



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

August 7, 2009

Ron Hicks  
Riverside Associates  
1123 Pomona Road  
Yakima, WA 98901

Re: Analytical Data for Project 809  
Laboratory Reference No. 0908-028

Dear Ron:

Enclosed are the analytical results and associated quality control data for samples submitted on August 5, 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 long horizontal flourish.

David Baumeister  
Project Manager

Enclosures

Date of Report: August 7, 2009  
Samples Submitted: August 5, 2009  
Laboratory Reference: 0908-028  
Project: 809

### **Case Narrative**

Samples were collected on August 3 and 4, 2009, and received by the laboratory on August 5, 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 7, 2009  
 Samples Submitted: August 5, 2009  
 Laboratory Reference: 0908-028  
 Project: 809

# **NWTPH-Dx**

Date Extracted: 8-5-09  
 Date Analyzed: 8-5-09

Matrix: Soil  
 Units: mg/kg (ppm)

<b>Client ID:</b>	<b>809B100</b>	<b>809B101</b>	<b>809B102</b>
Lab ID:	08-028-01	08-028-02	08-028-03
Diesel Range:	<b>ND</b>	<b>ND</b>	<b>ND</b>
PQL:	33	30	29
Identification:	---	---	---
Lube Oil Range:	<b>330</b>	<b>ND</b>	<b>ND</b>
PQL:	65	60	58
Identification:	Lube Oil	---	---
Surrogate Recovery			
o-Terphenyl:	78%	67%	75%
Flags:	Y	Y	Y

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### NWTPH-Dx

Date Extracted: 8-5-09  
 Date Analyzed: 8-5-09

Matrix: Soil  
 Units: mg/kg (ppm)

<b>Client ID:</b>	<b>809B103</b>	<b>809B104</b>	<b>809B105</b>
Lab ID:	08-028-04	08-028-05	08-028-06
Diesel Range:	<b>ND</b>	<b>ND</b>	<b>ND</b>
PQL:	29	30	29
Identification:	---	---	---
Lube Oil Range:	<b>ND</b>	<b>ND</b>	<b>ND</b>
PQL:	59	60	59
Identification:	---	---	---
Surrogate Recovery			
o-Terphenyl:	73%	75%	68%
Flags:	Y	Y	Y

Date of Report: August 7, 2009  
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# **NWTPH-Dx**

Date Extracted: 8-5-09  
 Date Analyzed: 8-5-09

Matrix: Soil  
 Units: mg/kg (ppm)

<b>Client ID:</b>	<b>809B108</b>	<b>809B109</b>	<b>809B110</b>
Lab ID:	08-028-09	08-028-10	08-028-11
Diesel Range:	<b>ND</b>	<b>ND</b>	<b>ND</b>
PQL:	33	32	32
Identification:	---	---	---
Lube Oil Range:	<b>ND</b>	<b>ND</b>	<b>ND</b>
PQL:	66	63	64
Identification:	---	---	---
Surrogate Recovery			
o-Terphenyl:	61%	56%	59%
Flags:	Y	Y	Y

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# **NWTPH-Dx**

Date Extracted: 8-5-09  
 Date Analyzed: 8-5-09

Matrix: Soil  
 Units: mg/kg (ppm)

<b>Client ID:</b>	<b>809B111</b>	<b>809B112</b>	<b>809B113</b>
Lab ID:	08-028-12	08-028-13	08-028-14
Diesel Range:	<b>ND</b>	<b>ND</b>	<b>ND</b>
PQL:	33	33	33
Identification:	---	---	---
Lube Oil Range:	<b>ND</b>	<b>ND</b>	<b>ND</b>
PQL:	66	67	66
Identification:	---	---	---
Surrogate Recovery			
o-Terphenyl:	57%	68%	54%
Flags:	Y	Y	Y

Date of Report: August 7, 2009  
Samples Submitted: August 5, 2009  
Laboratory Reference: 0908-028  
Project: 809

**NWTPH-Dx**  
**METHOD BLANK QUALITY CONTROL**

Date Extracted: 8-5-09  
Date Analyzed: 8-5-09

Matrix: Soil  
Units: mg/kg (ppm)

Lab ID: MB0805S2

Diesel Range: **ND**  
PQL: 25  
Identification: ---

Lube Oil Range: **ND**  
PQL: 50  
Identification: ---

Surrogate Recovery  
o-Terphenyl: 67%

Flags: Y

Date of Report: August 7, 2009  
Samples Submitted: August 5, 2009  
Laboratory Reference: 0908-028  
Project: 809

**NWTPH-Dx**  
**DUPLICATE QUALITY CONTROL**

Date Extracted: 8-5-09  
Date Analyzed: 8-5-09

Matrix: Soil  
Units: mg/kg (ppm)

Lab ID: 08-028-04 08-028-04 DUP

Diesel Range: **ND** **ND**  
PQL: 25 25

RPD: N/A

Surrogate Recovery  
o-Terphenyl: 73% 77%

Flags: Y Y



Date of Report: August 7, 2009  
Samples Submitted: August 5, 2009  
Laboratory Reference: 0908-028  
Project: 809

**NWTPH-Dx**  
**DUPLICATE QUALITY CONTROL**

Date Extracted: 8-5-09  
Date Analyzed: 8-5-09

Matrix: Soil  
Units: mg/kg (ppm)

Lab ID: 08-028-06 08-028-06 DUP

Diesel Range: **ND** **ND**  
PQL: 25 25

RPD: N/A

Surrogate Recovery  
o-Terphenyl: 68% 72%

Flags: Y Y

Date of Report: August 7, 2009  
Samples Submitted: August 5, 2009  
Laboratory Reference: 0908-028  
Project: 809

**NWTPH-Dx**

Date Extracted: 8-6-09  
Date Analyzed: 8-6-09

Matrix: Water  
Units: mg/L (ppm)

<b>Client ID:</b>	<b>809B106</b>	<b>809B107</b>
Lab ID:	08-028-07	08-028-08

Diesel Range:	<b>93</b>	<b>ND</b>
PQL:	5.9	0.30
Identification:	Diesel Fuel#2	---

Lube Oil Range:	<b>220</b>	<b>ND</b>
PQL:	9.4	0.48
Identification:	Lube Oil	---

Surrogate Recovery		
o-Terphenyl:	---	96%

Flags:	Y,S	Y
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Date of Report: August 7, 2009  
Samples Submitted: August 5, 2009  
Laboratory Reference: 0908-028  
Project: 809

**NWTPH-Dx**  
**METHOD BLANK QUALITY CONTROL**

Date Extracted: 8-6-09  
Date Analyzed: 8-6-09

Matrix: Water  
Units: mg/L (ppm)

Lab ID: MB0806W1

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

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

Surrogate Recovery  
o-Terphenyl: 71%

Flags: Y

Date of Report: August 7, 2009  
Samples Submitted: August 5, 2009  
Laboratory Reference: 0908-028  
Project: 809

**NWTPH-Dx**  
**DUPLICATE QUALITY CONTROL**

Date Extracted: 8-6-09  
Date Analyzed: 8-6-09

Matrix: Water  
Units: mg/L (ppm)

Lab ID: 08-028-08 08-028-08 DUP

Diesel Range: **ND** **ND**  
PQL: 0.30 0.30

RPD: N/A

Surrogate Recovery  
o-Terphenyl: 96% 96%

Flags: Y Y

Date of Report: August 7, 2009  
Samples Submitted: August 5, 2009  
Lab Traveler: 0908-028  
Project: 809

### % MOISTURE

Date Analyzed: 8-5-09

Client ID	Lab ID	% Moisture
809B100	08-028-01	23
809B101	08-028-02	16
809B102	08-028-03	14
809B103	08-028-04	15
809B104	08-028-05	16
809B105	08-028-06	15
809B108	08-028-09	24
809B109	08-028-10	21
809B110	08-028-11	22
809B111	08-028-12	24
809B112	08-028-13	25
809B113	08-028-14	24



### 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-naphthalene) are present in the sample.
- N - Hydrocarbons in the lube oil range are impacting the diesel 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) 883-3881 • Fax: (425) 885-4603

# Chain of Custody

Page 1 of 2

Company: <b>Riverside Associates</b>		Turnaround Request (in working days)		Laboratory Number:		Requested Analysis		08-028											
Project Number: <b>809</b>		<input type="checkbox"/> Same Day <input checked="" type="checkbox"/> 1 Day																	
Project Name: <b>Double H Site B1</b>		<input type="checkbox"/> 2 Day <input type="checkbox"/> 3 Day																	
Project Manager: <b>Ken Hicks</b>		<input type="checkbox"/> Standard (7 working days) (TPH analysis 5 working days)																	
Sampled by: <b>CESI</b>		<input type="checkbox"/> (other)																	
Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	# of 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	% Moisture
1	809 B100	8/3/09	1355	S	2			X											X
2	809 B101	8/3/09	1435	S	2			X											
3	809 B102	8/3/09	1436	S	2			X											
4	809 B103	8/3/09	1437	S	2			X											
5	809 B104	8/3/09	1438	S	2			X											
6	809 B105	8/3/09	1439	S	2			X											
7	809 B106	8/4/09	1035	W	2			X											
8	809 B107	8/4/09	1130	W	2			X											
9	809 B108	8/4/09	1135	S	2			X											
10	809 B109	8/4/09	1137	S	2			X											
Relinquished by		Signature	Company	Date	Time	Comments/Special Instructions													
Relinquished by		<i>Thaddeus</i>	CESI	8/4/09	1500	Please email copy of results to: cesi.eas@pocketnet.com													
Received by																			
Relinquished by																			
Received by																			
Relinquished by																			
Received by																			
Reviewed by/Date		Reviewed by/Date			Chromatograms with final report <input type="checkbox"/>														



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# Chain of Custody

**Environmental Inc.**

Phone: (425) 883-3881 • Fax: (425) 885-4603

**Laboratory Number:**

**08-028**

**Turnaround Request**  
(in working days)

(Check One)

☐ Same Day ☒ 1 Day

☐ 2 Day ☐ 3 Day

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

☐ (other)

**Requested Analysis**

- 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:

*Riverside Associates*

Project Number:

*809*

Project Name:

*Double H Site B1*

Project Manager:

*Ben Hicks*

Sampled by:

*CESI*

Lab ID

Sample Identification

Date Sampled

Time Sampled

Matrix

# of

Cont.

*11 809 B110*

*8/4/09*

*1139*

*S*

*2*

*12 809 B111*

*8/4/09*

*1151*

*S*

*2*

*13 809 B112*

*8/4/09*

*1153*

*S*

*2*

*14 809 B113*

*8/4/09*

*1155*

*S*

*2*

Signature

Company

Date

Time

Comments/Special Instructions

Relinquished by

*Whitett Davis*

*CESI*

*8/4/09*

*1500*

*Please email copy of results to: cesias@packtinet.com*

Relinquished by

Received by

Relinquished by

Received by

Reviewed by/Date

Reviewed by/Date

Chromatograms with final report ☐