TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

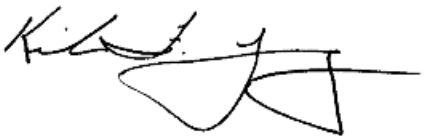
Job Number: 200-8445-1

SDG Number: WC02

Job Description: LPRSA - Phase I Removal Action

For:
ARCADIS U.S. Inc
2300 Eastlake Avenue, East
Suite 140
Seattle, WA 98102

Attention: Ms. Shannon Dunn



Approved for release.
Kirk F Young
Project Manager I
12/22/2011 4:23 PM

Kirk F Young
Project Manager I
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12/22/2011

cc: Mr. Joe Houser
Mr. Don Reed
Mr. Ryan Shatt

The test results in this report relate only to sample(s) as received by the laboratory. These test results were derived under a quality system that adheres to the requirements of NELAC. Pursuant to NELAC, this report may not be produced in full without written approval from the laboratory

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CASE NARRATIVE

Client: ARCADIS U.S. Inc

Project: LPRSA - Phase I Removal Action

Report Number: WC02 (200- 8445-1)

Enclosed is the data set for the referenced project work. With the exceptions noted as flags or footnotes, standard analytical protocols were followed in performing the analytical work and the applied control limits were met. Calibration and calibration verification were assessed on an analyte specific basis. Initial calibration and continuing calibration criteria may not have been met in all instances.

Calculations were performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods of analysis.

Manual integration was employed in deriving certain of the analytical results.

Positive instrument responses in the analysis of samples and quality controls were evaluated to the established method detection limit (MDL).

This is an abbreviated report. A more formal report will be issued in a CLP-like format, with supportive documentation and further narrative discussion.

METHOD SUMMARY

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Low/Medium Volatiles	TAL BUR	SOM01.2 SOM01.2/VOA	
TCLP Extraction			SW846 1311
Volatile Sample Preservation, TCLP Leachate	TAL BUR		SOM01.2 SOM01.2/VOA_PR
Semivolatiles	TAL BUR	SOM01.2 SOM01.2/SV	
TCLP Extraction			SW846 1311
Continuous Liquid-Liquid Extraction of Water Samples			SOM01.2 SOM01.2SV_CLLE
Aroclors	TAL BUR	SOM01.2 SOM01.2/PCB	
Ultrasonic Extraction of Soil/Sediment Samples			SOM01.2 SOM01.2PCB_SONC
Sulfuric Acid/Permanganate Cleanup			SOM01.2 SOM01.2/SO4CU
Pesticides	TAL BUR	SOM01.2 SOM01.2/Pest	
TCLP Extraction			SW846 1311
Separatory Funnel Extraction of Water Samples			SOM01.2 SOM01.2Pes_SFE
Florisil Cleanup			SOM01.2 SOM01.2/FLCU
ISM01.2 Mercury	TAL BUR	ISM01.2 ISM01.2/HG	
TCLP Extraction			SW846 1311
Preparation, ISM01.2 Mercury (EPA 7470A)			ISM01.2 ISM01.2/HG
ISM01.2 Metals (ICP)	TAL BUR	ISM01.2 ISM01.2/ICP	
TCLP Extraction			SW846 1311
Preparation, ISM01.2 Metals ICP (EPA 200.7)			ISM01.2 ISM01.2/ICP
ISM01.2 Cyanide	TAL BUR	ISM01.2 ISM01.2/CN	
Preparation, ISM01.2 Cyanide (MIDI-Distillation)			ISM01.2 ISM01.2/CN
Matrix: Water			
Low/Medium Volatiles	TAL BUR	SOM01.2 SOM01.2/VOA	
Volatile sample preservation, Field Preserved Water	TAL BUR		SOM01.2 SOM01.2/VOA_PR

Lab References:

TAL BUR = TestAmerica Burlington

Method References:

ISM01.2 = U.S. Environmental Protection Agency

SOM01.2 = U.S. Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Method	Analyst	Analyst ID
SOM01.2 SOM01.2/VOA	Phillips, Mark T	MTP
SOM01.2 SOM01.2/SV	Edwin, Joseph	JE
SOM01.2 SOM01.2/PCB	Duncan, Stacee L	SLD
SOM01.2 SOM01.2/Pest	Hammond, Ryan J	RJH
ISM01.2 ISM01.2/HG	Holzschuh, Jessica A	JAH
ISM01.2 ISM01.2/ICP	Lyons, Benjamin	BL
ISM01.2 ISM01.2/CN	Nelson, Andrea J	AJN

SAMPLE SUMMARY

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
200-8445-1	PRR1WC-CS03	Solid	12/06/2011 1330	12/07/2011 1140
200-8445-1MS	PRR1WC-CS03	Solid	12/06/2011 1330	12/07/2011 1140
200-8445-1MSD	PRR1WC-CS03	Solid	12/06/2011 1330	12/07/2011 1140
200-8445-1DU	PRR1WC-CS03	Solid	12/06/2011 1330	12/07/2011 1140
200-8445-2STOBLK	VHBLK01	Water	12/07/2011 1430	12/07/2011 1140

SAMPLE RESULTS

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Client Sample ID: **PRR1WC-CS03**

Lab Sample ID: 200-8445-1
Client Matrix: Solid

Date Sampled: 12/06/2011 1330
Date Received: 12/07/2011 1140

SOM01.2/VOA Low/Medium Volatiles-TCLP

Analysis Method:	SOM01.2/VOA	Analysis Batch:	200-30798	Instrument ID:	N.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	nfea19.d
Dilution:	1.0	Leach Batch:	200-30568	Initial Weight/Volume:	5 mL
Analysis Date:	12/15/2011 1722			Final Weight/Volume:	5 mL
Prep Date:	12/15/2011 1722				
Leach Date:	12/13/2011 1145				

Analyte	DryWt Corrected: N	Result (ug/L)	Qualifier	RL
Vinyl chloride		5.0	U	5.0
1,1-Dichloroethene		5.0	U	5.0
2-Butanone		35	B	10
Chloroform		52		5.0
Carbon tetrachloride		5.0	U	5.0
Benzene		5.0	U	5.0
1,2-Dichloroethane		5.0	U	5.0
Trichloroethene		22		5.0
Tetrachloroethene		0.098	J	5.0
Chlorobenzene		5.0	U	5.0
1,4-Dichlorobenzene		5.0	U	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	92		65 - 131
Chloroethane-d5	103		71 - 131
1,1-Dichloroethene-d2	80		55 - 104
2-Butanone-d5	229	*	49 - 155
Chloroform-d	148	*	78 - 121
1,2-Dichloroethane-d4	100		78 - 129
Benzene-d6	105		77 - 124
1,2-Dichloropropane-d6	101		79 - 124
Toluene-d8	105		77 - 121
trans-1,3-Dichloropropene-d4	103		73 - 121
2-Hexanone-d5	230	*	28 - 135
1,4-Dioxane-d8	109		50 - 150
1,1,2,2-Tetrachloroethane-d2	0	*	73 - 125
1,2-Dichlorobenzene-d4	107		80 - 131

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Client Sample ID: **VHBLK01**

Lab Sample ID: 200-8445-2STOBLK
Client Matrix: Water

Date Sampled: 12/07/2011 1430
Date Received: 12/07/2011 1140

SOM01.2/VOA Low/Medium Volatiles

Analysis Method:	SOM01.2/VOA	Analysis Batch:	200-30798	Instrument ID:	N.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	nfea20.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	12/15/2011 1751			Final Weight/Volume:	5 mL
Prep Date:	12/15/2011 1751				

Analyte	Result (ug/L)	Qualifier	RL
Vinyl chloride	5.0	U	5.0
1,1-Dichloroethene	5.0	U	5.0
2-Butanone	10	U	10
Chloroform	5.0	U	5.0
Carbon tetrachloride	5.0	U	5.0
Benzene	5.0	U	5.0
1,2-Dichloroethane	5.0	U	5.0
Trichloroethene	0.28	J B	5.0
Tetrachloroethene	5.0	U	5.0
Chlorobenzene	5.0	U	5.0
1,4-Dichlorobenzene	5.0	U	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	82		65 - 131
Chloroethane-d5	92		71 - 131
1,1-Dichloroethene-d2	72		55 - 104
2-Butanone-d5	97		49 - 155
Chloroform-d	91		78 - 121
1,2-Dichloroethane-d4	89		78 - 129
Benzene-d6	96		77 - 124
1,2-Dichloropropane-d6	90		79 - 124
Toluene-d8	95		77 - 121
trans-1,3-Dichloropropene-d4	97		73 - 121
2-Hexanone-d5	103		28 - 135
1,4-Dioxane-d8	99		50 - 150
1,1,2,2-Tetrachloroethane-d2	97		73 - 125
1,2-Dichlorobenzene-d4	94		80 - 131

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Client Sample ID: **PRR1WC-CS03**

Lab Sample ID: 200-8445-1
Client Matrix: Solid

Date Sampled: 12/06/2011 1330
Date Received: 12/07/2011 1140

SOM01.2/SV Semivolatiles-TCLP

Analysis Method:	SOM01.2/SV	Analysis Batch:	200-31040	Instrument ID:	R.i
Prep Method:	SOM01.2SV_CLLE	Prep Batch:	200-30614	Lab File ID:	rjqha06.d
Dilution:	1.0	Leach Batch:	200-30524	Initial Weight/Volume:	200 mL
Analysis Date:	12/20/2011 0837			Final Weight/Volume:	1000 uL
Prep Date:	12/13/2011 2213			Injection Volume:	2 uL
Leach Date:	12/12/2011 1717				

Analyte	DryWt Corrected: N	Result (ug/L)	Qualifier	RL
Pyridine		0.39	J	25
2-Methylphenol		25	U	25
4-Methylphenol		25	U	25
Hexachloroethane		25	U	25
Nitrobenzene		25	U	25
Hexachlorobutadiene		25	U	25
2,4,6-Trichlorophenol		55		25
2,4,5-Trichlorophenol		120		25
2,4-Dinitrotoluene		25	U	25
Pentachlorophenol		50	U	50
Total Cresols		25	U	25

Surrogate	%Rec	Qualifier	Acceptance Limits
Phenol-d5	89		39 - 106
Bis(2-chloroethyl)ether-d8	78		40 - 105
2-Chlorophenol-d4	84		41 - 106
4-Methylphenol-d8	115	*	25 - 111
Nitrobenzene-d5	93		43 - 108
2-Nitrophenol-d4	95		40 - 108
2,4-Dichlorophenol-d3	100		37 - 105
4-Chloroaniline-d4	81		1 - 145
Dimethylphthalate-d6	94		47 - 114
Acenaphthylene-d8	91		41 - 107
4-Nitrophenol-d4	63		33 - 116
Fluorene-d10	89		42 - 111
4,6-Dinitro-2-methylphenol-d2	82		22 - 104
Anthracene-d10	95		44 - 110
Pyrene-d10	90		52 - 119
Benzo(a)pyrene-d12	99		32 - 121

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Client Sample ID: **PRR1WC-CS03**

Lab Sample ID: 200-8445-1
Client Matrix: Solid % Moisture: 40.5

Date Sampled: 12/06/2011 1330
Date Received: 12/07/2011 1140

SOM01.2/PCB Aroclors

Analysis Method:	SOM01.2/PCB	Analysis Batch:	200-30597	Instrument ID:	5253.i
Prep Method:	SOM01.2PCB_SONC	Prep Batch:	200-30424	Initial Weight/Volume:	30.38 g
Dilution:	100			Final Weight/Volume:	10000 uL
Analysis Date:	12/13/2011 0824			Injection Volume:	1 uL
Prep Date:	12/09/2011 1708			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	RL
Aroclor-1016		5500	U	5500
Aroclor-1221		5500	U	5500
Aroclor-1232		5500	U	5500
Aroclor-1242		5500	U	5500
Aroclor-1248		5500	U	5500
Aroclor-1254		5500	U	5500
Aroclor-1260		5500	U	5500
Aroclor-1262		5500	U	5500
Aroclor-1268		5500	U	5500

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	0	D	30 - 150
Decachlorobiphenyl	0	D	30 - 150

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Client Sample ID: **PRR1WC-CS03**

Lab Sample ID: 200-8445-1
Client Matrix: Solid
% Moisture: 40.5

Date Sampled: 12/06/2011 1330
Date Received: 12/07/2011 1140

SOM01.2/PCB Aroclors

Analysis Method:	SOM01.2/PCB	Analysis Batch:	200-30597	Instrument ID:	5253.i
Prep Method:	SOM01.2PCB_SONC	Prep Batch:	200-30424	Initial Weight/Volume:	30.38 g
Dilution:	100			Final Weight/Volume:	10000 uL
Analysis Date:	12/13/2011 0824			Injection Volume:	1 uL
Prep Date:	12/09/2011 1708			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	0	D	30 - 150
Decachlorobiphenyl	0	D	30 - 150

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Client Sample ID: **PRR1WC-CS03**

Lab Sample ID: 200-8445-1
Client Matrix: Solid

Date Sampled: 12/06/2011 1330
Date Received: 12/07/2011 1140

SOM01.2/Pest Pesticides-TCLP

Analysis Method:	SOM01.2/Pest	Analysis Batch:	200-30815	Instrument ID:	5005.i
Prep Method:	SOM01.2Pes_SFE	Prep Batch:	200-30607	Initial Weight/Volume:	1060 mL
Dilution:	1.0	Leach Batch:	200-30524	Final Weight/Volume:	10000 uL
Analysis Date:	12/15/2011 0038			Injection Volume:	1 uL
Prep Date:	12/13/2011 1942			Result Type:	PRIMARY
Leach Date:	12/12/2011 1717				

Analyte	DryWt Corrected: N	Result (ug/L)	Qualifier	RL
gamma-BHC (Lindane)		0.018	J P	0.047
Heptachlor		0.0049	J P B	0.047
Heptachlor epoxide		0.013	J P	0.047
Endrin		0.011	J P	0.094
Methoxychlor		0.0031	J P	0.47
Toxaphene		4.7	U	4.7
Chlordane (technical)		0.47	U	0.47

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	111		30 - 150
Tetrachloro-m-xylene	105		30 - 150

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Client Sample ID: **PRR1WC-CS03**

Lab Sample ID: 200-8445-1
Client Matrix: Solid

Date Sampled: 12/06/2011 1330
Date Received: 12/07/2011 1140

SOM01.2/Pest Pesticides-TCLP

Analysis Method:	SOM01.2/Pest	Analysis Batch:	200-30815	Instrument ID:	5005.i
Prep Method:	SOM01.2Pes_SFE	Prep Batch:	200-30607	Initial Weight/Volume:	1060 mL
Dilution:	1.0	Leach Batch:	200-30524	Final Weight/Volume:	10000 uL
Analysis Date:	12/15/2011 0038			Injection Volume:	1 uL
Prep Date:	12/13/2011 1942			Result Type:	SECONDARY
Leach Date:	12/12/2011 1717				

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	114		30 - 150
Tetrachloro-m-xylene	106		30 - 150

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Client Sample ID: **PRR1WC-CS03**

Lab Sample ID: 200-8445-1
Client Matrix: Solid

Date Sampled: 12/06/2011 1330
Date Received: 12/07/2011 1140

ISM01.2/HG ISM01.2 Mercury-TCLP

Analysis Method:	ISM01.2/HG	Analysis Batch:	200-30941	Instrument ID:	MEPCV3 II
Prep Method:	ISM01.2/HG	Prep Batch:	200-30804	Lab File ID:	121911BB.PRN
Dilution:	1.0	Leach Batch:	200-30524	Initial Weight/Volume:	50 mL
Analysis Date:	12/19/2011 1124			Final Weight/Volume:	50 mL
Prep Date:	12/14/2011 1215				
Leach Date:	12/12/2011 1717				

Analyte	DryWt Corrected: N	Result (ug/L)	Qualifier	MDLE	RL
Mercury		0.20	U	0.084	0.20

ISM01.2/ICP ISM01.2 Metals (ICP)-TCLP

Analysis Method:	ISM01.2/ICP	Analysis Batch:	200-30845	Instrument ID:	METICP7
Prep Method:	ISM01.2/ICP	Prep Batch:	200-30648	Lab File ID:	121511-04.ttx
Dilution:	1.0	Leach Batch:	200-30524	Initial Weight/Volume:	100 mL
Analysis Date:	12/16/2011 0233			Final Weight/Volume:	100 mL
Prep Date:	12/14/2011 1131				
Leach Date:	12/12/2011 1717				

Analyte	DryWt Corrected: N	Result (ug/L)	Qualifier	MDL	RL
Arsenic		9.5	J	3.2	10.0
Barium		369		3.5	200
Cadmium		5.0	U	0.37	5.0
Chromium		269		1.0	10.0
Lead		13.9		2.5	10.0
Selenium		8.7	J	3.9	35.0
Silver		10.0	U N	0.81	10.0

General Chemistry

Client Sample ID: **PRR1WC-CS03**

Lab Sample ID: 200-8445-1
Client Matrix: Solid
% Moisture: 40.5
Date Sampled: 12/06/2011 1330
Date Received: 12/07/2011 1140

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide	0.31	J	mg/Kg	0.14	0.80	1.0	ISM01.2/CN

Analysis Batch: 200-30744 Analysis Date: 12/15/2011 1414 DryWt Corrected: Y
Prep Batch: 200-30715 Prep Date: 12/15/2011 0930

DATA REPORTING QUALIFIERS

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Lab Section	Qualifier	Description
GC/MS VOA		
	U	Analyzed for but not detected.
	J	Indicates an estimated value.
	*	Surrogate exceeds the control limit
	B	The analyte was found in an associated blank, as well as in the sample.
GC/MS Semi VOA		
	U	Analyzed for but not detected.
	E	Compound concentration exceeds the upper level of the calibration range of the instrument for that specific analysis.
	J	Indicates an estimated value.
	*	Surrogate exceeds the control limit
GC Semi VOA		
	U	Analyzed for but not detected.
	E	Compound concentration exceeds the upper level of the calibration range of the instrument for that specific analysis.
	J	Indicates an estimated value.
	D	Sample was analyzed at a higher dilution factor.
	P	The % Difference between columns is greater than 25%.
	B	The analyte was found in an associated blank, as well as in the sample.
Metals		
	U	Indicates analyzed for but not detected.
	J	Sample result is greater than the MDL but below the CRDL
	N	Spiked sample recovery is not within control limits.

DATA REPORTING QUALIFIERS

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Lab Section	Qualifier	Description
General Chemistry		
	U	Indicates analyzed for but not detected.
	J	Sample result is greater than the MDL but below the CRDL

QUALITY CONTROL RESULTS

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Prep Batch: 200-30568					
MB 200-30568/1-A	Method Blank	P	Solid	1311	
200-8445-1	PRR1WC-CS03	P	Solid	1311	
200-8445-1MS	Matrix Spike	P	Solid	1311	
200-8445-1MSD	Matrix Spike Duplicate	P	Solid	1311	
Analysis Batch:200-30798					
MB 200-30568/1-A	Method Blank	P	Solid	SOM01.2/VOA	
MB 200-30798/4	Method Blank	T	Water	SOM01.2/VOA	
200-8445-1	PRR1WC-CS03	P	Solid	SOM01.2/VOA	
200-8445-1MS	Matrix Spike	P	Solid	SOM01.2/VOA	
200-8445-1MSD	Matrix Spike Duplicate	P	Solid	SOM01.2/VOA	
200-8445-2STOBLK	VHBLK01	T	Water	SOM01.2/VOA	

Report Basis
P = TCLP
T = Total

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 200-30524					
200-8445-1	PRR1WC-CS03	P	Solid	1311	
200-8445-1MS	Matrix Spike	P	Solid	1311	
200-8445-1MSD	Matrix Spike Duplicate	P	Solid	1311	
Prep Batch: 200-30614					
MB 200-30614/1-A	Method Blank	T	Water	SOM01.2SV_CLL	
200-8445-1	PRR1WC-CS03	P	Solid	SOM01.2SV_CLL	200-30524
200-8445-1MS	Matrix Spike	P	Solid	SOM01.2SV_CLL	200-30524
200-8445-1MSD	Matrix Spike Duplicate	P	Solid	SOM01.2SV_CLL	200-30524
Analysis Batch:200-31040					
MB 200-30614/1-A	Method Blank	T	Water	SOM01.2/SV	200-30614
200-8445-1	PRR1WC-CS03	P	Solid	SOM01.2/SV	200-30614
200-8445-1MS	Matrix Spike	P	Solid	SOM01.2/SV	200-30614
200-8445-1MSD	Matrix Spike Duplicate	P	Solid	SOM01.2/SV	200-30614

Report Basis
P = TCLP
T = Total

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 200-30424					
LCS 200-30424/2-C	Lab Control Sample	T	Solid	SOM01.2PCB_S	
MB 200-30424/1-C	Method Blank	T	Solid	SOM01.2PCB_S	
200-8445-1	PRR1WC-CS03	T	Solid	SOM01.2PCB_S	
200-8445-1MS	Matrix Spike	T	Solid	SOM01.2PCB_S	
200-8445-1MSD	Matrix Spike Duplicate	T	Solid	SOM01.2PCB_S	
Prep Batch: 200-30524					
200-8445-1	PRR1WC-CS03	P	Solid	1311	
200-8445-1MS	Matrix Spike	P	Solid	1311	
200-8445-1MSD	Matrix Spike Duplicate	P	Solid	1311	
Analysis Batch:200-30597					
LCS 200-30424/2-C	Lab Control Sample	T	Solid	SOM01.2/PCB	200-30424
MB 200-30424/1-C	Method Blank	T	Solid	SOM01.2/PCB	200-30424
200-8445-1	PRR1WC-CS03	T	Solid	SOM01.2/PCB	200-30424
200-8445-1MS	Matrix Spike	T	Solid	SOM01.2/PCB	200-30424
200-8445-1MSD	Matrix Spike Duplicate	T	Solid	SOM01.2/PCB	200-30424
Prep Batch: 200-30607					
LCS 200-30607/2-C	Lab Control Sample	T	Water	SOM01.2Pes_SF	
MB 200-30607/1-C	Method Blank	T	Water	SOM01.2Pes_SF	
200-8445-1	PRR1WC-CS03	P	Solid	SOM01.2Pes_SF	200-30524
200-8445-1MS	Matrix Spike	P	Solid	SOM01.2Pes_SF	200-30524
200-8445-1MSD	Matrix Spike Duplicate	P	Solid	SOM01.2Pes_SF	200-30524
Analysis Batch:200-30815					
LCS 200-30607/2-C	Lab Control Sample	T	Water	SOM01.2/Pest	200-30607
MB 200-30607/1-C	Method Blank	T	Water	SOM01.2/Pest	200-30607
200-8445-1	PRR1WC-CS03	P	Solid	SOM01.2/Pest	200-30607
200-8445-1MS	Matrix Spike	P	Solid	SOM01.2/Pest	200-30607
200-8445-1MSD	Matrix Spike Duplicate	P	Solid	SOM01.2/Pest	200-30607

Report Basis
P = TCLP
T = Total

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 200-30524					
LB 200-30524/1-B	TCLP SPLPE Leachate Blank	P	Solid	1311	
LB 200-30524/1-C	TCLP SPLPE Leachate Blank	P	Solid	1311	
200-8445-1	PRR1WC-CS03	P	Solid	1311	
200-8445-1DU	Duplicate	P	Solid	1311	
200-8445-1MS	Matrix Spike	P	Solid	1311	
200-8445-1MSDL	Matrix Spike	P	Solid	1311	
Prep Batch: 200-30648					
LCS 200-30648/2-A	Lab Control Sample	T	Water	ISM01.2/ICP	
MB 200-30648/1-A	Method Blank	T	Water	ISM01.2/ICP	
LB 200-30524/1-B	TCLP SPLPE Leachate Blank	P	Solid	ISM01.2/ICP	200-30524
200-8445-1	PRR1WC-CS03	P	Solid	ISM01.2/ICP	200-30524
200-8445-1DU	Duplicate	P	Solid	ISM01.2/ICP	200-30524
200-8445-1MS	Matrix Spike	P	Solid	ISM01.2/ICP	200-30524
200-8445-1MSDL	Matrix Spike	P	Solid	ISM01.2/ICP	200-30524
Prep Batch: 200-30804					
MB 200-30804/11-A	Method Blank	T	Water	ISM01.2/HG	
LB 200-30524/1-C	TCLP SPLPE Leachate Blank	P	Solid	ISM01.2/HG	200-30524
200-8445-1	PRR1WC-CS03	P	Solid	ISM01.2/HG	200-30524
200-8445-1DU	Duplicate	P	Solid	ISM01.2/HG	200-30524
200-8445-1MS	Matrix Spike	P	Solid	ISM01.2/HG	200-30524
Analysis Batch:200-30845					
LB 200-30524/1-B	TCLP SPLPE Leachate Blank	P	Solid	ISM01.2/ICP	200-30648
LCS 200-30648/2-A	Lab Control Sample	T	Water	ISM01.2/ICP	200-30648
MB 200-30648/1-A	Method Blank	T	Water	ISM01.2/ICP	200-30648
200-8445-1	PRR1WC-CS03	P	Solid	ISM01.2/ICP	200-30648
200-8445-1DU	Duplicate	P	Solid	ISM01.2/ICP	200-30648
200-8445-1MS	Matrix Spike	P	Solid	ISM01.2/ICP	200-30648
200-8445-1MSDL	Matrix Spike	P	Solid	ISM01.2/ICP	200-30648
Analysis Batch:200-30941					
LB 200-30524/1-C	TCLP SPLPE Leachate Blank	P	Solid	ISM01.2/HG	200-30804
MB 200-30804/11-A	Method Blank	T	Water	ISM01.2/HG	200-30804
200-8445-1	PRR1WC-CS03	P	Solid	ISM01.2/HG	200-30804
200-8445-1DU	Duplicate	P	Solid	ISM01.2/HG	200-30804
200-8445-1MS	Matrix Spike	P	Solid	ISM01.2/HG	200-30804

Report Basis
P = TCLP
T = Total

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Prep Batch: 200-30715					
MB 200-30715/11-A	Method Blank	T	Solid	ISM01.2/CN	
200-8445-1	PRR1WC-CS03	T	Solid	ISM01.2/CN	
200-8445-1DU	Duplicate	T	Solid	ISM01.2/CN	
200-8445-1MS	Matrix Spike	T	Solid	ISM01.2/CN	
Analysis Batch:200-30744					
MB 200-30715/11-A	Method Blank	T	Solid	ISM01.2/CN	200-30715
200-8445-1	PRR1WC-CS03	T	Solid	ISM01.2/CN	200-30715
200-8445-1DU	Duplicate	T	Solid	ISM01.2/CN	200-30715
200-8445-1MS	Matrix Spike	T	Solid	ISM01.2/CN	200-30715

Report Basis
T = Total

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Surrogate Recovery Report

SOM01.2/VOA Low/Medium Volatiles

Client Matrix: Solid TCLP

Lab Sample ID	Client Sample ID	VCL %Rec	CLA %Rec	DCE %Rec	BUT %Rec	CLF %Rec	DCA %Rec	BEN %Rec	DPA %Rec
200-8445-1	PRR1WC-CS03	92	103	80	229*	148*	100	105	101
MB 200-30798/4		89	99	78	110	100	98	105	98
MB 200-30568/1-A		91	102	80	121	104	102	106	102
200-8445-1 MS	PRR1WC-CS03 MS	95	97	109*	238*	8*	107	109	107
200-8445-1 MSD	PRR1WC-CS03 MSD	97	99	112*	242*	7*	106	107	104

Surrogate	Acceptance Limits
VCL = Vinyl chloride-d3	65-131
CLA = Chloroethane-d5	71-131
DCE = 1,1-Dichloroethene-d2	55-104
BUT = 2-Butanone-d5	49-155
CLF = Chloroform-d	78-121
DCA = 1,2-Dichloroethane-d4	78-129
BEN = Benzene-d6	77-124
DPA = 1,2-Dichloropropane-d6	79-124

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Surrogate Recovery Report

SOM01.2/VOA Low/Medium Volatiles

Client Matrix: Solid TCLP

Lab Sample ID	Client Sample ID	TOL %Rec	TDP %Rec	HEX %Rec	DXE %Rec	TCA %Rec	DCZ %Rec
200-8445-1	PRR1WC-CS03	105	103	230*	109	0*	107
MB 200-30798/4		104	104	108	125	103	103
MB 200-30568/1-A		106	105	148*	156*	113	106
200-8445-1 MS	PRR1WC-CS03 MS	108	108	283*	116	0*	106
200-8445-1 MSD	PRR1WC-CS03 MSD	106	104	279*	107	0*	104

Surrogate	Acceptance Limits
TOL = Toluene-d8	77-121
TDP = trans-1,3-Dichloropropene-d4	73-121
HEX = 2-Hexanone-d5	28-135
DXE = 1,4-Dioxane-d8	50-150
TCA = 1,1,2,2-Tetrachloroethane-d2	73-125
DCZ = 1,2-Dichlorobenzene-d4	80-131

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Surrogate Recovery Report

SOM01.2/VOA Low/Medium Volatiles

Client Matrix: Water

Lab Sample ID	Client Sample ID	VCL %Rec	CLA %Rec	DCE %Rec	BUT %Rec	CLF %Rec	DCA %Rec	BEN %Rec	DPA %Rec
200-8445-2	VHBLK01	82	92	72	97	91	89	96	90

Surrogate	Acceptance Limits
VCL = Vinyl chloride-d3	65-131
CLA = Chloroethane-d5	71-131
DCE = 1,1-Dichloroethene-d2	55-104
BUT = 2-Butanone-d5	49-155
CLF = Chloroform-d	78-121
DCA = 1,2-Dichloroethane-d4	78-129
BEN = Benzene-d6	77-124
DPA = 1,2-Dichloropropane-d6	79-124

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Surrogate Recovery Report

SOM01.2/VOA Low/Medium Volatiles

Client Matrix: Water

Lab Sample ID	Client Sample ID	TOL %Rec	TDP %Rec	HEX %Rec	DXE %Rec	TCA %Rec	DCZ %Rec
200-8445-2	VHBLK01	95	97	103	99	97	94

Surrogate	Acceptance Limits
TOL = Toluene-d8	77-121
TDP = trans-1,3-Dichloropropene-d4	73-121
HEX = 2-Hexanone-d5	28-135
DXE = 1,4-Dioxane-d8	50-150
TCA = 1,1,2,2-Tetrachloroethane-d2	73-125
DCZ = 1,2-Dichlorobenzene-d4	80-131

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Surrogate Recovery Report

SOM01.2/SV Semivolatiles

Client Matrix: Solid TCLP

Lab Sample ID	Client Sample ID	PHL %Rec	BCE %Rec	2CP %Rec	4MP %Rec	NBZ %Rec	2NP %Rec	DCP %Rec	4CA %Rec
200-8445-1	PRR1WC-CS03	89	78	84	115*	93	95	100	81
MB 200-30614/1-A		77	72	73	95	85	86	80	86
200-8445-1 MS	PRR1WC-CS03 MS	90	77	80	114*	91	91	93	65
200-8445-1 MSD	PRR1WC-CS03 MSD	86	73	77	103	87	88	87	46

Surrogate	Acceptance Limits
PHL = Phenol-d5	39-106
BCE = Bis(2-chloroethyl)ether-d8	40-105
2CP = 2-Chlorophenol-d4	41-106
4MP = 4-Methylphenol-d8	25-111
NBZ = Nitrobenzene-d5	43-108
2NP = 2-Nitrophenol-d4	40-108
DCP = 2,4-Dichlorophenol-d3	37-105
4CA = 4-Chloroaniline-d4	1-145

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Surrogate Recovery Report

SOM01.2/SV Semivolatiles

Client Matrix: Solid TCLP

Lab Sample ID	Client Sample ID	DMP %Rec	ACY %Rec	4NP %Rec	FLR %Rec	NMP %Rec	ANC %Rec	PYR %Rec	BAP %Rec
200-8445-1	PRR1WC-CS03	94	91	63	89	82	95	90	99
MB 200-30614/1-A		98	84	106	89	65	88	86	90
200-8445-1 MS	PRR1WC-CS03 MS	84	89	59	82	81	87	92	92
200-8445-1 MSD	PRR1WC-CS03 MSD	83	82	62	78	82	86	96	90

Surrogate	Acceptance Limits
DMP = Dimethylphthalate-d6	47-114
ACY = Acenaphthylene-d8	41-107
4NP = 4-Nitrophenol-d4	33-116
FLR = Fluorene-d10	42-111
NMP = 4,6-Dinitro-2-methylphenol-d2	22-104
ANC = Anthracene-d10	44-110
PYR = Pyrene-d10	52-119
BAP = Benzo(a)pyrene-d12	32-121

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Surrogate Recovery Report

SOM01.2/PCB_Aroclors

Client Matrix: Solid

Lab Sample ID	Client Sample ID	TCX1 %Rec	TCX2 %Rec	DCB1 %Rec	DCB2 %Rec
200-8445-1	PRR1WC-CS03	0D	0D	0D	0D
MB 200-30424/1-C		97	100	108	103
LCS 200-30424/2-C		95	95	105	97
200-8445-1 MS	PRR1WC-CS03 MS	0D	0D	0D	0D
200-8445-1 MSD	PRR1WC-CS03 MSD	0D	0D	0D	0D

Surrogate	Acceptance Limits
TCX = Tetrachloro-m-xylene	30-150
DCB = Decachlorobiphenyl	30-150

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Surrogate Recovery Report

SOM01.2/Pest Pesticides

Client Matrix: Solid TCLP

Lab Sample ID	Client Sample ID	DCB1 %Rec	DCB2 %Rec	TCX1 %Rec	TCX2 %Rec
200-8445-1	PRR1WC-CS03	111	114	106	105
MB 200-30607/1-C		115	116	97	99
LCS 200-30607/2-C		124	127	110	111
200-8445-1 MS	PRR1WC-CS03 MS	115	112	103	103
200-8445-1 MS	PRR1WC-CS03 MS	104	106	99	101
200-8445-1 MSD	PRR1WC-CS03 MSD	110	111	102	101
200-8445-1 MSD	PRR1WC-CS03 MSD	104	108	101	103

Surrogate	Acceptance Limits
DCB = Decachlorobiphenyl	30-150
TCX = Tetrachloro-m-xylene	30-150

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Method Blank - Batch: 200-30798

Method: SOM01.2/VOA
Preparation: SOM01.2/VOA_PR

Lab Sample ID:	MB 200-30798/4	Analysis Batch:	200-30798	Instrument ID:	N.i
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	nfea04.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	12/15/2011 0943	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	12/15/2011 0943				
Leach Date:	N/A				

Analyte	Result	Qual	RL
Vinyl chloride	5.0	U	5.0
1,1-Dichloroethene	5.0	U	5.0
2-Butanone	10	U	10
Chloroform	5.0	U	5.0
Carbon tetrachloride	5.0	U	5.0
Benzene	5.0	U	5.0
1,2-Dichloroethane	5.0	U	5.0
Trichloroethene	0.17	J	5.0
Tetrachloroethene	0.044	J	5.0
Chlorobenzene	5.0	U	5.0
1,4-Dichlorobenzene	5.0	U	5.0

Surrogate	% Rec	Acceptance Limits
Vinyl chloride-d3	89	65 - 131
Chloroethane-d5	99	71 - 131
1,1-Dichloroethene-d2	78	55 - 104
2-Butanone-d5	110	49 - 155
Chloroform-d	100	78 - 121
1,2-Dichloroethane-d4	98	78 - 129
Benzene-d6	105	77 - 124
1,2-Dichloropropane-d6	98	79 - 124
Toluene-d8	104	77 - 121
trans-1,3-Dichloropropene-d4	104	73 - 121
2-Hexanone-d5	108	28 - 135
1,4-Dioxane-d8	125	50 - 150
1,1,2,2-Tetrachloroethane-d2	103	73 - 125
1,2-Dichlorobenzene-d4	103	80 - 131

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Method Blank - Batch: 200-30798

Method: SOM01.2/VOA
Preparation: SOM01.2/VOA_PR TCLP

Lab Sample ID:	MB 200-30568/1-A	Analysis Batch:	200-30798	Instrument ID:	N.i
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	nfea13.d
Dilution:	1.0	Leach Batch:	200-30568	Initial Weight/Volume:	5 mL
Analysis Date:	12/15/2011 1421	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	12/15/2011 1421				
Leach Date:	12/13/2011 1145				

Analyte	Result	Qual	RL
Vinyl chloride	5.0	U	5.0
1,1-Dichloroethene	5.0	U	5.0
2-Butanone	33		10
Chloroform	5.0	U	5.0
Carbon tetrachloride	5.0	U	5.0
Benzene	5.0	U	5.0
1,2-Dichloroethane	5.0	U	5.0
Trichloroethene	5.0	U	5.0
Tetrachloroethene	5.0	U	5.0
Chlorobenzene	5.0	U	5.0
1,4-Dichlorobenzene	5.0	U	5.0

Surrogate	% Rec		Acceptance Limits
Vinyl chloride-d3	91		65 - 131
Chloroethane-d5	102		71 - 131
1,1-Dichloroethene-d2	80		55 - 104
2-Butanone-d5	121		49 - 155
Chloroform-d	104		78 - 121
1,2-Dichloroethane-d4	102		78 - 129
Benzene-d6	106		77 - 124
1,2-Dichloropropane-d6	102		79 - 124
Toluene-d8	106		77 - 121
trans-1,3-Dichloropropene-d4	105		73 - 121
2-Hexanone-d5	148	*	28 - 135
1,4-Dioxane-d8	156	*	50 - 150
1,1,2,2-Tetrachloroethane-d2	113		73 - 125
1,2-Dichlorobenzene-d4	106		80 - 131

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 200-30798

Method: SOM01.2/VOA
Preparation: SOM01.2/VOA_PR
TCLP

MS Lab Sample ID:	200-8445-1	Analysis Batch:	200-30798	Instrument ID:	N.i
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	nfea14.d
Dilution:	1.0	Leach Batch:	200-30568	Initial Weight/Volume:	5 mL
Analysis Date:	12/15/2011 1449			Final Weight/Volume:	5 mL
Prep Date:	12/15/2011 1449				5 mL
Leach Date:	12/13/2011 1145				

MSD Lab Sample ID:	200-8445-1	Analysis Batch:	200-30798	Instrument ID:	N.i
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	nfea15.d
Dilution:	1.0	Leach Batch:	200-30568	Initial Weight/Volume:	5 mL
Analysis Date:	12/15/2011 1517			Final Weight/Volume:	5 mL
Prep Date:	12/15/2011 1517				5 mL
Leach Date:	12/13/2011 1145				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Vinyl chloride	113	120	75 - 125	6	15		
1,1-Dichloroethene	117	123	61 - 145	4	14		
2-Butanone	122	122	75 - 125	0	15	B	B
Chloroform	104	103	75 - 125	1	15		
Carbon tetrachloride	105	102	75 - 125	3	15		
Benzene	108	108	76 - 127	1	11		
1,2-Dichloroethane	107	107	75 - 125	0	15		
Trichloroethene	181	181	71 - 120	0	14		
Tetrachloroethene	104	103	75 - 125	1	15		
Chlorobenzene	107	107	75 - 130	0	13		
1,4-Dichlorobenzene	98	98	75 - 125	1	15		

Surrogate	MS % Rec		MSD % Rec		Acceptance Limits
Vinyl chloride-d3	95		97		65 - 131
Chloroethane-d5	97		99		71 - 131
1,1-Dichloroethene-d2	109	*	112	*	55 - 104
2-Butanone-d5	238	*	242	*	49 - 155
Chloroform-d	8	*	7	*	78 - 121
1,2-Dichloroethane-d4	107		106		78 - 129
Benzene-d6	109		107		77 - 124
1,2-Dichloropropane-d6	107		104		79 - 124
Toluene-d8	108		106		77 - 121
trans-1,3-Dichloropropene-d4	108		104		73 - 121
2-Hexanone-d5	283	*	279	*	28 - 135
1,4-Dioxane-d8	116		107		50 - 150
1,1,2,2-Tetrachloroethane-d2	0	*	0	*	73 - 125
1,2-Dichlorobenzene-d4	106		104		80 - 131

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Method Blank - Batch: 200-30614

Method: SOM01.2/SV
Preparation: SOM01.2SV_CLLE

Lab Sample ID:	MB 200-30614/1-A	Analysis Batch:	200-31040	Instrument ID:	R.i
Client Matrix:	Water	Prep Batch:	200-30614	Lab File ID:	rjqha09.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	200 mL
Analysis Date:	12/20/2011 1025	Units:	ug/L	Final Weight/Volume:	1000 uL
Prep Date:	12/13/2011 2213			Injection Volume:	2 uL
Leach Date:	N/A				

Analyte	Result	Qual	RL
Pyridine	25	U	25
2-Methylphenol	25	U	25
4-Methylphenol	25	U	25
Hexachloroethane	25	U	25
Nitrobenzene	25	U	25
Hexachlorobutadiene	25	U	25
2,4,6-Trichlorophenol	25	U	25
2,4,5-Trichlorophenol	25	U	25
2,4-Dinitrotoluene	25	U	25
Pentachlorophenol	50	U	50
Total Cresols	25	U	25

Surrogate	% Rec	Acceptance Limits
Phenol-d5	77	39 - 106
Bis(2-chloroethyl)ether-d8	72	40 - 105
2-Chlorophenol-d4	73	41 - 106
4-Methylphenol-d8	95	25 - 111
Nitrobenzene-d5	85	43 - 108
2-Nitrophenol-d4	86	40 - 108
2,4-Dichlorophenol-d3	80	37 - 105
4-Chloroaniline-d4	86	1 - 145
Dimethylphthalate-d6	98	47 - 114
Acenaphthylene-d8	84	41 - 107
4-Nitrophenol-d4	106	33 - 116
Fluorene-d10	89	42 - 111
4,6-Dinitro-2-methylphenol-d2	65	22 - 104
Anthracene-d10	88	44 - 110
Pyrene-d10	86	52 - 119
Benzo(a)pyrene-d12	90	32 - 121

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 200-30614

Method: SOM01.2/SV
Preparation: SOM01.2SV_CLLE
TCLP

MS Lab Sample ID:	200-8445-1	Analysis Batch:	200-31040	Instrument ID:	R.i
Client Matrix:	Solid	Prep Batch:	200-30614	Lab File ID:	rjqha07.d
Dilution:	1.0	Leach Batch:	200-30524	Initial Weight/Volume:	200 mL
Analysis Date:	12/20/2011 0913			Final Weight/Volume:	1000 uL
Prep Date:	12/13/2011 2213			Injection Volume:	2 uL
Leach Date:	12/12/2011 1717				

MSD Lab Sample ID:	200-8445-1	Analysis Batch:	200-31040	Instrument ID:	R.i
Client Matrix:	Solid	Prep Batch:	200-30614	Lab File ID:	rjqha08.d
Dilution:	1.0	Leach Batch:	200-30524	Initial Weight/Volume:	200 mL
Analysis Date:	12/20/2011 0949			Final Weight/Volume:	1000 uL
Prep Date:	12/13/2011 2213			Injection Volume:	2 uL
Leach Date:	12/12/2011 1717				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Pyridine	78	76	30 - 120	2	40		
2-Methylphenol	92	83	30 - 120	10	40		
Hexachloroethane	76	42	30 - 120	57	40		
Nitrobenzene	95	91	30 - 120	5	40		
Hexachlorobutadiene	77	40	30 - 120	63	40		
2,4,6-Trichlorophenol	92	90	30 - 120	2	40		
2,4,5-Trichlorophenol	86	77	30 - 120	11	40		
2,4-Dinitrotoluene	98	96	24 - 96	2	38		
Pentachlorophenol	80	79	9 - 103	2	50		

Surrogate	MS % Rec		MSD % Rec	Acceptance Limits
Phenol-d5	90		86	39 - 106
Bis(2-chloroethyl)ether-d8	77		73	40 - 105
2-Chlorophenol-d4	80		77	41 - 106
4-Methylphenol-d8	114	*	103	25 - 111
Nitrobenzene-d5	91		87	43 - 108
2-Nitrophenol-d4	91		88	40 - 108
2,4-Dichlorophenol-d3	93		87	37 - 105
4-Chloroaniline-d4	65		46	1 - 145
Dimethylphthalate-d6	84		83	47 - 114
Acenaphthylene-d8	89		82	41 - 107
4-Nitrophenol-d4	59		62	33 - 116
Fluorene-d10	82		78	42 - 111
4,6-Dinitro-2-methylphenol-d2	81		82	22 - 104
Anthracene-d10	87		86	44 - 110
Pyrene-d10	92		96	52 - 119
Benzo(a)pyrene-d12	92		90	32 - 121

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Method Blank - Batch: 200-30424

Method: SOM01.2/PCB
Preparation: SOM01.2PCB_SONC

Lab Sample ID:	MB 200-30424/1-C	Analysis Batch:	200-30597	Instrument ID:	5253.i
Client Matrix:	Solid	Prep Batch:	200-30424	Lab File ID:	12dec112108-r071.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.00 g
Analysis Date:	12/13/2011 0736	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	12/09/2011 1708			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	RL
Aroclor-1016	33	U	33
Aroclor-1221	33	U	33
Aroclor-1232	33	U	33
Aroclor-1242	33	U	33
Aroclor-1248	33	U	33
Aroclor-1254	33	U	33
Aroclor-1260	33	U	33
Aroclor-1262	33	U	33
Aroclor-1268	33	U	33

Surrogate	% Rec	Acceptance Limits
Tetrachloro-m-xylene	97	30 - 150
Decachlorobiphenyl	103	30 - 150

Surrogate	% Rec	Acceptance Limits
Tetrachloro-m-xylene	100	30 - 150
Decachlorobiphenyl	108	30 - 150

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Lab Control Sample - Batch: 200-30424

Method: SOM01.2/PCB
Preparation: SOM01.2PCB_SONC

Lab Sample ID:	LCS 200-30424/2-C	Analysis Batch:	200-30597	Instrument ID:	5253.i
Client Matrix:	Solid	Prep Batch:	200-30424	Lab File ID:	12dec112108-r081.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.00 g
Analysis Date:	12/13/2011 0800	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	12/09/2011 1708			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aroclor-1016	33.3	37	110	50 - 150	
Aroclor-1260	33.3	32	96	50 - 150	J

Surrogate	% Rec	Acceptance Limits
Tetrachloro-m-xylene	95	30 - 150
Decachlorobiphenyl	97	30 - 150

Lab Control Sample - Batch: 200-30424

Method: SOM01.2/PCB
Preparation: SOM01.2PCB_SONC

Lab Sample ID:	LCS 200-30424/2-C	Analysis Batch:	200-30597	Instrument ID:	5253.i
Client Matrix:	Solid	Prep Batch:	200-30424	Lab File ID:	12dec112108-r081.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.00 g
Analysis Date:	12/13/2011 0800	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	12/09/2011 1708			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aroclor-1016	33.3	37	110	50 - 150	
Aroclor-1260	33.3	35	106	50 - 150	

Surrogate	% Rec	Acceptance Limits
Tetrachloro-m-xylene	95	30 - 150
Decachlorobiphenyl	105	30 - 150

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 200-30424

Method: SOM01.2/PCB
Preparation: SOM01.2PCB_SONC

MS Lab Sample ID:	200-8445-1	Analysis Batch:	200-30597	Instrument ID:	5253.i
Client Matrix:	Solid	Prep Batch:	200-30424	Lab File ID:	12dec112108-r111.d
Dilution:	100	Leach Batch:	N/A	Initial Weight/Volume:	30.31 g
Analysis Date:	12/13/2011 0912			Final Weight/Volume:	10000 uL
Prep Date:	12/09/2011 1708			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	200-8445-1	Analysis Batch:	200-30597	Instrument ID:	5253.i
Client Matrix:	Solid	Prep Batch:	200-30424	Lab File ID:	12dec112108-r101.d
Dilution:	100	Leach Batch:	N/A	Initial Weight/Volume:	30.15 g
Analysis Date:	12/13/2011 0848			Final Weight/Volume:	10000 uL
Prep Date:	12/09/2011 1708			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.					
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Aroclor-1016	0	0	29 - 135		15	U	U
Aroclor-1260	0	0	29 - 135		20	U	U

Surrogate	MS % Rec		MSD % Rec		Acceptance Limits
Tetrachloro-m-xylene	0	D	0	D	30 - 150
Decachlorobiphenyl	0	D	0	D	30 - 150

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 200-30424

Method: SOM01.2/PCB
Preparation: SOM01.2PCB_SONC

MS Lab Sample ID:	200-8445-1	Analysis Batch:	200-30597	Instrument ID:	5253.i
Client Matrix:	Solid	Prep Batch:	200-30424	Lab File ID:	12dec112108-r111.d
Dilution:	100	Leach Batch:	N/A	Initial Weight/Volume:	30.31 g
Analysis Date:	12/13/2011 0912			Final Weight/Volume:	10000 uL
Prep Date:	12/09/2011 1708			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

MSD Lab Sample ID:	200-8445-1	Analysis Batch:	200-30597	Instrument ID:	5253.i
Client Matrix:	Solid	Prep Batch:	200-30424	Lab File ID:	12dec112108-r101.d
Dilution:	100	Leach Batch:	N/A	Initial Weight/Volume:	30.15 g
Analysis Date:	12/13/2011 0848			Final Weight/Volume:	10000 uL
Prep Date:	12/09/2011 1708			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

	% Rec.					
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Aroclor-1016	0	0	29 - 135		15	U	U
Aroclor-1260	0	0	29 - 135		20	U	U

Surrogate	MS % Rec		MSD % Rec		Acceptance Limits
Tetrachloro-m-xylene	0	D	0	D	30 - 150
Decachlorobiphenyl	0	D	0	D	30 - 150

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Method Blank - Batch: 200-30607

Method: SOM01.2/Pest
Preparation: SOM01.2Pes_SFE

Lab Sample ID:	MB 200-30607/1-C	Analysis Batch:	200-30815	Instrument ID:	5005.i
Client Matrix:	Water	Prep Batch:	200-30607	Lab File ID:	14dec111359-r011.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	12/14/2011 2346	Units:	ug/L	Final Weight/Volume:	10000 uL
Prep Date:	12/13/2011 1942			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	RL
gamma-BHC (Lindane)	0.050	U	0.050
Heptachlor	0.00066	J P	0.050
Heptachlor epoxide	0.050	U	0.050
Endrin	0.10	U	0.10
Methoxychlor	0.50	U	0.50
Toxaphene	5.0	U	5.0
Chlordane (technical)	0.50	U	0.50

Surrogate	% Rec	Acceptance Limits
Decachlorobiphenyl	115	30 - 150
Tetrachloro-m-xylene	97	30 - 150

Surrogate	% Rec	Acceptance Limits
Decachlorobiphenyl	116	30 - 150
Tetrachloro-m-xylene	99	30 - 150

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Lab Control Sample - Batch: 200-30607

Method: SOM01.2/Pest
Preparation: SOM01.2Pes_SFE

Lab Sample ID:	LCS 200-30607/2-C	Analysis Batch:	200-30815	Instrument ID:	5005.i
Client Matrix:	Water	Prep Batch:	200-30607	Lab File ID:	14dec111359-r021.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	12/15/2011 0012	Units:	ug/L	Final Weight/Volume:	10000 uL
Prep Date:	12/13/2011 1942			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
gamma-BHC (Lindane)	0.0500	0.051	101	50 - 120	
Heptachlor epoxide	0.0500	0.056	113	50 - 150	
Endrin	0.100	0.11	111	50 - 120	

Surrogate	% Rec	Acceptance Limits
Decachlorobiphenyl	124	30 - 150
Tetrachloro-m-xylene	110	30 - 150

Lab Control Sample - Batch: 200-30607

Method: SOM01.2/Pest
Preparation: SOM01.2Pes_SFE

Lab Sample ID:	LCS 200-30607/2-C	Analysis Batch:	200-30815	Instrument ID:	5005.i
Client Matrix:	Water	Prep Batch:	200-30607	Lab File ID:	14dec111359-r021.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	12/15/2011 0012	Units:	ug/L	Final Weight/Volume:	10000 uL
Prep Date:	12/13/2011 1942			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
gamma-BHC (Lindane)	0.0500	0.054	108	50 - 120	
Heptachlor epoxide	0.0500	0.060	120	50 - 150	
Endrin	0.100	0.12	117	50 - 120	

Surrogate	% Rec	Acceptance Limits
Decachlorobiphenyl	127	30 - 150
Tetrachloro-m-xylene	111	30 - 150

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 200-30607

Method: SOM01.2/Pest
Preparation: SOM01.2Pes_SFE
TCLP

MS Lab Sample ID:	200-8445-1	Analysis Batch:	200-30815	Instrument ID:	5005.i
Client Matrix:	Solid	Prep Batch:	200-30607	Lab File ID:	14dec111359-r051.d
Dilution:	1.0	Leach Batch:	200-30524	Initial Weight/Volume:	1050 mL
Analysis Date:	12/15/2011 0129			Final Weight/Volume:	10000 uL
Prep Date:	12/13/2011 1942			Injection Volume:	1 uL
Leach Date:	12/12/2011 1717			Column ID:	PRIMARY

MSD Lab Sample ID:	200-8445-1	Analysis Batch:	200-30815	Instrument ID:	5005.i
Client Matrix:	Solid	Prep Batch:	200-30607	Lab File ID:	14dec111359-r041.d
Dilution:	1.0	Leach Batch:	200-30524	Initial Weight/Volume:	1055 mL
Analysis Date:	12/15/2011 0104			Final Weight/Volume:	10000 uL
Prep Date:	12/13/2011 1942			Injection Volume:	1 uL
Leach Date:	12/12/2011 1717			Column ID:	PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
gamma-BHC (Lindane)	99	95	56 - 123	5	15		
Heptachlor	101	97	40 - 131	4	20	P B	P B
Heptachlor epoxide	82	79	40 - 130	3	20		
Endrin	115	111	56 - 121	4	21		
Methoxychlor	117	114	40 - 130	3	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Decachlorobiphenyl	112	110	30 - 150
Tetrachloro-m-xylene	103	101	30 - 150

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 200-30607

Method: SOM01.2/Pest
Preparation: SOM01.2Pes_SFE
TCLP

MS Lab Sample ID:	200-8445-1	Analysis Batch:	200-30815	Instrument ID:	5005.i
Client Matrix:	Solid	Prep Batch:	200-30607	Lab File ID:	14dec111359-r051.d
Dilution:	1.0	Leach Batch:	200-30524	Initial Weight/Volume:	1050 mL
Analysis Date:	12/15/2011 0129			Final Weight/Volume:	10000 uL
Prep Date:	12/13/2011 1942			Injection Volume:	1 uL
Leach Date:	12/12/2011 1717			Column ID:	SECONDARY

MSD Lab Sample ID:	200-8445-1	Analysis Batch:	200-30815	Instrument ID:	5005.i
Client Matrix:	Solid	Prep Batch:	200-30607	Lab File ID:	14dec111359-r041.d
Dilution:	1.0	Leach Batch:	200-30524	Initial Weight/Volume:	1055 mL
Analysis Date:	12/15/2011 0104			Final Weight/Volume:	10000 uL
Prep Date:	12/13/2011 1942			Injection Volume:	1 uL
Leach Date:	12/12/2011 1717			Column ID:	SECONDARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
gamma-BHC (Lindane)	109	106	56 - 123	3	15		
Heptachlor	36	32	40 - 131	12	20	E P B	B P
Heptachlor epoxide	107	104	40 - 130	3	20		
Endrin	33	31	56 - 121	6	21		
Methoxychlor	117	115	40 - 130	2	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Decachlorobiphenyl	115	111	30 - 150
Tetrachloro-m-xylene	103	102	30 - 150

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 200-30607

Method: SOM01.2/Pest
Preparation: SOM01.2Pes_SFE
TCLP

MS Lab Sample ID:	200-8445-1	Analysis Batch:	200-30815	Instrument ID:	5005.i
Client Matrix:	Solid	Prep Batch:	200-30607	Lab File ID:	14dec111359-r071.d
Dilution:	1.0	Leach Batch:	200-30524	Initial Weight/Volume:	1055 mL
Analysis Date:	12/15/2011 0221			Final Weight/Volume:	10000 uL
Prep Date:	12/13/2011 1942			Injection Volume:	1 uL
Leach Date:	12/12/2011 1717			Column ID:	PRIMARY

MSD Lab Sample ID:	200-8445-1	Analysis Batch:	200-30815	Instrument ID:	5005.i
Client Matrix:	Solid	Prep Batch:	200-30607	Lab File ID:	14dec111359-r061.d
Dilution:	1.0	Leach Batch:	200-30524	Initial Weight/Volume:	1050 mL
Analysis Date:	12/15/2011 0155			Final Weight/Volume:	10000 uL
Prep Date:	12/13/2011 1942			Injection Volume:	1 uL
Leach Date:	12/12/2011 1717			Column ID:	PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Toxaphene	87	84	40 - 130	4	30	P	P
Chlordane (technical)	94	93	40 - 130	1	30	P	P

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 200-30607

Method: SOM01.2/Pest
Preparation: SOM01.2Pes_SFE
TCLP

MS Lab Sample ID:	200-8445-1	Analysis Batch:	200-30815	Instrument ID:	5005.i
Client Matrix:	Solid	Prep Batch:	200-30607	Lab File ID:	14dec111359-r071.d
Dilution:	1.0	Leach Batch:	200-30524	Initial Weight/Volume:	1055 mL
Analysis Date:	12/15/2011 0221			Final Weight/Volume:	10000 uL
Prep Date:	12/13/2011 1942			Injection Volume:	1 uL
Leach Date:	12/12/2011 1717			Column ID:	SECONDARY

MSD Lab Sample ID:	200-8445-1	Analysis Batch:	200-30815	Instrument ID:	5005.i
Client Matrix:	Solid	Prep Batch:	200-30607	Lab File ID:	14dec111359-r061.d
Dilution:	1.0	Leach Batch:	200-30524	Initial Weight/Volume:	1050 mL
Analysis Date:	12/15/2011 0155			Final Weight/Volume:	10000 uL
Prep Date:	12/13/2011 1942			Injection Volume:	1 uL
Leach Date:	12/12/2011 1717			Column ID:	SECONDARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Toxaphene	113	110	40 - 130	3	30	P	P
Chlordane (technical)	123	119	40 - 130	4	30	P	P

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Decachlorobiphenyl	104	104	30 - 150
Decachlorobiphenyl	104	108	30 - 150
Decachlorobiphenyl	106	104	30 - 150
Decachlorobiphenyl	106	108	30 - 150
Tetrachloro-m-xylene	101	101	30 - 150
Tetrachloro-m-xylene	101	103	30 - 150
Tetrachloro-m-xylene	99	101	30 - 150
Tetrachloro-m-xylene	99	103	30 - 150

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Method Blank - Batch: 200-30804

Method: ISM01.2/HG
Preparation: ISM01.2/HG

Lab Sample ID:	MB 200-30804/11-A	Analysis Batch:	200-30941	Instrument ID:	MEPCV3 II
Client Matrix:	Water	Prep Batch:	200-30804	Lab File ID:	121911BB.PRN
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	12/19/2011 1118	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	12/14/2011 1215				
Leach Date:	N/A				

Analyte	Result	Qual	MDLE	RL
Mercury	0.20	U	0.084	0.20

TCLP SPLPE Leachate Blank - Batch: 200-30804

Method: ISM01.2/HG
Preparation: ISM01.2/HG
TCLP

Lab Sample ID:	LB 200-30524/1-C	Analysis Batch:	200-30941	Instrument ID:	MEPCV3 II
Client Matrix:	Solid	Prep Batch:	200-30804	Lab File ID:	121911BB.PRN
Dilution:	1.0	Leach Batch:	200-30524	Initial Weight/Volume:	50 mL
Analysis Date:	12/19/2011 1120	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	12/14/2011 1215				
Leach Date:	12/12/2011 1717				

Analyte	Result	Qual	MDLE	RL
Mercury	0.20	U	0.084	0.20

Matrix Spike - Batch: 200-30804

Method: ISM01.2/HG
Preparation: ISM01.2/HG
TCLP

Lab Sample ID:	200-8445-1	Analysis Batch:	200-30941	Instrument ID:	MEPCV3 II
Client Matrix:	Solid	Prep Batch:	200-30804	Lab File ID:	121911BB.PRN
Dilution:	1.0	Leach Batch:	200-30524	Initial Weight/Volume:	50 mL
Analysis Date:	12/19/2011 1128	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	12/14/2011 1215				
Leach Date:	12/12/2011 1717				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.20	U	10.0	9.0	90	75 - 125	

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Duplicate - Batch: 200-30804

Method: ISM01.2/HG
Preparation: ISM01.2/HG
TCLP

Lab Sample ID:	200-8445-1	Analysis Batch:	200-30941	Instrument ID:	MEPCV3 II
Client Matrix:	Solid	Prep Batch:	200-30804	Lab File ID:	121911BB.PRN
Dilution:	1.0	Leach Batch:	200-30524	Initial Weight/Volume:	50 mL
Analysis Date:	12/19/2011 1126	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	12/14/2011 1215				
Leach Date:	12/12/2011 1717				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Mercury	0.20	U	0.20			U

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Method Blank - Batch: 200-30648

Method: ISM01.2/ICP
Preparation: ISM01.2/ICP

Lab Sample ID:	MB 200-30648/1-A	Analysis Batch:	200-30845	Instrument ID:	METICP7
Client Matrix:	Water	Prep Batch:	200-30648	Lab File ID:	121511-04.ttx
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	12/16/2011 0212	Units:	ug/L	Final Weight/Volume:	100 mL
Prep Date:	12/14/2011 1131				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Arsenic	10.0	U	3.2	10.0
Barium	200	U	3.5	200
Cadmium	5.0	U	0.37	5.0
Chromium	10.0	U	1.0	10.0
Lead	10.0	U	2.5	10.0
Selenium	35.0	U	3.9	35.0
Silver	10.0	U	0.81	10.0

TCLP SPLPE Leachate Blank - Batch: 200-30648

Method: ISM01.2/ICP
Preparation: ISM01.2/ICP
TCLP

Lab Sample ID:	LB 200-30524/1-B	Analysis Batch:	200-30845	Instrument ID:	METICP7
Client Matrix:	Solid	Prep Batch:	200-30648	Lab File ID:	121511-04.ttx
Dilution:	1.0	Leach Batch:	200-30524	Initial Weight/Volume:	100 mL
Analysis Date:	12/16/2011 0226	Units:	ug/L	Final Weight/Volume:	100 mL
Prep Date:	12/14/2011 1131				
Leach Date:	12/12/2011 1717				

Analyte	Result	Qual	MDL	RL
Arsenic	10.0	U	3.2	10.0
Barium	200	U	3.5	200
Cadmium	5.0	U	0.37	5.0
Chromium	10.0	U	1.0	10.0
Lead	10.0	U	2.5	10.0
Selenium	35.0	U	3.9	35.0
Silver	10.0	U	0.81	10.0

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Lab Control Sample - Batch: 200-30648

Method: ISM01.2/ICP
Preparation: ISM01.2/ICP

Lab Sample ID:	LCS 200-30648/2-A	Analysis Batch:	200-30845	Instrument ID:	METICP7
Client Matrix:	Water	Prep Batch:	200-30648	Lab File ID:	121511-04.ttx
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	12/16/2011 0219	Units:	ug/L	Final Weight/Volume:	100 mL
Prep Date:	12/14/2011 1131				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Arsenic	20.0	22.7	113	70 - 130	
Barium	400	414	104	70 - 130	
Cadmium	10.0	10.5	105	70 - 130	
Chromium	20.0	21.0	105	70 - 130	
Lead	20.0	18.1	90	70 - 130	
Selenium	70.0	74.6	107	70 - 130	
Silver	20.0	21.0	105	70 - 130	

Matrix Spike - Batch: 200-30648

Method: ISM01.2/ICP
Preparation: ISM01.2/ICP
TCLP

Lab Sample ID:	200-8445-1	Analysis Batch:	200-30845	Instrument ID:	METICP7
Client Matrix:	Solid	Prep Batch:	200-30648	Lab File ID:	121511-04.ttx
Dilution:	1.0	Leach Batch:	200-30524	Initial Weight/Volume:	100 mL
Analysis Date:	12/16/2011 0303	Units:	ug/L	Final Weight/Volume:	100 mL
Prep Date:	12/14/2011 1131				
Leach Date:	12/12/2011 1717				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Barium	369		2000	2180	90	75 - 125	
Cadmium	5.0	U	50.0	46.7	93	75 - 125	
Silver	10.0	U	500	151	30	75 - 125	N

Matrix Spike - Batch: 200-30648

Method: ISM01.2/ICP
Preparation: ISM01.2/ICP
TCLP

Lab Sample ID:	200-8445-1DL	Analysis Batch:	200-30845	Instrument ID:	METICP7
Client Matrix:	Solid	Prep Batch:	200-30648	Lab File ID:	121511-04.ttx
Dilution:	10	Leach Batch:	200-30524	Initial Weight/Volume:	100 mL
Analysis Date:	12/16/2011 0311	Units:	ug/L	Final Weight/Volume:	100 mL
Prep Date:	12/14/2011 1131	Run Type:	DL		
Leach Date:	12/12/2011 1717				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Arsenic	9.5	J	1000	999	99	75 - 125	
Chromium	269		200	453	92	75 - 125	
Lead	13.9		500	494	96	75 - 125	
Selenium	8.7	J	2000	1980	98	75 - 125	

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Duplicate - Batch: 200-30648

Method: ISM01.2/ICP
Preparation: ISM01.2/ICP
TCLP

Lab Sample ID:	200-8445-1	Analysis Batch:	200-30845	Instrument ID:	METICP7
Client Matrix:	Solid	Prep Batch:	200-30648	Lab File ID:	121511-04.ttx
Dilution:	1.0	Leach Batch:	200-30524	Initial Weight/Volume:	100 mL
Analysis Date:	12/16/2011 0256	Units:	ug/L	Final Weight/Volume:	100 mL
Prep Date:	12/14/2011 1131				
Leach Date:	12/12/2011 1717				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Arsenic	9.5	J	8.8	7	10.0	J
Barium	369		348	6	200	
Cadmium	5.0	U	5.0			U
Chromium	269		269	0		
Lead	13.9		13.4	3	10.0	
Selenium	8.7	J	7.7	12	35.0	J
Silver	10.0	U	10.0			U

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
Sdg Number: WC02

Method Blank - Batch: 200-30715

Method: ISM01.2/CN
Preparation: ISM01.2/CN

Lab Sample ID:	MB 200-30715/11-A	Analysis Batch:	200-30744	Instrument ID:	WCLachat
Client Matrix:	Solid	Prep Batch:	200-30715	Lab File ID:	OM_12-15-11_02-01-0
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.00 g
Analysis Date:	12/15/2011 1413	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	12/15/2011 0930				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Cyanide	0.50	U	0.087	0.50

Matrix Spike - Batch: 200-30715

Method: ISM01.2/CN
Preparation: ISM01.2/CN

Lab Sample ID:	200-8445-1	Analysis Batch:	200-30744	Instrument ID:	WCLachat
Client Matrix:	Solid	Prep Batch:	200-30715	Lab File ID:	OM_12-15-11_02-01-0
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.02 g
Analysis Date:	12/15/2011 1416	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	12/15/2011 0930				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Cyanide	0.31	J	8.24	8.6	101	75 - 125	

Duplicate - Batch: 200-30715

Method: ISM01.2/CN
Preparation: ISM01.2/CN

Lab Sample ID:	200-8445-1	Analysis Batch:	200-30744	Instrument ID:	WCLachat
Client Matrix:	Solid	Prep Batch:	200-30715	Lab File ID:	OM_12-15-11_02-01-0
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.03 g
Analysis Date:	12/15/2011 1415	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	12/15/2011 0930				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Cyanide	0.31	J	0.29	6	0.80	J

infrastructure, environment, buildings
ARCADIS
6723 Towpath Rd
Syracuse, NY 13214
Phone/Fax: (315) 671-9688

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Lab Work Order #

Pag

PROJ. NO.	PROJECT NAME	SDG NUMBER	COC Number
B0009966.0002.70004	Waste Characterization Quality Assurance Project Plan - Phase I Removal Action	WC02	

SAMPLERS:

SAMPLE ID	DATE	TIME	MATRIX	Composite/Grab	# Containers	Requested Analyses 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Remarks
PRR1WC-CS03	12/6/2011	13:30	Solid	Composite	19	X	X	X	X	X	X	X		X	X	X										MS/MSD (Note: No MS/MSD for Paint Filter Test)
PRR1WC-CS03	12/6/2011	13:30	Solid	Grab	6								X													

Requested Analyses	
1	Aroclor PCBs
2	Cyanide
3	Sulfide
4	Ignitability
5	Corrosivity
6	Paint Filter Test
7	TCLP SVOCs
8	TCLP VOCs
9	TCLP Pesticides
10	TCLP Chlorinated Herbicides
11	TCLP Metals
12	
13	
14	
15	
16	
17	
18	
19	
20	

Special Instructions/Comments:

☐ Special QA/QC Instructions

Laboratory Information and Receipt

Lab Name: TestAmerica - Burlington, VT

Shipping Tracking # 795476006919

Specify Turnaround Requirements: Standard

☑ Cooler packed with ice

☑ Cooler custody seal intact

Sample Receipt: OK

Condition/Cooler Temp: 0.4

Relinquished by:	DATE	TIME	Received by:	Relinquished by:	DATE	TIME	Received by:
Kavin Gandhi	12/6/2011	1800					
Relinquished by:	DATE	TIME	Received by:	Relinquished by:	DATE	TIME	Received by:
			12/7/11 1140				
Relinquished by:	DATE	TIME	Received by:	Relinquished by:	DATE	TIME	Received by:

12/22/2011

FedEx 1455525 Rev. 02/09 RRDO 11

From: (609) 860-0590
Cranbury Staff
ARCADIS U.S., Inc.
8 South River Road

Cranbury, NJ 08512

Origin ID: ZRPA

FedEx Express

J1120110805022S

Ship Date: 05DEC11
ActWgt: 30.0 LB
CAD: 4490047/INET3210

Delivery Address Bar Code

SHIP TO: (802) 655-1203 BILL SENDER

Kirk Young
Test America
30 COMMUNITY DR STE 11

SOUTH BURLINGTON, VT 05403

Ref # B0030009966.0001.70002
Invoice #
PO #
Dept #

1 of 2

TUE - 06 DEC A4
PRIORITY OVERNIGHT

TRK# 7954 7600 6919
0201

MASTER

ZF BTVA

05403
VT-US
BTV

50FG1/859F/F5F4

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
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Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 200-8445-1
SDG Number: WC02

Login Number: 8445
List Number: 2
Creator: Holt, Jamie

List Source: TestAmerica Burlington

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	No numbers
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.4 ºC, IR gun ID 96, CF= 0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Refer to Job Narrative for details.
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level if required.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

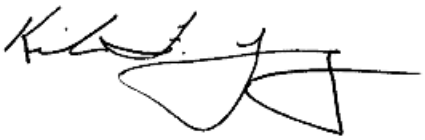
Job Number: 200-8445-2

SDG Number: WC02

Job Description: LPRSA - Phase I Removal Action

For:
ARCADIS U.S. Inc
2300 Eastlake Avenue, East
Suite 140
Seattle, WA 98102

Attention: Ms. Shannon Dunn



Approved for release.
Kirk F Young
Project Manager I
12/22/2011 4:27 PM

Kirk F Young
Project Manager I
kirk.young@testamericainc.com
12/22/2011

cc: Mr. Joe Houser
Mr. Don Reed
Mr. Ryan Shatt

The test results in this report relate only to sample(s) as received by the laboratory. These test results were derived under a quality system that adheres to the requirements of NELAC. Pursuant to NELAC, this report may not be produced in full without written approval from the laboratory

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CASE NARRATIVE

Client: ARCADIS U.S. Inc

Project: LPRSA - Phase I Removal Action

Report Number: WC02 (200-8445-2)

Enclosed is the data set for the referenced project work. With the exceptions noted as flags or footnotes, standard analytical protocols were followed in performing the analytical work and the applied control limits were met. Calibration and calibration verification were assessed on an analyte specific basis. Initial calibration and continuing calibration criteria may not have been met in all instances.

Calculations were performed before rounding to avoid round-off errors in calculated results.

Manual integration was employed in deriving certain of the analytical results.

For the Method 8151A analysis, positive instrument responses in the analysis of samples and quality controls were evaluated to the established method detection limit (MDL).

This is an abbreviated report. A more formal report will be issued in a CLP-like format, with supportive documentation and further narrative discussion.

METHOD SUMMARY

Client: ARCADIS U.S. Inc

Job Number: 200-8445-2
Sdg Number: WC02

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Herbicides (GC)	TAL BUR	SW846 8151A	
TCLP Extraction			SW846 1311
Extraction (Herbicides)			SW846 8151A
pH	TAL BUR	SW846 9045D	
Paint Filter	TAL BUR	SW846 9095B	
Ignitability, Solids	TAL EDI	SW846 1030	
Sulfide, Acid Soluble and Insoluble (Titrimetric)	TAL EDI	SW846 9034	
Sulfide, Distillation (Acid Soluble and Insoluble)			SW846 9030B

Lab References:

TAL BUR = TestAmerica Burlington

TAL EDI = TestAmerica Edison

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: ARCADIS U.S. Inc

Job Number: 200-8445-2
Sdg Number: WC02

Method	Analyst	Analyst ID
SW846 8151A	Hammond, Ryan J	RJH
SW846 1030	Cabanganan, Maria	MB
SW846 9034	Vu, Huan	HV
SW846 9045D	Nelson, Andrea J	AJN
SW846 9095B	Tam, Michelle N	MNT

SAMPLE SUMMARY

Client: ARCADIS U.S. Inc

Job Number: 200-8445-2
Sdg Number: WC02

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
200-8445-1	PRR1WC-CS03	Solid	12/06/2011 1330	12/07/2011 1140
200-8445-1MS	PRR1WC-CS03	Solid	12/06/2011 1330	12/07/2011 1140
200-8445-1MSD	PRR1WC-CS03	Solid	12/06/2011 1330	12/07/2011 1140
200-8445-1DU	PRR1WC-CS03	Solid	12/06/2011 1330	12/07/2011 1140

SAMPLE RESULTS

Client: ARCADIS U.S. Inc

Job Number: 200-8445-2
Sdg Number: WC02

Client Sample ID: **PRR1WC-CS03**

Lab Sample ID: 200-8445-1
Client Matrix: Solid

Date Sampled: 12/06/2011 1330
Date Received: 12/07/2011 1140

8151A Herbicides (GC)-TCLP

Analysis Method:	8151A	Analysis Batch:	200-31004	Instrument ID:	0911.i
Prep Method:	8151A	Prep Batch:	200-30670	Initial Weight/Volume:	950 mL
Dilution:	2.0	Leach Batch:	200-30524	Final Weight/Volume:	10000 uL
Analysis Date:	12/19/2011 1512			Injection Volume:	1 uL
Prep Date:	12/14/2011 1242			Result Type:	PRIMARY
Leach Date:	12/12/2011 1717				

Analyte	DryWt Corrected: N	Result (ug/L)	Qualifier	MDL	RL
2,4-D		150	E B	0.027	1.0
Silvex (2,4,5-TP)		0.079	J p	0.0012	0.40

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	122	p	60 - 130

Client: ARCADIS U.S. Inc

Job Number: 200-8445-2
Sdg Number: WC02

Client Sample ID: **PRR1WC-CS03**

Lab Sample ID: 200-8445-1
Client Matrix: Solid

Date Sampled: 12/06/2011 1330
Date Received: 12/07/2011 1140

8151A Herbicides (GC)-TCLP

Analysis Method:	8151A	Analysis Batch:	200-31004	Instrument ID:	0911.i
Prep Method:	8151A	Prep Batch:	200-30670	Initial Weight/Volume:	950 mL
Dilution:	2.0	Leach Batch:	200-30524	Final Weight/Volume:	10000 uL
Analysis Date:	12/19/2011 1512			Injection Volume:	1 uL
Prep Date:	12/14/2011 1242			Result Type:	SECONDARY
Leach Date:	12/12/2011 1717				

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	492	X	60 - 130

Client: ARCADIS U.S. Inc

Job Number: 200-8445-2
Sdg Number: WC02

Client Sample ID: **PRR1WC-CS03**

Lab Sample ID: 200-8445-1
Client Matrix: Solid

Date Sampled: 12/06/2011 1330
Date Received: 12/07/2011 1140

8151A Herbicides (GC)-TCLP

Analysis Method:	8151A	Analysis Batch:	200-31004	Instrument ID:	0911.i
Prep Method:	8151A	Prep Batch:	200-30670	Initial Weight/Volume:	950 mL
Dilution:	20	Leach Batch:	200-30524	Final Weight/Volume:	10000 uL
Analysis Date:	12/19/2011 1445	Run Type:	DL	Injection Volume:	1 uL
Prep Date:	12/14/2011 1242			Result Type:	SECONDARY
Leach Date:	12/12/2011 1717				

Analyte	DryWt Corrected: N	Result (ug/L)	Qualifier	MDL	RL
2,4-D		150	B D	0.27	10
Silvex (2,4,5-TP)		0.11	J p D	0.012	4.0

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	155	p D X	60 - 130
2,4-Dichlorophenylacetic acid	546	D X	60 - 130

General Chemistry

Client Sample ID: **PRR1WC-CS03**

Lab Sample ID: 200-8445-1
Client Matrix: Solid
% Moisture: 40.5
Date Sampled: 12/06/2011 1330
Date Received: 12/07/2011 1140

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Sulfide	14.6	U	mg/Kg	5.4	14.6	1.0	9034
Analysis Batch: 460-96374	Analysis Date: 12/13/2011 1700						DryWt Corrected: Y
Prep Batch: 460-96372	Prep Date: 12/13/2011 1037						

Analyte	Result	Qual	Units	Dil	Method
pH	12.0	HF	SU	1.0	9045D
Analysis Batch: 200-30350	Analysis Date: 12/08/2011 1635				DryWt Corrected: N
Free Liquid	Absent		mL/100g	1.0	9095B
Analysis Batch: 200-30372	Analysis Date: 12/08/2011 1930				DryWt Corrected: N

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Burn Rate	2.20	U	mm/sec	2.20	2.20	1.0	1030
Analysis Batch: 460-96407	Analysis Date: 12/19/2011 1130						DryWt Corrected: N

DATA REPORTING QUALIFIERS

Client: ARCADIS U.S. Inc

Job Number: 200-8445-2
Sdg Number: WC02

Lab Section	Qualifier	Description
GC Semi VOA		
	B	Compound was found in the blank and sample.
	U	Indicates the analyte was analyzed for but not detected.
	4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
	E	Result exceeded calibration range.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
	X	Surrogate is outside control limits
	p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
General Chemistry		
	HF	Field parameter with a holding time of 15 minutes
	U	Indicates the analyte was analyzed for but not detected.
	F	MS/MSD Recovery or RPD exceeds the control limits

QUALITY CONTROL RESULTS

Client: ARCADIS U.S. Inc

Job Number: 200-8445-2
Sdg Number: WC02

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 200-30524					
200-8445-1	PRR1WC-CS03	P	Solid	1311	
200-8445-1DL	PRR1WC-CS03	P	Solid	1311	
200-8445-1MS	Matrix Spike	P	Solid	1311	
200-8445-1MSD	Matrix Spike Duplicate	P	Solid	1311	
Prep Batch: 200-30670					
LCS 200-30670/5-A	Lab Control Sample	T	Water	8151A	
MB 200-30670/1-A	Method Blank	T	Water	8151A	
200-8445-1	PRR1WC-CS03	P	Solid	8151A	200-30524
200-8445-1DL	PRR1WC-CS03	P	Solid	8151A	200-30524
200-8445-1MS	Matrix Spike	P	Solid	8151A	200-30524
200-8445-1MSD	Matrix Spike Duplicate	P	Solid	8151A	200-30524
Analysis Batch:200-31004					
LCS 200-30670/5-A	Lab Control Sample	T	Water	8151A	200-30670
MB 200-30670/1-A	Method Blank	T	Water	8151A	200-30670
200-8445-1	PRR1WC-CS03	P	Solid	8151A	200-30670
200-8445-1DL	PRR1WC-CS03	P	Solid	8151A	200-30670
200-8445-1MS	Matrix Spike	P	Solid	8151A	200-30670
200-8445-1MSD	Matrix Spike Duplicate	P	Solid	8151A	200-30670

Report Basis
P = TCLP
T = Total

Client: ARCADIS U.S. Inc

Job Number: 200-8445-2
Sdg Number: WC02

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:200-30350					
200-8445-1	PRR1WC-CS03	T	Solid	9045D	
200-8445-1DU	Duplicate	T	Solid	9045D	
Analysis Batch:200-30372					
200-8445-1	PRR1WC-CS03	T	Solid	9095B	
200-8445-1DU	Duplicate	T	Solid	9095B	
Prep Batch: 460-96372					
LCS 460-96372/3-A	Lab Control Sample	T	Solid	9030B	
MB 460-96372/1-A	Method Blank	T	Solid	9030B	
200-8445-1	PRR1WC-CS03	T	Solid	9030B	
200-8445-1MS	Matrix Spike	T	Solid	9030B	
200-8445-1MSD	Matrix Spike Duplicate	T	Solid	9030B	
Analysis Batch:460-96374					
LCS 460-96372/3-A	Lab Control Sample	T	Solid	9034	460-96372
MB 460-96372/1-A	Method Blank	T	Solid	9034	460-96372
200-8445-1	PRR1WC-CS03	T	Solid	9034	460-96372
200-8445-1MS	Matrix Spike	T	Solid	9034	460-96372
200-8445-1MSD	Matrix Spike Duplicate	T	Solid	9034	460-96372
Analysis Batch:460-96407					
200-8445-1	PRR1WC-CS03	T	Solid	1030	
200-8445-1DU	Duplicate	T	Solid	1030	

Report Basis
T = Total

Client: ARCADIS U.S. Inc

Job Number: 200-8445-2
Sdg Number: WC02

Surrogate Recovery Report

8151A Herbicides (GC)

Client Matrix: Solid TCLP

Lab Sample ID	Client Sample ID	DCPA1 %Rec	DCPA2 %Rec
200-8445-1 DL	PRR1WC-CS03 DL	155p D X	546D X
200-8445-1	PRR1WC-CS03	122p	492X
MB 200-30670/1-A		94	91
LCS 200-30670/5-A		106	101
200-8445-1 MS	PRR1WC-CS03 MS	120p	401X
200-8445-1 MSD	PRR1WC-CS03 MSD	119p	449X

Surrogate	Acceptance Limits
DCPA = 2,4-Dichlorophenylacetic acid	60-130

Client: ARCADIS U.S. Inc

Job Number: 200-8445-2
Sdg Number: WC02

Method Blank - Batch: 200-30670

Method: 8151A
Preparation: 8151A

Lab Sample ID:	MB 200-30670/1-A	Analysis Batch:	200-31004	Instrument ID:	0911.i
Client Matrix:	Water	Prep Batch:	200-30670	Lab File ID:	19dec111133-r051.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1060 mL
Analysis Date:	12/19/2011 1350	Units:	ug/L	Final Weight/Volume:	10000 uL
Prep Date:	12/14/2011 1242			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
2,4-D	0.0220	J p	0.012	0.45
Silvex (2,4,5-TP)	0.18	U	0.00053	0.18

Surrogate	% Rec	Acceptance Limits
2,4-Dichlorophenylacetic acid	94	60 - 130

Surrogate	% Rec	Acceptance Limits
2,4-Dichlorophenylacetic acid	91	60 - 130

Lab Control Sample - Batch: 200-30670

Method: 8151A
Preparation: 8151A

Lab Sample ID:	LCS 200-30670/5-A	Analysis Batch:	200-31004	Instrument ID:	0911.i
Client Matrix:	Water	Prep Batch:	200-30670	Lab File ID:	19dec111133-r061.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	12/19/2011 1417	Units:	ug/L	Final Weight/Volume:	10000 uL
Prep Date:	12/14/2011 1242			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
2,4-D	8.00	8.29	104	70 - 135	
Silvex (2,4,5-TP)	0.800	0.794	99	65 - 145	

Surrogate	% Rec	Acceptance Limits
2,4-Dichlorophenylacetic acid	106	60 - 130

Surrogate	% Rec	Acceptance Limits
2,4-Dichlorophenylacetic acid	101	60 - 130

Client: ARCADIS U.S. Inc

Job Number: 200-8445-2
Sdg Number: WC02

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 200-30670

Method: 8151A
Preparation: 8151A
TCLP

MS Lab Sample ID:	200-8445-1	Analysis Batch:	200-31004	Instrument ID:	0911.i
Client Matrix:	Solid	Prep Batch:	200-30670	Lab File ID:	19dec111133-r091.d
Dilution:	2.0	Leach Batch:	200-30524	Initial Weight/Volume:	945 mL
Analysis Date:	12/19/2011 1540			Final Weight/Volume:	10000 uL
Prep Date:	12/14/2011 1242			Injection Volume:	1 uL
Leach Date:	12/12/2011 1717			Column ID:	PRIMARY

MSD Lab Sample ID:	200-8445-1	Analysis Batch:	200-31004	Instrument ID:	0911.i
Client Matrix:	Solid	Prep Batch:	200-30670	Lab File ID:	19dec111133-r101.d
Dilution:	2.0	Leach Batch:	200-30524	Initial Weight/Volume:	950 mL
Analysis Date:	12/19/2011 1608			Final Weight/Volume:	10000 uL
Prep Date:	12/14/2011 1242			Injection Volume:	1 uL
Leach Date:	12/12/2011 1717			Column ID:	PRIMARY

	% Rec.					
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
2,4-D	-3	-183	70 - 135	11	30	E 4	E 4
Silvex (2,4,5-TP)	110	102	65 - 145	7	30		

Surrogate	MS % Rec		MSD % Rec		Acceptance Limits
2,4-Dichlorophenylacetic acid	120	p	119	p	60 - 130

Surrogate	MS % Rec		MSD % Rec		Acceptance Limits
2,4-Dichlorophenylacetic acid	401	X	449	X	60 - 130

Client: ARCADIS U.S. Inc

Job Number: 200-8445-2
Sdg Number: WC02

Duplicate - Batch: 460-96407

Method: 1030
Preparation: N/A

Lab Sample ID:	200-8445-1	Analysis Batch:	460-96407	Instrument ID:	No Equipment
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	12/19/2011 1130	Units:	mm/sec	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Burn Rate	2.20	U	2.20	NC	10	U

Client: ARCADIS U.S. Inc

Job Number: 200-8445-2
Sdg Number: WC02

Method Blank - Batch: 460-96372

Method: 9034
Preparation: 9030B

Lab Sample ID:	MB 460-96372/1-A	Analysis Batch:	460-96374	Instrument ID:	No Equipment
Client Matrix:	Solid	Prep Batch:	460-96372	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	25 g
Analysis Date:	12/13/2011 1700	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	12/13/2011 1037				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Sulfide	8.7	U	3.2	8.7

Lab Control Sample - Batch: 460-96372

Method: 9034
Preparation: 9030B

Lab Sample ID:	LCS 460-96372/3-A	Analysis Batch:	460-96374	Instrument ID:	No Equipment
Client Matrix:	Solid	Prep Batch:	460-96372	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	25 g
Analysis Date:	12/13/2011 1700	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	12/13/2011 1037				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Sulfide	95.2	66.80	70	70 - 130	

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-96372

Method: 9034
Preparation: 9030B

MS Lab Sample ID:	200-8445-1	Analysis Batch:	460-96374	Instrument ID:	No Equipment
Client Matrix:	Solid	Prep Batch:	460-96372	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	25 g
Analysis Date:	12/13/2011 1700			Final Weight/Volume:	100 mL
Prep Date:	12/13/2011 1037				
Leach Date:	N/A				

MSD Lab Sample ID:	200-8445-1	Analysis Batch:	460-96374	Instrument ID:	No Equipment
Client Matrix:	Solid	Prep Batch:	460-96372	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	25 g
Analysis Date:	12/13/2011 1700			Final Weight/Volume:	100 mL
Prep Date:	12/13/2011 1037				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Sulfide	26	24	90 - 110	9	14	F	F

Client: ARCADIS U.S. Inc

Job Number: 200-8445-2
Sdg Number: WC02

Duplicate - Batch: 200-30350

Method: 9045D
Preparation: N/A

Lab Sample ID:	200-8445-1	Analysis Batch:	200-30350	Instrument ID:	WCpHmeter
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	40 mL
Analysis Date:	12/08/2011 1635	Units:	SU	Final Weight/Volume:	40 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
pH	12.0	11.97	0.08	5	HF

Client: ARCADIS U.S. Inc

Job Number: 200-8445-2
Sdg Number: WC02

Duplicate - Batch: 200-30372

Method: 9095B
Preparation: N/A

Lab Sample ID:	200-8445-1	Analysis Batch:	200-30372	Instrument ID:	No Equipment
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	12/08/2011 1930	Units:	mL/100g	Final Weight/Volume:	100.00 g
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Free Liquid	Absent	Absent	NC		

infrastructure, environment, buildings
ARCADIS
6723 Towpath Rd
Syracuse, NY 13214
Phone/Fax: (315) 671-9688

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Lab Work Order #

Pag

PROJ. NO.	PROJECT NAME	SDG NUMBER	COC Number
B0009966.0002.70004	Waste Characterization Quality Assurance Project Plan - Phase I Removal Action	WC02	

SAMPLERS:

SAMPLE ID	DATE	TIME	MATRIX	Composite/Grab	# Containers	Requested Analyses 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Remarks
PRR1WC-CS03	12/6/2011	13:30	Solid	Composite	19	X	X	X	X	X	X	X		X	X	X										MS/MSD (Note: No MS/MSD for Paint Filter Test)
PRR1WC-CS03	12/6/2011	13:30	Solid	Grab	6								X													

Requested Analyses	
1	Aroclor PCBs
2	Cyanide
3	Sulfide
4	Ignitability
5	Corrosivity
6	Paint Filter Test
7	TCLP SVOCs
8	TCLP VOCs
9	TCLP Pesticides
10	TCLP Chlorinated Herbicides
11	TCLP Metals
12	
13	
14	
15	
16	
17	
18	
19	
20	

Special Instructions/Comments:

☐ Special QA/QC Instructions

Laboratory Information and Receipt

Lab Name: TestAmerica - Burlington, VT

Shipping Tracking # 795476006919

Specify Turnaround Requirements: Standard

☑ Cooler packed with ice

☑ Cooler custody seal intact

Sample Receipt: OK

Condition/Cooler Temp: 0.4

Relinquished by:	DATE	TIME	Received by:	Relinquished by:	DATE	TIME	Received by:
Kavin Gandhi	12/6/2011	1800					
Relinquished by:	DATE	TIME	Received by:	Relinquished by:	DATE	TIME	Received by:
Relinquished by:	DATE	TIME	Received by:	Relinquished by:	DATE	TIME	Received by:

12/22/2011

FedEx 1455525 Rev. 02/09 RRDO 11

From: (609) 860-0590
Cranbury Staff
ARCADIS U.S., Inc.
8 South River Road

Cranbury, NJ 08512

Origin ID: ZRPA

FedEx Express

J11201108050225

Ship Date: 05DEC11
ActWgt: 30.0 LB
CAD: 4490047/INET3210

Delivery Address Bar Code

SHIP TO: (802) 655-1203 BILL SENDER

Kirk Young
Test America
30 COMMUNITY DR STE 11

SOUTH BURLINGTON, VT 05403

Ref # B0030009966.0001.70002
Invoice #
PO #
Dept #

1 of 2

TUE - 06 DEC A4
PRIORITY OVERNIGHT

TRK# 7954 7600 6919
0201

MASTER

ZF BTVA

05403
VT-US
BTV

50FG1/859F/F5F4

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Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 200-8445-2
SDG Number: WC02

Login Number: 8445
List Number: 2
Creator: Holt, Jamie

List Source: TestAmerica Burlington

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	No numbers
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.4 ºC, IR gun ID 96, CF= 0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Refer to Job Narrative for details.
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level if required.

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 200-8445-2
SDG Number: WC02

Login Number: 8445
List Number: 1
Creator: Meyers, Gary

List Source: TestAmerica Edison
List Creation: 12/08/11 12:26 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	419142
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.0 ° C IR #50
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 200-8445-2
SDG Number: WC02

Login Number: 8445
List Number: 2
Creator: Meyers, Gary

List Source: TestAmerica Edison
List Creation: 12/08/11 12:27 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 200-8445-2
SDG Number: WC02

Login Number: 8445
List Number: 3
Creator: Meyers, Gary

List Source: TestAmerica Edison
List Creation: 12/22/11 01:34 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	