



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

November 3, 2009

Ron Hicks
Riverside Associates
1123 Pomona Road
Yakima, WA 98901

Re: Analytical Data for Project 809
Laboratory Reference No. 0910-177

Dear Ron:

Enclosed are the analytical results and associated quality control data for samples submitted on October 22, 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: November 3, 2009
Samples Submitted: October 22, 2009
Laboratory Reference: 0910-177
Project: 809

Case Narrative

Samples were collected on October 20, 2009, and received by the laboratory on October 22, 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: November 3, 2009
 Samples Submitted: October 22, 2009
 Laboratory Reference: 0910-177
 Project: 809

NWTPH-Dx

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Date	Date	Flags
			Prepared	Analyzed	
Lab ID:	10-177-02				
Client ID:	809A305				
Diesel Range	ND	0.26	10-23-09	10-23-09	Y
Lube Oil Range	ND	0.41	10-23-09	10-23-09	Y
Surrogate: o-terphenyl	87%	50-150			
Lab ID:	10-177-03				
Client ID:	809A306				
Diesel Range	ND	0.26	10-23-09	10-23-09	Y
Lube Oil Range	ND	0.41	10-23-09	10-23-09	Y
Surrogate: o-terphenyl	90%	50-150			
Lab ID:	10-177-04				
Client ID:	809A307				
Diesel Range	ND	0.27	10-23-09	10-23-09	Y
Lube Oil Range	ND	0.42	10-23-09	10-23-09	Y
Surrogate: o-terphenyl	94%	50-150			
Lab ID:	10-177-05				
Client ID:	809A308				
Diesel Range	ND	0.27	10-23-09	10-23-09	Y
Lube Oil Range	ND	0.43	10-23-09	10-23-09	Y
Surrogate: o-terphenyl	95%	50-150			

Date of Report: November 3, 2009
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NWTPH-Dx
METHOD BLANK QUALITY CONTROL

Date Extracted: 10-23-09
Date Analyzed: 10-23-09

Matrix: Water
Units: mg/L (ppm)

Lab ID: MB1023W1

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

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

Surrogate Recovery
o-Terphenyl: 90%

Flags: Y

Date of Report: November 3, 2009
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NWTPH-Dx
DUPLICATE QUALITY CONTROL

Date Extracted: 10-23-09
Date Analyzed: 10-23-09

Matrix: Water
Units: mg/L (ppm)

Lab ID: 10-177-02 10-177-02 DUP

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

RPD: N/A

Surrogate Recovery
o-Terphenyl: 87% 91%

Flags: Y Y

Date of Report: November 3, 2009
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 Lab Traveler: 0910-177
 Project: 809

PCBs by EPA 8082

Matrix: Oil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	809A302b					
Laboratory ID:	10-177-01					
Aroclor 1016	ND	0.99	EPA 8082	10-27-09	10-28-09	
Aroclor 1221	ND	0.99	EPA 8082	10-27-09	10-28-09	
Aroclor 1232	ND	0.99	EPA 8082	10-27-09	10-28-09	
Aroclor 1242	ND	0.99	EPA 8082	10-27-09	10-28-09	
Aroclor 1248	ND	0.99	EPA 8082	10-27-09	10-28-09	
Aroclor 1254	ND	0.99	EPA 8082	10-27-09	10-28-09	
Aroclor 1260	ND	0.99	EPA 8082	10-27-09	10-28-09	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>DCB</i>	<i>61</i>	<i>33-113</i>				

Date of Report: November 3, 2009
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**PCBs by EPA 8082
 QUALITY CONTROL**

Matrix: Oil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1027O2					
Aroclor 1016	ND	1.0	EPA 8082	10-27-09	10-28-09	
Aroclor 1221	ND	1.0	EPA 8082	10-27-09	10-28-09	
Aroclor 1232	ND	1.0	EPA 8082	10-27-09	10-28-09	
Aroclor 1242	ND	1.0	EPA 8082	10-27-09	10-28-09	
Aroclor 1248	ND	1.0	EPA 8082	10-27-09	10-28-09	
Aroclor 1254	ND	1.0	EPA 8082	10-27-09	10-28-09	
Aroclor 1260	ND	1.0	EPA 8082	10-27-09	10-28-09	
Surrogate:	Percent Recovery Control Limits					

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	10-167-29										
	MS	MSD	MS	MSD		MS	MSD				
Aroclor 1260	1.85	1.88	5.00	4.98	ND	37	38	25-89	2	8	
Surrogate:											
DCB						59	61	33-113			

Date of Report: November 3, 2009
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TOTAL METALS
EPA 6010B/7471A

Matrix: Product
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Lab ID:	10-177-01					
Client ID:	809A3026					
<hr/>						
Arsenic	ND	10	6010B	10-30-09	10-30-09	
Barium	ND	2.5	6010B	10-30-09	10-30-09	
Cadmium	ND	0.50	6010B	10-30-09	10-30-09	
Chromium	ND	0.50	6010B	10-30-09	10-30-09	
Lead	ND	5.0	6010B	10-30-09	10-30-09	
Mercury	ND	0.25	7471A	11-3-09	11-3-09	
Selenium	ND	10	6010B	10-30-09	10-30-09	
Silver	ND	0.50	6010B	10-30-09	10-30-09	
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Date of Report: November 3, 2009
Samples Submitted: October 22, 2009
Laboratory Reference: 0910-177
Project: 809

**TOTAL METALS
EPA 6010B/7471A
METHOD BLANK QUALITY CONTROL**

Date Extracted: 10-30&11-3-09
Date Analyzed: 10-30&11-3-09

Matrix: Product
Units: mg/kg (ppm)

Lab ID: MB1030P1&MB1103P1

Analyte	Method	Result	PQL
Arsenic	6010B	ND	10
Barium	6010B	ND	2.5
Cadmium	6010B	ND	0.50
Chromium	6010B	ND	0.50
Lead	6010B	ND	5.0
Mercury	7471A	ND	0.25
Selenium	6010B	ND	10
Silver	6010B	ND	0.50

Date of Report: November 3, 2009
Samples Submitted: October 22, 2009
Laboratory Reference: 0910-177
Project: 809

**TOTAL METALS
EPA 6010B/7471A
DUPLICATE QUALITY CONTROL**

Date Extracted: 10-30&11-3-09
Date Analyzed: 10-30&11-3-09

Matrix: Product
Units: mg/kg (ppm)

Lab ID: 10-177-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Arsenic	ND	ND	NA	10	
Barium	ND	ND	NA	2.5	
Cadmium	ND	ND	NA	0.50	
Chromium	ND	ND	NA	0.50	
Lead	ND	ND	NA	5.0	
Mercury	ND	ND	NA	0.25	
Selenium	ND	ND	NA	10	
Silver	ND	ND	NA	0.50	

Date of Report: November 3, 2009
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**TOTAL METALS
 EPA 6010B/7471A
 MS/MSD QUALITY CONTROL**

Date Extracted: 10-30&11-3-09
 Date Analyzed: 10-30&11-3-09

Matrix: Product
 Units: mg/kg (ppm)

Lab ID: 10-177-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Arsenic	100	96.0	96	97.1	97	1	
Barium	100	97.6	98	97.1	97	1	
Cadmium	50	51.4	103	50.7	101	1	
Chromium	100	98.3	98	96.3	96	2	
Lead	250	249	99	248	99	0	
Mercury	0.50	0.493	99	0.490	98	1	
Selenium	100	103	103	103	103	0	
Silver	25	26.3	105	26.4	105	0	

Date of Report: November 3, 2009
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BTEX by EPA 8021B

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Date Prepared	Date Analyzed	Flags
<hr/>					
Lab ID:	10-177-02				
Client ID:	809A305				
<hr/>					
Benzene	ND	1.0	10-23-09	10-23-09	
Toluene	ND	1.0	10-23-09	10-23-09	
Ethyl Benzene	ND	1.0	10-23-09	10-23-09	
m,p-Xylene	ND	1.0	10-23-09	10-23-09	
o-Xylene	ND	1.0	10-23-09	10-23-09	
Surrogate: Fluorobenzene	104%	74-121			

Lab ID:	10-177-03				
Client ID:	809A306				
<hr/>					
Benzene	ND	1.0	10-23-09	10-23-09	
Toluene	ND	1.0	10-23-09	10-23-09	
Ethyl Benzene	ND	1.0	10-23-09	10-23-09	
m,p-Xylene	ND	1.0	10-23-09	10-23-09	
o-Xylene	ND	1.0	10-23-09	10-23-09	
Surrogate: Fluorobenzene	105%	74-121			

Lab ID:	10-177-04				
Client ID:	809A307				
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Benzene	ND	1.0	10-23-09	10-23-09	
Toluene	ND	1.0	10-23-09	10-23-09	
Ethyl Benzene	ND	1.0	10-23-09	10-23-09	
m,p-Xylene	ND	1.0	10-23-09	10-23-09	
o-Xylene	ND	1.0	10-23-09	10-23-09	
Surrogate: Fluorobenzene	104%	74-121			

Date of Report: November 3, 2009
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BTEX by EPA 8021B

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Date Prepared	Date Analyzed	Flags
Lab ID:	10-177-05				
Client ID:	809A308				
Benzene	ND	1.0	10-23-09	10-23-09	
Toluene	ND	1.0	10-23-09	10-23-09	
Ethyl Benzene	ND	1.0	10-23-09	10-23-09	
m,p-Xylene	ND	1.0	10-23-09	10-23-09	
o-Xylene	ND	1.0	10-23-09	10-23-09	
Surrogate: Fluorobenzene	103%	74-121			

Date of Report: November 3, 2009
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Project: 809

BTEX by EPA 8021B
METHOD BLANK QUALITY CONTROL

Date Extracted: 10-23-09
Date Analyzed: 10-23-09

Matrix: Water
Units: ug/L (ppb)

Lab ID: MB1023W3

	Result	Flags	PQL
Benzene	ND		1.0
Toluene	ND		1.0
Ethyl Benzene	ND		1.0
m,p-Xylene	ND		1.0
o-Xylene	ND		1.0

Surrogate Recovery:
Fluorobenzene 102%

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BTEX by EPA 8021B
DUPLICATE QUALITY CONTROL

Date Extracted: 10-23-09
Date Analyzed: 10-23-09

Matrix: Water
Units: ug/L (ppb)

Lab ID:	10-176-02 Original	10-176-02 Duplicate	RPD	Flags
Benzene	ND	ND	NA	
Toluene	ND	ND	NA	
Ethyl Benzene	ND	ND	NA	
m,p-Xylene	ND	ND	NA	
o-Xylene	ND	ND	NA	
Surrogate Recovery:				
Fluorobenzene	103%	102%		

Date of Report: November 3, 2009
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**BTEX by EPA 8021B
 MS/MSD QUALITY CONTROL**

Date Extracted: 10-23-09
 Date Analyzed: 10-23-09

Matrix: Water
 Units: ug/L (ppb)

Spike Level: 50.0 ppb

Lab ID:	10-176-01 MS	Percent Recovery	10-176-01 MSD	Percent Recovery	RPD	Flags
Benzene	51.6	103	52.6	105	2	
Toluene	52.7	105	53.7	107	2	
Ethyl Benzene	52.4	105	53.4	107	2	
m,p-Xylene	53.1	106	53.9	108	2	
o-Xylene	52.6	105	53.2	106	1	

Surrogate Recovery:		
Fluorobenzene	103%	101%

Date of Report: November 3, 2009
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TOTAL ARSENIC
EPA 200.8

Date Extracted: 10-22-09
Date Analyzed: 10-22-09

Matrix: Water
Units: ug/L (ppb)

Client ID	Lab ID	Result	PQL
809A305	10-177-02	28	3.3
809A306	10-177-03	18	3.3
809A307	10-177-04	18	3.3
809A308	10-177-05	11	3.3

Date of Report: November 3, 2009
Samples Submitted: October 22, 2009
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**TOTAL ARSENIC
EPA 200.8
METHOD BLANK QUALITY CONTROL**

Date Extracted: 10-22-09
Date Analyzed: 10-22-09

Matrix: Water
Units: ug/L (ppb)

Lab ID: MB1022W1

Analyte	Method	Result	PQL
Arsenic	200.8	ND	3.3

Date of Report: November 3, 2009
Samples Submitted: October 22, 2009
Laboratory Reference: 0910-177
Project: 809

**TOTAL ARSENIC
EPA 200.8
DUPLICATE QUALITY CONTROL**

Date Extracted: 10-22-09

Date Analyzed: 10-22-09

Matrix: Water

Units: ug/L (ppb)

Lab ID: 10-142-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Arsenic	6.39	6.30	1	3.3	

Date of Report: November 3, 2009
Samples Submitted: October 22, 2009
Laboratory Reference: 0910-177
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TOTAL ARSENIC
EPA 200.8
MS/MSD QUALITY CONTROL

Date Extracted: 10-22-09

Date Analyzed: 10-22-09

Matrix: Water

Units: ug/L (ppb)

Lab ID: 10-142-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Arsenic	110	124	107	115	99	7	



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



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Company: Riverside Associates						(Check One)															
Project Number: 809						<input type="checkbox"/> Same Day	<input type="checkbox"/> 1 Day														
Project Name: Double H						<input type="checkbox"/> 2 Day	<input type="checkbox"/> 3 Day														
Project Manager: Ron Hicks						<input checked="" type="checkbox"/> Standard (7 working days) (TPH analysis 5 working days)															
Sampled by: CESI						<input type="checkbox"/> _____ (other)															
Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Cont.	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	EPA 8021B/8260B BTEX	Arsenic	% Moisture
1	809 A302b	10/26/09	1510	W/X	3								X				X				
2	809 A305	10/26/09	1025	W	5			X											X	X	
3	809 A306	10/26/09	1145	W	5			X											X	X	
4	809 A307	10/26/09	1250	W	5			X											X	X	
5	809 A308	10/26/09	1405	W	5			X											X	X	
Signature: <i>[Handwritten Signature]</i>		Company: CESI		Date: 10/26/09		Time: 1300		Comments/Special Instructions: Please email results to cesreas@packerline.net. com * product from waste oil													
Relinquished by		Received by		Relinquished by		Received by		Relinquished by		Received by		Relinquished by		Received by		Relinquished by		Received by		Reviewed by/Date	
																				Chromatograms with final report <input type="checkbox"/>	