



14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

August 14, 2009

Ron Hicks
Riverside Associates
1123 Pomona Road
Yakima, WA 98901

Re: Analytical Data for Project 809
Laboratory Reference No. 0908-070

Dear Ron:

Enclosed are the analytical results and associated quality control data for samples submitted on August 11, 2009.

The standard policy of OnSite Environmental Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read 'DB', followed by a horizontal line.

David Baumeister
Project Manager

Enclosures

Date of Report: August 14, 2009
Samples Submitted: August 11, 2009
Laboratory Reference: 0908-070
Project: 809

Case Narrative

Samples were collected on August 6, 2009, and received by the laboratory on August 11, 2009. They were maintained at the laboratory at a temperature of 2°C to 6°C except as noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Date of Report: August 14, 2009
 Samples Submitted: August 11, 2009
 Laboratory Reference: 0908-070
 Project: 809

NWTPH-Dx

Date Extracted: 8-12-09
 Date Analyzed: 8-12-09

Matrix: Water
 Units: mg/L (ppm)

Client ID:	809B155	809B156	809B171
Lab ID:	08-070-01	08-070-02	08-070-03
Diesel Range:	ND	ND	ND
PQL:	0.26	0.26	0.26
Identification:	---	---	---
Lube Oil Range:	1.5	0.55	ND
PQL:	0.42	0.41	0.42
Identification:	Lube Oil	Lube Oil	---
Surrogate Recovery			
o-Terphenyl:	91%	121%	107%
Flags:	Y	Y	Y

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NWTPH-Dx

Date Extracted: 8-12-09
Date Analyzed: 8-12-09

Matrix: Water
Units: mg/L (ppm)

Client ID:	809B172	809B173
Lab ID:	08-070-04	08-070-05

Diesel Range:	ND	ND
PQL:	0.25	0.26
Identification:	---	---

Lube Oil Range:	ND	ND
PQL:	0.40	0.41
Identification:	---	---

Surrogate Recovery		
o-Terphenyl:	104%	104%

Flags:	Y	Y
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NWTPH-Dx
METHOD BLANK QUALITY CONTROL

Date Extracted: 8-12-09
Date Analyzed: 8-12-09

Matrix: Water
Units: mg/L (ppm)

Lab ID: MB0812W1

Diesel Range: **ND**
PQL: 0.25
Identification: ---

Lube Oil Range: **ND**
PQL: 0.40
Identification: ---

Surrogate Recovery
o-Terphenyl: 104%

Flags: Y

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NWTPH-Dx
DUPLICATE QUALITY CONTROL

Date Extracted: 8-12-09
Date Analyzed: 8-12-09

Matrix: Water
Units: mg/L (ppm)

Lab ID: 08-059-02 08-059-02 DUP

Diesel Range: **ND** **ND**
PQL: 0.26 0.26

RPD: N/A

Surrogate Recovery
o-Terphenyl: 84% 83%

Flags: Y Y

Date of Report: August 14, 2009
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**TOTAL METALS
EPA 200.8/7470A**

Date Extracted: 8-13&14-09
Date Analyzed: 8-13&14-09

Matrix: Water
Units: ug/L (ppb)

Lab ID: 08-070-01
Client ID: 809B155

Analyte	Method	Result	PQL
Arsenic	200.8	100	3.3
Barium	200.8	1900	28
Cadmium	200.8	6.3	4.4
Chromium	200.8	150	11
Lead	200.8	250	1.1
Mercury	7470A	0.51	0.50
Selenium	200.8	13	5.6
Silver	200.8	ND	11

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**TOTAL METALS
EPA 200.8/7470A**

Date Extracted: 8-13&14-09
Date Analyzed: 8-13&14-09

Matrix: Water
Units: ug/L (ppb)

Lab ID: 08-070-02
Client ID: 809B156

Analyte	Method	Result	PQL
Arsenic	200.8	52	3.3
Barium	200.8	220	28
Cadmium	200.8	ND	4.4
Chromium	200.8	13	11
Lead	200.8	6.9	1.1
Mercury	7470A	ND	0.50
Selenium	200.8	9.7	5.6
Silver	200.8	ND	11

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**TOTAL METALS
 EPA 200.8/7470A**

Date Extracted: 8-13&14-09
 Date Analyzed: 8-13&14-09

Matrix: Water
 Units: ug/L (ppb)

Lab ID: 08-070-03
 Client ID: 809B171

Analyte	Method	Result	PQL
Arsenic	200.8	210	3.3
Barium	200.8	4200	28
Cadmium	200.8	ND	4.4
Chromium	200.8	230	11
Lead	200.8	190	1.1
Mercury	7470A	ND	0.50
Selenium	200.8	29	5.6
Silver	200.8	ND	11

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**TOTAL METALS
 EPA 200.8/7470A**

Date Extracted: 8-13&14-09
 Date Analyzed: 8-13&14-09

Matrix: Water
 Units: ug/L (ppb)

Lab ID: 08-070-04
 Client ID: 809B172

Analyte	Method	Result	PQL
Arsenic	200.8	74	3.3
Barium	200.8	340	28
Cadmium	200.8	ND	4.4
Chromium	200.8	19	11
Lead	200.8	14	1.1
Mercury	7470A	ND	0.50
Selenium	200.8	12	5.6
Silver	200.8	ND	11

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**TOTAL METALS
 EPA 200.8/7470A**

Date Extracted: 8-13&14-09
 Date Analyzed: 8-13&14-09

Matrix: Water
 Units: ug/L (ppb)

Lab ID: 08-070-05
 Client ID: 809B173

Analyte	Method	Result	PQL
Arsenic	200.8	76	3.3
Barium	200.8	450	28
Cadmium	200.8	ND	4.4
Chromium	200.8	31	11
Lead	200.8	17	1.1
Mercury	7470A	ND	0.50
Selenium	200.8	11	5.6
Silver	200.8	ND	11

Date of Report: August 14, 2009
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Project: 809

**TOTAL METALS
EPA 200.8
METHOD BLANK QUALITY CONTROL**

Date Extracted: 8-13&14-09
Date Analyzed: 8-13&14-09

Matrix: Water
Units: ug/L (ppb)

Lab ID: MB0813W1&MB0814W1

Analyte	Method	Result	PQL
Arsenic	200.8	ND	3.3
Barium	200.8	ND	28
Cadmium	200.8	ND	4.4
Chromium	200.8	ND	11
Lead	200.8	ND	1.1
Selenium	200.8	ND	5.6
Silver	200.8	ND	11

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**TOTAL METALS
EPA 7470A
METHOD BLANK QUALITY CONTROL**

Date Extracted: 8-14-09
Date Analyzed: 8-14-09

Matrix: Water
Units: ug/L (ppb)

Lab ID: MB0814W1

Analyte	Method	Result	PQL
Mercury	7470A	ND	0.50

Date of Report: August 14, 2009
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**TOTAL METALS
 EPA 200.8
 DUPLICATE QUALITY CONTROL**

Date Extracted: 8-13&14-09
 Date Analyzed: 8-13&14-09

Matrix: Water
 Units: ug/L (ppb)

Lab ID: 08-035-09

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Arsenic	ND	ND	NA	3.3	
Barium	ND	ND	NA	28	
Cadmium	ND	ND	NA	4.4	
Chromium	ND	ND	NA	11	
Lead	ND	ND	NA	1.1	
Selenium	ND	ND	NA	5.6	
Silver	ND	ND	NA	11	

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**TOTAL METALS
EPA 7470A
DUPLICATE QUALITY CONTROL**

Date Extracted: 8-14-09

Date Analyzed: 8-14-09

Matrix: Water

Units: ug/L (ppb)

Lab ID: 08-095-17

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Mercury	ND	ND	NA	0.50	

Date of Report: August 14, 2009
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**TOTAL METALS
 EPA 200.8
 MS/MSD QUALITY CONTROL**

Date Extracted: 8-13&14-09
 Date Analyzed: 8-13&14-09

Matrix: Water
 Units: ug/L (ppb)

Lab ID: 08-035-09

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Arsenic	110	111	101	114	104	3	
Barium	110	116	105	121	110	5	
Cadmium	110	113	103	116	105	2	
Chromium	110	107	97	109	99	2	
Lead	110	109	99	116	105	6	
Selenium	110	112	102	116	105	3	
Silver	110	107	97	116	106	8	

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**TOTAL METALS
EPA 7470A
MS/MSD QUALITY CONTROL**

Date Extracted: 8-14-09

Date Analyzed: 8-14-09

Matrix: Water

Units: ug/L (ppb)

Lab ID: 08-095-17

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Mercury	12.5	12.5	100	12.1	96	4	



Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
- B - The analyte indicated was also found in the blank sample.
- C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
- E - The value reported exceeds the quantitation range and is an estimate.
- F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
- H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
- I - Compound recovery is outside of the control limits.
- J - The value reported was below the practical quantitation limit. The value is an estimate.
- K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
- L - The RPD is outside of the control limits.
- M - Hydrocarbons in the gasoline range are impacting the diesel range result.
- M1 - Hydrocarbons in the gasoline range (toluene-napthalene) are present in the sample.
- N - Hydrocarbons in the lube oil range are impacting the diesel range result.
- N1 - Hydrocarbons in the diesel range are impacting the lube oil range result.
- O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
- P - The RPD of the detected concentrations between the two columns is greater than 40.
- Q - Surrogate recovery is outside of the control limits.
- S - Surrogate recovery data is not available due to the necessary dilution of the sample.
- T - The sample chromatogram is not similar to a typical _____.
- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- U1 - The practical quantitation limit is elevated due to interferences present in the sample.
- V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
- W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
- X - Sample extract treated with a mercury cleanup procedure.
- Y - Sample extract treated with an acid/silica gel cleanup procedure.
- Z -
- ND - Not Detected at PQL
- PQL - Practical Quantitation Limit
- RPD - Relative Percent Difference



OnSite
Environmental Inc.

Phone: (425) 883-9881 • Fax: (425) 885-4603

Chain of Custody

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08-070

Turnaround Request
(in working days)

Laboratory Number:

(Check One)

☐ Same Day ☐ 1 Day

☐ 2 Day ☒ 3 Day

☐ Standard (7 working days)
(TPH analysis 5 working days)

Requested Analysis

(other)

NWTPH-HCID

NWTPH-Gx/BTEX

NWTPH-Dx

Volatiles by 8260B

Halogenated Volatiles by 8260B

Semivolatiles by 8270D

PAHs by 8270D / SIM

PCBs by 8082

Pesticides by 8081A

Herbicides by 8151A

Total RCRA Metals (8)

TCLP Metals

HEM by 1664

% Moisture

Company:

Project Number:

Project Name:

Project Manager:

Sampled by:

CESI

Lab ID Sample Identification

Date Sampled

Time Sampled

Matrix

of Cont.

Analysis

Analysis

Analysis

Analysis

Analysis

Analysis

Analysis

Analysis

Analysis

Analysis

1 809B155

2 809B156

3 809B171

4 809B172

5 809B173

8/6/09 0724

8/6/09 0730

8/6/09 0802

8/6/09 0815

8/6/09 0820

W

W

W

W

W

2

2

2

2

2

X

X

X

X

X

X

X

X

X

X

Signature

Company

Date

Time

Comments/Special Instructions

Relinquished by

Received by

Relinquished by

Received by

Relinquished by

Received by

Reviewed by/Date

Reviewed by/Date

Chromatograms with final report ☐

Please send copy of lab results to:
cesias@pocketinet.com