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
	Benzene	14000	13000	7.4 %
	Carbon disulfide	11000	10000	9.5 %
SB-17 (10-10.7) / DUP-04-06252012	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

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.

J Estimated (result is < RL)

## **DATA VALIDATION CHECKLIST FOR VOCs**

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

%R

Percent recovery
Relative percent difference RPD %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
3VV-040 6270C	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	
	RRF < 0.05	Non-detect	R	
	KKF < 0.00	Detect	J	
Initial and Continuing	RRF < 0.01 ¹	Non-detect	R	
Calibration	KKF < 0.01	Detect	J	
	RRF > 0.05 or RRF > 0.01 ¹	Non-detect	No Action	
	KKF > 0.05 0  KKF > 0.01	Detect		
Initial Calibration	%RSD > 15% or a	Non-detect	UJ	
Initial Calibration	correlation coefficient < 0.99	Detect	J	
	%D > 20%	Non-detect	No Action	
Continuing Colibration	(increase in sensitivity)	Detect	J	
Continuing Calibration	%D > 20%	Non-detect	UJ	
	(decrease in sensitivity)		J	

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 central limit (III)	Non-detect	No Action
> the upper control limit (UL)	Detect	J
the lower central limit (LL) but a 100/	Non-detect	UJ
< the lower control limit (LL) but > 10%	Detect	J
. 100/	Non-detect	R
< 10%	Detect	J
Surrogates diluted below	Non-detect	₁ 1
the calibration range	Detect	J

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
	4-Chloroaniline 3,3'-Dichlorobenzidine	< 10%	< 10%
	4-Nitrophenol	AC	< 10%
SB-17 (11.2-12.2)	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
> trie upper control limit (OL)	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
< the lower control limit (LL) but > 10 %	Detect	J
< 10%	Non-detect	R
< 10%	Detect	J
Parent sample concentration > 4x the	Detect	No Action
MS/MSD spiking solution concentration.	Non-detect	INO ACTION

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
> UL	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
	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 %
SB-17 (10-10.7) /	Chrysene	2700 J	1300 J	AC
DUP-04-06252012	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 No Yes		Performance Acceptable		Not
			No	Yes	Required
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (	GC/MS)				
Tier II Validation					
Holding Times		Х		Х	
Reporting Limits (units)		Х		Х	
Blanks					
A. Method Blanks		Х		Х	
B. Equipment/Field Blanks					Х
Laboratory Control Sample (LCS) Accuracy (%R)		Х		Х	
Laboratory Control Sample Duplicate (LCSD) %R					Х
LCS/LCSD Precision (RPD)					Х
Matrix Spike (MS) %R		Х	Х		
Matrix Spike Duplicate (MSD) %R		Х	Х		
MS/MSD RPD		Х	Х		
Field/Laboratory Duplicate Sample RPD		Х		Х	
Surrogate Spike %R		Х	Х		
Dilution Factor		Х		Х	
Moisture Content		Х		Х	
Tier III Validation					
System Performance and Column Resolution		Х		Х	
Initial Calibration %RSDs		Х		Х	
Continuing Calibration RRFs		Х		Х	
Continuing Calibration %Ds		Х	Х		
Instrument Tune and Performance Check		Х		Х	
Ion Abundance Criteria for Each Instrument Used		Х		Х	
Internal Standards		Х		Х	
Compound Identification and Quantitation		•	•		•
A. Reconstructed Ion Chromatograms		Х		X	
B. Quantitation Reports		Х		Х	
C. RT of Sample Compounds Within the Established RT Windows		Х		Х	
D. Quantitation transcriptions/calculations		Х		Х	
E. Reporting Limits Adjusted for Sample Dilutions  %R Percent Recovery		Х		Х	

%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
3VV-040 6U6ZA	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	Non-detect	UJ
Illitial Calibration	correlation coefficient <0.99	Detect	J
	%D > 15%	Non-detect	No Action
Continuing	(increase in sensitivity)	Detect	J
Calibration	%D > 15%	Non-detect	UJ
	(decrease in sensitivity)	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 central limit (LIL)	Non-detect	No Action
> the upper control limit (UL)	Detect	J

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

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	Required
GAS CHROMATOGRAPHY (GC/ECD)					
Tier II Validation					
Holding times		Х		Х	
Reporting limits (units)		X		Х	
Blanks					
A. Method blanks		Х		Х	
B. Equipment/Field blanks					Х
Laboratory Control Sample (LCS) Accuracy %R		Х		Х	
Laboratory Control Sample Duplicate (LCSD) %R					Х
LCS/LCSD Precision (RPD)					Х
Matrix Spike (MS) %R		Х		Х	
Matrix Spike Duplicate (MSD) %R		Х		Х	
MS/MSD RPD		Х		Х	
Field/Laboratory Duplicate Sample RPD		Х		Х	
Surrogate Spike %R		Х	Х		
Column (%D) (If dual column is performed-not confirmation purposes only)		Х		Х	
Dilution Factor		Х		Х	
Moisture Content		Х		Х	
Tier III Validation					
Initial calibration %RSDs		Х		Х	
Continuing calibration %Ds		Х	Х		
System performance and column resolution		Х		Х	
Compound identification and quantitation					
A. Quantitation Reports		Х		Х	
B. RT of sample compounds within the established RT windows		Х		Х	
C. Identification/Confirmation		Х		Х	
D. Quantitation transcriptions/calculations		Х		Х	
E. Reporting limits adjusted for sample dilutions		Х		Х	

%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
SD 17 (11 2 12 2)	Antimony	17 %
SB-17 (11.2-12.2)	Arsenic	52 %

Sample Location	Analyte	MS Recovery
	Barium	74 %
	Beryllium	74 %
	Cadmium	71 %
	Chromium	73 %
SB-17 (11.2-12.2)	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 200/ to 740/	Non-detect	UJ
MS percent recovery 30% to 74%	Detect	J
MC percent receivery 4 200/	Non-detect	R
MS percent recovery < 30%	Detect	J
MC percent receivers 1250/	Non-detect	No Action
MS percent recovery > 125%	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	Water: 20%	Non-detect	UJ
concentration > 5x RL	Soil: 35%	Detect	J
Parent sample and/or laboratory	Water: 1x RL	Non-detect	UJ
duplicate sample result • 5x the RL and difference between samples > RL	Soil: 2x RL	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
	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 %
SB-17 (10-10.7) /	Chromium	124	43.6	95.9 %
DUP-04-06252012	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
	Silver	0.3 J	1.3 U	AC
	Sodium	270 J	80.2 J	AC
SB-17 (10-10.7) /	Thallium	2.1 J	3.3 U	AC
DUP-04-06252012	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 %
	Aluminum	22 %
	Calcium	25 %
	Chromium	22 %
	Cobalt	24 %
	Iron	25 %
SB-17 (11.2-12.2)	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
> UL	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	Rep	orted		mance ptable	Not
	No	Yes	No	Yes	Required
Inductively Coupled Plasma – Atomic Emission Spect Atomic Absorption – Manual Cold Vapor (CV)	trometry (I	CP)			
Tier II Validation					
Holding Times		Х		Х	
Reporting limits (units)		Х		Х	
Blanks					
A. Instrument Blanks		Х	Х		
B. Method Blanks		Х	Х		
C. Equipment/Field Blanks					Х
Laboratory Control Sample (LCS)		Х		Х	
Matrix Spike (MS) Accuracy (%R)		Х	Х		
Matrix Spike Duplicate (MSD) %R					Х
MS/MSD Precision (RPD)					Х
Field/Laboratory Duplicate Sample RPD		Х	Х		
ICP Serial Dilution		Х	X		
Dilution Factor		Х		Х	
Moisture Content		Х		Х	
Tier III Validation					
Initial Calibration Verification		Х		Х	
Continuing Calibration Verification		Х		Х	
RL Standard		Х		Х	
ICP Interference Check		Х		Х	
Quantitation transcriptions/calculations		Х		Х	
Reporting limits adjusted to reflect sample dilutions		Х		Х	

[%]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	Water	28 days from collection to analysis	Cool to 4±2 °C; pH of < 2
by SM 4500-NH3-H	Soil	28 days from collection to analysis	Cool to 4±2 °C;
Cyanide by SW-846 9012,	Water	14 days from collection to analysis	Cool to 4±2 °C; pH of > 12.
9016	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	Water	28 days from collection to analysis	Cool to 4±2 °C; pH of < 2
by SM 4500-P-E	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	Water	28 days from collection to analysis	Cool to 4±2 °C; pH of < 2
by SW-846 9056	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)	рН	> 14 Days	ASAP

Sample Locations	Analyte	Analysis Completed	HT Criteria
SB-22 (5.7-6.7)	Corrosivity	> 14 Days	7 Days
SB-24 (5.5-6.5)	рН	> 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.

	Qualification		
Criteria	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
Wishvisib percent recovery 30% to 74%	Detect	J
MS/MSD percent recovery < 30%	Non-detect	R
M3/M3D percent recovery < 30%	Detect	J
MS/MSD percent recovery > 1259/	Non-detect	No Action
MS/MSD percent recovery > 125%	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
> the appear control limit (OL)	Detect	J
the lower central limit (LL) but > 109/	Non-detect	UJ
< the lower control limit (LL) but > 10%	Detect	J
. 100/	Non-detect	R
< 10%	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) /	Total Cyanide	583	240	83.4 %
DUP-04-06252012	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,	Rep	Reported		Performance Acceptable	
and 4500-P-E	No	Yes	No	Yes	Required
Miscellaneous Instrumentation					
Tier II Validation					
Holding times		Х	Х		
Reporting limits (units)		Х		Х	
Blanks					
A. Method blanks		Х		Х	
B. Equipment blanks					Х
Laboratory Control Sample (LCS) Accuracy (%R)		Х	Х		
Laboratory Control Sample Duplicate (LCSD) %R		Х		Х	
LCS/LCSD Precision (RPD)		Х		Х	
Matrix Spike (MS) %R		Х	Х		
Matrix Spike Duplicate (MSD) %R		Х	Х		
MS/MSD RPD		Х		Х	
Field/Laboratory Duplicate Sample RPD		Х	Х		
Dilution Factor		Х		Х	
Moisture Content		Х		Х	
Tier III Validation					
Initial calibration %RSD or correlation coefficient		Х		Х	
Continuing calibration %R		Х		Х	
Raw Data		Х		Х	
Quantitation transcriptions/calculations		Х		Х	
Reporting limits adjusted for sample dilutions		Х		Х	

[%]RSD – relative standard deviation

[%]R – percent recovery
RPD – relative percent difference
%D – difference

### **SAMPLE COMPLIANCE REPORT**

Sample Delivery					,		Comp	liancy ¹			
Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	voc	svoc	РСВ	DRO	MET	MISC	Noncompliance
	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
200-11441	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						1	Comp	liancy ¹	1		
Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	VOC	svoc	РСВ	DRO	MET	MISC	Noncompliance
	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
200-11441	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							Comp	liancy ¹			
Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	voc	svoc	РСВ	DRO	MET	MISC	Noncompliance
	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
200-11441	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 Bv:	Dennis Dvke

Signature:

Date: _August 31, 2012

Peer Review: Dennis Capria

Date: September 11, 2012

### CHAIN OF CUSTODY / CORRECTED SAMPLE ANALYSIS DATA SHEETS

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

**TestAmerico** 

LAB USE ONLY けってい 1 color Project No: Sample Numbers Job No: NY: K Other: Site/Project Identification  $R \omega 43027$ Ż ANALYSIS REQUESTED (ENTER 'X: BELOW TO INDICATE REQUEST) State (Location of site): Regulatory Program: 4 CHAIN OF CUSTODY / ANALYSIS REQUEST Soil: No. of. Water Samplers Name ( Printed Cont. Rush Opfages Authorized For: M Analysis Turnaround Time Matrix 13; 5001 Standard X 2 Week 1 Week Preservation Used: 1 = ICE, 2 = HCI,  $3 = H_2SO_4$ ,  $4 = HNO_3$ , 5 = NaOHOther 0420 02/1 1200 0%8 00917/61 Time 950 P.O.# 1030 1310 0191 11/61/9 1025 NOUL 8/2/17 Date Special Instructions AMELS Include 7 = Other 121605 State, THE LEADER IN ENVIRONMENTAL TESTING Name (for report and invoice) Sample Identification 6,5) R.7-9.7 Fax 2 12.8-13.9 139-145 6 = Other 29.8. 5,5 6 7.1 8-89 631-682-632 5-25 SB-284 SB-10. 58-15 58-08 87-68 とアーブ 58-09 SB:16 Company Address

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Relinquished by:	Date/Time:		0	Company		Recei	Received by:	•••							Date/Time:	ne:			_	•	Com	Company		1		
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2					:	•• !				i.	:	ï	Ý	•			,	١							-	

## **[estAmerico**

THE LEADER IN ENVIRONMENTAL TESTING

TAI PMS JIM Madison

**CHAIN OF CUSTODY / ANALYSIS REQUEST** 

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

asses of the second Vitrate Nitrate TAL-0016 (0408) F/WOF/L chiorile Suilute, Autons Water Metals Filtered (Yes/No)? LAB USE ONLY Project No: Sample Numbers Job No: - Krasklale Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132) Company Company Company ES ANALYSIS REQUESTED JENTER'X: BELOW TO INDICATE REQUEST) Site/Project Identification State (Location of site): 1300 49027, 0002, 680Cb Regulatory Program: Ummon Dia, 5,0114 Received by Received by 1025-1211930 m ග なというこ Maxthe But Jate / Time Date / Time Water: Samplers Name (Printed) No. of. Cont M N M Rush Chrages Authorized For: W Analysis Turnaround Time Standard 13 capaics Matrix 1:15 7:5 K Preservation Used: 1 = ICE, 2 = HCl, 3 = H₂SO₄, 4 = HNO₃, 5 = NaOH 2 Week 1 Week Other 1200 Time 1200 # O a: 6/25112 | 1330 1 S(25/112 -7115219 21/52/9 2118212 2118219 AN CA! Date , 7 = Other induks Company Company Company Name (for report and invoice) 5.7-6.7 5.5-6.5 221-2 DUO-011-06252017 Special Instructions # Mul A Sample Identification 217-682-927 6 = Other 4RC*もこ* B-06252012 Relinquished by Relinquished by Relinquished by 2016 2-85 2)-45 1-85 Company Relinquis Address Phone Š ŝ

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

## Chain of Custody Record



State, Zip: NJ, 08817 Empty Kit Relinquished by: Possible Hazard Identification DUP-04-06252012 (200-11460-8) SB-18 (11.1-11.7) (200-11460-6) SB-17 (11.2-12.2) (200-11460-5MSD SB-17 (11.2-12.2) (200-11460-5MS) SB-17 (11.2-12.2) (200-11460-5DU) SB-17 (11.2-12.2) (200-11460-5) SB-17 (10-10.7) (200-11460-4) SB-24 (5.5-6.5) (200-11460-3) SB-23 (5-6) (200-11460-2) SB-22 (5.7-6.7) (200-11460-1) Sample Identification - Client ID (Lab ID) Project Name: Krasdale, Hunts Point Bronx, NY Phone: 732-549-3900(Tel) Shipping/Receiving Client Information (Sub Contract Lab) Relinquished by: Deliverable Requested: I, II, III, IV, Other (specify) 777 New Durham Road telinquished by: estAmerica Laboratories, Inc. Custody Seals Intact: 732-549-3679(Fax) Custody Seal No.: X Project #: 20003974 WO# Due Date Requested: 7/9/2012 Sampler Date/Time: SSOW# TAT Requested (days): Sample Date 6/25/12 6/25/12 6/25/12 6/25/12 6/25/12 6/25/12 6/25/12 6/23/12 6/23/12 6/23/12 Date: Eastern Sample Time Eastern Eastern 12:05 Eastern 12:05 Eastern 12:05 Eastern 12:05 Eastern 12:00 Eastern 12:45 astern 13:30 ころ (C=comp Sample Preservation Code MSD SM 5 Company BT=Tissue, A=A Company (W=water, S=solld, O=waste/oll, Matrix Solid Solid Solid Solid Solid Solid Solid Solid Solid Solid jim.madison@testamericainc.com E-Mail: Lab PM: Madison, James W lime: Field Filtered Sample (Yes or No) Special Instructions/QC Requirements: Sample Disposal (A fee may be assessed if samples Perform MS/MSD (Yes or No) Cooler Temperature(s) °C and Other Remarks: Received by: Received by: ₹eceived by: × × Return To Client 9012A_Calc/ (MOD) Copy Analytes × × × ×  $\times$ ×  $\times$ × × × × SM4500_NH3_H/SM4500NH3_B ×  $\times$ × × ×  $\times$ × × × 9016/9016_ExtPrep Analysis Requested × × 2320B/DI_LEACH (MOD) Local Method × × × × Disposal Carrier Tracking No(s) × × × 8270C/3541 (MOD) Target Compound List for BNAs × × × × × Method of Shipment: × × × × × × × × × 9012A/9012A Prep l By Lab Date/Time: are retained longer than 1 month) ** 11527 1 -LA. 4 --Total Number of containers A - HCL
B - NaOH
C - Zri Acetate
C - Vitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid J-Ice J-DI Water K-EDTA L-EDA COC No: 200-8727.1 Page: Page 1 of 1 200-11441-1 reservation Codes: Special Instructions/Note: 6 M - Hexane
N - None
O - AsNaO2
P - NaZO4S
Q - NaZSO3
R - NaZSO3
S - H2SO4
I - TSP Dodecahydrate
U - Acetone
V - MCAA
W - ph 4-5
Z - other (specify) Company

Page

3863 of 3870

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:

Date Sampled: 06/22/2012 0950 Date Received: 06/23/2012 1010

8260B	Volatile	Organic	Compounds	(CC/MS)
040VD	voiatile	Organic	Compounds	GCIMIO

Analysis Batch:

Prep Batch:

Analysis Method: Prep Method: Dilution:

8260B 5035

1.0

200-41307

40.7

Instrument ID: 200-40882

Lab File ID: Initial Weight/Volume:

ngap08.d 6.09 g

Dilution: 1.0			i 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	MDJ	RL	
Dichlorodifluoromethane	6.9	U	0,32	6.9	
Chloromethane	6.9	U	0.36	6.9	
/inyl chloride	6.9	U	0.42	6.9	
Bromomethane	6.9	U	1.0	6.9	
Chloroethane	6.9	U /	0.53	6.9	
richlorofluoromethane	6.9	U /	0.46	6.9	
,1-Dichloroethene	6.9	U /	0.51	6.9	
,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	
rans-1,2-Dichloroethene	6.9	Ú	0.51	6.9	
flethyl t-butyl ether	6.9	ŭ	0.42	6.9	
,2-Dichloroethene, Total	6.9	ŭ	1.1	6.9	
.1-Dichloroethane	6.9	Ü	0.57	6.9	
is-1,2-Dichloroethene	6.9	Ü	0.58	6.9	
-Butanone	6.6	j	2.1	6.9	
Chloroform	6.9	ŭ	0.44		
,1,1-Trichloroethane	6.9	Ü	0.44	6.9	
Cyclohexane	6.9	\ U	1.2	6.9	
Carbon tetrachloride	6.9	VU	1.1	6.9	
Benzene	/11			6.9	
,2-Dichloroethane	6.9		0.98	6.9	
richloroethene	/	U U	0.86	6.9	
	6.9	U \	0.66	6.9	
Methylcyclohexane	6.9	U	0.24	6.9	
,2-Dichloropropane	6.9	U	0.40	6.9	
Bromodichloromethane	6.9	U \	0.29	6.9	
is-1,3-Dichloropropene	6.9	U \	0.48	6.9	
-Methyl-2-pentanone	6.9	U	0.83	6.9	
oluene /	3.0	JB	0.14	6.9	
rans-1,3-Dichtoropropene	6.9	U	0.18	6.9	
,1,2-Trichloroethane	6.9	U	0.47	6.9	
etrachloroethene /	6.9	U	0.15	6.9	
-Hexanone	6.9	U	0.68	6.9	
Dibromochloromethane /	6.9	U	0.15	6.9	
,2-Dibromoethane	6.9	U	0.21	6.9	
Chlorobenzene /	6.9	U	0.11	6.9	
Ethylbenzene /	7.4		0.078	6.9	
ylenes, Total	11		1.0	6.9	
Styrene	1.4	J	0.14	6,9	
Promoform /	6.9	U	0.28	6.9	
sopropylbenzene	0.66	J	0.11	6.9	
,1,2,2-Tetrachloroethane	6.9	U	0.36	6.9	
,3-Dichlorobenzene	6.9	U	0.21	6.9	1
I,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

Date Sampled: 06/22/2012 0950

Client Matrix: Solid		% Moisture:	40.7	Date	Received: 06/2	23/2012 1010
× × × × × × × × × × × × × × × × × × ×		260B Volatile Organic (	Compounds (GC/MS	34		
Analysis Method: 8260B Prep Method: 5035	C selection		00-41307 00-4088 <del>2</del>	Instrument ID: Lab File ID:	N.i ngap08.d	
Dilution: 1.0 Analysis Date: 07/02/201			w.)	Initial Weight/Volume: Final Weight/Volume:	6.09 g 5 mL	
Prep Date: 06/25/201						
Analyte	DryWt Corrected: Y	Result (ug/Kg			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	JB	0.28	6.9	
Surrogate		%Rec	Qualifie	Acceptar	nce Limits	The grant of
1,2-Dichloroethane-d4	t de tre de transcription de transcription de transcription de la company de la company de la company de la comp	87	######################################	65 - 155		
Toluene-d8		115		80 - 115		
Bromofluorobenzene	4,	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 Voiatlie Organic Compounds (GC/MS)

Analysis Method:

8260B

Analysis Batch:

200-41377

Instrument ID:

Prep Method: Dilution:

5035

Prep Batch:

200-40882

Lab File ID: Initial Weight/Volume: ngaq06.d 5.62 g

Analysis Date:

1.0

Run Type:

RE

07/03/2012 1026 06/25/2012 1044

Prep	Date:
------	-------

Final	Weight	/Volume	):

5 mL

Analyte	DryWt Corrected: \	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-trichfluo	oroethane	7.5		U	0.50	7.5
Acetone	A	44		<del>1</del> <del>1</del>	1.5	7.5
Carbon disulfide		53		丁	0.47	7.5
Methyl acetate		7.5		U	0.95	7.5
Methylene Chloride		7.542		+ 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		UJ	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		Ü	1.1	7.5
Benzene		14		I	1.1	7.5
1,2-Dichloroethane		7.5		Ú	0.93	7.5
Trichloroethene		7.5		U	0.72	7.5
Methylcyclohexane		7.5		Ū	0.26	7.5
1,2-Dichloropropane		7.5		U	0.44	7.5
Bromodichloromethane		7.5		Ū	0.32	7.5
cis-1,3-Dichloropropene		7.5		Ū	0.53	7.5
4-Methyl-2-pentanone		7.5		U ,	0.90	7.5
Toluene		3.1		JÆ	0.15	7.5
trans-1,3-Dichloropropene		7.5		ΰ	0.20	7.5
1,1,2-Trichloroethane		7.5		Ū	0.51	7.5
Tetrachloroethene		7.5		Ū	0.17	7.5
2-Hexanone		7.5		Ū	0.74	7.5
Dibromochloromethane		7.5		Ü	0.17	7.5
1.2-Dibromoethane		7.5		Ü	0.23	7.5
Chlorobenzene		7.5		Ü.	0.11	7.5
Ethylbenzene		7.3			0.084	7.5
Xylenes, Total		9.2		子	1.1	7.5
Styrene		7.5		O JE	0.15	7.5
December		7.0			0.10	7.5

1,1,2,2-Tetrachloroethane

Bromoform

Isopropylbenzene

1,3-Dichlorobenzene

1,4-Dichlorobenzene

7.5

7.5

7.5

7.5

0.63

U

J

U

U

U

0.30

0.12

0.39

0.23

0.35

7.5

7.5

7.5

7.5

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:

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

40.7

Instrument ID:

N.i

Prep Method:

5035

Lab File ID:

Prep Batch:

200-40882

ngaq06.d

Dilution:

1.0

Run Type:

Initial Weight/Volume:

5.62 g

Analysis Date:

07/03/2012 1026

RE

Final Weight/Volume:

Prep Date:

06/25/2012 1044

5 mL

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

Lab File ID:

ngap09.d

Dilution:

Prep Batch:

200-40882

Initial Weight/Volume:

5.64 g

1.0

Analysis Date:

07/02/2012 1310

Pren Date:

Final Weight/Volume:

0.30

6.6

5 mL

Г	rep	Date.	

Analyte DryWt Co	rrected: 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	P. D. Three	6.6		U	0.39	6.6
Bromomethane	**	6.6		U	0.97	6.6
Chloroethane		6.6		UI	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		I.	1.3	6.6
Carbon disulfide		39		0 H H	0.41	6.6
Methyl acetate		6.6		U	0.83	6.6
Methylene Chloride	6.6	0.85		+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		Ū	0.42	6.6
1,1,1-Trichloroethane		6.6		Ū	0.92	6.6
Cyclohexane		6.6		Ū	1.1	6.6
Carbon tetrachloride		6.6		Ū	1.0	6.6
Benzene		45		I	0.93	6.6
1,2-Dichloroethane		6.6		Ú	0.81	6.6
Trichloroethene		6.6		Ū	0.63	6.6
Methylcyclohexane		0.95		J	0.22	6.6
1,2-Dichloropropane		6.6		Ū	0.38	6.6
Bromodichloromethane		6.6		Ū	0.28	6.6
cis-1,3-Dichloropropene		6.6		Ü	0.46	6.6
4-Methyl-2-pentanone		6.6		Ü	0.79	6.6
Toluene		7.5		RJ.	0.13	6.6
trans-1,3-Dichloropropene		6.6		U	0.17	6.6
1,1,2-Trichloroethane		6.6		Ü	0.45	6.6
Tetrachloroethene		6.6		Ü	0.14	6.6
2-Hexanone		6.6		Ü	0.64	6.6
Dibromochloromethane		6.6		Ü	0.14	6.6
1,2-Dibromoethane		6.6		Ü	0.20	6.6
Chlorobenzene		6.6			0.10	6.6
Ethylbenzene		28		7	0.073	6.6
Xylenes, Total		24		0 H H 0	0.96	6.6
Styrene		6.6		11	0.13	6.6
Bromoform		6.6		U	0.13	6.6
Isopropylbenzene		3.3		J	0.10	6.6
1,1,2,2-Tetrachloroethane		6.6		UJ	0.10	
		6.6		υ <i>/</i> Σ		6.6
1,3-Dichlorobenzene		0.0		لثر∪	0.20	6.6

1,4-Dichlorobenzene

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:

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

32.4

Instrument ID:

Prep Method:

5035

N.i

Prep Batch:

200-40882

Lab File ID:

ngap09.d

Dilution:

1.0

Initial Weight/Volume:

5.64 g

Analysis Date:

07/02/2012 1310

Prep Date:

06/25/2012 1044

Final Weight/Volume:

5 mL

٠.	ıcp	Du	ic.

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		6.6	UJ	0.29	6.6
1,2-Dibromo-3-Chloropropane		6.6	U	1.2	6.6
1,2,4-Trichlorobenzene		6.6 0.35	JO UB	0.26	6.6

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	. 80	enterioristi en en enterioristi (en en espeti en en entretistat de enterioristica entreta en este en en en de	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:

TestAmerica Burlington

200-11441-2

Client Matrix:

Solid

% Moisture:

32.4

Date Sampled: 06/22/2012 1420

Date Received: 06/23/2012 1010

		8260B Volatila O	nie Compour	de (CC/III	IC)		
		8260B Volatile Orga		us (GC/N			
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: 07/03/20	12 1056	Run Type:	RE		Final Weight/Volume:	5 mL	
Prep Date: 06/25/20	12 1044						
Analyte	DryWt Corrected: \	Result (u	ı/Kg)	Qualific	er MDL	RL	
Dichlorodifluoromethane	4	7.1		Ū	0.33	7.1	4 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		Ū	0.54	7.1	
Trichlorofluoromethane		7.1		Ü	0.47	7.1	
1,1-Dichloroethene		7.1		U	Ø.53	7.1	
1,1,2-Trichloro-1,2,2-trichfluoro	ethane	7.1		Ü	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	
		7.1			/		
Methylene Chloride				U /	0.78	7.1	
trans-1,2-Dichloroethene		7.1		U/	0.53	7.1	
Methyl t-butyl ether		7.1		של	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		7,8			1.0	7.1	
1,2-Dichloroethane		<b>/</b> 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		Ŭ	0.41	7.1	
Bromodichloromethane		7.1		U	0.30	7.1	
cis-1,3-Dichloropropene		7.1		Ü	0.50	7.1	
4-Methyl-2-pentanone		7.1	`	\			
		11		7	0.85	7.1	
Toluene	/ =			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		<b>7.1</b>		U	0.21	7.1	
Chlorobenzene		7.1		U	0.11	7.1	
Ethylbenzene		38		В	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	
sopropyleenzene		3.4		J	0.11	7.1	
1,1,2,2 Tetrachloroethane		7.1		Ü	0.37	7.1	
1,3-Dichlorobenzene		7.1		Ü	0.21	7.1	
1,4-Dichlorobenzene		7.1		U	0.33	7.1	

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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 Voiatile Organic Compounds (GC/MS)

Analysis Method:

8260B

Analysis Batch: Prep Batch:

200-41377 200-40882

Instrument ID: Lab File ID:

N.i

Prep Method: Dilution:

5035 1.0

Initial Weight/Volume:

ngaq07.d 5.2 g

Analysis Date:

Run Type: RE Final Weight/Volume:

MDL

5 mL

Prep Date:

Analyte

Toluene-d8

07/03/2012 1056 06/25/2012 1044

DryWt Corrected: Y

Result (ug/Kg) Qualifier 7.1 7.1 Ù,

0.31 1.3 0.28 7.1 7.1 7.1

RL

1,2,4-Trichlorobenzene Surrogate 1,2-Dichloroethane-d4

1,2-Dibromo-3-Chloropropane

1,2-Dichlorobenzene

Bromofluorobenzene

1,2-Dichlorobenzene-d4

%Rec 92

122

142

122

0.49

Qualifier Х

JΒ

Х

Acceptance Limits 65 - 155 80 - 115

80 - 115 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

82	60B	Volatile	Organic	Compour	nds (GC/MS	;)
	۸۵۵	lucio Do	lob. C	000 44207		

Analysis Method:

8260B

Analysis Batch:

Instrument ID:

N.i

Prep Method: Dilution:

5035

Prep Batch:

200-40882

Lab File ID: Initial Weight/Volume:

ngap10.d 5.89 g

Analysis Date:

1.0

07/02/2012 1341

Final Weight/Volume:

5 mL

Prep Date:

06/25/2012 1044

Analyte .	DryWt Corrected: Y	Result (ug/K	(g)	Qualifier	MDL	/ RL
Dichlorodifluoromethane		6.8		U	0.31	6.8
Chloromethane		6.8		U	0.35	6.8
Vinyl chloride	10	6.8		U	0.41	6.8
Bromomethane		6.8		U	1.0	6.8
Chloroethane	and the second	6.8		U	0.52	6.8
Trichlorofluoromethane	ACT I	6.8		U	0.45	6.8
1,1-Dichloroethene		6.8		U	0.51	6.8
1,1,2-Trichloro-1,2,2-trichfluo	roethane	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		χÚ	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 X		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		ά	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		JB \	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		Ū	0.10	6.8
Ethylbenzene		0.15		J	0.076	6.8
Xylenes, Total		6.8		Ū	1.0	6.8
Styrene		6.8		Ü	0.14	6.8
Bromoform		6.8	8	Ü	0.27	6.8
isopropylbenzene		6.8		Ü	0.11	6.8
1,1,2,2-Tetrachloroethane		6.8		Ü	0.35	6.8
1,3-Dichlorobenzene		6.8		Ü	0.20	6.8
1,4-Dichlorobenzene		6.8		U	0.20	6.8
1,7 DIGINOTODE IZENE		0.0		J	0.31	0.0

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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

9/ Mainte

37.8

Date Sampled: 06/22/2012 1310

Client Matrix: Solid	d .	% Moisture:	37.8	Date	Received: 06/2	3/2012 101
		8260B Voiatile Organic	Compounds (GC/MS)			
Analysis Method: 8260B	M type in	Analysis Batch: 2	200-41307 Ir	nstrument ID:	N.i	
Prep Method: 5035		Prep Batch: 2	200-40882 L	ab File ID:	ngap10.d	
Dilution: 1.0			Ir	nitial Weight/Volume:	5.89 g	
Analysis Date: 07/02/2	012 1341	= = = = = = = = = = = = = = = = = = = =	/ =	inal Weight/Volume:	5 mL	
Prep Date: 06/25/2	012 1044					
			49			
Analyte	DryWt Corrected: \	Result (ug/K	g) 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	11 - 11	6.8	U	0.27	6.8	
Surrogate		%Rec	Qualifier	Acceptan	ce Limits	
1,2-Dichloroethane-d4		76		65 - 155		*****************
Toluene-d8		108		80 - 115		
Bromofluorobenzene		130	Х	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 Voiatile Organic Compounds (GC/MS)

Result (ug/Kg)

Analysis Method:

8260B

Analysis Batch:

200-41377

Instrument ID:

Prep Method:

5035

Prep Batch:

200-40882

Lab File ID:

Qualifier

ngaq08.d

Dilution:

1.0

Run Type:

RE

Initial Weight/Volume:

5.33 g

Analysis Date:

07/03/2012 1127 06/25/2012 1044

DryWt Corrected: Y

Final Weight/Volume:

MDL

5 mL

RL

Analyte	

		(-33)		
Dichlorodifluoromethane	7.5	UT	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	é U	0.56	7.5
1,1,2-Trichloro-1,2,2-trichfluoroethane	7.5	U	0.50	7.5
Acetone	140	<b>—</b>	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	Ū	1.2	7.5
1,1-Dichloroethane	7.5	Ü	0.62	7.5
cis-1,2-Dichloroethene	7.5	: U	0.63	7.5
2-Butanone	27	<b>エ</b>	2.3	7.5
Chloroform	7.5	Ú	0.48	7.5
1,1,1-Trichloroethane	7.5	× Ū	1.1	7.5
Cyclohexane	7.5	Ū	1.3	7.5
Carbon tetrachloride	7.5	Ū	1.1	7.5
Benzene	7.5	Ū	1.1	7.5
1,2-Dichloroethane	7.5	Ū	0.94	7.5
Trichloroethene	7.5	Ū	0.72	7.5
Methylcyclohexane	7.5	. U -=	0.26	7.5
1,2-Dichloropropane	7.5	Ū	0.44	7.5
Bromodichloromethane	7.5	U	0.32	7.5
cis-1,3-Dichloropropene	7.5	Ū =	0.53	7.5
4-Methyl-2-pentanone	7.5	Ü	0.91	7.5
Toluene	7.5 <del>0.39</del>	18 B	0.15	7.5
trans-1,3-Dichloropropene	7.5	Ü	0.20	7.5
1,1,2-Trichloroethane	7.5	U	0.51	7.5
Tetrachloroethene	7.5	Ü	0.17	7.5
2-Hexanone	7.5	Ü	0.74	7.5
Dibromochloromethane	7.5	Ü	0.17	7.5
1,2-Dibromoethane	7.5	Ü	0.23	7.5
Chlorobenzene	7.5	Ü	0.11	7.5
Ethylbenzene	7.5	Ü	0.084	7.5
Xylenes, Total	7.5	Ü	1.1	7.5
Styrene	7.5	Ü	0.15	7.5
Bromoform	7.5	Ü	0.30	7.5
Isopropylbenzene	7.5	Ü	0.12	7.5
1,1,2,2-Tetrachloroethane	7.5	Ü	0.39	7.5 7.5
4.2 Diebleschennen	:	<u> </u>	0.00	

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1,3-Dichlorobenzene

1,4-Dichlorobenzene

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U

U

0.23

0.35

7.5

7.5

7.5

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)
02000	ACIMENTO	Organic	COMPOUNDS	COMMO

Analysis Method:

8260B

Analysis Batch:

200-41377

Instrument ID:

Prep Method:

5035

Lab File ID:

Dilution: Analysis Date:

Prep Batch:

200-40882

Initial Weight/Volume:

ngaq08.d

1.0

Run Type:

5.33 g

Prep Date:

RE

07/03/2012 1127

Final Weight/Volume:

5 mL

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	2	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	Colo in Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Colonia de Col	85	\$40 \$4000000000000000000000000000000000	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:

Prep Method:

5035

Lab File ID:

ngap11.d

Dilution:

Prep Batch: 200-40882

Initial Weight/Volume:

5.84 g

Analysis Date:

1.0

07/02/2012 1411

Final Weight/Volume:

5 mL

Prep I	Date:
--------	-------

06/25/2012 1044

Analyte	DryWt Corrected: Y	. 1 5 11	Result (ug/Kg)	1.	Qualifier	MDL MDL	RL	Ų
Dichlorodifluoromethane		.,	5.6	- Principle Springspaper - y-sys	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-trichfluo	roethane		5.6		U	0.37	5.6	
Acetone			9.5		1	1.1	5.6	
Carbon disulfide			5.6		Ú	0.35	5.6	
Methyl acetate			5.6		Ų	0.70	5.6	
Methylene Chloride		5,6	1.3"		+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		Ü	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	90	Ü	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		Ū	0.15	5.6	
1.1.2-Trichloroethane			5.6		Ū	0.38	5.6	
Tetrachioroethene			5.6		Ü	0.12	5.6	
2-Hexanone			5.6		Ü	0.55	5.6	
Dibromochloromethane			5.6		Ū	0.12	5.6	
1.2-Dibromoethane			5.6		Ü	0.17	5.6	
Chlorobenzene			5.6		Ü	0.085	5.6	
Ethylbenzene			5.6		Ü	0.063	5.6	
Xylenes, Total			5.6		Ü	0.82	5.6	
Styrene			5.6		Ü	0.11	5.6	
Bromoform			5.6		Ü	0.22	5.6	
Isopropylbenzene			5.6		Ü	0.086	5.6	
1,1,2,2-Tetrachloroethane			5.6		Ü	0.000	5.6	
1.3-Dichlorobenzene			5.6		U	0.29		
1,0-21011010001120110			J.U		U	Ų. I 7	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

Lab File ID:

Dilution:

1.0

Prep Batch:

200-40882

ngap11.d

Result (ug/Kg)

Analysis Date:

Initial Weight/Volume:

5.84 g

07/02/2012 1411

Final Weight/Volume:

5 mL

Prep Date:

06/25/2012 1044

Qualifier MDL

RL

Analyte		DryWt Corrected: Y
1,2-Dichlor	robenzene	
1,2-Dibron	no-3-Chloropropane	* * * * *
1.2.4-Trich	lorobenzene	* ,

1,2-Dichlorobenzene-d4

5.6 5.6 5.6

%Rec

U U

U

Qualifier

0.25 1.0 0.22 5.6 5.6 5.6

Surrogate	
1,2-Dichloroethane-d4	
Toluene-d8	
Bromofluorobenzene	

80 - 115 80 - 115 45 - 145

65 - 155

Acceptance Limits

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 Voiatiie Organic Compounds (GC/MS)

Analysis Method:

8260B

Analysis Batch:

200-41116

Instrument ID:

L.i

Prep Method: Dilution:

5035

Prep Batch:

Lab File ID:

lhbaf15.d

440

200-40878

Initial Weight/Volume:

Analysis Date:

5.54 g

Prep Date:

06/28/2012 1545 06/25/2012 1025 Final Weight/Volume:

10 mL

Analyte	DryWt Corrected: Y	Result (ug/K	g) i		MDL	RL	
Dichlorodifluoromethane		46000		リブ	9600	46000	-
Chloromethane		46000	* '	U J	12000	46000	
Vinyl chloride		46000		U	9200	46000	
Bromomethane		46000		リナ	11000	46000	
Chloroethane		46000		U	6900	46000	
Trichlorofluoromethane		46000		U	6000	46000	- 1
1,1-Dichloroethene		46000		U	10000	46000	
1,1,2-Trichloro-1,2,2-trichfluoro	ethane	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	(4)	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		Ü	7800	46000	
Isopropylbenzene		46000		Ū	8700	46000	
1,1,2,2-Tetrachloroethane		46000		Ü	8300	46000	
1,3-Dichlorobenzene		46000		U	8700	46000	
				_			

TestAmerica Burlington

1,4-Dichlorobenzene

Page 68 of 3870

U

8700

46000

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:

Analysis Date:

5.54 g

06/28/2012 1545

Prep Date:

Final Weight/Volume:

10 mL

06/25/2012 1025

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene	b 3	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:	Υ	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	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-trichfluc	oroethane		4.8		U	0.32	4.8
Acetone			54		工	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	4.2		1UB	0.53	4.8
trans-1,2-Dichloroethene		1,0	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 a	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	- <del>0.10</del>		JB UB	0.097	4.8
trans-1,3-Dichloropropene		1.0	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		Ū	0.48	4.8
Dibromochloromethane			4.8		U	0.11	4.8
1.2-Dibromoethane			4.8		Ū	0.15	4.8
Chlorobenzene			4.8		Ū	0.074	4.8
Ethylbenzene			0.070		J	0.054	4.8
Xylenes, Total			4.8		Ü	0.71	4.8
Styrene			4.8		Ū	0.097	4.8
Bromoform	59		4.8		Ü	0.19	4.8
Isopropylbenzene			4.8		Ü	0.075	4.8
1,1,2,2-Tetrachloroethane			4.8		Ü	0.25	4.8
1,3-Dichlorobenzene			4.8		Ü	0.15	4.8
.,					3	0.10	7.0

1,4-Dichlorobenzene

U

0.22

4.8

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

Lab File ID:

Dilution:

Prep Batch:

200-40882

ngap12.d

1.0

Analysis Date:

Initial Weight/Volume:

5.84 g

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-Chloroprop	ane	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	in return i illustration den desta returni, frastrum frantisch, frastrum in den den den den den den den den de	rtirkurutusir 200 võõ hõistudus varvus ett võututugulpetutu.	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:

Lab File ID:

ngap13.d

Dilution:

200-40882

Initial Weight/Volume:

5.48 g

Analysis Date:

1.0

07/02/2012 1512

F

Final We	eight/Volume:
----------	---------------

5 mL

06/25/2012 1044

(ug/Kg)	Qualifier	MDL	RL

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		UJ	0.39	5.1
Trichlorofluoromethane		5.1	*	U	0.34	5.1
1,1-Dichloroethene		5.1		Ū	0.38	5.1
1,1,2-Trichloro-1,2,2-trichfluc	proethane	5.1		Ū	0.34	5.1
Acetone		32		Ī	1.0	5.1
Carbon disulfide		5.1		Ū	0.32	5.1
Methyl acetate		5.1		Ü	0.64	5.1
Methylene Chloride	5.1			+ UB	0.56	5.1
trans-1,2-Dichloroethene	9,1	5.1		U	0.38	5.1
Methyl t-butyl ether		5.1		Ü	0.31	5.1
1,2-Dichloroethene, Total	e:	5.1		U	0.78	5.1
1,1-Dichloroethane		5.1		Ü		
N' I I					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		Ū	0.50	5.1
Dibromochloromethane		5.1		Ü	0.11	5.1
1,2-Dibromoethane		5.1		Ū	0.15	5.1
Chlorobenzene		5.1		Ü	0.077	5.1
Ethylbenzene		5.1		Ü	0.057	5.1
Xylenes, Total		5.1		Ü	0.74	5.1
Styrene		5.1 5.1		U		
Bromoform		5.1 5.1			0.10	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 Voiatile Organic Compounds (GC/MS)

Analysis Method:

8260B

Analysis Batch:

200-41307

Instrument ID:

N.i

Prep Method:

5035

Prep Batch:

Lab File ID:

Dilution:

200-40882

ngap13.d

1.0

Initial Weight/Volume:

Analysis Date:

07/02/2012 1512

5.48 g

Final Weight/Volume:

5 mL

Prep Date:

Analyte

06/25/2012 1044

DryWt Corrected: Y

Qualifier	MDL .	RL
U	0.22	5.1

1,2-Dichlorobenzene
1,2-Dibromo-3-Chloropropane
1,2,4-Trichlorobenzene

5.1	
5.1	
5.1	

Result (ug/Kg)

5.1 5.1

Surrogate		%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	-	75	Pridet vict vict and information attention to the first information to the first victor and abstract an account of abstract victor and abstract victor and abstract victor and abstract victor and abstract victor and abstract victor and abstract victor and abstract victor and abstract victor and abstract victor and abstract victor and abstract victor and abstract victor and abstract victor and abstract victor and abstract victor and abstract victor and abstract victor and abstract victor and abstract victor and abstract victor and abstract victor and abstract victor and abstract victor and abstract victor and abstract victor and abstract victor and abstract victor and abstract victor and abstract victor and abstract victor and abstract victor and abstract victor victor and abstract victor victor and abstract victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor victor vic	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:

Lab File 1D:

ngap14.d

Dilution:

1.0

200-40882

Initial Weight/Volume:

6.01 a

Analysis Date:

07/02/2012 1542

Prep Date:

06/25/2012 1044

0.01 g	
5 mL	

Analyte DryWt Correcte Dichlorodifluoromethane	ed: Y Result (ug/K) 4.6	g) Qualifier U	MDL 0.21	RL 46	
Chloromethane	4.6	U		4.6	
	4.6	U	0.24	4.6	
Vinyl chloride			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	4.614	-+ 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	リブ	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-Dichtoroethane	4.6	U gg	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>/</b> g	0.092	4.6	
trans-1,3-Dichtoropropene	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 E	0.052	4.6	
Xylenes, Total	3.8	J	0.67	4.6	
Styrene	4.6	U	0.092	4.6	
Bromoform	4.6	i Ü	0.18	4.6	
Isopropylbenzene	0.33	j	0.071	4.6	
1,1,2,2-Tetrachioroethane	4.6	Ü	0.24	4.6	
1,3-Dichlorobenzene	4.6	Ü	0.14	4.6	
1,4-Dichlorobenzene	4.6	Ü	0.14	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)
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Analysis Method:

8260B

Analysis Batch:

200-41307

Instrument ID:

N.i

Prep Method:

5035

Prep Batch:

Lab File ID:

ngap14.d

Dilution:

1.0

200-40882

Initial Weight/Volume:

6.01 g

Analysis Date:

07/02/2012 1542

Prep Date:

06/25/2012 1044

Final Weight/Volume:

5 mL

Ana	lyte	

Analyte	DryWt Corrected: Y
1,2-Dichlorobenzene	

ane

Result (ug/Kg) 4.6 4.6

U U

0.20 0.84

MDL

RL 4.6

1,2-Dibromo-3-0	Chloropropa
1,2,4-Trichlorob	enzene

4.6

68

81

85

84

%Rec

U

Qualifier

Qualifier

0.18

4.6 4.6

Acceptance Limits

65 - 155

Surrogate
1,2-Dichloro
Toluene-d8

ethane-d4 Bromofluorobenzene 1,2-Dichlorobenzene-d4

80 - 115 80 - 115 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

200-40882

Lab File ID:

ngaq09.d

Dilution:

1.0

Prep Batch:

Initial Weight/Volume:

6.22 g

Analysis Date:

07/03/2012 1157

Final Weight/Volume:

5 mL

Prep	Date:

06/25/2012 1044

alifier	MDL	RL
7	0.23	4.9
	0.26	4.9

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		リブ	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-trichfluor	oethane	4.9		U	0.33	4.9	
Acetone		59	1.	5	0.99	4.9	
Carbon disulfide		5.5			0.31	4.9	
Methyl acetate		4.9		U	0.62	4.9	
Methylene Chloride		4913		+ 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		7	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		Ų	0.35	4.9	
4-Methyl-2-pentanone		4.9		U	0.59	4.9	
Toluene	1	19-0.19		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		Ū	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

Lab File ID:

Dilution:

Prep Batch:

200-40882

ngaq09.d

1.0

6.22 g

Initial Weight/Volume:

Analysis Date:

07/03/2012 1157

Prep Date:

06/25/2012 1044

Final Weight/Volume:

Analyte	DryWt Corrected: Y	Result (ug/Kg)		Qualifier	MDL	RL
1,2-Dichlorobenzene	41	4.9	T-	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	**************************************	We are in the death and are are an extension of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract o	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:

Prep Method:

5035

200-40882

Lab File ID:

ngap16.d

Dilution:

1.0

Prep Batch:

Initial Weight/Volume:

5.58 g

Analysis Date:

07/02/2012 1643

06/25/2012 1044

Final Weight/Volume:

5 mL

Prep Date: 06/25	6/2012 1044							
Analyte	DryWt Corrected: Y		Result (ug/Kg)	)	Qualifier	MDL	RL	
Dichlorodifluoromethane	50 II		5.3		Ū	0.24	5.3	V SIGN
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ブ	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-trichflu	ioroethane		5.3		U	0.35	5.3	
Acetone			87		<b></b>	1.1	5.3	
Carbon disulfide			50			0.33	5.3	
Methyl acetate			5.3		U	0.67	5.3	
Methylene Chlonde		5.3	12		+ 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		ゴ	1.6	5.3	
Chloroform			5.3		Ú	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		υU	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		Ū	0.12	5.3	
			_ 1			: - <del>-</del>	2.0	

5.3

5.3

5.3

5.3

5.3

5.3

5.3

5.3

5.3

5.3

5.3

5.3

1,1,2,2-Tetrachloroethane

2-Hexanone

Dibromochloromethane

1,2-Dibromoethane

Chlorobenzene

Ethylbenzene

Xylenes, Total

Isopropylbenzene

1,3-Dichlorobenzene

1,4-Dichlorobenzene

Styrene

**Bromoform** 

U

U

U

U

U

U

U

U

U

U

U

U

0.52

0.12

0.16

0.080

0.059

0.77

0.11

0.21

0.27

0.16

0.24

0.081

5.3

5.3

5.3

5.3

5.3

5.3

5.3

5.3

5.3

5.3

5.3

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 Voiatile Organic Compounds (GC/MS)

Analysis Method:

8260B

Analysis Batch:

200-41307

Instrument ID:

N.i

Prep Method:

5035

Dilution:

Prep Batch:

Lab File ID:

ngap16.d

200-40882

1.0

Initial Weight/Volume:

5.58 g

Analysis Date:

07/02/2012 1643

Prep Date:

Final Weight/Volume:

5 mL

Δr	alvte	

06/25/2012	1044

Qualifier	MDL	RL.

1,2-Dichlorobenzene 1,2-Dibromo-3-Chloropropane 1,2,4-Trichlorobenzene

1,2-Dichlorobenzene-d4

5.3 5.3 5.3

94

Result (ug/Kg)

U U U

0.23 0.96 0.21

5.3 5.3 5.3

Surrogate	%Rec	Qualifier
1,2-Dichloroethane-d4	74	
Toluene-d8	88	
Bromofluorobenzene	06	

DryWt Corrected: Y

65 - 155 80 - 115 80 - 115

45 - 145

Acceptance Limits

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 5 mL

Dilution:

1.0

Initial Weight/Volume:

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		UI	0.090	1.0	
Chloromethane	1.0		ULT	0.12	1.0	
Vinyl chloride	1.0		リグゴ	0.090	1.0	
Bromomethane	1.0		UNJ	0.43	1.0	
Chloroethane	1.0		U	0.12	1.0	
Trichlorofluoromethane	1.0		Ū	0.092	1.0	
1,1-Dichloroethene	1.0		Ü	0.18	1.0	
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0		Ü	0.18	1.0	
Acetone	5.0		Ü	0.92	5.0	
Carbon disulfide	1.0		Ü	0.15	1.0	
Methyl acetate	1.0		Ü	0.13	1.0	
Methylene Chloride	0.24		J	0.23	1.0	
trans-1,2-Dichloroethene	1.0		U			
	1.0			0.17	1.0	
Methyl t-butyl ether			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		Ū	0.16	1.0	
4-Methyl-2-pentanone	5.0		Ū	0.90	5.0	
Toluene	1.0		Ü	0.17	1.0	
trans-1,3-Dichloropropene	1.0		Ü	0.18	1.0	
1,1,2-Trichloroethane	1.0		Ü	0.18	1.0	
Tetrachloroethene	1.0		U	0.18		
2-Hexanone	5.0				1.0	
			U	1.1	5.0	
Dibromochloromethane	1.0		U	0.17	1.0	33
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	

TestAmerica Burlington

Page 80 of 3870

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1

Sdg Number: 11441

Cilent 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 Voiatile Organic Compounds (GC/MS)

Analysis Method: Prep Method:

8260B 5030B

1.0

Analysis Date:

06/27/2012 0143

Prep Date:

Dilution:

06/27/2012 0143

Analysis Batch: Prep Batch:

200-41005

N/A

Instrument ID:

Lab File ID: Initial Weight/Volume: L.i lhbad11.d

5 mL

Final Weight/Volume:

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	artiririririida irirani virtani virti iririi. 2000. 2000, aand farrii iradia qaada qaada qaa	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:

TestAmerica Burlington

200-11460-1

Client Matrix:

Solid

% Moisture:

17.8

Date Sampled: 06/23/2012 1200

Date Received: 06/26/2012 1050

	8260B Volatile Organic C	compounds (GC/MS)			
Analysis Method: 8260B	Analysis Batch: 20	0-41487 Ins	strument ID:	N.i	
Prep Method: 5035	Prep Batch: 20	0-41085 La	b File ID:	ngar07.d	J E 9
Dilution: 1.0			tial Weight/Volume:	5.07 g	
Analysis Date: 07/07/2012 1122			nal Weight/Volume:	5 mL	
Prep Date: 06/28/2012 1318		- "	iai vveigni voiame.	3 1112	
Trep Bate.					
Analyte DryWt Corr	ected: Y Result (ug/Kg)	Qualifier	MDL /	RL	
Dichlorodifluoromethane	6.0	U	0.28	6.0	Arrandamantamanananan
Chloromethane	6.0	U	0.31	6.0	
Vinyl chloride	6.0	U	0.36	6.0	
Bromomethane	6.0	u U	0.89	6.0	
Chloroethane	6.0	U	0,46	6.0	
Trichlorofluoromethane	6.0	Ü	0.40	6.0	
1,1-Dichloroethene	6.0	Ü	0.44	6.0	
1,1,2-Trichloro-1,2,2-trichfluoroethane	6.0	Ü	0.40	6.0	
Acetone	30	•	1.2	6.0	
Carbon disulfide	3.3	J /	0.37	6.0	
Methyl acetate	6.0	Ů /	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> </u>	0.36	6.0	
	6.0	Ú			
1,2-Dichloroethene, Total		/	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	V	0.74	6.0	
Trichloroethene	6.0	\ U	0.58	6.0	
Methylcyclohexane	9⁄51	- J J	0.20	6.0	
1,2-Dichloropropane	6.0	Ų	0.35	6.0	
Bromodichloromethane	6.0	Ů	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	JB	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	Ū	0.24	6.0	
Isopropylbenzene	6.0	Ü	0.092	6.0	
1,1,2,2-Tetrachloroethane	6.0	Ü	0.31	6.0	
1,3-Dichlorobenzene	6.0	Ü	0.18	6.0	
,				\	
1,4-Dichlorobenzerie	6.0	U	0.28	6.0	

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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:

200-41460-1

Client Matrix:

Solid

% Moisture:

17.8

Date Sampled: 06/23/2012 1200

Date Received: 06/26/2012 1050

260B	Voiatile	<b>Organic</b>	Compounds	(GC/MS)	
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Analysis Method:

8260B 5035

Analysis Batch: Prep Batch:

200-41487 200-41085

Instrument ID:

N.i

Prep Method: Dilution:

1.0

DryWt Corrected: Y

Lab File ID: Initial Weight/Volume:

Qualifier

ngar07.d 5.07 g

Analysis Date:

07/07/2012 1122

Final Weight/Volume:

MDL

5 mL

RL

Prep Date:

06/28/2012 1318

Analyte	7-	
1,2-Dichlorol	enzene	*
1,2-Dibromo	-3-Chloropropane	
1,2,4-Trichlo	robenzene	

6.0	
6.0	
1.1	

Result (ug/Kg)

U	0.26
U	1.1
JB	0.24
	_

6.0 6.0 6.0

Surrogate
1,2-Dichloroethane-d4
Toluene-d8
Bromofluorobenzene /
1,2-Dichlorobenzene-d4

%Rec	
105	
123	
145	
114	

Qualifier Acceptance Limits 65 - 155 Х 80 - 115 Х 80 - 115 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

200-41085

Lab File ID:

ngar08.d

Dilution:

1.0

Prep Batch:

Run Type:

Initial Weight/Volume:

5.5 g

Analysis Date:

07/07/2012 1153

RE

Final Weight/Volume:

5 mL

Prep Date:

06/28/2012 1318

Analyte	DryWt Corrected: Y		Result (ug/Kg)	=/1	Qualifier	MDL		RL
Dichlorodifluoromethane			5.5		U5	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		リブ	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-trichfluo	roethane		5.5		U _ =	0.36		5.5
Acetone			28		エ	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			JUB	0.61	:	5.5
trans-1,2-Dichloroethene			5.5		U	0.41	8	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		リブ	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		II J	0.78		5.5
1,2-Dichloroethane			5.5		U	0.69	_ <del>!</del>	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	0.86		JB 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		エ	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ゴ	0.29		5.5
1,3-Dichlorobenzene			5.5		UÍ	0.17		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	<b>Organic Com</b>	pounds (	(GC/MS)
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Analysis Method:

8260B

Analysis Batch:

200-41487

Instrument ID:

N.i

Prep Method:

5035

Prep Batch:

Run Type:

200-41085

Lab File ID:

1.0

ngar08.d

Dilution:

Initial Weight/Volume:

5.5 g

Analysis Date:

07/07/2012 1153

RE

Prep Date:

06/28/2012 1318

Final Weight/Volume:

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2-Dichlorobenzene		5.5	ULT	0.24	5.5
1,2-Dibromo-3-Chloropropane		5.5	U A	1.0	5.5
1,2,4-Trichlorobenzene		55 163	JB-UB	0.22	5.5

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	104	the description of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contrac	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: Initial Weight/Volume: ngap17.d 5.62 g

Dilution: Analysis Date: 1.0

07/02/2012 1714

Final Weight/Volume:

Pr	ep	Date:	

06/28/	2012	1318

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL	
Dichlorodifluoromethane	21 1 2	4.9	U.5	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	UJ	0.38	4.9	
Trichlorofluoromethane		4.9	บ้า	0.33	4.9	
1,1-Dichloroethene		4.9	υ	0.37	4.9	
1,1,2-Trichloro-1,2,2-trichflu	oroethane	4.9	υŧ	0.33	4.9	
Acetone		4.7	J	0.99	4.9	
Carbon disulfide		4.9	ロゴ	0.31	4.9	
Methyl acetate		4.9	u ケ	0.62	4.9	
Methylene Chloride		4.9-0.82	J- UB	0.54	4.9	
trans-1,2-Dichloroethene		4.9	UJ	0.37	4.9	
Methyl t-butyl ether		4.9	Ui	0.30	4.9	
1,2-Dichloroethene, Total		4.9	υl	0.76	4.9	
1,1-Dichloroethane		4.9	υĺ	0.41	4.9	
cis-1,2-Dichloroethene		4.9	ŭ 4	0.42	4.9	
2-Butanone		4.9	Ŭ.J	1.5	4.9	
Chloroform		4.9	UI	0.32	4.9	
1,1,1-Trichloroethane		4.9	Ü	0.69	4.9	
Cyclohexane		4.9	υl	0.84	4.9	
Carbon tetrachloride		4.9	υĺ	0.75	4.9	
Benzene		4.9	Ü	0.70	4.9	
1,2-Dichloroethane	14	4.9	ŭ l	0.70	4.9	
Trichloroethene		4.9	U 🕏	0.48	4.9	
Methylcyclohexane		0.23	J	0.48	4.9	
1,2-Dichloropropane		4.9	U J			
Bromodichloromethane	- 1	4.9	U	0.29	4.9	
cis-1,3-Dichloropropene	. A	4.9	U	0.21	4.9	
		4.9		0.35	4.9	
4-Methyl-2-pentanone		/	U 1 HB VB	0.59	4.9	
Toluene	-	4.9 0.17		0.099	4.9	
trans-1,3-Dichloropropene		4.9	υJ	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	Π 4.	0.075	4.9	
Ethylbenzene		1.0	J	0.055	4.9	
Xylenes, Total		4.9	υゴ	0.72	4.9	
Styrene		4.9	U	0.099	4.9	
Bromoform		4.9	U	0.20	4.9	
Isopropylbenzene		4.9	υ	0.076	4.9	
1,1,2,2-Tetrachloroethane		4.9	U (	0.26	4.9	
1,3-Dichlorobenzene		4.9	υ	0.15	4.9	
1,4-Dichlorobenzene		4.9	υŤ	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

Lab File ID:

ngap17.d

1.0

Dilution:

Prep Batch:

200-41085

Analysis Date:

Initial Weight/Volume:

MDL

5.62 g

RL

07/02/2012 1714

Final Weight/Volume:

5 mL

Prep Date:

06/28/2012 1318

Analyte	DryWt Corrected: Y	Result (ug/Kg)
1,2-Dichlorobenzene		4.9
1,2-Dibromo-3-Chloropropa	ane	4.9
1,2,4-Trichlorobenzene		4.9

U.5	0.22	4.9
リゴ	0.90	4.9
UJ	0.20	4.9
0. 110		

Qualifier

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	143	Quainer	65 - 155
Toluene-d8	* * *	¥	
	226	<u> </u>	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:

TestAmerica Burlington

200-11460-2

Client Matrix:

Solid

% Moisture:

10.1

Date Sampled: 06/23/2012 1245 Date Received: 06/26/2012 1050

	8	260B Volatile Organic Co	ompounds (GC/MS)		- /.
	8260B	•		trument ID:	N.i
	5035	Prep Batch: 200	-41085 Lat	File ID:	ngáq10.d
	1.0		Init	ial Weight/Volume	,
-	07/03/2012 1228	Run Type: RE	Fin	al Weight/Volume	: / 5 mL
Prep Date:	06/28/2012 1318	8		71111	
Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL/	RL
Dichlorodifluorometha	ne	4.4	U	0.20	4.4
Chloromethane	- 3	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
Trichlorofluoromethan	8	4.4	U /	0.29	4.4
1,1-Dichloroethene	in heli anno nathanna	4.4	U /	0.33	4.4
1,1,2-Trichloro-1,2,2-tr	ichiluoroethane	4.4	U	0.29	4.4
Acetone		9.9	./	0.89	4.4
Carbon disulfide		0.56	<i>y</i>	0.27	4.4
Methyl acetate		4.4	/0	0.56	4.4
Methylene Chloride		0.79	J	0.49	4.4
trans-1,2-Dichloroethe	ne	4.4	/ U	0.33	4.4
Methyl t-butyl ether	t	4.4	/ "	0.27	4.4
1,2-Dichloroethene, To	otai	4.4	U	0.68	4.4
1,1-Dichloroethane		4.4	U -	0.36	4.4
cis-1,2-Dichloroethene 2-Butanone	•	4.4	U	0.37	4.4
		4.4	U	1.3	4.4
Chloroform		4.4	U	0.28	4.4
1,1,1-Trichloroethane Cyclohexane		4.4	U	0.62	4.4
Carbon tetrachioride		4.4/	\u0	0.75	4.4
Benzene		4/4 /1.9	ď	0.67	4.4
1,2-Dichloroethane		4.4	J	0.63	4.4
Trichloroethene		4.4	U	0.55	4.4
		0.39	Ů \	0.43	4.4
Methylcyclohexane			1	0.15	4.4
1,2-Dichloropropane Bromodichloromethan		4.4 4.4	U	0.26	4.4
cis-1,3-Dichloroproper	/	4.4	U	0.19	4.4
		4.4 4.4		0.31	4.4
4-Methyl-2-pentanone Toluene		4.4 4.4	U W	0.53	4.4
trans-1,3-Dichloroprop	ene /	4.4	U	\	4.4
1,1,2-Trichloroethane	lerie /			0.12	4.4
Tetrachloroethene		4.4 4.4	U	0.30	4.4
2-Hexanone			U	0.097	4.4
Dibromochloromethan	. /	4.4	U	0.43	4.4
1,2-Dibromoethane	e /	4.4 4.4	υ 5 υ	0.097	4.4
Chlorobenzene				0.13	4.4
Ethylbenzene		4.4 0.65	U JB	0.067 0.050	4.4
-		0.65 4.4	n 18		4.4
Xylenes, Total				0.65	4.4
Styrene Bromoform	/	4.4 4.4	U	0.089	**4
1			U	0.18	4.4
Isopropylbenzene	nno	4.4	U	0.068	4.4
1,1,2,2-Tetrachloroethat 1,3-Dichlorobenzene	alle D	4.4	U	0.23	4.4
•		4.4	U	0.13	4.4
1,4-Dichlorobenzene		4.4	U	0.20	4.4

Page 88 of 3870

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1

Sdg Number: 11441

**Client Sample ID:** 

SB-23 (5-6)

Lab Sample ID:

Bromofluorobenzene

1,2-Dichlorobenzene-d4

200-11460-2

Client Matrix:

Solid

% Moisture:

219

176

10.1

Date Sampled: 06/23/2012 1245 Date Received: 06/26/2012 1050

**8**0 - 115

45 145

	8260B Volatile Organ	nic 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:		
Analysis Date: 07/03/2012 1228	Run Type:	RE	Final Weight/Volume:	_	
Prep Date: 06/28/2012 1318					
Analyte DryWt Cor	rected: Y Result (ug	/kg) Qualif	ier MDL	RL	
1,2-Dichlorobenzene	4.4	V	0.19	4.4	
1,2-Dibromo-3-Chloropropane	4.4	U	0.81	4.4	IDUTATO SEC
1,2,4-Trichlorobenzene	4.4	<i>D</i>	0.18	4.4	1 111
Surrogate	%Rec	Qualif	ier Accept	tance Limits	
1,2-Dichloroethane-d4	- *************************************	tivilisentrikkin laiken tun een een een een een laintaal laintaatiin keitä " visteksi vuon vastaastaalaet	65 - 15	55	hakin ilina dan mananan mananan da da da da da da da da da da da da da
Toluene-d8	185	, , , X	80 - 11	5	

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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:

Prep Method:

5035

Prep Batch:

200-41085

Lab File ID:

ngap18.d

Dilution:

1.0

Initial Weight/Volume:

8.47 g

Analysis Date:

Prep Date:

07/02/2012 1744 06/28/2012 1318 Final Weight/Volume:

Prep Date:	06/28/20	12 1318						
Analyte		DryWt Corrected: Y		Result (ug/Kg)		Qualifier	MDL	RL
Dichlorodifluorome	ethane	ALM STATE		3.0	7.6	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		U5	0.23	3.0
Trichlorofluoromet	hane			3.0		U	0.20	3.0
1,1-Dichloroethen	е			3.0		U	0.22	3.0
1,1,2-Trichloro-1,2	,2-trichfluoro	ethane		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 Chlorid	е		3.0	0.85		+ UB	0.33	3.0
trans-1,2-Dichloro	ethene			3.0		U	0.22	3.0
Methyl t-butyl ethe	er			3.0		U	0.18	3.0
1,2-Dichloroethen	e, Total			3.0		U	0.47	3.0
1,1-Dichloroethan	е			3.0		U	0.25	3.0
cis-1,2-Dichloroeth	nene			3.0		U	0.26	3.0
2-Butanone				2.8		J	0.91	3.0
Chloroform				3.0		Ü	0.19	3.0
1,1,1-Trichloroetha	ane			3.0		Ū	0.43	3.0
Cyclohexane				3.0		Ū	0.52	3.0
Carbon tetrachlori	de			3.0		Ū	0.46	3.0
Benzene				3.0		Ū	0.43	3.0
1,2-Dichloroethan	e U			3.0		Ū	0.38	3.0
Trichloroethene				3.0		Ü	0.29	3.0
Methylcyclohexan	e			3.0		Ü	0.10	3.0
1,2-Dichloropropa				3.0		Ü	0.18	3.0
Bromodichloromet				3.0		Ü	0.13	3.0
cis-1,3-Dichloropro				3.0		Ü	0.21	3.0
4-Methyl-2-pentan	-			3.0		Ü	0.36	3.0
Toluene			3.0	<del>-0.085</del>		JB-UB	0.061	3.0
trans-1,3-Dichloro	propene		,,,	3.0		U	0.079	3.0
1,1,2-Trichloroetha				3.0		Ü	0.21	3.0
Tetrachloroethene				3.0		Ü	0.067	3.0
2-Hexanone				3.0		Ü	0.30	3.0
Dibromochloromet	hane			3.0		Ü	0.067	3.0
1,2-Dibromoethan				3.0		Ü	0.007	3.0
Chlorobenzene	C			3.0		Ü	0.046	3.0
Ethylbenzene				3.0		U		
Xylenes, Total				3.0		Ü	0.034 0.44	3.0
Styrene				3.0		U		3.0
Styrene Bromoform				3.0			0.061	3.0
Isopropylbenzene						U	0.12	3.0
	othone			3.0		U	0.047	3.0
1,1,2,2-Tetrachloro				3.0		U	0.16	3.0
1,3-Dichlorobenze				3.0		U	0.091	3.0
1,4-Dichlorobenze	ne	3523		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

Lab File ID:

ngap18.d

Dilution:

Prep Batch:

200-41085

Initial Weight/Volume:

8.47 g

Analysis Date:

1.0

07/02/2012 1744

Prep Date:

06/28/2012 1318

Final Weight/Volume:

Analyte	DryWt Corrected: Y.	Result (ug/Kg)	Qualifier		MDL	RL	,
1,2-Dichlorobenzene		3.0	U	1000-1006-1000-00-0-0-0-0-0-0-0-0-0-0-0-	0.13	3.0	***************************************
1,2-Dibromo-3-Chloropropane	s	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	hr A-milleath ann dhaile a' airthean dh' airthe an Amhlan dhe na dh' ain amhlan an fhangan bhannan,	nn mill men din dunin verden belan di di en distribut de de distribut de de distribut de de distribut de de de . 80	re te rete de mendiamentament dament mentambera periode de periode de paración el periode de periode de periode T	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)
02000	ACIGNIC	VIGATIIC	CUIIDUUIIUS	

Analysis Method:	
Prep Method:	

8260B

Analysis Batch:

200-41377

Instrument ID: Lab File ID:

ngaq11.d

Dilution:

5035 1.0

Prep Batch:

200-41085

Initial Weight/Volume:

5.45 g

Analysis Date:

07/03/2012 1258

Run Type:

RE

Final Weight/Volume:

rep Dete:	06/28/2012	1318
-----------	------------	------

Analyte	DryWt Corrected: Y	Result (ug/Kg)		Qualifier	MDL	RL
Dichlorodifluoremethane		4.7		U	0.22	4.7
Chloromethane		4.7		U	0,25	4.7
Vinyl chloride	10,000	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		Ù	0.31	4.7
1,1-Dichloroethene		4.7		U	0.35	4.7
1,1,2-Trichloro-1,2,2-trichfluor	oethane	4.7		U	0.31	4.7
Acetone	23	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		8	0.52	4.7
trans-1,2-Dichloroethene		4.7	1	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	19	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		<b>/4.7</b>		U	0.59	4.7
Trichloroethene	/	4.7		U	0.45	4.7
Methylcyclohexane	=== " /	4.7	= "	U	0.16	<b>-4.7</b>
1,2-Dichloropropane		4.7		U	0.27	4.7
Bromodichloromethane	" /	4.7		U	0.20	4.7
cis-1,3-Dichloropropene		4.7	11	U	0.33	4.7
4-Methyl-2-pentanone	/ %	4.7	`	Ψ	0.57	4.7
Toluene		0.25		Ŋβ	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		υ `	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	Q.14	4.7
Chlorobenzene		4.7		U	0.072	4.7
Ethylbenzene		0.50		JB	ò.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
lsopropylbenzene/		4.7		U	0.073	4.7
1,1,2,2-Tetrachloroethane		4.7	55	U	0.25	4.7
1,3-Dichlorobenzene		4.7		U	0.14	4.7
1,4-Dichloropenzene		4.7		U	0.22	4.7

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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:

Date Sampled: 06/23/2012 1330 Date Received: 06/26/2012 1050

= = =	8260B Volatile Organ	nic Compounds	GC/MS)			
0B 5 3/2012 1258 8/2012 1318	Analysis Batch: Prep Batch: Run Type:	200-41377 200-41085 RE	Lab E	łé ID: Weight/Volume:	N.i ngaq11.d 5.45 g 5 mL	
DryWt Corrected: Y	Result (ug	ı/Kg)	Qualifier	MDL	RL	
-00-10-0-1-00-07-77-000-0-1-0-10-07-7-0-000-00	4.7		U	0.21	4.7	
ane	4.7	,	U	0.86	4.7	
	M. M.		U	0.19	4.7	
	%Rec	1.1	Qualifier	Acceptar	nce Limits	
	83 .	-		65 - 155	\$-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0	
	107			80 - 115		
	124		x	80 - 115		
	118			45 - 145		
	0B 3/2012 1258 8/2012 1318 DryWt Corrected: Y	DB Analysis Batch: Prep Batch:  3/2012 1258 Run Type:  8/2012 1318  DryWt Corrected: Y Result (ug 4.7 4.7 4.7 4.7 4.7 4.7 4.7 4.7 4.7 4.7	Analysis Batch: 200-41377 Prep Batch: 200-41085  3/2012 1258 Run Type: RE  DryWt Corrected: Y Result (ug/Kg)  4.7 4.7 4.7 %Rec  83 107 124	Prep Batch: 200-41085 Lab Final V	Analysis Batch: 200-41377   Instrument ID: Lab File ID: Initial Weight/Volume: S7/2012 1258   Run Type: RE   Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final Weight/Volume: Final	Analysis Batch: 200-41377   Instrument ID:   N.i

2.9

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1

Sdg Number: 11441

Cilent 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 Voiatile Organic Compounds (GC/MS)

Analysis Method:

8260B

Analysis Batch:

200-41500

Instrument ID:

L.i

Prep Method:

5035

Prep Batch:

Lab File ID:

lhj22.d

Dilution:

35.2

200-41083

Initial Weight/Volume:

5.64 g

Analysis Date:

10 mL

Prep Date:

07/06/2012 2159 06/28/2012 1314

Final Weight/Volume:

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL	
Dichlorodifluoromethane		6000	U	1300	6000	* .
Chloromethane		6000	U	1500	6000	
Vinyl chloride		6000	U/ゴ	1200	6000	
Bromomethane		6000	U ゴ	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-trichfluo	roethane	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	UIT	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-Methyi-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	ゴ	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	

TestAmerica Burlington

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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

Lab File ID:

Dilution:

Prep Batch:

200-41083

lhj22.d

35.2

Analysis Date:

Result (ug/Kg)

Initial Weight/Volume:

5.64 g

07/06/2012 2159

Final Weight/Volume:

10 mL

Prep Date:

Toluene-d8

06/28/2012 1314

DryWt Corrected: Y

Qualifier

RL

Analyte 1,2-Dichlorobenzene 1,2-Dibromo-3-Chloropropane

6000 6000 6000 U U U 1200 1000 1200

MDL

6000 6000 6000

1,2,4-Trichlorobenzene Surrogate 1,2-Dichloroethane-d4

Bromofluorobenzene

1,2-Dichlorobenzene-d4

96

Qualifier Acceptance Limits 65 - 155 80 - 115

80 - 115 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:

Prep Batch:

200-41085

Lab File ID:

ngap19.d

Dilution:

5035 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

	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		US	1.1	7.6
Chloroethane	7.6		UJ	0.58	7.6
Trichlorofluoromethane	7.6		U	0.50	7.6
1.1-Dichloroethene	7.6		Ü	0.56	7.6
1,1,2-Trichloro-1,2,2-trichfluoroethane	7.6		Ŭ.J	0.50	7.6
Acetone	100		7	1.5	7.6 7.6
Carbon disulfide	28				
			J	0.47	7.6
Methylana Chlarida	7.6		U 	0.96	7.6
Methylene Chloride	7.6		リナ	0.84	7.6
trans-1,2-Dichloroethene	7.6		U 22	0.56	7.6
Methyl t-butyl ether	7.6		UÍ	0.46	7.6
1,2-Dichloroethene, Total	7.6		U 7	1.2	7.6
1,1-Dichloroethane	7.6			0.62	7.6
cis-1,2-Dichloroethene	7.6		U	0.64	7.6
2-Butanone	25		J	2.3	7.6
Chloroform	7.6		U ブ	0.49	7.6
1,1,1-Trichloroethane	7.6		UI	1.1	7.6
Cyclohexane	7.6		U	1.3	7.6
Carbon tetrachloride	7.6		リブ	1.2	7.6
Benzene	29		Ĭ	1.1	7.6
1,2-Dichloroethane	7.6		Ū	0.94	7.6
Trichloroethene	7.6		ک ن		· · -
			07	0.73	7.6
Methylcyclohexane	7.6			0.26	7.6
1,2-Dichloropropane	7.6		UJ	0.44	7.6
Bromodichloromethane	7.6		U 2	0.32	7.6
cis-1,3-Dichloropropene	7.6		UJ	0.53	7.6
4-Methyl-2-pentanone	7.6		U	0.91	7.6
Toluene	1.9		Jø	0.15	7.6
trans-1,3-Dichloropropene	7.6		UJ	0.20	7.6
1,1,2-Trichloroethane	7.6		UJ	0.52	7.6
Tetrachloroethene	7.6		リブ	0.17	7.6
2-Hexanone	7.6		υ	0.74	7.6
Dibromochloromethane	7.6		Ū	0.17	7.6
1.2-Dibromoethane	7.6		Ŭ,I	0.23	7.6
Chlorobenzene	7.6		Ū	0.12	7.6
Ethylbenzene	4.6				
•			J	0.085	7.6
Xylenes, Total	5.0		J	1.1	7.6
Styrene	7.6		UJ	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		ي كتران	0.40	7.6
1,3-Dichlorobenzene	7.6		UI	0.23	7.6
			UJ		

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:

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

36.4

Instrument ID:

N.i

Prep Method:

Bromofluorobenzene

1,2-Dichlorobenzene-d4

5035

Lab File ID:

Prep Batch:

200-41085

ngap19.d

Dilution:

Χ

1.0

Initial Weight/Volume:

5.17 g

Analysis Date:

07/02/2012 1815

Prep Date:

06/28/2012 1318

Final Weight/Volume:

80 - 115

45 - 145

5 mL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	-	Qualifier	MDL	RL	
1,2-Dichlorobenzene		7.6		کہ ں	0.33	7.6	
1,2-Dibromo-3-Chloropropane		7.6		UIT	1.4	7.6	
1,2,4-Trichlorobenzene		7.6		UI	0.30	7.6	
Surrogate		%Rec		Qualifier	Accepta	ance Limits	
1,2-Dichloroethane-d4	and also the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state	80	shrevis/bandunytha.Aunuccuss	t - On-Philippe (C)-Philippe (C)-Philippe (Addition ) and contact and a short of particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particular particu	65 - 15	5	nametical de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de la competita de l
Toluene-d8		111			80 - 115	5	

127

110

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1

Sdg Number: 11441

Cilent 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:

Initial Weight/Volume:

5.96 g

Analysis Date:

1.0

07/02/2012 1845

Final Weight/Volume:

5 mL

۲	1	е	p	U	a	te	

06/28/2012 1318

(m)	Ouglifier	MDL	

Analyte	DryWt Correcte	d: Y·	Result (ug	/Kg)	Qualifier	MDL	RL	1:- 1
Dichlorodifluoromethane	-	*	5.4		U	0.25	5.4	* 1
Chloromethane		1	5.4		U	0.28	5.4	
Vinyl chloride			5.4		U	0.32	5.4	VIII
Bromomethane			5.4		U ,	0.80	5.4	
Chloroethane			5.4		ا کر ں	0.41	5.4	
Trichlorofluoromethane			5.4		υ´	0.35	5.4	
1,1-Dichloroethene			5.4		U	0.40	5.4	
1,1,2-Trichloro-1,2,2-trichflu	oroethane		5.4	,	Ü	0.35	5.4	
Acetone			34		<b>ゴ</b>	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	<del>0.86</del>		JUB	0.59	5.4	
trans-1,2-Dichloroethene		0.1	5.4		U	0.40	5.4	
Methyl t-butyl ether			5.4		U es	0.32	5.4	
1,2-Dichloroethene, Total			5.4		U	0.83	5.4	
1,1-Dichloroethane			5.4		Ū	0.44	5.4	
cis-1,2-Dichloroethene			5.4		Ū	0.45	5.4	
2-Butanone			7.7		J	1.6	5.4	
Chloroform			5.4		Ú	0.34	5.4	
1,1,1-Trichloroethane			5.4		Ü	0.75	5.4	
Cyclohexane			5.4		Ū	0.91	5.4	
Carbon tetrachloride			5.4		Ŭ =	0.82	5.4	
Benzene			5.4		Ü	0.76	5.4	
1,2-Dichloroethane			5.4		Ü	0.67	5.4	
Trichloroethene			5.4		Ü	0.52	5.4	
Methylcyclohexane			5.4		Ŭ	0.18	5.4	
1,2-Dichloropropane			5.4		Ü	0.31	5.4	
Bromodichloromethane			5.4		Ü	0.23	5.4	
cis-1,3-Dichloropropene			5.4		Ü	0.38	5.4	
4-Methyl-2-pentanone			5.4		Ü	0.64	5.4	
Toluene		614	0.26		AB UB	0.11	5.4	
trans-1,3-Dichloropropene		2,5	5.4		U U	0.11	5.4	
1,1,2-Trichloroethane			5.4		U	0.14	5.4	
Tetrachloroethene			5.4		U	0.12		
2-Hexanone			5.4		U		5.4	
Dibromochloromethane			5. <del>4</del> 5.4			0.53	5.4	
1,2-Dibromoethane			5. <del>4</del> 5.4		U	0.12	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:

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

21.9

Instrument ID:

N.i

Prep Method:

5035

Lab File ID:

1.0

Prep Batch:

200-41085

ngap20.d

Dilution:

Initial Weight/Volume:

Analysis Date:

5.96 g

Prep Date:

07/02/2012 1845

06/28/2012 1318

Final Weight/Volume:

Analyte	DryWt Corrected: Y	Result (ug/Kg)		Qualifier	MDL	RL
1,2-Dichlorobenzene		 5.4	~ ^-/-//	Ü	0.24	5.4
1,2-Dibromo-3-Chloropropar	ne	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	**************************************	y fill time from to the resident for the day day day day do be to the designation on the consequence of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second	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

5030B

Prep Method: Dilution:

1.0

Analysis Date:

07/06/2012 1846

Analysis Batch: Prep Batch:

200-41500

N/A

Initial Weight/Volume:

Final Weight/Volume:

Prep Date:	07/06/2012 1846			Aligi
Analyte		Result (ug/L)	Qualifier	MDL
Dichlorodifluorometha	ne	1.0	U	0.090
Chloromethane		1.0	U	0.12
Vinyl chloride		1.0	UMJ	0.090
Bromomethane		1.0	U	0.43
Chloroethane		1.0	U	0.12
Trichlorofluoromethan	е	1.0	U	0.092
1,1-Dichloroethene		1.0	U	0.18
1,1,2-Trichloro-1,2,2-tr	ichfluoroethane	1.0	U	. 0.18
Acetone		5.0	U	0.92

1,1-Dichloroethene
1,1,2-Trichloro-1,2,2-trichfluoroethane
Acetone
Carbon disulfide
Methyl acetate
Methylene Chloride
trans-1,2-Dichloroethene
Methyl t-butyl ether
1,2-Dichloroethene, Total
1,1-Dichloroethane
cis-1,2-Dichloroethene
2-Butanone

Chloroform	
1,1,1-Trichloroethane	
Cyclohexane	
Carbon tetrachloride	
Benzene	
1,2-Dichloroethane	

Methylcyclohexane
1,2-Dichloropropane
Bromodichloromethane
cis-1,3-Dichloropropene
4-Methyl-2-pentanone
Toluene

trans-1,3-Dichloropropene

**Trichloroethene** 

1,1,2-Trichloroethane	
Tetrachloroethene	
2-Hexanone	
Dibromochloromethane	
1.2-Dibromoethane	

Chlorobenzene

Ethylbenzene

Xylenes, Total

Styrene

Bromoform
Isopropylbenzene
1,1,2,2-Tetrachloroethane
1,3-Dichlorobenzene
1,4-Dichlorobenzene

1.0 U 1.0 U 0.29 J 1.0 U U 1.0 U 1.0 U 1.0 1.0 U 5.0 UI 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 5.0 U 1.0 U 1.0 U 1.0 U 1.0 5.0 U 1.0

U U U U U U U U U U U U

Instrument ID: Lab File ID:

lhj16.d 5 mL

5 mL

RL

1.0 1.0

1.0 1.0

0.70	1.0
0.12	1.0
0.092	1.0
0.18	1.0
0.18	1.0
0.92	5.0
0.15	1.0
0.23	1.0
0.21	1.0
0.17	1.0
0.17	1.0
0.32	1.0
0.16	1.0
0.16	1.0
1.1	5.0
0.16	1.0
0.16	1.0
0.23	1.0
0.17	1.0
0.17	1.0
0.15	1.0
0.14	1.0
0.25	1.0
0.17	1.0
0.16	1.0
0.16	1.0
0.90	5.0
0.17	1.0
0.18	1.0
0.18	1.0
0.18	1.0
1.1	5.0
0.17	1.0
0.18	1.0
0.19	1.0
0.18	1.0
0.17	1.0
0.17	1.0
0.17	1.0
0.17	1.0
0.17	1.0
0.18	1.0
0.15	1.0

1.0

1.0

1.0

1.0

1.0

1.0

1.0

1.0

1.0

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

Lab File ID:

lhj16.d

Dilution:

1.0

Prep Batch:

N/A

Analysis Date:

Initial Weight/Volume:

5 mL

07/06/2012 1846

Final Weight/Volume:

5 mL

Prep Date:

07/06/2012 1846

Result (ug/L)

MDL 0.15

Analyte 1,2-Dichlorobenzene 1,2-Dibromo-3-Chloropropane 1,2,4-Trichlorobenzene

1.0 1.0 1.0

%Rec

U U

U

Qualifier

Qualifier

0.22 0.18

1.0 1.0 1.0

RL

Surrogate 1,2-Dichloroethane-d4 Toluene-d8 Bromofluorobenzene

1,2-Dichlorobenzene-d4

Acceptance Limits 80 - 115 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

L.i

Prep Method:

5035

lhj23.d

Dilution:

17.6

Prep Batch:

200-41083

Initial Weight/Volume:

Analysis Date:

Prep Date:

Chloroform

06/28/2012 1314

Final Weight/Volume:

MDL

790

980

750

940

570

490

830

680

3400

600

790

750

680

680

750

680

3200

720

750

750

570

790

640

640

680

720

720

680

4100

750

640

720

750

2900

600

720

750

750

790

640

640

720

680

720

720

1000

10 mL

Analyte	DryWt Corrected: Y
Dichlorodifluoromethane	
Chloromethane	
Vinyl chloride	

Dichlorodifluoromethane	
Chloromethane	
Vinyl chloride	

Chloromethane		
Vinyl chloride		
Bromomethane		
Chloroethane		
Trichlorofluoromethane		
1,1-Dichloroethene		
1.1.2-Trichloro-1.2.2-trichfluo	rnethane	

1,1,2-Trichloro-1,2,2-trichfluoroethane Acetone Carbon disulfide Methyl acetate

Methylene Chloride trans-1,2-Dichloroethene Methyl t-butyl ether 1,2-Dichloroethene, Total 1,1-Dichloroethane cis-1,2-Dichloroethene 2-Butanone

1,1,1-Trichloroethane Cyclohexane Carbon tetrachloride Benzene 1,2-Dichloroethane **Trichloroethene** Methylcyclohexane 1,2-Dichloropropane

Toluene trans-1,3-Dichloropropene 1,1,2-Trichloroethane Tetrachloroethene 2-Hexanone

Dibromochloromethane

1,2-Dibromoethane

Chlorobenzene

Ethylbenzene

Bromodichloromethane

cis-1,3-Dichloropropene

4-Methyl-2-pentanone

Xylenes, Total Styrene **Bromoform** Isopropylbenzene 1,1,2,2-Tetrachloroethane 1,3-Dichlorobenzene

07/06/2012 2231

Result (ug/Kg) Qualifier 3800 U 3800 U UNS

3800 Uゴ 3800 3800 U 3800 U 3800 U 3800 U

19000 U 10000 3800 U 3800 U 3800 U 3800 U 3800 U 3800 U 3800 U

19000 UJ 3800 U 3800 U 3800 U 3800 U 13000 3800 U 3800 U 3800 U 3800 U 3800

19000 U 2600 J 3800 U 3800 U 3800 U 19000 U 3800 U 3800 U 3800 U 54000 11000

3800

3800

3800

3200

3800

3800

3800

J U J U U U

U

U

Instrument ID: Lab File ID:

5.13 g

RL

3800

3800

3800

3800

3800

3800

3800

3800

19000

3800

3800

3800

1,4-Dichlorobenzene

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1

Sdg Number: 11441

Cilent 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

Lab File ID:

Dilution:

Prep Batch:

lhj23.d

17.6

200-41083

Initial Weight/Volume:

5.13 g

Analysis Date:

07/06/2012 2231

Prep Date:

06/28/2012 1314

Final Weight/Volume:

10 mL

Analyte	DryWt Corrected: Y	mega:	Result (ug/Kg)		Qualifier	MDL	RL
1,2-Dichlorobenzene			3800	* **	U	750	3800
1,2-Dibromo-3-Chloropropane	711		3800		U	640	3800
1,2,4-Trichlorobenzene			3800		U	750	3800

Surrogate		%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	****************	104	millioni (millioni) in decembro de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrato de contrat	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		Ū	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		Ü	830	8400
Bis(2-chloroethyl)ether		280		Ū	38	280
1,3-Dichlorobenzene		2800		Ū	250	2800
Benzoic acid		2800		Ū	2800	2800
1,4-Dichlorobenzene	10	2800		Ū	310	2800
1,2-Dichlorobenzene		2800		Ü	320	2800
N-Nitrosodi-n-propylamine		280		Ū	46	280
Hexachloroethane		280		Ü	31	280
Nitrobenzene		280		Ū	40	280
Isophorone		2800		Ū	340	2800
Bis(2-chloroethoxy)methane		2800		U	360	2800
1,2,4-Trichlorobenzene		280		Ü	32	280
Naphthalene		1400		= <b>J</b>	320	2800
4-Chloroaniline		2800		U	740	2800
Hexachlorobutadiene		560		Ū	68	560
2-Methylnaphthalene		2800		Ū	360	2800
Hexachlorocyclopentadiene		2800		Ū	330	2800
2-Chloronaphthalene		2800		Ū	310	2800
2-Nitroaniline		5600		Ū	1200	5600
Dimethyl phthalate		2800		Ü	330	2800
Acenaphthylene		1200		J	330	2800
2.6-Dinitrotoluene		560		Ü	84	560
3-Nitroaniline		5600		Ü	980	5600
Acenaphthene		2800		Ü	410	2800
Dibenzofuran		5500		4.5	330	2800
2,4-Dinitrotoluene		560		U	92	560
Diethyl phthalate		2800		Ü	330	2800
4-Chlorophenyl phenyl ether		2800		Ü	330	2800
Fluorene		4100		-	360	2800
4-Nitroaniline		5600		U .	870	5600
N-Nitrosodiphenylamine		2800		Ü	270	2800
4-Bromophenyl phenyl ether		2800		U	280	2800
Hexachlorobenzene		280		Ü	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:

Date Sampled: 06/22/2012 0950 Date Received: 06/23/2012 1010

8270C Semivolatile	Organic Com	pounds (GC/MS)
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Analysis Method:

8270C

Analysis Batch:

460-119065

Instrument ID:

BNAMS10

Prep Method:

3541

40.7

Lab File ID:

p31687.d

Dilution:

5.0

Prep Batch:

460-118530

Initial Weight/Volume:

15.05 g

Analysis Date: Prep Date:

07/08/2012 1839

07/03/2012 1953

Final Weight/Volume: Injection Volume:

1 mL 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	12.	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	innivitationivitari Miritari Makataninina kalina kataliringtarini anatanini matananini Masamusana-anakari paka	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

07/03/2012 1953

Client Matrix:

Prep Date:

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
Prep Method:	3541	Prep Batch:	460-118530
Dilution:	2.0		
Analysis Date:	07/08/2012 1903		

Instrument ID:
Lab File ID:
Initial Weight/Volume:

BNAMS10 p31688.d 15.00 g

Final Weight/Volume:	_ 1	mL
Injection Volume:	1	uL

		_
1	mL	
4		

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	Ü	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	Ü	410	2000
Dimethyl phthalate		980	Ū	120	980
Acenaphthylene		520	J =	120	980
2.6-Dinitrotoluene		200	Ū	29	200
3-Nitroaniline		2000	Ū	350	2000
Acenaphthene		980	Ü	140	980
Dibenzofuran		940	J	110	980
2,4-Dinitrotoluene		200	Ŭ	32	200
Diethyl phthalate		980	Ü	120	980
4-Chlorophenyl phenyl ether		980	ŭ	110	980
Fluorene		1900	_	130	980
4-Nitroaniline		2000	U	300	2000
N-Nitrosodiphenylamine		980	U	96	980
• •			U	97	980
4-Bromophenyl phenyl ether		980			

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:

Benzo[g,h,i]perylene

2,2'-oxybis[1-chloropropane]

3541

Prep Batch:

Lab File ID:

p31688.d

Dilution:

2.0

460-118530

Initial Weight/Volume:

15.00 g

980

980

Analysis Date: Prep Date:

07/08/2012 1903

07/03/2012 1953

Final Weight/Volume: Injection Volume:

72

110

U

1 mL 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

2700

980

Surrogate		%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	-	51.		38 - 105
Phenol-d5		58		41 - 118
Terphenyl-d14		76		16 - 151 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December 100 December
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

Cilent Sample ID:

SB-28A (8.7-9.7)

Lab Sample ID:

200-11441-3

Client Matrix:

Solid

% Moisture:

Date Sampled: 06/22/2012 1310

Date Received: 06/23/2012 1010

#### 8270C Semivolatile Organic Compounds (GC/MS)

37.8

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/K	g)	Qualifier	MDL	RL (at
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-methylph	enol	530		U	80	530
2,4,6-Trichloropheno	l III	530		U	62	530
2,4,5-Trichloropheno	1	530		U	69	530
2,4-Dinitrophenol		1600		U	300	1600
4-Nitrophenol		1600		U	340	1600
4,6-Dinitro-2-methyly	phenol	1600		U	140	1600
Pentachlorophenol		1600		U	160	1600
Bis(2-chloroethyl)eth	er	53		U	7.3	53
1,3-Dichlorobenzene		530		U	48	530
Benzoic acid		530		U	530	530
1,4-Dichlorobenzene		530		Ū	60	530
1,2-Dichlorobenzene		530		Ū	62	530
N-Nitrosodi-n-propyl		53		Ü	8.9	53
Hexachloroethane	- Complete	53		Ü	5.9	53
Nitrobenzene		53		Ü	7.6	53
Isophorone		530		Ü	64	530
Bis(2-chloroethoxy)r	nethane	530		Ü	69	530
1,2,4-Trichlorobenze		53		Ü	6.0	53
Naphthalene	ile -	63		J	62	530
4-Chloroaniline		530		U	140	530
Hexachlorobutadien		110		U	13	110
2-Methylnaphthalen		530				
		530		U	68	530
Hexachlorocyclopen				_	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	592	1100		U	190	1100
Acenaphthene		530		U	78	530
Dibenzofuran		530	(4)	U	62	530
2,4-Dinitrotoluene		110		U	18	110
Diethyl phthalate		530		U	63	530
4-Chlorophenyl pher	yl ether	530		U	62	530
Fluorene		530		U	68	530
4-Nitroaniline		1100		U	170	1100
N-Nitrosodiphenylan	nine	530		U	52	530
4-Bromophenyl pher	ıyl 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:

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

37.8

Instrument ID:

BNAMS10

Prep Method: Dilution:

3541

Prep Batch:

Lab File ID: Initial Weight/Volume:

p31678.d 15.00 g

Analysis Date:

1.0

460-118530

Final Weight/Volume:

1 mL

Prep Date:

07/08/2012 1507 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		³ 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	- 2	U	59	530

Surrogate		%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5		71	www.	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

Cilent 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	D	-	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
I-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
,4-Dichlorobenzene			430	U	49	430
,2-Dichlorobenzene			430	U	50	430
I-Nitrosodi-n-propylamine			43	U	7.2	43
lexachloroethane			43	U	4.8	43
litrobenzene			43	U	6.1	43
sophorone			430	U	52	430
Bis(2-chloroethoxy)methane			430	U	56	430
,2,4-Trichlorobenzene			43	U	4.9	43
Naphthalene			430	U	- 50	430
-Chloroaniline			430	U	110	430
lexachlorobutadiene			87	U	11	87
?-Methylnaphthalene			430	U	55	430
lexachlorocyclopentadiene			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
I-Chlorophenyl phenyl ether			430	U	50	430
Fluorene			430	U	55	430
I-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: Prep Method:

8270C

Analysis Batch:

460-119065

Instrument ID:

BNAMS10

Dilution:

3541

Prep Batch:

Lab File ID:

p31679.d 15.04 g

1.0

460-118530

Initial Weight/Volume: Final Weight/Volume:

1 mL

Analysis Date: Prep Date:

07/08/2012 1531 07/03/2012 1953

Injection Volume:

1 uL

Analyte	DryWt Corrected: Y	Result (ug/	/Kg)	Qualifier	MDL	RL
Phenanthrene		430	77	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	700 8	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	1 - 2 - 3	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		Ū	32	430
2,2'-oxybis[1-chloropropane]		430		U	48	430
Surrogate		%Rec		Qualifier	Acceptan	ce Limits
Nitrobonos de		05				

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)

Analy	sis l	vleth	od:
Prep	Meth	nod:	

8270C

Analysis Batch:
Prep Batch:

460-119216 460-118530 Instrument ID: Lab File ID: BNAMS10 p31722.d

Dilution:

3541 100

Initial Weight/Volume:

2.00 g

Analysis Date:

07/09/2012 1907

Run Type: DL

Final Weight/Volume: Injection Volume:

1 mL 1 uL

rep Date:	07/03/2012	1953

Analyte Dr	yWt 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		υļ	67000	270000
2,4-Dichlorophenol		270000		υİ	40000	270000
4-Chloro-3-methylphenol		270000		υ\	41000	270000
2,4,6-Trichlorophenol		270000		U	32000	270000
2,4,5-Trichlorophenol		270000		U	35000	270000
2,4-Dinitrophenol		830000		υ	160000	830000
4-Nitrophenol		830000		U	180000	830000
4,6-Dinitro-2-methylphenol		830000		υĺ	74000	830000
Pentachlorophenol		830000		υ	81000	830000
Bis(2-chloroethyl)ether		27000		U	3700	27000
1,3-Dichlorobenzene		270000		υ	25000	270000
Benzoic acid		270000		υ	270000	270000
1,4-Dichlorobenzene		270000		υ	31000	270000
1,2-Dichlorobenzene		270000		υ	32000	270000
N-Nitrosodi-n-propylamine		27000		υ	4600	27000
Hexachloroethane		27000		u. l	3000	27000
Nitrobenzene		27000		υ	3900	27000
Isophorone		270000		υl	33000	270000
Bis(2-chloroethoxy)methane		270000		υ	35000	270000
1,2,4-Trichlorobenzene		27000		u 🕈 🕠	3100	27000
Naphthalene		2500000		DJ	32000	270000
4-Chloroaniline		270000		UJ	72000	270000
Hexachlorobutadiene		55000		UI	6700	55000
2-Methylnaphthalene		1100000		DJ	35000	270000
Hexachlorocyclopentadiene		270000		ロゴ	32000	270000
2-Chloronaphthalene		270000		Ū l	30000	270000
2-Nitroaniline		550000		U	110000	550000
Dimethyl phthalate		270000		υţ	32000	270000
Acenaphthylene		780000		0 5	32000	270000
2.6-Dinitrotoluene		55000		US	8200	55000
3-Nitroaniline		550000		U J	97000	550000
Acenaphthene		100000		JD	40000	270000
Dibenzofuran		270000		DJ	32000	270000
2.4-Dinitrotoluene		55000		UJ	9000	55000
Diethyl phthalate		270000		UJ	33000	270000
4-Chlorophenyl phenyl ether		270000		υŢ	32000	270000
Fluorene		830000		DJ	35000	270000
4-Nitroaniline		550000		υ <u>Τ</u>	85000	550000
N-Nitrosodiphenylamine		270000		Ul	27000	270000
4-Bromophenyl phenyl ether		270000		Ü	27000	270000
Hexachlorobenzene		27000		u 🕈	3700	27000

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1

Sdg Number: 11441

Ciient Sample iD:

SB-10 (5-6)

Lab Sample ID:

200-11441-5

Client Matrix:

Solid

% Moisture:

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

460-118530

Lab File ID:

p31722.d

Dilution:

Prep Batch:

9.1

Initial Weight/Volume:

Analysis Date:

100

Run Type:

Final Weight/Volume:

2.00 g 1 mL

Prep Date:

07/09/2012 1907 07/03/2012 1953

DL

Injection Volume:

1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)		Qualifier	MDL	RL
Phenanthrene		3300000		DJ	35000	270000
Anthracene		820000		DJ	33000	270000
Carbazole		170000		JD	32000	270000
Di-n-butyl phthalate		270000		U.J	34000	270000
Fluoranthene	*	1200000		DJ	36000	270000
Pyrene		1500000		DJ	23000	270000
Butyl benzyl phthalate		270000		UJ	25000	270000
3,3'-Dichlorobenzidine		550000		υſ	96000	550000
Benzo[a]anthracene		680000		DJ	1900	27000
Chrysene		710000		DJ	32000	270000
Bis(2-ethylhexyl) phthalate		270000		UJ	91000	270000
Di-n-octyl phthalate		270000		ログ	17000	270000
Benzo[b]fluoranthene		470000		DJ	1700	27000
Benzo[k]fluoranthene	III Viel	150000		DI	2100	27000
Benzo[a]pyrene		630000		D	1900	27000
Indeno[1,2,3-cd]pyrene		280000	149	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		ログ	30000	270000

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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	La E	0		D	37 <b>- 125</b> ·
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	Re	esult (ug/Kg)	Qualifier	MDL	RL
Phenol		37	70	U	50	370
2-Chlorophenol		37	70	U	49	370
2-Methylphenol		37	70	U	64	370
2-Nitrophenol		37	70	U	42	370
3 & 4 Methylphenol		37	70	U	64	370
2,4-Dimethylphenol		37	70	U	92	370
2,4-Dichlorophenol		37		U	55	370
4-Chloro-3-methylphenol		37		U	57	370
2,4,6-Trichlorophenol		37		Ü	44	370
2,4,5-Trichlorophenol		37		Ü	48	370
2,4-Dinitrophenol			00	Ü	210	1100
4-Nitrophenol			00	Ü	240	1100
4,6-Dinitro-2-methylphenol			00	Ü	100	1100
Pentachlorophenol			00	Ü	110	1100
Bis(2-chloroethyl)ether	250	37		U	5.1	37
1,3-Dichlorobenzene		37		U	34	370
Benzoic acid		37		U	370	
				U		370
1,4-Dichlorobenzene		37			42	370
1,2-Dichlorobenzene		37		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		37		U	45	370
Bis(2-chloroethoxy)methane		37		U	48	370
1,2,4-Trichlorobenzene		37		U	4.2	37
Naphthalene		37		U	43	370
4-Chloroaniline		37	70	U	99	370
Hexachlorobutadiene		76	5	U	9.1	76
2-Methylnaphthalene		37	70	U	48	370
Hexachlorocyclopentadiene		37	70	U	44	370
2-Chloronaphthalene		37	70	U	42	370
2-Nitroaniline		76	30	U	160	760
Dimethyl phthalate		37	70	U	44	370
Acenaphthylene		37	70	U	44	370
2,6-Dinitrotoluene		76	3	U	11	76
3-Nitroaniline		76		U	130	760
Acenaphthene		37		U	55	370
Dibenzofuran		37		Ū	44	370
2,4-Dinitrotoluene		76		Ü	12	76
Diethyl phthalate		37		Ü	45	370
4-Chlorophenyl phenyl ether		37		Ü	44	370
Fluorene		37		Ü	48	370
4-Nitroaniline		76		Ü	120	760
N-Nitrosodiphenylamine		37		U	37	370
4-Bromophenyl phenyl ether		37		Ü	37	
Hexachlorobenzene		37		U		370
mexacilioropenzene		3/		Ų	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

Lab File ID:

p31677.d

Dilution:

Prep Batch:

460-118530

Initial Weight/Volume:

15.00 g

1.0

Final Weight/Volume: Injection Volume:

1 mL 1 uL

07/08/2012 1443 Analysis Date: 07/03/2012 1953 Prep Date:

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene	William III	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	υ	4.7	37
Benzo[g,h,i]perylene		370	υ	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-Fluorophenoi	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: Prep Method:

8270C

Analysis Batch:

460-118849

Instrument ID:

BNAMS10

Dilution:

3541 1.0

Prep Batch:

460-118530

Lab File ID: Initial Weight/Volume: p31655.d 15.03 g

Analysis Date:

07/06/2012 1438

Final Weight/Volume: Injection Volume:

1 mL 1 uL

07/03/2012 1953 Prep Date:

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenoi		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
Pentachiorophenoi		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		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	3. 1	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: Injection Volume:

1 mL 1 uL

07/03/2012 1953 Prep Date:

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenanthrene		370	Ū	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
Prep Method:	3541
Dilution:	1.0

Analysis Batch:

460-118849

Instrument ID:

BNAMS10 p31656.d

Dilution:

Prep Batch: 460-118530

Lab File ID: Initial Weight/Volume:

15.02 g

Analysis Date: Prep Date:

07/06/2012 1502 07/03/2012 1953 Final Weight/Volume: Injection Volume:

1 mL 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	11 4.7	Qualifier	MDL	RL
Phenol		360	Annonius vanasans	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	7.0	U	240	1100
4,6-Dinitro-2-methylphenol		1100		Ü	100	1100
Pentachlorophenol		1100		Ü	110	1100
Bis(2-chloroethyl)ether		36		Ü	5.0	36
1,3-Dichlorobenzene		360		Ü	33	360
Benzoic acid		360		US	360	360
1.4-Dichlorobenzene		360		U	41	360
1,2-Dichlorobenzene		360		Ü	42	360
N-Nitrosodi-n-propylamine		36		Ü	6.1	36
Hexachloroethane		36		Ū	4.1	36
Nitrobenzene		36		Ü	5.2	36
Isophorone		360		Ü	44	360
Bis(2-chloroethoxy)methane		360		Ü	47	360
1.2.4-Trichlorobenzene		36		Ü	4.1	36
Naphthalene		360		Ü	42	360
4-Chloroaniline		360		Ü	97	360
Hexachlorobutadiene		74		Ü	8.9	74
2-Methylnaphthalene		360		Ü	47	360
Hexachlorocyclopentadiene		360		Ū	43	360
2-Chloronaphthalene		360		Ü	41	360
2-Nitroaniline		740		Ü	150	740
Dimethyl phthalate		360		Ü	43	360
Acenaphthylene		360		Ü	43	360
2.6-Dinitrotoluene		74		Ü	11	74
3-Nitroaniline		740		Ü	130	740
Acenaphthene		360		Ü	53	360
Dibenzofuran		360		Ü	43	360
2,4-Dinitrotoluene		74		Ŭ	12	74
Diethyl phthalate		360		Ü	44	360
4-Chlorophenyl phenyl ether		360		Ü	43	360
Fluorene		360		Ü	47	360
4-Nitroaniline		740		Ŭ	110	740
N-Nitrosodiphenylamine		360		Ü	36	360
4-Bromophenyl phenyl ether		360		Ü	36	360

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 Semivoiatile	Organic Cor	npounds (GC/MS)
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Analysis Method:

8270C

Analysis Batch:

460-118849

Instrument ID:

BNAMS10

Prep Method:

3541

Lab File ID:

p31656.d

Dilution:

Prep Batch:

460-118530

Initial Weight/Volume:

15.02 g

Analysis Date: Prep Date:

1.0

07/06/2012 1502 07/03/2012 1953

Final Weight/Volume: Injection Volume:

1 mL 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	1.0	36		U	2.6	36		
Indeno[1,2,3-cd]pyrene		36		U	6.8	36		
Dibenz(a,h)anthracene	16	36		U	4.6	36		
Benzo[g,h,i]perylene		360		U	27	360		
2,2'-oxybis[1-chloropropane]	8 10	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:

Date Sampled: 06/19/2012 1610 Date Received: 06/23/2012 1010

#### 8270C Semivolatile Organic Compounds (GC/MS)

18.6

Analysis Mothad:	8270C	Analysis Databy	4CO-1404E0	Instrument ID:	DNAMO40
Analysis Method:	6270C	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	W I	1200	, <b>U</b>	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 See	37		410
Benzoic acid		410	U <i>J</i>	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
-lexachloroethane		41	^τ U	4.5		41
Nitrobenzene		41	U	5.8		41
sophorone		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	Ū	52		410
Hexachlorocyclopentadiene		410	Ū	48		410
2-Chloronaphthalene		410	Ū	45		410
2-Nitroaniline		820	Ū	170		820
Dimethyl phthalate		410	Ü	48		410
Acenaphthylene		410	Ü	48		410
2,6-Dinitrotoluene		82	Ū	12		82
3-Nitroaniline		820	Ü	140		820
Acenaphthene		410	Ü	59		410
Dibenzofuran		410	Ü	48		410
2,4-Dinitrotoluene		82	Ü	13		82
Diethyl phthalate		410	Ü	48		410
1-Chlorophenyl phenyl ether		410	Ü	48		410
Fluorene		410	Ü	<del>4</del> 0 52		410
1-Nitroaniline		820	U	130		820
N-Nitrosodiphenylamine		410	U	40		410
•		410	U			
4-Bromophenyl phenyl ether		410	J	40		410

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

Date Sampled: 06/19/2012 1610

			21				
	8270	DC Semivolatile C	rganic Compou	ınds (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	HEALTH EN				Initial Weight/Volume:	15.01 g	
•	012 0751				Final Weight/Volume:	1 mL	
Prep Date: 07/02/20	012 1327				Injection Volume:	1 uL	
Analyte	DryWt Corrected: Y	Result (	ug/Kg)	Qualifie	r MDL	RL	
Phenanthrene		52		J	52	410	
Anthracene		410		U	49	410	
Carbazole		410		U	48	410	
Di-n-butyl phthalate		410	K.	U	50	410	
Fluoranthene		410		U	<b>54</b>	410	
Pyrene		410	117	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	
ndeno[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		Qualifie	r Acceptan	ce 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

Cilent 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 Semivoiatile Organic Compounds (GC/MS)

Analysis Method: Prep Method:

8270C

Analysis Batch:

460-118458

Instrument ID:

BNAMS10

Dilution:

3541

Prep Batch:

Lab File ID:

p31587.d

1.0

460-118324

Initial Weight/Volume:

15.00 g

Analysis Date: Prep Date:

07/03/2012 0815 07/02/2012 1327

Final Weight/Volume: Injection Volume:

1 mL 1 uL

				,	, 42	
Analyte	DryWt Corrected: Y	Result (ug/Kg	3)	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		UJ	390	390
1,4-Dichlorobenzene		390		U n	× 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	9	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		Ü	57	390
Dibenzofuran		390		Ü	46	390
2,4-Dinitrotoluene		79		Ü	13	79
Diethyl phthalate		390		Ü	46	390
4-Chlorophenyl phenyl ethe	ſ	390		Ū	46	390
Fluorene		390		Ü	50	390
4-Nitroaniline		790		Ü	120	790
N-Nitrosodiphenylamine		390		Ŭ	38	390
4-Bromophenyl phenyl ethe	r	390		Ŭ	39	390
Hexachlorobenzene		39		Ü	5.3	39
1 ICAGCIIIO ODEI IZEITE		55		O	3.3	39

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1

Sdg Number: 11441

Cilent 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: Dilution:

3541

Prep Batch:

460-118324

Lab File ID:

p31587.d

Analysis Date:

Surrogate

Phenol-d5

Nitrobenzene-d5

Terphenyl-d14

2-Fluorophenoi

2-Fluorobiphenyl

2,4,6-Tribromophenol

1.0

Initial Weight/Volume: Final Weight/Volume:

15.00 g 1 mL

Prep Date:

07/03/2012 0815 07/02/2012 1327

Injection Volume:

1 uL

Acceptance Limits

38 - 105

41 - 118

16 - 151

10 - 120

37 - 125

40 - 109

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	100
Di-n-butyl phthalate		390	U	48	390	The Harbon
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	4
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	34 Ec.
Benzo[g,h,i]perylene		390	U	29	390	
2,2'-oxybis[1-chloropropane]		390	U	43	390	

Qualifier

%Rec

78

73

97

60

76

78

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

BNAMS11

z19446.d

15.02 g

1 mL

1 uL

Injection Volume:

#### 8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270C Analysis Batch: 460-118767 Instrument ID: Prep Method: 3541 Prep Batch: 460-118532 Lab File ID: Dilution: 1.0 Initial Weight/Volume: 07/05/2012 1758 Analysis Date: Final Weight/Volume: Prep Date: 07/03/2012 1954

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		Ü	5.5	40
1,3-Dichlorobenzene		400		Ü	36	400
Benzoic acid		400		Ü	400	400
1,4-Dichlorobenzene		400		Ü	45	400
1,2-Dichlorobenzene		400		Ü	47	400
N-Nitrosodi-n-propylamine		40		Ŭ	6.7	40
Hexachloroethane		40		Ŭ	4.5	40
Nitrobenzene		40		Ü	5.7	40
Isophorone		400		Ü	49	400
Bis(2-chloroethoxy)methane		400		U	52	400
1,2,4-Trichlorobenzene		40		U	4.6	400
Naphthalene		96		J	4.0	400
4-Chloroaniline	17	400		Ü	110	
Hexachlorobutadiene		81		U	9.8	400
		57				81
2-Methylnaphthalene				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	17	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

Lab File ID:

z19446.d

Dilution:

Prep Batch:

460-118532

Initial Weight/Volume:

Analysis Date:

1.0

Final Weight/Volume:

38 - 105

41 - 118 16 - 151

10 - 120 37 - 125

40 - 109

15.02 g 1 mL

Prep Date:

Nitrobenzene-d5

Terphenyl-d14

2-Fluorophenol

2-Fluorobiphenyl

2,4,6-Tribromophenol

Phenol-d5

07/05/2012 1758 07/03/2012 1954

Injection Volume:

1 uL

Analyte	DryWt Corrected: Y	Result (ug/	Kg)	Qualifier	MDL	RL
Phenanthrene		550			51	400
Anthracene	1	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	Acceptan	ce Limits

78

71

83

43

70

90

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: Prep Method:

8270C

Analysis Batch:

460-118767

Instrument ID:

BNAMS11

Dilution:

3541 1.0

Prep Batch: 460-118532 Lab File ID: Initial Weight/Volume: z19447.d 14.99 g

Analysis Date:

07/05/2012 1821

Final Weight/Volume: Injection Volume:

1 mL 1 uL

Prep Date:	07/03/2012	1954	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier		MDL	RL
Phenol	16	370	U		49	370
2-Chlorophenol		370	U	ø.	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	Ū		5.0	37
1,3-Dichlorobenzene		370	U		33	370
Benzoic acid		370	Ü		370	370
1,4-Dichlorobenzene		370	Ū		42	370
1,2-Dichlorobenzene		370	Ū		43	370
N-Nitrosodi-n-propylamine		37	Ü		6.1	37
Hexachloroethane	Contract Contract	•	Ū		4.1	37
Nitrobenzene		37	Ŭ		5.2	37
Isophorone		370	Ū		45	370
Bis(2-chloroethoxy)methane		370	Ü		48	370
1,2,4-Trichlorobenzene		37	Ü		4.2	37
Naphthalene		200	J =		43	370
4-Chloroaniline		370	Ŭ		98	370
Hexachlorobutadiene		75	Ü		9.0	75
2-Methylnaphthalene		210	J		47	370
Hexachlorocyclopentadiene		370	Ü		43	370
2-Chloronaphthalene		370	U		41	370
2-Nitroaniline		750	U		150	750
Dimethyl phthalate		370	U		44	370
Acenaphthylene		55	J		44	370 370
2,6-Dinitrotoluene		75	U		11	
3-Nitroaniline		750 750	U			75 750
Acenaphthene		340	J		130 54	750
Dibenzofuran		280			-	370
			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

Lab File ID:

z19447.d

Dilution:

Prep Batch:

460-118532

1.0

Initial Weight/Volume:

14.99 g

Analysis Date:

Final Weight/Volume:

1 mL

Prep Date:

07/05/2012 1821 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 Li	mits
Nitrobenzene-d5	73		38 - 105	The Park
Phenol-d5	72		41 - 118	
Terphenyl-d14	80		16 - 151	
2,4,6-Tribromophenol	39		10 - 120	Time in the
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

**BNAMS11** 

#### 8270C Semivolatile Organic Compounds (GC/MS)

 Analysis Method:
 8270C
 Analysis Batch:
 460-118964
 Instrument ID:

 Prep Method:
 3541
 Prep Batch:
 460-118532
 Lab File ID:

 Dilution:
 1.0
 Initial Weight/V

 Analysis Date:
 07/06/2012
 0915
 Final Weight/V

 Prep Date:
 07/03/2012
 1954
 Injection Volume

Lab File ID: z19474.d Initial Weight/Volume: 15.05 g

Final Weight/Volume: 1 mL Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/	Kg)	Qualifier	MDL	RL
Phenol	. ,	340		U	46	340 - 2 - 3 - 2 - 3 - 3 - 3 - 3 - 3 - 3 - 3
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 (1: 11 1: 11
2,4,5-Trichlorophenol		340		U	44	340
2,4-Dinitrophenol		1000		Ū	190	1000
4-Nitrophenol		1000		Ū	220	1000
4,6-Dinitro-2-methylphenol		1000		Ü	92	1000
Pentachlorophenol		1000		Ü	100	1000
Bis(2-chloroethyl)ether		34		Ü	4.6	34
1,3-Dichlorobenzene		340		ŭ	31	340
Benzoic acid		340		Ü .	340	340
1.4-Dichlorobenzene		340		Ü	38	340
1,2-Dichlorobenzene		340		Ŭ	39	340
N-Nitrosodi-n-propylamine		34		Ü	5.7	34
Hexachloroethane		34		Ü	3.8	34
Nitrobenzene		34		Ü	4.8	34
Isophorone		340		Ū	41	340
Bis(2-chloroethoxy)methane		340		Ü	44	340
1,2,4-Trichlorobenzene		34		Ü	3.8	34
Naphthalene		340		= U	39	340
4-Chloroaniline		340		Ü	90	340
Hexachlorobutadiene		69		U	8.3	69
2-Methylnaphthalene		340		U	6.3 44	340
The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s		340	1	U		
Hexachlorocyclopentadiene 2-Chloronaphthalene		340		U	40 38	340
2-Nitroaniline				-		340
		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)
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Analysis Method:

8270C

Analysis Batch:

460-118964

Instrument ID:

BNAMS11

Prep Method:

3541

Lab File ID:

Dilution:

1.0

Prep Batch:

460-118532

Initial Weight/Volume:

z19474.d

Analysis Date:

Final Weight/Volume:

15.05 g 1 mL

07/06/2012 0915 07/03/2012 1954

Prep Date: 07/03/2	012 1954			Inje	ection 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		8	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]	- 1		340	U	38	340	
Surrogate			%Rec	Qualifier	Accept	ance Limits	
Nitrobenzene-d5			56		38 - 10	5	
Phenol-d5			63		41 - 11	8	
Terphenyl-d14			98		16 - 15		
2,4,6-Tribromophenol	T.		53		10 - 12		
2-Fluorophenol	- T	111	56		37 - 12	-	
2-Fluorobiphenyl			57		40 - 10	9	
			60				

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:

e: 36.8

Date Sampled: 06/25/2012 1200

Date Received: 06/26/2012 1050

8270C Semivolatile	Organic Com	nounds (	GC/MS)

Analysis Mathadi	92700	Analusia Datah	400 440707	In the second ID.	D11414044
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 5	700	5200
2-Chlorophenol		5200	Uj	690	5200
2-Methylphenol		5200	U	890	5200
2-Nitrophenol		5200	υ (	580	5200
3 & 4 Methylphenol		5200	U-/	890	5200
2,4-Dimethylphenol		5200	U	1300	5200
2,4-Dichlorophenol		5200	u l	760	5200
4-Chloro-3-methylphenol		5200	υ \	790	5200
2,4,6-Trichlorophenol		5200	U	610	5200
2,4,5-Trichlorophenol		5200	ŭ \	670	5200
2,4-Dinitrophenol		16000	Ū )	3000	16000
I-Nitrophenol		16000	υl	3400	16000
1,6-Dinitro-2-methylphenol		16000	Ü	1400	16000
Pentachlorophenol		16000	ŭΙ	1600	16000
Bis(2-chloroethyl)ether		520	ŭ /	71	520
.3-Dichlorobenzene		5200	Ü	470	5200
Benzoic acid		5200	υĺ	5200	5200
,4-Dichlorobenzene		5200	U	590	5200
,2-Dichlorobenzene		5200	U	610	
J-Nitrosodi-n-propylamine		5200	υĺ	87	5200
lexachloroethane		520	ΰĺ		520
Nitrobenzene				58	520
		520	U (	74	520
sophorone		5200	U\	630	5200
Bis(2-chloroethoxy)methane		5200	U \	670	5200
,2,4-Trichlorobenzene		520	0	59	520
Naphthalene		63000	DJ	600	5200
l-Chloroaniline		5200	U 15	1400	5200
lexachlorobutadiene		1100	UJ	130	1100
-Methylnaphthalene	*	6200	DJ	670	5200
lexachlorocyclopentadiene		5200	US	610	5200
2-Chloronaphthalene		5200	U	580	5200
?-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
cenaphthene		5200	υþr	760	5200
Dibenzofuran		2100	JD.	610	5200
,4-Dinitrotoluene		1100	UJ	170	1100
Diethyl phthalate		5200	UJ	620	5200
-Chlorophenyl phenyl ether		5200	UJ	610	5200
luorene		3400	JD	670	5200
-Nitroaniline		11000	U 5	1600	11000
I-Nitrosodiphenylamine		5200	Uí	510	5200
I-Bromophenyl phenyl ether		5200	Ü	520	5200
lexachlorobenzene		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:

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: Dilution:

3541

Prep Batch:

460-118532

36.8

Lab File ID:

z19445.d

10

Initial Weight/Volume:

15.03 g

Analysis Date:

07/05/2012 1734

Run Type:

DL

Final Weight/Volume:

1 mL

Prep Date:

Phenol-d5

Terphenyl-d14

2-Fluorophenol

2-Fluorobiphenyl

2,4,6-Tribromophenol

07/03/2012 1954

Injection Volume:

41 - 118

16 - 151

10 - 120

37 - 125

40 - 109

1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)		Qualifier	MDL	RL 🕒
Phenanthrene		10000		DJ	660	5200
Anthracene		2300		J D	630	5200
Carbazole		5200		UJ	620	5200
Di-n-butyl phthalate		5200		ロゴ	640	5200
Fluoranthene		4300		JD	700	5200
Pyrene		3700		JD	440	5200
Butyl benzyl phthalate		5200		UJ	480	5200
3,3'-Dichlorobenzidine		11000		UJ	1800	11000
Benzo[a]anthracene		2500		05	36	520
Chrysene		2700		JD	610	5200
Bis(2-ethylhexyl) phthalate		5200		UJ	1700	5200
Di-n-octyl phthalate		5200		U 5	330	5200
Benzo[b]fluoranthene	3 1	1700		DJ	33	520
Benzo[k]fluoranthene		670		DI	40	520
Benzo[a]pyrene		1500		D	37	520
Indeno[1,2,3-cd]pyrene		1400		Dt	97	520
Dibenz(a,h)anthracene		340		J D	66	520
Benzo[g,h,i]perylene		1500		JD	390	5200
2,2'-oxybis[1-chloropropane]		5200		U J	580	5200
Surrogate		%Rec		Qualifier	Acceptance L	imits
Nitrobenzene-d5		0	111111111111111111111111111111111111111	D	38 - 105	

D

D

D

D

D

0

0

0

0

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
I-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
-Nitrophenol	E.	3100	-U-R	<del>-670</del>	-3100
,6-Dinitro-2-methylphenol		3100	U	280	3100
Pentachlorophenol		3100	Uゴ	310	3100
Bis(2-chloroethyl)ether		100	U	14	100
,3-Dichlorobenzene		1000	U	94	1000
Benzoic acid		1000	U	1000	1000
,4-Dichlorobenzene		1000	U	120	1000
,2-Dichlorobenzene		1000	U	120	1000
I-Nitrosodi-n-propylamine		100	U	17	100
lexachloroethane		100	U	12	100
litrobenzene		100	U	15	100
sophorone		1000	U	130	1000
Bis(2-chloroethoxy)methane		1000	U	130	1000
,2,4-Trichlorobenzene		100	U	12	100
laphthalene		1000	U	120	1000
-Chloroaniline		-1000	-UR	<del>270</del> —	1000
lexachlorobutadiene		210	U	25	210
-Methylnaphthalene		1000	Ü	130	1000
lexachlorocyclopentadiene		1000	UJ	120	1000
-Chloronaphthalene		1000	U	120	1000
-Nitroaniline		2100	Ū	430	2100
Dimethyl phthalate		1000	Ū	120	1000
cenaphthylene		1000	Ü	120	1000
2,6-Dinitrotoluene		210	Ü	31	210
-Nitroaniline		2100	ک ت	370	2100
Acenaphthene		1000	U	150	1000
Dibenzofuran		1000	U	120	1000
.4-Dinitrotoluene		210	U	34	210
Diethyl phthalate		1000	U	120	1000
-Chlorophenyl phenyl ether		1000	U	120	1000
Fluorene		1000	u	130	1000
I-Nitroaniline		2100	U J	320	2100
N-Nitrosodiphenylamine		1000	UJ	100	
-Bromophenyl phenyl ether		1000	ט ט	100	1000 1000
+-DIOMODHEMY DHEMY ELITER		1000	U	TUU	11100

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:

Date Sampled: 06/25/2012 1205

Date Received: 06/26/2012 1050

227AC	Combolatile	Oznania	Compounds	ICC/MC1

Analysis Method:

8270C

Analysis Batch:

460-118767

36.4

Instrument ID:

BNAMS11

Prep Method:

3541

Lab File ID:

z19449.d

Dilution:

2.0

Prep Batch:

460-118532

Analysis Date:

Initial Weight/Volume: Final Weight/Volume:

15.03 g

Prep Date:

07/05/2012 1908 07/03/2012 1954

Injection Volume:

1 mL 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)		Qualifier	MDL	RL
Phenanthrene	E .	1000	177	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		<del>2100</del>		-4-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

0/ 1/

% Moisture: 2

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)	4.74	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		Ū	130	1300
Bis(2-chloroethyl)ether		42		Ū	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		Ū	4.7	42
Nitrobenzene		42		Ū	6.0	42
Isophorone		420		Ū	51	420
Bis(2-chloroethoxy)methane		420		U	55	420
1,2,4-Trichlorobenzene		42		Ū	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		Ū	47	420
2-Nitroaniline		860		U	180	860
Dimethyl phthalate		420		Ū	50	420
Acenaphthylene		420		Ü	50	420
2,6-Dinitrotoluene		86		Ü	13	86
3-Nitroaniline		860		Ū	150	860
Acenaphthene		420		Ü	62	420
Dibenzofuran		420		Ü	50	420
2,4-Dinitrotoluene		86		Ü	14	86
Diethyl phthalate		420		Ü	50	420
4-Chlorophenyl phenyl ether		420		Ŭ	50	420
Fluorene		420		Ü	54	420
4-Nitroaniline	W	860		Ü	130	860
N-Nitrosodiphenylamine		420		Ü	42	420
4-Bromophenyl phenyl ether		420		Ü	42	420
Hexachlorobenzene		420		Ü	5.8	420 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

Lab File ID:

z19475.d

Dilution:

1.0

Prep Batch:

460-118532

Initial Weight/Volume:

15.02 g

Analysis Date:

Final Weight/Volume: Injection Volume:

1 mL 1 uL

Prep Date:

07/06/2012 0955 07/03/2012 1954

Analyte	DryWt Corrected: Y	Result (ug/Kg)		Qualifier	MDL	RL
Phenanthrene		91	THEF	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	2000	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		11	47	420

Surrogate		%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	-	87	Marie Control	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:

Date Sampled: 06/25/2012 0000

Date Received: 06/26/2012 1050

#### 8270C Semivolatile Organic Compounds (GC/MS)

44.2

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 07/06/2012 2000 Analysis Date: 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	§ 40	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		Ü	920	6000
N-Nitrosodiphenylamine		3000		Ü	290	3000
4-Bromophenyl phenyl ether		3000		Ü	290	3000
Hexachlorobenzene		300		Ü	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

Analysis Method: Prep Method: Dilution:

8270C 3541

Analysis Batch: Prep Batch:

460-118967

Instrument ID: Lab File ID:

BNAMS11 z19496.d

5.0

460-118532

Initial Weight/Volume: Final Weight/Volume:

15.01 g 1 mL

Analysis Date: Prep Date:

07/06/2012 2000 07/03/2012 1954

Injection Volume:

1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)		Qualifier	MDL	RL 2
Phenanthrene		2500	TIL.	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	10.5	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:

Tetrachloro-m-xylene

DCB Decachlorobiphenyl

200-11441

Solid

% Moisture:

40.7

Date Sampled: 06/22/2012 0950

Date Received: 06/23/2012 1010

30 - 130

45 - 125

8082A Polychlorinated	Biphenyls (PC	Bs) by Gas	Chromatography
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		6062A Polyt	iniorinated bipnenyis (P	CDS) by	Gas Chro	matography		
Analysis Me		8082A	•	0-41316		Instrument ID:	5253.i	
Prep Metho	d:	3541	Prep Batch: 20	0-40879		Initial Weight/Volume:	15.63 g	
Dilution:		1.0				Final Weight/Volume:	5000 uL	
Analysis Da	te:	07/03/2012 0254				Injection Volume:	1 uL	
Prep Date:		06/25/2012 1030				Result Type:	PRIMARY	
Analyte		DryWt Corrected: Y	Result (ug/Kg)		Qualifie	r MDL	RL	
PCB-1016	ul		28	118/5	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		UI	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		υŤ	2.3	28	
Surrogate			%Rec		Qualifie	r Acceptan	ce Limits	

Х

37

41

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

06/25/2012 1030

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

Dilution:

Initial Weight/Volume:

15.63 g

1.0

Prep Batch:

200-40879

Final Weight/Volume:

Analysis Date:

Injection Volume:

5000 uL 1 uL

Prep Date:

07/03/2012 0254

Result Type:

Qualifier

**SECONDARY** 

Surrogate

Tetrachloro-m-xylene DCB Decachlorobiphenyl %Rec 37 59

30 - 130 45 - 125

Acceptance Limits

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:

PCB-1268

Solid

% Moisture:

32.4

Date Sampled: 06/22/2012 1420

25

Date Received: 06/23/2012 1010

8082A Poh	vchlorinated E	Siphenvi	s (PCBs)	by Gas	Chromatography
000271 01	, 0111011114604 2		0 (1 OD0)	<b>D J G G G</b>	om omatograpmy

Analysis Method: 8082A Analysis Batch: 200-41296 Instrument ID: 5253.i Prep Method: 3541 14.91 g Prep Batch: 200-40879 Initial Weight/Volume: Dilution: 1.0 Final Weight/Volume: 5000 uL 06/29/2012 1123 Analysis Date: 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 25 PCB-1260 U 3.6 25 PCB-1262 25 U 2.2 25

U

2.1

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	54	-	30 - 130
DCB Decachlorobiphenyl	37	X	45 - 125

25

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 Polychiorinated Biphenyis (PCBs) by Gas Chromatography

Analysis Method:

8082A

Analysis Batch:

200-41296

Instrument ID:

5253.i

Prep Method:

3541

Initial Weight/Volume:

Dilution:

1.0

Prep Batch:

200-40879

14.91 g

Final Weight/Volume:

5000 uL

Qualifier

**Acceptance Limits** 

Analysis Date:

06/29/2012 1123

Injection Volume:

1 uL

Prep Date:

06/25/2012 1030

Result Type:

**SECONDARY** 

Surrogate Tetrachloro-m-xylene DCB Decachlorobiphenyl

61 50

%Rec

30 - 130 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

		= 000ZA POIYC	hiorinated Bipheny	is (PCBS) by	Gas Chro	matograpny		
Analysis Method:	8082A		Analysis Batch:	200-41296		Instrument ID:	5253.i	
Prep Method:	3541		Prep Batch:	200-40879		Initial Weight/Volume:	14.74 g	1
Dilution:	1.0					Final Weight/Volume:	5000 uL	
Analysis Date:	06/29/2012 1	147				Injection Volume:	_1 uL	
Prep Date:	06/25/2012 1	030				Result Type:	PRIMARY	
Analyte	Dry	Wt Corrected: Y	Result (ug	ı/Kg)	Qualifie	r 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		Qualifie	r Accepta	nce Limits	
Tetrachloro-m-xylene		anaannaagannannaanaanayan _t -an _t -aagan-aganaagga.aanaa	97	ld-Haeldonji-1394-in-inn-4-138-seer/1019-laacenn-4-natreen-ve		30 - 130		0-00-0-00-00-00-00-00-00-00-00-00-00-00
DCB Decachlorobiph	enyl		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 Blphenyls (PCBs) by Gas Chromatography

Analysis Method:

8082A

Analysis Batch:

200-41296

Instrument ID:

5253.i

Prep Method:

3541

Initial Weight/Volume:

Dilution:

Prep Batch:

200-40879

14.74 g

1.0

Final Weight/Volume:

5000 uL

Analysis Date:

06/29/2012 1147

Injection Volume:

1 uL

Acceptance Limits

Prep Date:

06/25/2012 1030

Result Type:

Qualifier

**SECONDARY** 

Surrogate Tetrachloro-m-xylene

DCB Decachlorobiphenyl

%Rec 102 79

30 - 130 45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1

Sdg Number: 11441

Client Sample ID:

Tetrachloro-m-xylene

DCB Decachlorobiphenyl

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

30 - 130

45 - 125

8082A Polychlorinated	l Biphenyls (PCBs	) by Gas Chromatography
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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 06/29/2012 1211 Analysis Date: 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 23 5.7 PCB-1232 23 U 23 4.4 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 23 1.9 Surrogate %Rec Qualifier Acceptance Limits

86

71

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

Dilution:

Prep Batch:

200-40879

Initial Weight/Volume:

14.72 g

1.0

Analysis Date:

Final Weight/Volume:

5000 uL

DCB Decachlorobiphenyl

1 uL

Prep Date:

06/29/2012 1211 06/25/2012 1030 Injection Volume: Result Type:

**SECONDARY** 

Surrogate

Tetrachloro-m-xylene

%Rec 88 73

Qualifier 30 - 130

Acceptance Limits

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:

Prep Date:

Solid

% Moisture:

9.1

Date Sampled: 06/22/2012 1030

Date Received: 06/23/2012 1010

TOOLA I OIS CHICKING CONTINUES IN COST DE COSTUDINATORINATION	(PCBs) by Gas Chromatography
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8082A Analysis Method: Prep Method: Dilution: Analysis Date:

3541 1.0

07/05/2012 1153 07/03/2012 1640 Analysis Batch: Prep Batch:

200-41383 200-41331 Instrument ID: Initial Weight/Volume:

3283.i 15.09 g 5000 uL

Final Weight/Volume: Injection Volume: 1 uL 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: Dilution:

3541

Qualifier

1.0

Prep Batch:

200-41331

Initial Weight/Volume:

15.09 g

Final Weight/Volume: Injection Volume:

5000 uL 1 uL

Analysis Date: Prep Date:

07/05/2012 1153 07/03/2012 1640

Result Type:

**SECONDARY** 

Surrogate

Tetrachloro-m-xylene DCB Decachlorobiphenyl %Rec 49 54

**Acceptance Limits** 30 - 130

45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1

Sdg Number: 11441

Client Sample ID:

Tetrachloro-m-xylene

DCB Decachlorobiphenyl

SB-10 (7.4-8.4)

Lab Sample ID:

200-11441-6

Client Matrix:

Solid

% Moisture:

88

83

11.7

Date Sampled: 06/22/2012 1035

30 - 130

45 - 125

Date Received: 06/23/2012 1010

8082A Polychlorinated	Rinbanyle (PCRe) by	Gae Chromatography
OUOLA FUIVUIIIUI III aleu	OUNCIVISTECESTUV	Gas Chromatography

Analysis Method: 8082A Analysis Batch: 200-41296 Instrument 1D: 5253.i Prep Method: 3541 Prep Batch: 200-40879 Initial Weight/Volume: 15.41 g Dilution: 1.0 Final Weight/Volume: 5000 uL 06/29/2012 1235 Analysis Date: Injection Volume: 1 uL 06/25/2012 1030 Prep Date: 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

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

Initial Weight/Volume:

Dilution:

1.0

200-40879

15.41 g

Prep Batch:

Final Weight/Volume:

5000 uL

Analysis Date: Prep Date:

06/29/2012 1235

06/25/2012 1030

Injection Volume: Result Type:

1 uL **SECONDARY** 

Surrogate

Tetrachloro-m-xylene

DCB Decachlorobiphenyl

%Rec 96

87

Qualifier 30 - 130

Acceptance Limits

45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1

Sdg Number: 11441

Client Sample ID:

DCB Decachlorobiphenyl

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

45 - 125

8082A Polychlorinated	Biphenyls (P	CBs) by Gas	Chromatography
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Analysis Method:	8082A	Analysis Batch: 200-	11296	Instrument ID:	5253.i	
Prep Method:	3541	Prep Batch: 200-	10879	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)	Qual	lifier MDL	RL	
PCB-1016		19	U	6.1	19	all to the
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	201	19	U	1.6	19	
PCB-1268		19	U	1.5	19	
Surrogate		%Rec	Qual	lifier Accep	tance Limits	
Tetrachloro-m-xylen	16	83	~~~~delations to receive and recovery and	30 - 1	30	ertelen antikali antikali antikali (nova panagalaa

**7**9

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1

Sdg Number: 11441

Cilent 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 Polychiorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:

8082A

Analysis Batch:

200-41296

Instrument ID:

5253.i

Prep Method:

3541

15.27 g

Dilution:

Prep Batch:

200-40879

Initial Weight/Volume:

1.0

Final Weight/Volume:

5000 uL

Analysis Date:

Injection Volume:

Qualifier

1 uL

Prep Date:

06/29/2012 1258 06/25/2012 1030

Result Type:

**SECONDARY** 

Surrogate

%Rec 90

30 - 130

Acceptance Limits

Tetrachloro-m-xylene 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

Analysis Method:	8082A	Analysis Batch: 20	0-41296	Instrument ID:	5253.i
Prep Method:	3541	Prep Batch: 20	0-40879	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)	Qualit	fier MDL	RL
PCB-1016		18	U	6.1	18
PCB-1221	11 21	18	THE U	4.6	18
PCB-1232		18	U	3.6	18
PCB-1242		18	U	7.2	18

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

		•	0.0	
PCB-1242	18	U	7.2	18
PCB-1248	18	U	2.2	18
PCB-1254	18	v Ü	3.0	18
PCB-1260	18	U	2.6	18
PCB-1262	18	U	1.6	18
PCB-1268	18	U	1.5	18
Commonto	0/ 5	0156		

Surrogate			%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	ns c c/Cycli challyddig sor hou ganulyndy erisyr cagnol ang cu'u bunlyn oegan ,	, .	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:

Initial Weight/Volume:

15.36 g

Dilution:

200-40879

1.0

Final Weight/Volume:

5000 uL

Analysis Date: Prep Date:

06/29/2012 1346

Injection Volume: Result Type:

Qualifier

1 uL **SECONDARY** 

Surrogate

06/25/2012 1030

%Rec 89

30 - 130

Acceptance Limits

Tetrachloro-m-xylene

DCB Decachlorobiphenyl

81

45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1

Sdg Number: 11441

Ciient Sampie 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

808ZA Polycnic	orinated Bipner	iyis (PCBs) by	Gas Chromatography

Analysis Method: Prep Method: Dilution: Analysis Date: Prep Date:	8082A 3541 1.0 06/29/2012 1410 06/25/2012 1030	Analysis Batch: Prep Batch:	200-41296 200-40879		Instrument ID: Initial Weight/Volume: Final Weight/Volume: Injection Volume: Result Type:	5253.i 15.59 g 5000 uL 1 uL PRIMARY	
Analyte	DryWt Corrected: Y	Result (u	g/Kg)	Qualifie	MDL	RL	
PCB-1016		20		U	6.6	3120	***************************************
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

Initial Weight/Volume:

15.59 g

Dilution:

1.0

Prep Batch:

200-40879

Qualifier

Final Weight/Volume:

5000 uL

Analysis Date: Prep Date:

06/29/2012 1410 06/25/2012 1030

Injection Volume: Result Type:

1 uL SECONDARY

Surrogate

Tetrachloro-m-xylene DCB Decachlorobiphenyl %Rec 87 82

30 - 130 45 - 125

Acceptance Limits

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1

Sdg Number: 11441

Client Sample ID:

Tetrachloro-m-xylene

DCB Decachlorobiphenyl

SB-08 (12.8-13.9)

Lab Sample ID:

200-11441-10

Client Matrix:

Solid

% Moisture:

15.1

Date Sampled: 06/19/2012 1600

30 - 130

45 - 125

Date Received: 06/23/2012 1010

8082A Polychiorinated	Biphenyls (PCBs) by	Gas Chromatography
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	8082A Polyd	hiorinated Biphenyls (PCBs) by	Gas Chro	matography	
Analysis Method: Prep Method: Dilution: Analysis Date: Prep Date:	8082A 3541 1.0 06/29/2012 1434 06/25/2012 1030	Analysis Batch: 200-41296 Prep Batch: 200-40879		Instrument ID: Initial Weight/Volume: Final Weight/Volume: Injection Volume: Result Type:	5253.i 15.15 g 5000 uL 1 uL PRIMARY
Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifie	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	Qualifie	Accepta	nce Limits

76

72

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:

Prep Method:

3541

5253.i

Prep Batch:

200-40879

Initial Weight/Volume:

15.15 g

Dilution:

1.0

Final Weight/Volume:

5000 uL

Analysis Date:

Injection Volume:

Qualifier

1 uL

Prep Date:

06/29/2012 1434 06/25/2012 1030

Result Type:

**SECONDARY** 

Surrogate

%Rec

Acceptance Limits 30 - 130

Tetrachloro-m-xylene DCB Decachlorobiphenyl 80 74

45 - 125

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1

Sdg Number: 11441

Cilent Sample ID:

SB-22 (5.7-6.7)

Lab Sample ID:

200-11460-1

Client Matrix:

PCB-1260

PCB-1262

PCB-1268

Solid

% Moisture:

17.8

Date Sampled: 06/23/2012 1200 Date Received: 06/26/2012 1050

21

21

21

3.0

1.9

1.7

#### 8082A Polychiorinated Biphenyis (PCBs) by Gas Chromatography

Analysis Method: Prep Method: Dilution: Analysis Date: Prep Date:	8082A 3541 1.0 07/05/2012 1243 06/27/2012 1018	,	00-41383 00-40997	Instrument ID: Initial Weight/Volume: Final Weight/Volume: Injection Volume: Result Type:	3283.i 14.75 g 5000 uL 1 uL PRIMARY
Fiep Date.	00/21/2012 1010			Result Type.	PRIMART
Analyte	DryWt Corrected:	Y Result (ug/Kg	) Qualifie	er 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		300 <b>21</b>	U	2.5	21
PCB-1254		21	U	3.5	21

Surrogate	%Rec	Qualifier	Acceptance Limits	
Tetrachloro-m-xylene	74		30 - 130	SoftMag.
DCB Decachlorobiphenyl	59		45 - 125	

U

U

65

21

21

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 Blphenyls (PCBs) by Gas Chromatography

Analysis Method:

8082A

Analysis Batch:

200-41383

Instrument ID:

3283.i

Prep Method:

3541

63

200-40997

Initial Weight/Volume:

14.75 g

Dilution:

Prep Batch:

Qualifier

1.0

Final Weight/Volume:

5000 uL

Analysis Date:

Injection Volume:

1 uL

Prep Date:

07/05/2012 1243 06/27/2012 1018

Result Type:

**SECONDARY** 

Surrogate Tetrachloro-m-xylene

DCB Decachlorobiphenyl

%Rec 84

30 - 130 45 - 125

Acceptance Limits

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1

Sdg Number: 11441

Client Sample ID:

SB-23 (5-6)

Lab Sample ID:

Tetrachioro-m-xylene

DCB Decachlorobiphenyl

200-11460-2

Client Matrix:

Solid

% Moisture:

78

59

10.1

Date Sampled: 06/23/2012 1245

30 - 130

45 - 125

Date Received: 06/26/2012 1050

	8082A Polyd	hiorinated Bipheny	is (PCBs) by	Gas Chro	matography		
Analysis Method: Prep Method: Dilution: Analysis Date: Prep Date:	8082A 3541 1.0 07/05/2012 1308 06/27/2012 1018	Analysis Batch: Prep Batch:	200-41383 200-40997		Instrument ID: Initial Weight/Volume: Final Weight/Volume: Injection Volume: Result Type:	3283.i 14.75 g 5000 uL 1 uL PRIMARY	
Analyte	DryWt Corrected: Y	Result (ug	/Kg)	Qualifie	r MDL	RL	
PCB-1016	in the second	19		U	6.3	19	s leave
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		Qualifie	r Acceptar	nce Limits	

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

Initial Weight/Volume:

Dilution:

14.75 g

Prep Batch:

200-40997

1.0

Final Weight/Volume:

5000 uL 1 uL

Analysis Date: Prep Date:

07/05/2012 1308 06/27/2012 1018

Injection Volume: Result Type:

Qualifier

SECONDARY

Surrogate

%Rec 88

30 - 130

Tetrachloro-m-xylene DCB Decachlorobiphenyl

67

45 - 125

**Acceptance Limits** 

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1

Sdg Number: 11441

Cilent 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

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 07/02/2012 2144 Analysis Date: Injection Volume: 1 uL 06/27/2012 1018 Prep Date: 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 U 17 1.4 17

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	89	99000 PPCC88804097-38804005986127-9900007880909748808080409746-97-97-97-98804-4-00-97-97-97-97-97-97-97-97-97	30 - 130
DCB Decachlorohiphenyl	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 Biphenyis (PCBs) by Gas Chromatography

Analysis Method:

8082A

Analysis Batch:

200-41316

Instrument ID:

5253.i

Prep Method:

3541

Initial Weight/Volume:

Dilution:

Prep Batch: `

200-40997

15.41 g

1.0

Final Weight/Volume:

5000 uL

Analysis Date: Prep Date:

07/02/2012 2144

06/27/2012 1018

Qualifier

Injection Volume: 1 uL

Acceptance Limits

Result Type:

**SECONDARY** 

Surrogate

Tetrachloro-m-xylene DCB Decachlorobiphenyl %Rec 99

100

30 - 130 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 Polychiorinated Biphenyis (PCBs) by Gas Chromatography
--------------------------------------------------------------

Analysis Method:	8082A	Analysis Batch: 2	00-41503		Instrument ID:	3283.i	
Prep Method:	3541	Prep Batch: 2	00-40997		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/K	g)	Qualifie	r MDL	RL	
PCB-1016		1300		U	440	1300	***************************************
PCB-1221	19	1300		υŢ	340	1300	
PCB-1232		1300		U	260	1300	
PCB-1242		1300		υ .	530	1300	
PCB-1248		1300		U	160	1300	
PCB-1254		1300		υ	220	1300	
PCB-1260		1300		U	190	1300	
PCB-1262		1300	* * *	υ∖	120	1300	
PCB-1268		1300		η 4	110	1300	
Surrogate		%Rec		Qualifie	r Acceptan	ice Limits	
Tetrachloro-m-xylen	e ·	0	vanca varannopuuvvalungepäyyvyyyy	Х	30 - 130		venne vennaklitet venneklannenar och och
DCB Decachlorobip	henyl	0		Χ	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 Biphenyis (PCBs) by Gas Chromatography

Analysis Method:

8082A

Analysis Batch:

200-41503

Instrument ID:

3283.i

Prep Method:

3541

Dilution:

50

200-40997

Initial Weight/Volume:

Prep Batch:

14.97 g

Final Weight/Volume:

5000 uL

Analysis Date:

Injection Volume:

1 uL

Prep Date:

07/06/2012 2320 06/27/2012 1018

Result Type:

**SECONDARY** 

Surrogate Tetrachloro-m-xylene DCB Decachlorobiphenyl

0 0

%Rec

Х Х

Qualifier

30 - 130 45 - 125

Acceptance Limits

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

0/ 14-1-

% Moisture: 36.4

Date Sampled: 06/25/2012 1205 Date Received: 06/26/2012 1050

	8082A Polyc	hiorinated Biphenyis (	PCBs) by (	Gas Chro	matography		
Analysis Method: Prep Method: Dilution: Analysis Date: Prep Date:	8082A 3541 1.0 07/02/2012 2255 06/27/2012 1018	•	00-41316 00-40997		Instrument ID: Initial Weight/Volume: Final Weight/Volume: Injection Volume: Result Type:	5253.i 15.43 g 5000 uL 1 uL PRIMARY	
Analyte	DryWt Corrected: Y	Result (ug/Ko	g)	Qualifie	MDL	RL	
PCB-1016		26		U	8.6	26	N. Le
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	Accepta	ince Limits	
Tetrachloro-m-xyler	16	. 91	nnariinekäriduukkaniiniilähivinininniilikouuuuuliliniintek	c braindahnblasannanitaanaanalaann	30 - 130	^~~\alternaceateanaaattattataaaaaaaaaaaaaaaaaaaaa	**************************************
DCB Decachlorobip	henyl	93			45 - 125	5	

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

Dilution:

Initial Weight/Volume:

15.43 g

Prep Batch:

200-40997

1.0

Final Weight/Volume:

5000 uL

Analysis Date:

Injection Volume:

1 uL

Prep Date:

07/02/2012 2255 06/27/2012 1018

Result Type:

**SECONDARY** 

Surrogate Tetrachloro-m-xylene

DCB Decachlorobiphenyl

%Rec 97 99

Qualifier Acceptance Limits 30 - 130

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:

DCB Decachlorobiphenyl

Solid

% Moisture:

86

21.9

Date Sampled: 06/25/2012 1330

45 - 125

Date Received: 06/26/2012 1050

8082A Pol	vchlorinated Bi	phenyls	(PCBs) b	v Gas	Chromatography
	,	pilolijio	(. 000) 2	,	will will detograping

	8082A Poly	chlorinated Biphenyls (PCBs) by	Gas Chro	omatography	
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)	Qualifie	r 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	Qualifie	r Accepta	nce Limits
Tetrachloro-m-xyler	ie	85	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	30 - 130	************************************

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

Dilution:

Prep Batch:

200-40997

Initial Weight/Volume:

15.53 g

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:

Qualifier

**SECONDARY** 

Surrogate

%Rec 89

30 - 130

Tetrachloro-m-xylene

DCB Decachlorobiphenyl

90

45 - 125

Acceptance Limits

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

Analysis Method: 8082A Analysis Batch: 200-41503 Instrument ID: 3283.i Prep Method: 3541 200-40997 Prep Batch: Initial Weight/Volume: 14.69 g Dilution: 50 Final Weight/Volume: 5000 uL 07/07/2012 0011 Analysis Date: Injection Volume: 1 uL 06/27/2012 1018 Prep Date: Result Type: PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		1600	UT	510	1600
PCB-1221		1600	U	390	1600
PCB-1232		1600	υ	300	1600
PCB-1242	\$	1600	U	610	1600
PCB-1248		1600	U	180	1600
PCB-1254		1600	υ	260	1600
PCB-1260		1600	υ	220	1600
PCB-1262		1600	υ (	140	1600
PCB-1268		1600	∪ ∮	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: Dilution:

3541

50

Initial Weight/Volume:

14.69 g

Prep Batch:

200-40997

Final Weight/Volume:

5000 uL

Analysis Date:

07/07/2012 0011

Injection Volume: Result Type:

1 uL **SECONDARY** 

Prep Date:

06/27/2012 1018

Qualifier

Acceptance Limits

Surrogate Tetrachloro-m-xylene DCB Decachlorobiphenyl

0 0

%Rec

Х Х 30 - 130 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: Dilution:

3050B

Prep Batch:

Lab File ID:

070712-01.ttx

1.0

200-40979

Initial Weight/Volume:

1.46 g

Analysis Date:

07/06/2012 2215

Prep Date:

06/26/2012 1708

Final Weight/Volume:

100 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL. II g, N, =
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	72	76.7		0.25	2.9
ron		77300	5	15.0	23.1
_ead		65.5		0.51	1.2
Magnesium		76.8	J	16.2	578
Manganese		257		0.52	1.7
Vickel		86.3		0.34	4.6
otassium		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
/anadium		27.9		0.15	5.8
Zinc		34.8		0.65	2.3

7471R Morcus	v in Solid	or Samicalld V	Maeta (Manual	Cold Vanor	Tachnique

Analysis Method:

7471B 7471B Analysis Batch:

200-41238

Instrument ID: Lab File ID:

MEPCV3 II 070212AA.PRN

Prep Method: Dilution:

5.0

Prep Batch:

200-41224

Initial Weight/Volume:

0.30 g

Analysis Date: Prep Date:

07/02/2012 1348 06/28/2012 1600

Final Weight/Volume:

50 mL

Analyte Mercury DryWt Corrected: Y

Result (mg/Kg) 8.0

Qualifier

MDL 0.019 RL 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: Prep Method:

6010C 3050B

Analysis Batch:

200-41473

Instrument ID:

METICP7

Dilution:

Prep Batch:

200-40979

Lab File ID:

070712-01.ttx

1.0

Initial Weight/Volume:

1.32 g

Analysis Date:

07/06/2012 2230 06/26/2012 1708

Final Weight/Volume:

100 mL

A 62.75	
<b>*</b>	Prep Date:

Analyte	DryWt Corrected: Y	Result (mg/Kg)		Qualifier	MDL	RL	
Aluminum		1520	17.50		19.0	22.4	Elek
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	
lron		32600		J	14.6	22.4	
Lead	=11	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: Prep Method:

Analysis Date:

7471B 7471B Analysis Batch: Prep Batch:

200-41238 200-41224 Instrument ID: Lab File ID:

MEPCV3 II 070212AA.PRN

Dilution:

Prep Date:

1.0

07/02/2012 1305 06/28/2012 1600

Initial Weight/Volume: Final Weight/Volume:

0.33 g 50 mL

Analyte Mercury DryWt Corrected: Y

Result (mg/Kg) 0.95

Qualifier

MDL 0.0030 RL 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:

Prep Batch:

37.8

200-40979

Date Sampled: 06/22/2012 1310

Date Received: 06/23/2012 1010

6010C Metals (ICP)

Analysis Method:

6010C 3050B

1.0

Analysis Date: Prep Date:

Prep Method:

Dilution:

07/06/2012 2235

06/26/2012 1708

Analysis Batch: 200-41473 Instrument ID:

Lab File ID:

METICP7 070712-01.ttx

Initial Weight/Volume: Final Weight/Volume:

1.37 g 100 mL

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:

Analysis Date:

Prep Date:

Dilution:

6010C Prep Method:

3050B 10

07/07/2012 1131 06/26/2012 1708 Analysis Batch: Prep Batch:

200-41484 200-40979 Instrument ID:

METICP7 Lab File ID: 070712-04.ttx

Initial Weight/Volume: Final Weight/Volume:

1.37 g

100 mL

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 235 6.1 Beryllium 0.97 0.38 J 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 0.95 58.7 Copper 12.9 2.6 29.3 1 Iron 39600 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 U 41.1 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: Prep Method:

Prep Date:

7471B 7471B

Analysis Batch: Prep Batch:

200-41238 200-41224 Instrument ID: Lab File ID:

MEPCV3 II 070212AA.PRN

1.0 Dilution: 07/02/2012 1312 Analysis Date:

06/28/2012 1600

Initial Weight/Volume: Final Weight/Volume:

0.32 g 50 mL

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: Prep Method:

6010C

Analysis Batch:

200-41473

Instrument ID:

METICP7

Dilution:

3050B

Prep Batch:

200-40979

Lab File ID: Initial Weight/Volume:

070712-01.ttx 1.44 g

Analysis Date: Prep Date:

1.0

07/06/2012 2240

06/26/2012 1708

Final Weight/Volume:

100 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)		Qualifier	MDL	RL	
Aluminum		 4880	17		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		7	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 Solld or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:

7471B 7471B Analysis Batch:

200-41238

Instrument ID: Lab File ID:

MEPCV3 II 070212AA.PRN

Prep Method: Dilution:

1.0

Prep Batch:

200-41224

Initial Weight/Volume:

0.32 g

Analysis Date: Prep Date:

07/02/2012 1314 06/28/2012 1600

Final Weight/Volume:

50 mL

Analyte Mercury

DryWt Corrected: Y

Result (mg/Kg) 0.065

Qualifier MDL 0.0027

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 3050B

Analysis Batch:

200-41473

Instrument ID:

METICP7

Prep Method: Dilution:

1.0

Prep Batch:

200-40979

Lab File ID:

070712-01.ttx

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		1	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 7471B Analysis Batch:

200-41238

Instrument ID: Lab File ID:

MEPCV3 II 070212AA.PRN

Prep Method: Dilution:

1.0

Prep Batch:

200-41224

Initial Weight/Volume: Final Weight/Volume:

0.30 g 50 mL

Analysis Date: Prep Date:

07/02/2012 1317 06/28/2012 1600

Analyte Mercury DryWt Corrected: Y

Result (mg/Kg) 0.014

Qualifier

MDL 0.0024

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

201	20	BRASS	ale i	(ICP)

Analysis Method: Prep Method:

6010C 3050B

Analysis Batch: Prep Batch:

200-41473

Instrument ID:

METICP7 070712-01.ttx

Dilution:

200-40979

Lab File ID: Initial Weight/Volume:

1.32 g

Analysis Date:

1.0

07/06/2012 2250

Final Weight/Volume:

100 mL

Prep Date:

06/26/2012 1708

Analyte	DryWt Corrected: Y	Result (mg/	Result (mg/Kg)			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		5		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: Prep Method:

6010C 3050B

Analysis Batch: Prep Batch:

200-41484

Instrument ID: Lab File ID:

METICP7 070712-04.ttx

Dilution: Analysis Date:

Prep Date:

10

07/07/2012 1202 06/26/2012 1708 200-40979

Initial Weight/Volume: Final Weight/Volume:

1.32 g 100 mL

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: Prep Method:

7471B 7471B

Analysis Batch: Prep Batch:

200-41238 200-41224

Instrument ID: Lab File ID:

MEPCV3 II 070212AA.PRN

Dilution: Analysis Date: 1.0 07/02/2012 1320 Initial Weight/Volume: Final Weight/Volume:

MDL

0.31 g

Prep Date:

06/28/2012 1600

Result (mg/Kg)

50 mL

Analyte

DryWt Corrected: Y

Qualifier

Mercury

0.036

0.0024

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 3050B

Analysis Batch:

200-41473

Instrument ID:

**METICP7** 

Prep Method: Dilution:

1.0

Prep Batch:

200-40979

Lab File ID: Initial Weight/Volume: 070712-01.ttx

Analysis Date:

12400

5.5

1.5

102

0.30

0.076

1790

27.8

12.4

45.7

5.6

4300

20300

Result (mg/Kg)

Qualifier

U

J

J

I

U

U

J

U

1.22 g

Prep Date:

07/06/2012 2310

06/26/2012 1708

Final Weight/Volume:

MDL

15.5

0.45

0.51

0.48

0.029

0.071

46.6

0.10

0.074

0.20

11.9

0.40

12.8

0.41

0.27

13.7

0.80

0.12

6.9

0.37

0.12

0.51

100 mL

RL

18.3

5.5

0.91

18.3

0.46

0.46

457

0.91

4.6

2.3

18.3

0.91

457

1.4

3.7

457

3.2

0.91

457

2.3

4.6

1.8

Analyte DryWt Corrected: Y Aluminum

Antimony Arsenic Barium

Beryllium Cadmium Calcium Chromium

Cobalt Copper Iron Lead Magnesium Manganese

7471B

7471B

07/02/2012 1322

06/28/2012 1600

1.0

Nickel Potassium Selenium Silver Sodium **Thallium** 

Vanadium Zinc

360 21.5 3530 3.2 0.91 130

> 36.2 37.0

2.3

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique) Analysis Batch: Prep Batch:

200-41238 200-41224

Instrument ID: Lab File ID:

MEPCV3 II 070212AA.PRN

Initial Weight/Volume: Final Weight/Volume:

0.32 g 50 mL

Analysis Date: Prep Date:

Analysis Method:

Prep Method:

Dilution:

Analyte

Mercury

DryWt Corrected: Y

Result (mg/Kg) 0.035

Qualifier U

MDL 0.0023

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 3050B Analysis Batch:

200-41473

Instrument ID:

METICP7

Prep Method: Dilution:

Prep Batch:

200-40979

Lab File ID:

070712-01.ttx

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/K	(g)	Qualifier	MDL	RL	
Aluminum	1 87 7		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		ello "	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	
						50		

# 7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:

7471B 7471B Analysis Batch:

200-41238

Instrument ID: Lab File ID:

MEPCV3 II 070212AA.PRN

Prep Method: Dilution:

1.0

Prep Batch:

200-41224

Initial Weight/Volume: Final Weight/Volume:

0.32 g 50 mL

Analysis Date: Prep Date:

07/02/2012 1324 06/28/2012 1600

> DryWt Corrected: Y Result (mg/Kg) 0.034

Qualifier U

MDL 0.0023

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

6010	C Met	ais (ICP)

Analysis Method: Prep Method:

6010C

Analysis Batch:

200-41473

Instrument ID:

METICP7

Dilution:

3050B

Prep Batch:

200-40979

Lab File ID: Initial Weight/Volume: 070712-01.ttx 1.24 g

Analysis Date:

1.0

Final Weight/Volume:

100 mL

Prep Date:

07/06/2012 2320 06/26/2012 1708

Analyte		DryWt Corrected: Y		Result (mg/Kg)		Qualifier	MDL,		RL	2 ª · · ·
Aluminum	ndel adaptifikerenda pietra karterina ar desta arabiteka da elemantatuda da h			3660	* *		16.8	Territorio di Albandesia della di	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	14
Calcium				1780			50.5		495	F E. MO.
Chromium				13.2			0.11		0.99	
Cobalt				3.8		J	0.080		5.0	
Copper				5.6			0.22		2.5	
Iron				14900		1	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	4)	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 7471B Analysis Batch:

200-41238

Instrument ID: Lab File ID:

MEPCV3 II 070212AA.PRN

Prep Method: Dilution:

1.0

Prep Batch:

200-41224

Initial Weight/Volume: Final Weight/Volume:

0.33 g 50 mL

Analysis Date: Prep Date:

07/02/2012 1326 06/28/2012 1600

Result (mg/Kg)

Qualifier

MDL

RL

Analyte Mercury DryWt Corrected: Y

0.037

U

0.0025

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 3050B

Analysis Batch:

200-41473

Instrument ID:

METICP7

Prep Method: Dilution:

1.0

Prep Batch:

200-40979

Lab File ID: Initial Weight/Volume: 070712-01.ttx

Analysis Date:

1.25 g

Prep Date:

07/06/2012 2325 06/26/2012 1708 Final Weight/Volume:

100 mL

Analyte	310	DryWt Corrected: Y		Result (mg/Kg)		Qualifier	MDL	RL	
Aluminum	- P.		1	4960	Whiteheadadadadan J		16.0	18.8	*
Antimony			1	5.7		U	0.46	5.7	3.7
Arsenic		** ·	€.	1.6			0.53	0.94	
Barium			C	6.7	1,0	J	0.49	18.8	
Beryllium		* LOTTING	ξ	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	- 1, 11 ×
Cobalt		men "		2.7		J	0.076	4.7	
Copper				5.9			0.21	2.4	
Iron				7920		<i>J</i>	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	DIS.		0.53	1.9	

7471R Marcury in Solid or Samleolid Wasto (Many	ual Cold Vanor Tachnique

Analysis Method: Prep Method:

7471B 7471B Analysis Batch:

200-41238

Instrument ID: Lab File ID:

MEPCV3 II 070212AA.PRN

Dilution:

1.0

Prep Batch:

200-41224

Initial Weight/Volume: Final Weight/Volume:

0.30 g 50 mL

Analysis Date: Prep Date:

07/02/2012 1329 06/28/2012 1600

Result (mg/Kg)

Qualifier

RL

Analyte Mercury DryWt Corrected: Y

0.039

U

MDL 0.0026

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

		(ICP)

Analysis Method: Prep Method:

6010C 3050B Analysis Batch:

200-41474

Instrument ID: Lab File ID:

**METICP7** 070712-02.ttx

Dilution:

1.0

Prep Batch:

200-41175

Initial Weight/Volume: Final Weight/Volume: 1.45 g 100 mL

Analysis Date: Prep Date:

07/07/2012 0202

06/29/2012 1430

Analyte		DryWt Corrected: Y	Result (mg/Kg	g)	Qualifier	MDL	RL	-
Aluminum	***		8190			14.3	16.8	* *
Antimony			0.80		J	0.41	5.0	. 1. 10
Arsenic			7.0		<b>ブ</b>	0.47	0.84	
Barium			82.9	1.0	7	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	16	エ	0.18	2.1	
Iron			31700		5	10.9	16.8	
Lead			99.9			0.37	0.84	
Magnesium			7130		エ	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		リブ	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		5.	0.11	4.2	
Zinc			69.0		4	0.47	1.7	

## 7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method: Prep Method:

7471B 7471B

1.0

Analysis Batch: Prep Batch:

0.052

200-41330 200-41294 Instrument ID: Lab File ID:

MEPCV3 II 070312FF.PRN

Dilution: Analysis Date: Prep Date:

07/03/2012 1534 07/03/2012 1000 Initial Weight/Volume: Final Weight/Volume:

0.35 g 50 mL

RL

Analyte Mercury DryWt Corrected: Y

Result (mg/Kg) 0.052

Qualifier UB

MDL 0.0023

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: Prep Method:

Analysis Batch:

200-41474

Instrument ID: Lab File ID:

METICP7

Dilution:

3050B 1.0

6010C

Prep Batch: 200-41175

Initial Weight/Volume:

070712-02.ttx 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	J		11000	<b>ブ</b>	15.1	17.8	
Antimony			0.78	J	0.44	5.3	
Arsenic			3.6	エ	0.50	0.89	
Barium			110	1	0.46	17.8	
Beryllium			0.38	J	0.028	0.44	
Cadmium			0.67	I	0.069	0.44	
Calcium			3950	55 Th	45.4	445	
Chromium			22.8	5	0.098	0.89	
Cobalt			8.7		0.072	4.4	
Copper			79.2	5	0.20	2.2	
Iron			24300	J	11.6	17.8	
Lead			170		0.39	0.89	
Magnesium			3580	5	12.5	445	
Manganese			453	7	0.40	1.3	
Nickel			18.4	5	0.26	3.6	
Potassium			3390	1	13.3	445	
Selenium			3.1	UJ	0.77	3.1	
Silver			0.89	UJ	0.12	0.89	
Sodium			205	J	6.7	445	
Thallium			0.42	J -	0.36	2.2	
Vanadium			32.4	7	0.12	4.4	
Zinc			468	5	0.50	1.8	

7471R Morous	in Solid or S	omisolid Wasto (M	anual Cold Vana	" Toohnlaud

Analysis Method:

7471B 7471B Analysis Batch:

200-41330

Instrument ID: Lab File ID:

MEPCV3 II 070312FF.PRN

Prep Method: Dilution:

1.0

Prep Batch:

200-41294

Initial Weight/Volume:

0.34 g

Analysis Date: Prep Date:

07/03/2012 1537 07/03/2012 1000 Final Weight/Volume:

50 mL

Analyte Mercury

DryWt Corrected: Y

Result (mg/Kg) 0.16

Qualifier B

MDL 0.0022

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

^^	40	$\sim$ 1	 -1- 4	ICP)

Analysis Method: Prep Method:

6010C 3050B

Analysis Batch:

200-41474

Instrument ID:

METICP7 070712-02.ttx

Dilution:

1.0

Prep Batch:

200-41175

Lab File ID: Initial Weight/Volume:

1.28 g

Analysis Date: Prep Date:

07/07/2012 0212 06/29/2012 1430

Final Weight/Volume:

100 mL

Aluminum		Result (mg/Kg)	Qualifier	MDL	RL	
		3580	 5	13.7	16.1	
Antimony		0.42	Ĵ	0.39	4.8	
Arsenic		1.8	5	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	5	0.089	0.80	
Cobalt		3.4	J	0.065	4.0	
Copper		7.6	I	0.18	2.0	
iron		9790	5	10.5	16.1	
Lead		6.3		0.35	0.80	
Magnesium		2200	J	11.3	402	
Manganese		75.7	5	0.36	1.2	
Nickel		11.0	7	0.23	3.2	
Potassium		512	5	12.1	402	
Selenium		2.8	ŪJ	0.70	2.8	
Silver		0.80	UJ	0.10	0.80	
Sodium		151	J	6.0	402	
Thallium		2.0	Ū	0.33	2.0	
Vanadium		11.0	5	0.10	4.0	
Zinc	S Years 1 St	19.7	J	0.45	1.6	

## 7471B Mercury In Solld or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method: Prep Method:

7471B 7471B 1.0

Analysis Batch: Prep Batch:

200-41330 200-41294

Instrument ID: Lab File ID:

MEPCV3 II 070312FF.PRN

Dilution: Analysis Date:

Prep Date:

07/03/2012 1539 07/03/2012 1000

Initial Weight/Volume: Final Weight/Volume:

0.35 g 50 mL

Analyte Mercury DryWt Corrected: Y

Result (mg/Kg) 0.034

Qualifier MDL **U**B 0.0019 RL 0.029

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

60100	C Metals	(ICP)

Analysis Method:	
Prep Method:	

6010C 3050B

Analysis Batch:

200-41474

Instrument ID: Lab File ID:

METICP7 070712-02.ttx

Dilution:

1.0

Prep Batch: 200-41175

Initial Weight/Volume:

1.32 q

Analysis Date: Prep Date:

07/07/2012 0217

06/29/2012 1430

Final Weight/Volume:

100 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		1400	7	20.4	24.0
Antimony		11.4	<b>ナ</b>	0.59	7.2
Arsenic		29.2	ナ	0.67	1.2
Barium		56.8	<b></b>	0.62	24.0
Beryllium		0.87	7	0.038	0.60
Cadmium		11.7	7	0.093	0.60
Calcium		2780	h $H$ $h$ $h$	61.1	599
Chromium		124	2	0.13	1.2
Cobalt		10.1		0.097	6.0
Copper		110	T	0.26	3.0
Magnesium		178	J	16.8	599
Manganese		351	J.	0.54	1.8
Nickel		33.7	T	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	- エ	0.16	6.0
Zinc		1110	J	0.67	2.4

Analysis Method: Prep Method:

6010C 3050B

Analysis Batch: Prep Batch:

200-41689 200-41175

Instrument ID: Lab File ID:

METICP7 071112-01.ttx

Dilution: Analysis Date:

Prep Date:

Selenium

Thallium

1.0

07/11/2012 1453 06/29/2012 1430 Initial Weight/Volume: Final Weight/Volume:

MDL

1.32 g 100 mL

RL

Analyte	DryWt Corrected: Y
Lead	

200
4.2
2.1

* 5 ひとブ

Qualifier

0.53 1.2 1.0 4.2 0.49 3.0

Analysis Method: Prep Method:

6010C 3050B 2.0

Analysis Batch: Prep Batch:

200-41689 200-41175

Instrument ID: Lab File ID:

METICP7 071112-01.ttx 1.32 g

Dilution: Analysis Date: Prep Date:

07/11/2012 1458 06/29/2012 1430 Initial Weight/Volume: Final Weight/Volume:

31.1

100 mL

Analyte Iron

DryWt Corrected: Y

Result (mg/Kg) 227000

Result (mg/Kg)

Qualifier

J

MDL

RL.

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

Cilent Sample ID:

SB-17 (10-10.7)

Lab Sample ID:

200-11460-4

07/03/2012 1000

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

Dilution:

Prep Batch:

200-41294

Lab File ID:

070312FF.PRN

1.0

Initial Weight/Volume:

0.35 g

Analysis Date: Prep Date:

07/03/2012 1541

Final Weight/Volume:

50 mL

Analyte

DryWt Corrected: Y

Result (mg/Kg)

Qualifier

MDL

RL

Mercury

0.76

85

0.0030

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 3050B Analysis Batch:

200-41474

Instrument ID:

METICP7

Prep Method: Dilution:

1.0

Prep Batch: 200-41175

Lab File ID:
Initial Weight/Volume:

070712-02.ttx 1.23 g

Analysis Date:

07/07/2012 0222

Final Weight/Volume:

1.23 g 100 mL

Prep Date:

06/29/2012 1430

Analyte		DryWt Corrected: Y		Result (mg/Kg)		Qualifier	MDL	RL	
Aluminum	Driet .		T II.	12800	117	5	21.7	25.5	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s
Antimony				0.69		ะป	0.63	7.7	
Arsenic				8.6		J	0.72	1.3	
Barium				30.8		5	0.66	25.5	
Beryllium				0.62		J	0.041	0.64	
Cadmium				0.14		J	0.10	0.64	
Calcium				18100		<b>ブ</b>	65.1	639	
Chromium				25.5		5	0.14	1.3	1.53
Cobalt				8.2		ゴ	0.10	6.4	
Copper				9.8		J	0.28	3.2	
Iron				37200		<b>ブ</b>	16.6	25.5	
Lead				13.2			0.56	1.3	
Magnesium				5540		<b>ブ</b>	17.9	639	
Manganese				580		7	0.57	1.9	
Nickel			3	17.8		J	0.37	5.1	
Potassium				3110		J	19.2	639	
Selenium				4.5		U ゴ	1.1	4.5	
Silver				1.3		UJ	0.17	1.3	
Sodium				941		J	9.6	639	
Thallium				3.2		Ú	0.52	3.2	
Vanadium				33.2		5	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: Prep Method:

7471B 7471B Analysis Batch: Prep Batch: 200-41330 200-41294 Instrument ID: Lab File ID: MEPCV3 II 070312FF.PRN

Dilution:

Prep Date:

Analysis Date:

1.0

07/03/2012 1543 07/03/2012 1000 Initial Weight/Volume: Final Weight/Volume:

0.0030

0.34 g 50 mL

Analyte Mercury DryWt Corrected: Y

Result (mg/Kg) -0:020 Qualifier
UB

MDL

RL 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)
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Analysis Method: Prep Method:

6010C

Analysis Batch:

200-41474

Instrument ID:

**METICP7** 

Dilution:

3050B 1.0

Prep Batch:

200-41175

Lab File ID: Initial Weight/Volume: 070712-02.ttx 1.30 g

Analysis Date: Pron Data:

07/07/2012 0303 06/20/2012 1430

Final Weight/Volume:

100 mL

riep Date.	00/23/2012	1730
Analyte	יט	1/A/# C

Analyte	DryWt Corrected: Y		Result (mg/Kg)		Qualifier	MDL	RL
Antimony	2115		0.58	11	J	0.48	5.9
Arsenic			8.1		5	0.55	0.99
Cadmium			0.15		J	0.077	0.49
Chromium			21.4		J	0.11	0.99
Cobalt	2 THE		9.0		エ	0.080	4.9
Copper			15.4		ゴ	0.22	2.5
tron			21200		J	12.8	19.7
Lead			36.7			0.43	0.99
Manganese			429		J	0.44	1.5
Nickel			16.3		エ	0.29	3.9
Selenium			3.4		UJ	0.86	3.4
Silver			0.99		U ブ	0.13	0.99
Thallium		É	2.5		U	0.40	2.5
Vanadium			27.3		5	0.13	4.9
Zinc			55.9		ゴ	0.55	2.0

Analysis Metho	od:
Prep Method:	
Dilution:	

6010C 3050B 2.0

Analysis Batch: Prep Batch:

200-41689 200-41175

Instrument ID: Lab File ID:

METICP7 071112-01.ttx

Analysis Date: Prep Date:

07/11/2012 1508 06/29/2012 1430 Initial Weight/Volume: Final Weight/Volume:

1.30 g 100 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		12400	<u>.</u>	33.5	39.4
Barium		46.3	10 T	1.0	39.4
Beryllium		0.49	Suckey	0.063	0.99
Calcium		3930	5	100	985
Magnesium		5660	· J	27.6	985
Potassium		2760	J	29.6	985
Sodium		803	Ŋ <b>β</b> (	14.8	985

# 7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method: Prep Method:

7471B 7471B Analysis Batch: Prep Batch:

200-41330 200-41294

Instrument ID: Lab File ID:

MEPCV3 II 070312FF.PRN

Dilution:

1.0

07/03/2012 1556

Initial Weight/Volume:

0.35 g

Analysis Date: Prep Date:

07/03/2012 1000

Final Weight/Volume:

50 mL

Analyte

Result (mg/Kg) 0.12

Qualifier

RL

DryWt Corrected: Y

UB

MDL 0.0024

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:

Date Sampled: 06/25/2012 0000

Date Received: 06/26/2012 1050

6010C Metals (ICP)	6010C Metals (I	CP)
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Analysis Method: Prep Method:

6010C 3050B

Analysis Batch:

200-41474

44.2

Instrument ID:

METICP7

Dilution:

1.0

Prep Batch:

200-41175

Lab File ID:

070712-02.ttx

Analysis Date:

Initial Weight/Volume:

1.36 g

Prep Date:

07/07/2012 0308 06/29/2012 1430 Final Weight/Volume:

100 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL	
Aluminum		662	7	22.4	26.3	
Antimony		5.6	J	0.65	7.9	
Arsenic		18.5	<b></b>	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	7	67.2	658	
Chromium		43.6	1	0.14	1.3	
Cobalt		6.1	J	0.11	6.6	
Copper		68.2	J	0.29	3.3	
Iron		59600	5	17.1	26.3	
Lead		41.6	<b>ブ</b>	0.58	1.3	
Magnesium		980	五	18.4	658	
Manganese		55.2	7777	0.59	2.0	
Nickel		43.6	J	0.38	5.3	
Potassium		67.5	J	19.8	658	
Selenium		4.6	Uブ	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	<b></b>	0.17	6.6	
Zinc		44.8	ナ	0.74	2.6	

# 7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method: Prep Method:

7471B 7471B Analysis Batch:

200-41330

Instrument ID: Lab File ID:

MEPCV3 II 070312FF.PRN

Dilution:

1.0

Prep Batch:

200-41294

Initial Weight/Volume: Final Weight/Volume:

0.35 g 50 mL

Analysis Date: Prep Date:

07/03/2012 1558 07/03/2012 1000

RL

Analyte Mercury DryWt Corrected: Y

Result (mg/Kg) 0.10

Qualifier UΒ

MDL 0.0034

0.051 0.10

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1

Sdg Number: 11441

General	Chemistry
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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
рН	5.60	HFJ SU			1.0	9045C
	Analysis Batch: 460-119669	Analysis Date: 07/12/2012 16	07			DryWt Corrected: N
Corrosivity	5.60	JHF 🗲 SU			1.0	9045C
	Analysis Batch: 460-119669	Analysis Date: 07/12/2012 16	07			DryWt Corrected: N
Percent Solids	59.3	%	0.25	0.25	1.0	Moisture
	Analysis Batch: 200-40897	Analysis Date: 06/25/2012 13	31			DryWt Corrected: N

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

Analyte	Result	Qual Units MDL	RL RL	Dil	Method
рН	6.68	HFJ SU		1.0	9045C
	Analysis Batch: 460-119669	Analysis Date: 07/12/2012 1608			DryWt Corrected: N
Corrosivity	6.68	HFJ 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

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1

Sdg Number: 11441

General	Chemistry
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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

RL Analyte Result Qual Units MDL Dil Method pΗ 5.52 # 5 SU 1.0 9045C Analysis Batch: 460-119669 Analysis Date: 07/12/2012 1609 DryWt Corrected: N #5 SU Corrosivity 5.52 9045C 1.0 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 C	hemistry
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Client Sample ID:

SB-15 (5.5-6.5)

Lab Sample ID:

200-11441-4

Client Matrix:

Solid

Date Sampled: 06/22/2012 1200

Analyte	*/	Result	4.0	Qual	Units		MDL	R	lL.	Dil	Method
pH		7.53		#5	SU					1.0	9045C
	Analysis Batch: 46	80-119669	Analysis	Date: 0	07/12/20	12 1610					DryWt Corrected: N
Corrosivity		7.53	j	HF 5	SU					1.0	9045C
	Analysis Batch: 46	80-119669	Analysis	Date: 0	07/12/20	12 1610					DryWt Corrected: N
Percent Solids		76.7			%	(	0.25	0	.25	1.0	Moisture
	Analysis Batch: 20	0-40897	Analysis	Date: 0	06/25/20	12 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

Analyte	Result	Qual Units MDL	RL	Dil	Method
pH	7.47	₩ J SU		1.0	9045C
	Analysis Batch: 460-119669	Analysis Date: 07/12/2012 1611			DryWt Corrected: N
Corrosivity	7.47	⊬r∕∫ 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

Analyte		Result		Qual	Units		MDL		RL		Dil	Method
pH		7.72	,	HF5	SU		***************************************	10000000000000000000000000000000000000	erfin se -storae to-conceptible constitues and		1.0	9045C
	Analysis Batch: 4	60-119669	Analys	is Date: (	07/12/20	12 161	2		1			DryWt Corrected: N
Согтовічіту		7.72		JHF J	SU						1.0	9045C
	Analysis Batch: 4	60-119669	Analys	is Date: (	07/12/20	12 161	2			to v. ·		DryWt Corrected: N
Percent Solids		88.3			%		0.25		0.25		1.0	Moisture
	Analysis Batch: 2	00-40897	Analys	is Date: (	06/25/20	12 133	31					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			Date Sample	ed: 06/22/2012 0945
Client Matrix:	Solid			Date Receiv	ed: 06/23/2012 1010
Analyte	Result	Qual Units MDL	RL	Dil	Method
pH	7.35	HPJ SU		1.0	9045C
	Analysis Batch: 460-119669	Analysis Date: 07/12/2012 1613			DryWt Corrected: N
Corrosivity	7.35	H₽ <b>∫</b> 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

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 N	Method
pH	7.80	HFJ SU		1.0 9	045C
	Analysis Batch: 460-119669	Analysis Date: 07/12/2012 1615		Dry'	Wt Corrected: N
Corrosivity	7.80	HFJ SU		1.0 9	0045C
	Analysis Batch: 460-119669	Analysis Date: 07/12/2012 1615		Dry	Wt Corrected: N
Percent Solids	90.3	% 0.25	0.25	1.0 N	/loisture
	Analysis Batch: 200-40897	Analysis Date: 06/25/2012 1331		Dry	Wt Corrected: N

Client: ARCADIS U.S. Inc

Analysis Batch: 200-40897

Job Number: 200-11441-1

Sdg Number: 11441

DryWt Corrected: N

General	Chemistry
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			Ge	eneral Chemis	stry			
Client Sample ID:	SB-08 (13	.9-14.5)						LI HIGHLIFT,
Lab Sample ID:	200-1144	1-9					Date Sample	ed: 06/19/2012 1610
Client Matrix:	Solid						Date Receiv	/ed: 06/23/2012 1010
Analyte		Result	Qual	Units	MDL	RL	Dil	Method
pH		6.21	HFT	F SU		}	1.0	9045C
	Analysis Batch	: 460-118709	Analysis Date	e: 07/05/2012	1605			DryWt Corrected: N
Corrosivity	,	6.21	JHF :	SU SU			1.0	9045C
	Analysis Batch	: 460-118709	Analysis Date	e: 07/05/2012	1605			DryWt Corrected: N
Percent Solids		81.4		%	0.25	0.25	1.0	Moisture

Analysis Date: 06/25/2012 1331

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

Analyte	Result	Qual Units MDL	RL	Dil	Method
рН	4.18	HFJ 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

Job Number: 200-11441-1

Sdg Number: 11441

DryWt Corrected: Y

#### **General Chemistry**

Client Sample ID:

SB-22 (5.7-6.7)

Analysis Batch: 460-118518

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 Ho		9.33	HP/II	SU	Char		1.0	9045C
	Analysis Batch:	460-119669	Analysis Date:	07/12/20	12 1616			DryWt Corrected: N
Corrosivity		9.33	<b>ポ</b> ケ	SU	T se		1.0	9045C
	Analysis Batch:	460-119669	Analysis Date:	07/12/20	12 1616			DryWt Corrected: N
Chloride-Soluble		1940		mg/Kg	24.2	121	5.0	9056
	Analysis Batch:	680-242043	Analysis Date:	06/30/20	12 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:	06/28/20	12 2309			DryWt Corrected: Y
Nitrite as N-Soluble		-6.0	R-b-	mg/Kg	<del>-1.8</del>	<del>-6.0</del>	5.0	9056
	Analysis Batch:	680-241960	Analysis Date:	06/28/20	12 2309			DryWt Corrected: Y
Sulfate-Soluble		1070		mg/Kg	24.2	121	5.0	9056
	Analysis Batch:	680-242043	Analysis Date:	06/30/20	12 0509			DryWt Corrected: Y
Fluoride-Soluble		7.9	J	mg/Kg	4.8	24.2	5.0	9056
	Analysis Batch:	680-242043	Analysis Date:	06/30/20	12 0509			DryWt Corrected: Y
Percent Solids		82.2		%	0.25	0.25	1.0	Moisture
	Analysis Batch:	200-40970	Analysis Date:	06/26/20	12 1507			DryWt Corrected: N
Bicarbonate Alkalini CaCO3-Soluble	ty as	24.3	U	mg/Kg	24.3	24.3	1.0	SM 2320B
	Analysis Batch:	460-118518	Analysis Date:	07/03/20	12 1741			DryWt Corrected: Y
Carbonate Alkalinity CaCO3-Soluble	as	53.7		mg/Kg	24.3	24.3	1.0	SM 2320B
	Analysis Batch:	460-118518	Analysis Date:	07/03/20	12 1741			DryWt Corrected: Y
Alkalinity-Soluble		77.7	,	mg/Kg	24.3	24.3	1.0	SM 2320B

Analysis Date: 07/03/2012 1741

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 I

Method

Percent Solids

89.9

%

0.25

0.25

1.0 I

Moisture

Analysis Batch: 200-40970

Analysis Date: 06/26/2012 1507

Job Number: 200-11441-1

Sdg Number: 11441

## **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

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia (as N)-ASTM Leach	0.018	J J	mg/L	0.013	0.10	1.0	4500 NH3 H
Analysis Bat	ch: 460-120125	Analysis Date:	07/17/201	2 1154			DryWt Corrected: N
Prep Batch:	460-120071	Prep Date: 07/	17/2012 0	630			
Sulfide	9.0	Uゴ		3.3	9.0	1.0	9034
Analysis Bat	ch: 460-121677	Analysis Date:	06/30/201	2 1533			DryWt Corrected: Y
Prep Batch:	460-121675	Prep Date: 06/	30/2012 1	200			
рН	8.27	HFJ.	SU			1.0	9045C
Analysis Bat	ch: 460-119669	Analysis Date:		2 1617			DryWt Corrected: N
Corrosivity	8.27	¥₩ <b>ブ</b>				1.0	9045C
Analysis Bat	ch: 460-119669	Analysis Date:	07/12/201	2 1617			DryWt Corrected: N
Chloride-Soluble	36.2	J	mg/Kg	20.6	103	5.0	9056
Analysis Bat	ch: 680-242043	Analysis Date:	06/30/201	2 0521			DryWt Corrected: Y
Nitrate as N-Soluble	5.1	U	mg/Kg	1.5	5.1	5.0	9056
Analysis Bate	ch: 680-241960	Analysis Date:	06/28/201	2 2324			DryWt Corrected: Y
Nitrite as N-Soluble	5.1	U	mg/Kg	1.5	5.1	5.0	9056
Analysis Bat	ch: 680-241960	Analysis Date:	06/28/201	2 2324			DryWt Corrected: Y
Sulfate-Soluble	26.3	J	mg/Kg	20.6	103	5.0	9056
Analysis Bat	ch: 680-242043	Analysis Date:	06/30/201	2 0521			DryWt Corrected: Y
Fluoride-Soluble	20.6	U	mg/Kg	4.1	20.6	5.0	9056
Analysis Bate	ch: 680-242043	Analysis Date:	06/30/201	2 0521			DryWt Corrected: Y
Percent Solids	97.1		%	0.25	0.25	1.0	Moisture
Analysis Bat	ch: 200-40970	Analysis Date:	06/26/201	2 1507			DryWt Corrected: N
Bicarbonate Alkalinity as CaCO3-Soluble	41.2	#5	mg/Kg	20.6	20.6	1.0	SM 2320B
Analysis Bat	ch: 460-119472	Analysis Date:	07/11/201	2 1838			DryWt Corrected: Y
Carbonate Alkalinity as CaCO3-Soluble	20.6	RAH.	mg/Kg	20.6	20.6	1.0	SM 2320B
Analysis Bate	ch: 460-119472	Analysis Date:		2 1838			DryWt Corrected: Y
Alkalinity-Soluble	45.2	ルブ	mg/Kg	20.6	20.6	1.0	SM 2320B
Analysis Bate	ch: 460-119472	Analysis Date:	07/11/201	2 1838			DryWt Corrected: Y
Phosphorus as PO4	300		mg/Kg	3.1	7.7	5.0	SM 4500 P E
Analysis Bate	ch: 460-119560	Analysis Date:	07/11/201	2 1530			DryWt Corrected: Y
Prep Batch:	460-119552	Prep Date: 07/	11/2012 11	138			
Phosphorus as P	98.0		mg/Kg	3.1	7.7 -	5.0	SM 4500 P E
	ch: 460-119560	Analysis Date:		2 1530			DryWt Corrected: Y
Prep Batch:	460-119552	Prep Date: 07/					,

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1

Sdg Number: 11441

**General Chemistry** 

Client Sample ID:

SB-17 (10-10.7)

Analysis Batch: 200-40970

Lab Sample ID:

200-11460-4

Client Matrix:

Solid

Date Sampled: 06/25/2012 1200

1.0

Date Received: 06/26/2012 1050

Analyte

Result

Qual Units

MDL

RL 0.25 Dil Metho

Method Moisture

Percent Solids

63.2

% 0.25 Analysis Date: 06/26/2012 1507

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

%

0.25

0.25

1.0 Moisture

63.6 Analysis Batch: 200-40970

Analysis Date: 06/26/2012 1507

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 Percent Solids Result

Qual Units

MDL

RL 0.25 Dil Method

.

78.1

%

0.25

1.0 N

Moisture

Analysis Batch: 200-40970

Analysis Date: 06/26/2012 1507

Client: ARCADIS U.S. Inc

Job Number: 200-11441-1

Sdg Number: 11441

General	Chemistry
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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

MDL

RL

Dil

Method

Percent Solids

55.8

Units %

0.25

0.25

Moisture 1.0

Job Number: 200-11441-2

Sdg Number: 11441-2

General	Chemistry
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Client Sample ID:

SB-18 (3-3.5)

Lab Sample ID:

Client Matrix:

200-11441-1

Solid

% Moisture:

40.7

Date Sampled: 06/22/2012 0950

Analyte		Docult		l timita	MOI	DI		
	*	Result	Qua	l Units	MDL	RL	Dil	Method
Cyanide, Total		2040	ľ. "	≐mg/Kg	9.1	84.4	100	9012A
	Analysis Batch: 460-118857 Prep Batch: 460-118786		Analysis Date: 07/06/2012 1451				DryWt Corrected: Y	
			Prep Date: 07/06/2012 0630					
Cyanide, Free		56.5		: mg/Kg	0.35	1.4	2.0	9016
	Analysis Batch: 460-118248 Prep Batch: 460-118240		Analysis Date: 06/28/2012 1200 Prep Date: 06/28/2012 0600				DryWt Corrected: Y	

Job Number: 200-11441-2

Sdg Number: 11441-2

**General Chemistry** 

Client Sample ID:

SB-17 (4-5)

Lab Sample ID:

Client Matrix:

Solid

200-11441-2

% Moisture:

32.4

Date Sampled: 06/22/2012 1420

Analyte		Result		Qual	Units	MDL		RL		Dil	Method
Cyanide, Total		523			mg/Kg	4.0	http://www.neenstreenses.com/	37.0		50	9012A
	Analysis Batch: 460-118857		Analysis Date: 07/06/2012 1456					I , III. *	DryWt Corrected: Y		
	Prep Batch: 460-118786		Prep Date: 07/06/2012 0630								
Cyanide, Free		8.6	٠.		mg/Kg	0.16		0.63		1.0	9016
. 11. 11 7:20(11)	Analysis Batch: 460-118248		Analysis Date: 06/28/2012 1200							DryWt Corrected: Y	
	Prep Batch: 460-118240		Prep Date: 06/28/2012 0600								

Prep Batch: 460-118240

Job Number: 200-11441-2

Sdg Number: 11441-2

		General Chemistry		
Client Sample ID:	SB-28A (8.7-9.7)			
Lab Sample ID:	200-11441-3	륈		Date Sampled: 06/22/2012 1310
Client Matrix:	Solid	% Moisture: 37.8		Date Received: 06/23/2012 1010
Analyte	Resul	t 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
k	Analysis Batch: 460-118248	Analysis Date: 06/28/2012 1200	Harry College	DryWt Corrected: Y

Prep Date: 06/28/2012 0600

Job Number: 200-11441-2

Sdg Number: 11441-2

General	Chemistry	
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Client Sample ID:

SB-15 (5.5-6.5)

Lab Sample ID:

Client Matrix:

200-11441-4

Solid

% Moisture:

23.3

Date Sampled: 06/22/2012 1200

Olient Matrix.	Solid	76 Wolsture. 23.3				Date Received, 00/23/2012 101			
Analyte	Re	esult Qual	Units	MDL		RL	Dil	Method	
Cyanide, Total	0. Analysis Batch: 460-1188 Prep Batch: 460-118790	28 J 81 Analysis Date Prep Date: 07			***	0.65	1.0	9012A DryWt Corrected: Y	
Cyanide, Free	6. Analysis Batch: 460-1182 Prep Batch: 460-118240	4	mg/Kg : 06/28/2012	0.14 1200		0.56	1.0	9016 DryWt Corrected: Y	

Job Number: 200-11441-2

Sdg Number: 11441-2

General	Chemistry	
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Client Sample ID:

SB-10 (5-6)

Lab Sample ID: 200-11441-5 Client Matrix: Solid		% Moisture: 9.1							npled: 06/22/2012 1030 beived: 06/23/2012 1010	
Analyte		Result	Qual	Units	MDL		RL		Dil	Method
Cyanide, Total	***************************************	5.2	* 4	mg/Kg	0.059		0.55		1.0	9012A
THE ME	Analysis B	atch: 460-118881	Analysis Date:	07/06/2012 1	639					DryWt Corrected: Y
	Prep Batch	n: 460-118790	Prep Date: 07/	06/2012 0900						
Cyanide, Free		0.89		mg/Kg	0.11		0.45		1.0	9016
	Analysis B	atch: 460-118248	Analysis Date:	06/28/2012 1	200					DryWt Corrected: Y
	Prep Batch	n: 460-118240	Prep Date: 06/	28/2012 0600						•

Analysis Batch: 460-118248

Prep Batch: 460-118240

Job Number: 200-11441-2

Sdg Number: 11441-2

DryWt Corrected: Y

		General Chemistr	у			
Client Sample ID:	SB-10 (7.4-8.4)					
Lab Sample ID:	200-11441-6			Da	ite Sample	ed: 06/22/2012 1035
Client Matrix: Solid		% Moisture: 11.7	Da	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 1	640			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 Date: 06/28/2012 1200

Prep Date: 06/28/2012 0600

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

Date Sampled: 06/22/2012 0945

Client Matrix: Solid		% Moisture: 10.4				Date Receiv	ate 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:	07/06/201	2 1641			DryWt Corrected: Y	
	Prep Batch: 460	-118790	Prep Date: 07/	06/2012 09	900		11 . 11 . 12		
Cyanide, Free		0.51		mg/Kg	0.12	0.46	1.0	9016	
	Analysis Batch:	460-118248	Analysis Date:	06/28/201	2 1200			DryWt Corrected: Y	
	Prep Batch: 460	-118240	Prep Date: 06/	28/2012 06	300	•			

Job Number: 200-11441-2

Sdg Number: 11441-2

General	Chemistry
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Client Sample ID:

SB-09 (8-8.9)

Lab Sample ID:

200-11441-8

Date Sampled: 06/22/2012 0920

Client Matrix:	Solid	% Moisture: 9.7	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
t*	Analysis Batch: 460-118248	Analysis Date: 06/28/2012 1200	DryWt Corrected: Y
	Prep Batch: 460-118240	Prep Date: 06/28/2012 0600	

Job Number: 200-11441-2

Sdg Number: 11441-2

General Chemistry	General	Chemistry
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Cilent Sample ID:

SB-08 (13.9-14.5)

Lab Sample ID:

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Client Matrix:

200-11441-9

Solid

% Moisture:

ure: 18.6

Date Sampled: 06/19/2012 1610

Analyte	Resul	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		a Level
Cyanide, Free	0.56	mg/Kg 0.13	0.51	1.0 9016
1,00	Analysis Batch: 460-118469	Analysis Date: 07/03/2012 1200		DryWt Corrected: Y
	Prep Batch: 460-118468	Prep Date: 07/03/2012 0600		

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

Analyte	Resu	t Qual Units MDL	RL Dil Method
Cyanide, Total	0.25 Analysis Batch: 460-118346	J mg/Kg 0.064 Analysis Date: 07/02/2012 1502	0.59 1.0 9012A DryWt Corrected: Y
	Prep Batch: 460-118311	Prep Date: 07/02/2012 1030	
Cyanide, Free	0.79 Analysis Batch: 460-118469 Prep Batch: 460-118468	mg/Kg 0.13 Analysis Date: 07/03/2012 1200 Prep Date: 07/03/2012 0600	0.50 1.0 9016  DryWt Corrected: Y

Job Number: 200-11441-2

Sdg Number: 11441-2

**General Chemistry** 

Client Sample ID:

SB-22 (5.7-6.7)

Lab Sample ID:

____.

Client Matrix:

200-11460-1

Solid

% Moisture: 17.8

Date Sampled: 06/23/2012 1200

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 090	0			
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					

Job Number: 200-11441-2

Sdg Number: 11441-2

**General Chemistry** 

Client Sample ID:

SB-23 (5-6)

Lab Sample ID:

Client Matrix:

200-11460-2

Solid

% Moisture: 10.1 Date Sampled: 06/23/2012 1245

Analyte	Result	Qual Units MDL	nasan RL Dil	Method
Cyanide, Total	3.5 Analysis Batch: 460-118881	mg/Kg 0.060 Analysis Date: 07/06/2012 1645	0.56 1.0	9012A DryWt Corrected: Y
	Prep Batch: 460-118790	Prep Date: 07/06/2012 0900		
Cyanide, Free	0.47 Analysis Batch: 460-118469 Prep Batch: 460-118468	U mg/Kg 0.12 Analysis Date: 07/03/2012 1200 Prep Date: 07/03/2012 0600	0.47 1.0	9016 DryWt Corrected: Y

Job Number: 200-11441-2

Sdg Number: 11441-2

General	Chemistry
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Client Sample ID:

SB-24 (5.5-6.5)

Lab Sample ID:

Client Matrix:

200-11460-3

Solid

% Moisture:

2.9

Date Sampled: 06/23/2012 1330

Analyte		Result	Qual	Units	MDL	P : F	RL	Dil	Method
Cyanide, Total	P	0.15	· J	mg/Kg	0.056		.51	1.0	9012A
	Analysis Batch: 460-118881		Analysis Date: 07/06/2012 1646						DryWt Corrected: Y
	Prep Batch:	: 460-118790	Prep Date: 0	7/06/2012:0	900				·
Cyanide, Free		0.43	U	mg/Kg	0.11		.43	1.0	9016
	Analysis Ba	itch: 460-118469	Analysis Date: 07/03/2012 1200		2 1200	, , :			DryWt Corrected: Y
	Prep Batch: 460-118468		Prep Date: 07/03/2012 0600						•

Job Number: 200-11441-2

Sdg Number: 11441-2

**General Chemistry** 

Client Sample ID:

SB-17 (10-10.7)

Lab Sample ID:

Client Matrix:

200-11460-4

Solid

% Moisture:

Date Sampled: 06/25/2012 1200

Date Received: 06/26/2012 1050

36.8

Analyte Result Qual Units MDL RL Dil Method Cyanide, Total 583 I 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

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Job Number: 200-11441-2

Sdg Number: 11441-2

Gen		

Client Sample iD:

SB-17 (11.2-12.2)

Lab Sample ID:

Client Matrix:

200-11460-5

Solid

% Moisture:

36.4

Date Sampled: 06/25/2012 1205

Analyte		Result		Qual	Units	MDL	RL	Dil	Method
Cyanide, Total		1.6	nervision and desirent to the constant		mg/Kg	0.085	0.79	1.0	9012A
	Analysis Batch: 4	60-118942	Analysis Date: 07/07/2012 1754					DryWt Corrected: Y	
	Prep Batch: 460-	118938	Prep D	ate: 07/	07/2012 14	130			•
Cyanide, Free		1.7			mg/Kg	0.17	0.67	1.0	9016
	Analysis Batch: 460-118469		Analysis Date: 07/03/2012 1200				E1.	DryWt Corrected: Y	
	Prep Batch: 460-	118468	Prep D	ate: 07/	03/2012 06	300			•

Job Number: 200-11441-2

Sdg Number: 11441-2

**General Chemistry** 

Client Sample ID:

SB-18 (11.1-11.7)

Lab Sample ID:

Client Matrix:

200-11460-6

Solid

% Moisture:

21.9

Date Sampled: 06/25/2012 1330

Client Matrix.	Solia		% IVIOIS	ture: 21.9		L	ate Receiv	ed: 06/26/2012 1050
Analyte		Result	Qual	Units	MDL	·· RL	Dil	Method
Cyanide, Total	ang (panamananananananananananananananananana	0.64	· · · · · · · · · · · · · · · · · · ·	mg/Kg	0.069	0.64	1.0	9012A
Analysis Batch: 460-118942		460-118942	Analysis Date: 07/07/2012 1800					DryWt Corrected: Y
	Prep Batch: 460	-118938	Prep Date: 07/	07/2012 1430				7
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		E 10 III 1		•

Job Number: 200-11441-2

Sdg Number: 11441-2

General	Chemistry
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Client Sample iD:

DUP-04-06252012

Lab Sample ID:

Client Matrix:

200-11460-8

Prep Batch: 460-118468

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 _ mg/Kg 2.4 22.4 25 9012A Analysis Date: 07/07/2012 1811 Analysis Batch: 460-118942 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 Date: 07/03/2012 0600