

US EPA ARCHIVE DOCUMENT



**United States Environmental Protection Agency
Region 9 Laboratory**

1337 S. 46th Street Building 201
Richmond, CA 94804

Date: 3/17/2011

Subject: Analytical Testing Results - Project R11R03
SDG: 11042B

From: Brenda Bettencourt, Director
EPA Region 9 Laboratory
MTS-2

To: Cameron McDonald
RCRA Enforcement Office
WST-3

Attached are the results from the analysis of samples from the **Western Environmental, Inc. 2011 RCRA Inspection** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Eugenia McNaughton at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Analyses included in this report:

Mercury by CVAA

Mercury by CVAA

Metals by ICP

Metals by ICP

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United States Environmental Protection Agency

Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Cameron McDonald	RCRA Enforcement Office	SDG: 11042B
Project Number: R11R03	75 Hawthorne Street	Reported: 03/17/11 15:55
Project: Western Environmental, Inc. 2011 RCRA Inspection	San Francisco CA, 94105	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
WTA-1	1102012-01	Water	02/09/11 09:57	02/10/11 16:30
WTA-3	1102012-02	Water	02/09/11 10:51	02/10/11 16:30
WTA-4	1102012-03	Water	02/09/11 10:59	02/10/11 16:30
WTA-5	1102012-04	Water	02/09/11 10:09	02/10/11 16:30
UOTA-1	1102012-05	Oil	02/10/11 11:17	02/10/11 16:30
UOTA-2	1102012-06	Oil	02/10/11 11:15	02/10/11 16:30

SDG ID 11042B

No Chain of Custody form was received with the water or oil samples for this work order. Sample dates and times were taken from the bottle labels.

Work Order(s)

1102012



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Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method	
Lab ID: 1102012-01							Water - Sampled: 02/09/11 09:57			
Sample ID: WTA-1							Metals by EPA 200 Series Methods			
Mercury		0.70		0.30	ug/L	B1C0009	03/03/11	03/03/11	245.1/SOP515	
Arsenic		93		20	"	B1B0045	02/15/11	02/21/11	200.7/SOP505	
Barium		740		10	"	"	"	"	200.7/SOP505	
Cadmium		330		5	"	"	"	"	200.7/SOP505	
Chromium	RE1	770		200	"	"	"	03/03/11	200.7/SOP505	
Lead		630		20	"	"	"	02/21/11	200.7/SOP505	
Selenium		210		20	"	"	"	"	200.7/SOP505	
Silver		37		10	"	"	"	"	200.7/SOP505	
Lab ID: 1102012-02							Water - Sampled: 02/09/11 10:51			
Sample ID: WTA-3							Metals by EPA 200 Series Methods			
Mercury		ND	U	0.30	ug/L	B1C0009	03/03/11	03/03/11	245.1/SOP515	
Arsenic		24		20	"	B1B0045	02/15/11	02/21/11	200.7/SOP505	
Barium		26		10	"	"	"	"	200.7/SOP505	
Cadmium		5.2		5	"	"	"	"	200.7/SOP505	
Chromium	RE1	43		10	"	"	"	03/03/11	200.7/SOP505	
Lead		25		20	"	"	"	02/21/11	200.7/SOP505	
Selenium		49	J, Q4	20	"	"	"	"	200.7/SOP505	
Silver		ND	U	10	"	"	"	"	200.7/SOP505	
Lab ID: 1102012-03							Water - Sampled: 02/09/11 10:59			
Sample ID: WTA-4							Metals by EPA 200 Series Methods			
Mercury		ND	U	0.30	ug/L	B1C0009	03/03/11	03/03/11	245.1/SOP515	
Arsenic		20		20	"	B1B0045	02/15/11	02/21/11	200.7/SOP505	
Barium		24		10	"	"	"	"	200.7/SOP505	
Cadmium		4.6	C1, J	5	"	"	"	"	200.7/SOP505	
Chromium	RE1	39		10	"	"	"	03/03/11	200.7/SOP505	
Lead		18	C1, J	20	"	"	"	02/21/11	200.7/SOP505	
Selenium		45		20	"	"	"	"	200.7/SOP505	
Silver		ND	U	10	"	"	"	"	200.7/SOP505	
Lab ID: 1102012-04							Water - Sampled: 02/09/11 10:09			
Sample ID: WTA-5							Metals by EPA 200 Series Methods			
Mercury		1.3		0.30	ug/L	B1C0009	03/03/11	03/03/11	245.1/SOP515	
Arsenic		93		20	"	B1B0045	02/15/11	02/21/11	200.7/SOP505	
Barium		1,200		10	"	"	"	"	200.7/SOP505	
Cadmium		350		5	"	"	"	"	200.7/SOP505	
Chromium	RE1	600		10	"	"	"	03/03/11	200.7/SOP505	
Lead		600		20	"	"	"	02/21/11	200.7/SOP505	
Selenium		210		20	"	"	"	"	200.7/SOP505	
Silver		37		10	"	"	"	"	200.7/SOP505	
Lab ID: 1102012-05							Oil - Sampled: 02/10/11 11:17			



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Project Number: R11R03	75 Hawthorne Street	Reported: 03/17/11 15:55
Project: Western Environmental, Inc. 2011 RCRA Inspection	San Francisco CA, 94105	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID:	1102012-05								Oil - Sampled: 02/10/11 11:17
Sample ID:	UOTA-1								Metals by EPA 6000/7000 Series Methods
Mercury		ND	U	0.025	mg/kg	B1B0041	02/14/11	02/14/11	7473/SOP535
Arsenic		ND	J, Q4, Q6, U	4	"	B1B0111	02/28/11	03/06/11	6010C/SOP503
Cadmium	RE1	ND	J, Q4, Q6, U	1	"	"	"	03/07/11	6010C/SOP503
Chromium	RE1	1.2	C1, J, Q4, Q6	2	"	"	"	"	6010C/SOP503
Lead	RE1	7.0	J, Q4, Q6	6	"	"	"	"	6010C/SOP503
Lab ID:	1102012-06								Oil - Sampled: 02/10/11 11:15
Sample ID:	UOTA-2								Metals by EPA 6000/7000 Series Methods
Mercury		ND	U	0.025	mg/kg	B1B0041	02/14/11	02/14/11	7473/SOP535
Arsenic		ND	U	4	"	B1B0111	02/28/11	03/06/11	6010C/SOP503
Cadmium	RE1	ND	U	1	"	"	"	03/07/11	6010C/SOP503
Chromium	RE1	1.3	C1, J	2	"	"	"	"	6010C/SOP503
Lead	RE1	6.1		6	"	"	"	"	6010C/SOP503



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Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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Batch B1B0041 - 7473 Hg Prep - Mercury

Prepared & Analyzed: 02/14/11

Metals by EPA 6000/7000 Series Methods - Quality Control

Blank (B1B0041-BLK1)

Mercury	ND	U	0.025	mg/kg						
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Matrix Spike (B1B0041-MS1) Source: 1102012-05

Mercury	0.476		0.025	mg/kg	0.455	ND	105	80-120		20
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Matrix Spike Dup (B1B0041-MSD1) Source: 1102012-05

Mercury	0.523		0.025	mg/kg	0.510	ND	103	80-120	2	20
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Reference (B1B0041-SRM1)

Mercury	1.21		0.025	mg/kg	1.10		110	80-120		
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Batch B1B0045 - 200 Series Digest - Metals by 200.7

Prepared: 02/15/11 Analyzed: 02/21/11

Metals by EPA 200 Series Methods - Quality Control

Blank (B1B0045-BLK1)

Arsenic	ND	U	20	ug/L						
Barium	ND	U	10	"						
Cadmium	ND	U	5	"						
Lead	ND	U	20	"						
Selenium	ND	U	20	"						
Silver	ND	U	10	"						

Blank (B1B0045-BLK2)

Chromium	ND	U	10	ug/L						
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LCS (B1B0045-BS1)

Arsenic	834		20	ug/L	800		104	85-115		
Barium	209		10	"	200		104	85-115		
Cadmium	204		5	"	200		102	85-115		
Lead	1,020		20	"	1000		102	85-115		
Selenium	2,140		20	"	2000		107	85-115		
Silver	74.4		10	"	75.0		99	85-115		

LCS (B1B0045-BS2)

Chromium	410		10	ug/L	400		103	85-115		
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Matrix Spike (B1B0045-MS1) Source: 1102012-02

Arsenic	778		20	ug/L	800	23.5	94	70-130		20
Barium	201		10	"	200	25.6	88	70-130		20
Cadmium	165		5	"	200	5.22	80	70-130		20
Lead	798		20	"	1000	25.1	77	70-130		20
Selenium	1,230		20	"	2000	49.2	59	70-130		20
Silver	63.9		10	"	75.0	ND	85	70-130		20

Matrix Spike (B1B0045-MS2) Source: 1102012-02RE1

Chromium	363		10	ug/L	400	42.9	80	70-130		20
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Matrix Spike Dup (B1B0045-MSD1) Source: 1102012-02

Arsenic	767		20	ug/L	800	23.5	93	70-130	1	20
Barium	198		10	"	200	25.6	86	70-130	2	20
Cadmium	163		5	"	200	5.22	79	70-130	1	20



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Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B1B0045 - 200 Series Digest - Metals by 200.7 Prepared: 02/15/11 Analyzed: 02/21/11										
Metals by EPA 200 Series Methods - Quality Control										
Matrix Spike Dup (B1B0045-MSD1) Source: 1102012-02										
Lead	785			20 "	1000	25.1	76	70-130	2	20
Selenium	1,240			20 "	2000	49.2	60	70-130	1	20
Silver	63.1			10 "	75.0	ND	84	70-130	1	20
Matrix Spike Dup (B1B0045-MSD2) Source: 1102012-02RE1										
Chromium	354			10 ug/L	400	42.9	78	70-130	3	20
Batch B1B0111 - 3051 Microwave Dig - Metals by 6010 Prepared: 02/28/11 Analyzed: 03/06/11										
Metals by EPA 6000/7000 Series Methods - Quality Control										
Blank (B1B0111-BLK1)										
Arsenic	ND	U		4 mg/kg						
Blank (B1B0111-BLK2)										
Cadmium	ND	U		1 mg/kg						
Chromium	ND	U		2 "						
Lead	ND	U		6 "						
Matrix Spike (B1B0111-MS1) Source: 1102012-05										
Arsenic	146			4 mg/kg	120	ND	122	75-125		20
Matrix Spike (B1B0111-MS2) Source: 1102012-05RE1										
Cadmium	158			1 mg/kg	120	ND	132	75-125		20
Chromium	171			2 "	120	1.17	141	75-125		20
Lead	169			6 "	120	6.95	135	75-125		20
Matrix Spike Dup (B1B0111-MSD1) Source: 1102012-05										
Arsenic	203			4 mg/kg	120	ND	169	75-125	33	20
Matrix Spike Dup (B1B0111-MSD2) Source: 1102012-05RE1										
Cadmium	221			1 mg/kg	120	ND	185	75-125	33	20
Chromium	237			2 "	120	1.17	197	75-125	33	20
Lead	237			6 "	120	6.95	192	75-125	34	20
Reference (B1B0111-SRM1)										
Arsenic	69.2			4 mg/kg	80.0		87	80-120		
Reference (B1B0111-SRM2)										
Cadmium	18.8			1 mg/kg	20.0		94	80-120		
Chromium	40.9			2 "	40.0		102	80-120		
Lead	197			6 "	200		99	80-120		
Batch B1C0009 - 245.1 Hg Prep. - Mercury Prepared & Analyzed: 03/03/11										
Metals by EPA 200 Series Methods - Quality Control										
Blank (B1C0009-BLK1)										
Mercury	ND	U		0.03 ug/L						
LCS (B1C0009-BS1)										
Mercury	0.199			0.03 ug/L	0.200		99	85-115		
Matrix Spike (B1C0009-MS1) Source: 1102012-01										
Mercury	2.52			0.3 ug/L	2.00	0.698	91	70-130		20
Matrix Spike Dup (B1C0009-MSD1) Source: 1102012-01										



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Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B1C0009 - 245.1 Hg Prep. - Mercury						Prepared & Analyzed: 03/03/11				
Matrix Spike Dup (B1C0009-MSD1)						Metals by EPA 200 Series Methods - Quality Control				
			Source: 1102012-01							
Mercury	2.54			0.3 ug/L	2.00	0.698	92	70-130	0.5	20



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Inspection

RCRA Enforcement Office

75 Hawthorne Street
San Francisco CA, 94105

SDG: 11042B

Reported: 03/17/11 15:55

Qualifiers and Comments

Q6 Matrix spike/matrix spike duplicate precision criteria were not met for this analyte (see MS/MSD results for this batch in QC summary).

Q4 The matrix spike and/or matrix spike duplicate associated with this sample did not meet recovery criteria for this analyte (see MS/MSD results for this batch in QC summary)

J The reported result for this analyte should be considered an estimated value.

C1 The reported concentration for this analyte is below the quantitation limit.

U Not Detected

NR Not Reported

RE1, RE2, etc: Result is from a sample re-analysis.