



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

October 14, 2009

Ron Hicks  
Riverside Associates  
1123 Pomona Road  
Yakima, WA 98901

Re: Analytical Data for Project 809  
Laboratory Reference No. 0910-039

Dear Ron:

Enclosed are the analytical results and associated quality control data for samples submitted on October 2, 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: October 14, 2009  
Samples Submitted: October 2, 2009  
Laboratory Reference: 0910-039  
Project: 809

### **Case Narrative**

Samples were collected on October 1, 2009, and received by the laboratory on October 2, 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.

#### Volatiles EPA 8260B (soil) Analysis

Per EPA Method 5035A, samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: October 14, 2009  
Samples Submitted: October 2, 2009  
Laboratory Reference: 0910-039  
Project: 809

**NWTPH-Dx**

Date Extracted: 10-9-09  
Date Analyzed: 10-12-09

Matrix: Water  
Units: mg/L (ppm)

**Client ID:** 809A302  
Lab ID: 10-039-01

Diesel Range: **ND**  
PQL: 26000  
Identification: ---

Lube Oil Range: **110000**  
PQL: 14000  
Identification: Lube Oil

Surrogate Recovery  
o-Terphenyl: ---

Flags: Y,U1,S

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

Date Extracted: 10-9-09  
Date Analyzed: 10-9-09

Matrix: Water  
Units: mg/L (ppm)

Lab ID: MB1009W1

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

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

Surrogate Recovery  
o-Terphenyl: 87%

Flags: Y

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

Date Extracted: 10-9-09  
Date Analyzed: 10-9-09

Matrix: Water  
Units: mg/L (ppm)

Lab ID: 10-064-01 10-064-01 DUP

Diesel Range: **ND** **ND**  
PQL: 0.25 0.25

RPD: N/A

Surrogate Recovery  
o-Terphenyl: 69% 76%

Flags: Y Y

Date of Report: October 14, 2009  
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# **VOLATILES by EPA 8260B**

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Date Extracted: 10-7-09

Date Analyzed: 10-7-09

Matrix: Water

Units: ug/L (ppb)

Lab ID: 10-039-01

**Client ID: 809A302**

<b>Compound</b>	<b>Results</b>	<b>Flags</b>	<b>PQL</b>
Dichlorodifluoromethane	ND		2.0
Chloromethane	ND		10
Vinyl Chloride	ND		2.0
Bromomethane	ND		2.0
Chloroethane	ND		10
Trichlorofluoromethane	ND		2.0
1,1-Dichloroethene	ND		2.0
Acetone	ND		50
Iodomethane	ND		10
Carbon Disulfide	ND		2.0
Methylene Chloride	130	H	10
(trans) 1,2-dichloroethene	ND		2.0
Methyl t-Butyl Ether	ND		2.0
1,1-Dichloroethane	ND		2.0
Vinyl Acetate	ND		20
2,2-Dichloropropane	ND		2.0
(cis) 1,2-Dichloroethene	ND		2.0
2-Butanone	72		50
Bromochloromethane	ND		2.0
Chloroform	ND		2.0
1,1,1-Trichloroethane	ND		2.0
Carbon Tetrachloride	ND		2.0
1,1-Dichloropropene	ND		2.0
Benzene	ND		2.0
1,2-Dichloroethane	ND		2.0
Trichloroethene	ND		2.0
1,2-Dichloropropane	ND		2.0
Dibromomethane	ND		2.0
Bromodichloromethane	ND		2.0
2-Chloroethyl Vinyl Ether	ND		10
(cis) 1,3-Dichloropropene	ND		2.0
Methyl Isobutyl Ketone	33		20
Toluene	ND		10
(trans) 1,3-Dichloropropene	ND		2.0

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# **VOLATILES by EPA 8260B**

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Lab ID: 10-039-01  
 Client ID: 809A302

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		2.0
Tetrachloroethene	ND		10
1,3-Dichloropropane	ND		2.0
2-Hexanone	ND		20
Dibromochloromethane	ND		2.0
1,2-Dibromoethane	ND		2.0
Chlorobenzene	ND		2.0
1,1,1,2-Tetrachloroethane	ND		2.0
Ethylbenzene	ND		2.0
m,p-Xylene	ND		4.0
o-Xylene	ND		2.0
Styrene	ND		2.0
Bromoform	ND		10
Isopropylbenzene	ND		2.0
Bromobenzene	ND		2.0
1,1,2,2-Tetrachloroethane	ND		2.0
1,2,3-Trichloropropane	ND		2.0
n-Propylbenzene	ND		2.0
2-Chlorotoluene	ND		2.0
4-Chlorotoluene	ND		2.0
1,3,5-Trimethylbenzene	ND		2.0
tert-Butylbenzene	ND		2.0
1,2,4-Trimethylbenzene	ND		2.0
sec-Butylbenzene	ND		2.0
1,3-Dichlorobenzene	ND		2.0
p-Isopropyltoluene	ND		2.0
1,4-Dichlorobenzene	ND		2.0
1,2-Dichlorobenzene	ND		2.0
n-Butylbenzene	ND		2.0
1,2-Dibromo-3-chloropropane	ND		10
1,2,4-Trichlorobenzene	ND		2.0
Hexachlorobutadiene	ND		2.0
Naphthalene	ND		10
1,2,3-Trichlorobenzene	ND		2.0

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	79	71-126
Toluene-d8	84	76-116
4-Bromofluorobenzene	82	70-123

Date of Report: October 14, 2009  
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**VOLATILES by EPA 8260B**  
**METHOD BLANK QUALITY CONTROL**

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Date Extracted: 10-7-09  
 Date Analyzed: 10-7-09  
  
 Matrix: Water  
 Units: ug/L (ppb)  
  
 Lab ID: MB1007W1

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		1.0
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Acetone	ND		5.0
Iodomethane	ND		1.0
Carbon Disulfide	ND		0.20
Methylene Chloride	ND		1.0
(trans) 1,2-dichloroethene	ND		0.20
Methyl t-Butyl Ether	ND		0.20
1,1-Dichloroethane	ND		0.20
Vinyl Acetate	ND		2.0
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	ND		0.20
2-Butanone	ND		5.0
Bromochloromethane	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
Benzene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	ND		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
Methyl Isobutyl Ketone	ND		2.0
Toluene	ND		1.0
(trans) 1,3-Dichloropropene	ND		0.20



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**VOLATILES by EPA 8260B**  
**METHOD BLANK QUALITY CONTROL**

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Lab ID: MB1007W1

<b>Compound</b>	<b>Results</b>	<b>Flags</b>	<b>PQL</b>
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	ND		1.0
1,3-Dichloropropane	ND		0.20
2-Hexanone	ND		2.0
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Ethylbenzene	ND		0.20
m,p-Xylene	ND		0.40
o-Xylene	ND		0.20
Styrene	ND		0.20
Bromoform	ND		1.0
Isopropylbenzene	ND		0.20
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
n-Propylbenzene	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3,5-Trimethylbenzene	ND		0.20
tert-Butylbenzene	ND		0.20
1,2,4-Trimethylbenzene	ND		0.20
sec-Butylbenzene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
p-Isopropyltoluene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
n-Butylbenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
Naphthalene	ND		1.0
1,2,3-Trichlorobenzene	ND		0.20

<b>Surrogate</b>	<b>Percent Recovery</b>	<b>Control Limits</b>
Dibromofluoromethane	83	71-126
Toluene-d8	84	76-116
4-Bromofluorobenzene	82	70-123

Date of Report: October 14, 2009  
 Samples Submitted: October 2, 2009  
 Laboratory Reference: 0910-039  
 Project: 809

**VOLATILES by EPA 8260B  
 SB/SBD QUALITY CONTROL**

Date Extracted: 10-7-09  
 Date Analyzed: 10-7-09  
  
 Matrix: Water  
 Units: ug/L (ppb)

Lab ID: SB1007W1

Compound	Spike Amount	SB	Percent Recovery	SBD	Percent Recovery	Recovery Limits	Flags
1,1-Dichloroethene	10.0	12.2	122	11.8	118	70-130	
Benzene	10.0	11.2	112	11.1	111	70-130	
Trichloroethene	10.0	10.5	105	10.4	104	70-123	
Toluene	10.0	10.6	106	10.5	105	77-120	
Chlorobenzene	10.0	10.3	103	10.3	103	73-115	

	RPD	RPD Limit	Flags
1,1-Dichloroethene	3	21	
Benzene	1	18	
Trichloroethene	2	18	
Toluene	1	17	
Chlorobenzene	0	18	

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# **VOLATILES by EPA 8260B**

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Date Extracted: 10-6-09

Date Analyzed: 10-6-09

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: 10-039-04

**Client ID: 809B305**

<b>Compound</b>	<b>Results</b>	<b>Flags</b>	<b>PQL</b>
Dichlorodifluoromethane	ND		0.0010
Chloromethane	ND		0.0052
Vinyl Chloride	ND		0.0010
Bromomethane	ND		0.0010
Chloroethane	ND		0.0052
Trichlorofluoromethane	ND		0.0010
1,1-Dichloroethene	ND		0.0010
Acetone	0.010	H	0.0052
Iodomethane	ND		0.0052
Carbon Disulfide	ND		0.0010
Methylene Chloride	0.010	H	0.0052
(trans) 1,2-Dichloroethene	ND		0.0010
Methyl t-Butyl Ether	ND		0.0010
1,1-Dichloroethane	ND		0.0010
Vinyl Acetate	ND		0.0052
2,2-Dichloropropane	ND		0.0010
(cis) 1,2-Dichloroethene	ND		0.0010
2-Butanone	0.015		0.0052
Bromochloromethane	ND		0.0010
Chloroform	ND		0.0010
1,1,1-Trichloroethane	ND		0.0010
Carbon Tetrachloride	ND		0.0010
1,1-Dichloropropene	ND		0.0010
Benzene	ND		0.0010
1,2-Dichloroethane	ND		0.0010
Trichloroethene	ND		0.0010
1,2-Dichloropropane	ND		0.0010
Dibromomethane	ND		0.0010
Bromodichloromethane	ND		0.0010
2-Chloroethyl Vinyl Ether	ND		0.0052
(cis) 1,3-Dichloropropene	ND		0.0010
Methyl Isobutyl Ketone	ND		0.0052
Toluene	ND		0.0052
(trans) 1,3-Dichloropropene	ND		0.0010

Date of Report: October 14, 2009  
 Samples Submitted: October 2, 2009  
 Laboratory Reference: 0910-039  
 Project: 809

# **VOLATILES by EPA 8260B**

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Lab ID: 10-039-04  
 Client ID: 809B305

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.0010
Tetrachloroethene	ND		0.0010
1,3-Dichloropropane	ND		0.0010
2-Hexanone	ND		0.0052
Dibromochloromethane	ND		0.0010
1,2-Dibromoethane	ND		0.0010
Chlorobenzene	ND		0.0010
1,1,1,2-Tetrachloroethane	ND		0.0010
Ethylbenzene	ND		0.0010
m,p-Xylene	ND		0.0021
o-Xylene	ND		0.0010
Styrene	ND		0.0010
Bromoform	ND		0.0010
Isopropylbenzene	ND		0.0010
Bromobenzene	ND		0.0010
1,1,2,2-Tetrachloroethane	ND		0.0010
1,2,3-Trichloropropane	ND		0.0010
n-Propylbenzene	ND		0.0010
2-Chlorotoluene	ND		0.0010
4-Chlorotoluene	ND		0.0010
1,3,5-Trimethylbenzene	ND		0.0010
tert-Butylbenzene	ND		0.0010
1,2,4-Trimethylbenzene	ND		0.0010
sec-Butylbenzene	ND		0.0010
1,3-Dichlorobenzene	ND		0.0010
p-Isopropyltoluene	ND		0.0010
1,4-Dichlorobenzene	ND		0.0010
1,2-Dichlorobenzene	ND		0.0010
n-Butylbenzene	ND		0.0010
1,2-Dibromo-3-chloropropane	ND		0.0052
1,2,4-Trichlorobenzene	ND		0.0010
Hexachlorobutadiene	ND		0.0052
Naphthalene	ND		0.0010
1,2,3-Trichlorobenzene	ND		0.0010

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	103	55-125
Toluene-d8	105	56-127
4-Bromofluorobenzene	79	54-130

Date of Report: October 14, 2009  
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**VOLATILES by EPA 8260B**  
**METHOD BLANK QUALITY CONTROL**

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Date Extracted: 10-6-09  
 Date Analyzed: 10-6-09  
  
 Matrix: Soil  
 Units: mg/kg (ppm)  
  
 Lab ID: MB1006S1

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.0010
Chloromethane	ND		0.0050
Vinyl Chloride	ND		0.0010
Bromomethane	ND		0.0010
Chloroethane	ND		0.0050
Trichlorofluoromethane	ND		0.0010
1,1-Dichloroethene	ND		0.0010
Acetone	ND		0.0050
Iodomethane	ND		0.0050
Carbon Disulfide	ND		0.0010
Methylene Chloride	ND		0.0050
(trans) 1,2-Dichloroethene	ND		0.0010
Methyl t-Butyl Ether	ND		0.0010
1,1-Dichloroethane	ND		0.0010
Vinyl Acetate	ND		0.0050
2,2-Dichloropropane	ND		0.0010
(cis) 1,2-Dichloroethene	ND		0.0010
2-Butanone	ND		0.0050
Bromochloromethane	ND		0.0010
Chloroform	ND		0.0010
1,1,1-Trichloroethane	ND		0.0010
Carbon Tetrachloride	ND		0.0010
1,1-Dichloropropene	ND		0.0010
Benzene	ND		0.0010
1,2-Dichloroethane	ND		0.0010
Trichloroethene	ND		0.0010
1,2-Dichloropropane	ND		0.0010
Dibromomethane	ND		0.0010
Bromodichloromethane	ND		0.0010
2-Chloroethyl Vinyl Ether	ND		0.0050
(cis) 1,3-Dichloropropene	ND		0.0010
Methyl Isobutyl Ketone	ND		0.0050
Toluene	ND		0.0050
(trans) 1,3-Dichloropropene	ND		0.0010

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**VOLATILES by EPA 8260B**  
**METHOD BLANK QUALITY CONTROL**

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Lab ID: MB1006S1

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.0010
Tetrachloroethene	ND		0.0010
1,3-Dichloropropane	ND		0.0010
2-Hexanone	ND		0.0050
Dibromochloromethane	ND		0.0010
1,2-Dibromoethane	ND		0.0010
Chlorobenzene	ND		0.0010
1,1,1,2-Tetrachloroethane	ND		0.0010
Ethylbenzene	ND		0.0010
m,p-Xylene	ND		0.0020
o-Xylene	ND		0.0010
Styrene	ND		0.0010
Bromoform	ND		0.0010
Isopropylbenzene	ND		0.0010
Bromobenzene	ND		0.0010
1,1,2,2-Tetrachloroethane	ND		0.0010
1,2,3-Trichloropropane	ND		0.0010
n-Propylbenzene	ND		0.0010
2-Chlorotoluene	ND		0.0010
4-Chlorotoluene	ND		0.0010
1,3,5-Trimethylbenzene	ND		0.0010
tert-Butylbenzene	ND		0.0010
1,2,4-Trimethylbenzene	ND		0.0010
sec-Butylbenzene	ND		0.0010
1,3-Dichlorobenzene	ND		0.0010
p-Isopropyltoluene	ND		0.0010
1,4-Dichlorobenzene	ND		0.0010
1,2-Dichlorobenzene	ND		0.0010
n-Butylbenzene	ND		0.0010
1,2-Dibromo-3-chloropropane	ND		0.0050
1,2,4-Trichlorobenzene	ND		0.0010
Hexachlorobutadiene	ND		0.0050
Naphthalene	ND		0.0010
1,2,3-Trichlorobenzene	ND		0.0010

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	107	55-125
Toluene-d8	109	56-127
4-Bromofluorobenzene	92	54-130

Date of Report: October 14, 2009  
 Samples Submitted: October 2, 2009  
 Laboratory Reference: 0910-039  
 Project: 809

**VOLATILES by EPA 8260B  
 SB/SBD QUALITY CONTROL**

Date Extracted: 10-6-09

Date Analyzed: 10-6-09

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: SB1006S1

Compound	Spike Amount	SB	Percent Recovery	SBD	Percent Recovery	Recovery Limits	Flags
1,1-Dichloroethene	0.0500	0.0639	128	0.0603	121	70-130	
Benzene	0.0500	0.0483	97	0.0477	95	70-128	
Trichloroethene	0.0500	0.0470	94	0.0469	94	70-124	
Toluene	0.0500	0.0488	98	0.0488	98	73-123	
Chlorobenzene	0.0500	0.0441	88	0.0451	90	73-115	

	RPD	RPD Limit	Flags
1,1-Dichloroethene	6	16	
Benzene	1	15	
Trichloroethene	0	14	
Toluene	0	14	
Chlorobenzene	2	13	

Date of Report: October 14, 2009  
 Samples Submitted: October 2, 2009  
 Lab Traveler: 0910-039  
 Project: 809

### PCBs by EPA 8082

Matrix: Water  
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>809A304</b>					
Laboratory ID:	10-039-03					
Aroclor 1016	ND	0.12	EPA 8082	10-8-09	10-9-09	X
Aroclor 1221	ND	0.12	EPA 8082	10-8-09	10-9-09	X
Aroclor 1232	ND	0.12	EPA 8082	10-8-09	10-9-09	X
Aroclor 1242	ND	0.12	EPA 8082	10-8-09	10-9-09	X
Aroclor 1248	ND	0.12	EPA 8082	10-8-09	10-9-09	X
Aroclor 1254	ND	0.12	EPA 8082	10-8-09	10-9-09	X
Aroclor 1260	ND	0.12	EPA 8082	10-8-09	10-9-09	X
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>DCB</i>	<i>106</i>	<i>39-128</i>				



Date of Report: October 14, 2009  
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 Project: 809

**PCBs by EPA 8082  
 QUALITY CONTROL**

Matrix: Water  
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>METHOD BLANK</b>						
Laboratory ID:	MB1008W1					
Aroclor 1016	ND	0.050	EPA 8082	10-8-09	10-9-09	X
Aroclor 1221	ND	0.050	EPA 8082	10-8-09	10-9-09	X
Aroclor 1232	ND	0.050	EPA 8082	10-8-09	10-9-09	X
Aroclor 1242	ND	0.050	EPA 8082	10-8-09	10-9-09	X
Aroclor 1248	ND	0.050	EPA 8082	10-8-09	10-9-09	X
Aroclor 1254	ND	0.050	EPA 8082	10-8-09	10-9-09	X
Aroclor 1260	ND	0.050	EPA 8082	10-8-09	10-9-09	X
Surrogate:	Percent Recovery	Control Limits				
DCB	113	39-128				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS											
Laboratory ID:	SB1008W1										
	SB	SBD	SB	SBD		SB	SBD				
Aroclor 1260	0.524	0.529	0.500	0.500	N/A	105	106	58-113	1	11	
Surrogate:											
DCB						112	115	39-128			

Date of Report: October 14, 2009  
 Samples Submitted: October 2, 2009  
 Lab Traveler: 0910-039  
 Project: 809

### PCBs by EPA 8082

Matrix: Soil  
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>809A303</b>					
Laboratory ID:	10-039-02					
Aroclor 1016	ND	0.054	EPA 8082	10-8-09	10-8-09	
Aroclor 1221	ND	0.054	EPA 8082	10-8-09	10-8-09	
Aroclor 1232	ND	0.054	EPA 8082	10-8-09	10-8-09	
Aroclor 1242	ND	0.054	EPA 8082	10-8-09	10-8-09	
Aroclor 1248	ND	0.054	EPA 8082	10-8-09	10-8-09	
Aroclor 1254	ND	0.054	EPA 8082	10-8-09	10-8-09	
Aroclor 1260	ND	0.054	EPA 8082	10-8-09	10-8-09	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>DCB</i>	<i>89</i>	<i>33-122</i>				
<b>Client ID:</b>	<b>809B305</b>					
Laboratory ID:	10-039-04					
Aroclor 1016	ND	0.052	EPA 8082	10-8-09	10-8-09	
Aroclor 1221	ND	0.052	EPA 8082	10-8-09	10-8-09	
Aroclor 1232	ND	0.052	EPA 8082	10-8-09	10-8-09	
Aroclor 1242	ND	0.052	EPA 8082	10-8-09	10-8-09	
Aroclor 1248	ND	0.052	EPA 8082	10-8-09	10-8-09	
Aroclor 1254	ND	0.052	EPA 8082	10-8-09	10-8-09	
Aroclor 1260	ND	0.052	EPA 8082	10-8-09	10-8-09	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>DCB</i>	<i>94</i>	<i>33-122</i>				

Date of Report: October 14, 2009  
 Samples Submitted: October 2, 2009  
 Lab Traveler: 0910-039  
 Project: 809

**PCBs by EPA 8082  
 QUALITY CONTROL**

Matrix: Soil  
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>METHOD BLANK</b>						
Laboratory ID:	MB1008S1					
Aroclor 1016	ND	0.050	EPA 8082	10-8-09	10-8-09	
Aroclor 1221	ND	0.050	EPA 8082	10-8-09	10-8-09	
Aroclor 1232	ND	0.050	EPA 8082	10-8-09	10-8-09	
Aroclor 1242	ND	0.050	EPA 8082	10-8-09	10-8-09	
Aroclor 1248	ND	0.050	EPA 8082	10-8-09	10-8-09	
Aroclor 1254	ND	0.050	EPA 8082	10-8-09	10-8-09	
Aroclor 1260	ND	0.050	EPA 8082	10-8-09	10-8-09	
Surrogate:	Percent Recovery	Control Limits				
DCB	102	33-122				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	10-059-25										
	MS	MSD	MS	MSD		MS	MSD				
Aroclor 1260	0.428	0.406	0.500	0.500	ND	86	81	24-125	5	18	
Surrogate:											
DCB						85	81	33-122			

Date of Report: October 14, 2009  
Samples Submitted: October 2, 2009  
Laboratory Reference: 0910-039  
Project: 809

**TOTAL METALS  
EPA 200.8/7470A**

Date Extracted: 10-6&7-09  
Date Analyzed: 10-6&9-09

Matrix: Water  
Units: ug/L (ppb)

Lab ID: 10-039-03  
**Client ID: 809A304**

Analyte	Method	Result	PQL
Arsenic	200.8	<b>9.3</b>	6.0
Barium	200.8	<b>75</b>	50
Cadmium	200.8	<b>ND</b>	4.0
Chromium	200.8	<b>ND</b>	20
Lead	200.8	<b>ND</b>	2.0
Mercury	7470A	<b>ND</b>	0.50
Selenium	200.8	<b>ND</b>	10
Silver	200.8	<b>ND</b>	20

Date of Report: October 14, 2009  
Samples Submitted: October 2, 2009  
Laboratory Reference: 0910-039  
Project: 809

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

Date Extracted: 10-7-09  
Date Analyzed: 10-9-09  
  
Matrix: Water  
Units: ug/L (ppb)  
  
Lab ID: MB1007W1

Analyte	Method	Result	PQL
Arsenic	200.8	<b>ND</b>	3.0
Barium	200.8	<b>ND</b>	25
Cadmium	200.8	<b>ND</b>	4.0
Chromium	200.8	<b>ND</b>	10
Lead	200.8	<b>ND</b>	1.0
Selenium	200.8	<b>ND</b>	5.0
Silver	200.8	<b>ND</b>	10

Date of Report: October 14, 2009  
Samples Submitted: October 2, 2009  
Laboratory Reference: 0910-039  
Project: 809

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

Date Extracted: 10-6-09  
Date Analyzed: 10-6-09  
  
Matrix: Water  
Units: ug/L (ppb)  
  
Lab ID: MB1006W1

Analyte	Method	Result	PQL
Mercury	7470A	<b>ND</b>	0.50

Date of Report: October 14, 2009  
 Samples Submitted: October 2, 2009  
 Laboratory Reference: 0910-039  
 Project: 809

**TOTAL METALS  
 EPA 200.8  
 DUPLICATE QUALITY CONTROL**

Date Extracted: 10-7-09  
 Date Analyzed: 10-9-09

Matrix: Water  
 Units: ug/L (ppb)

Lab ID: 10-057-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Arsenic	<b>ND</b>	<b>ND</b>	NA	3.0	
Barium	<b>67.6</b>	<b>71.0</b>	5	25	
Cadmium	<b>ND</b>	<b>ND</b>	NA	4.0	
Chromium	<b>381</b>	<b>414</b>	8	10	
Lead	<b>ND</b>	<b>ND</b>	NA	1.0	
Selenium	<b>ND</b>	<b>ND</b>	NA	5.0	
Silver	<b>ND</b>	<b>ND</b>	NA	10	

Date of Report: October 14, 2009  
Samples Submitted: October 2, 2009  
Laboratory Reference: 0910-039  
Project: 809

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

Date Extracted: 10-6-09  
Date Analyzed: 10-6-09

Matrix: Water  
Units: ug/L (ppb)

Lab ID: 10-044-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Mercury	<b>ND</b>	<b>ND</b>	NA	0.50	



Date of Report: October 14, 2009  
 Samples Submitted: October 2, 2009  
 Laboratory Reference: 0910-039  
 Project: 809

**TOTAL METALS  
 EPA 200.8  
 MS/MSD QUALITY CONTROL**

Date Extracted: 10-7-09  
 Date Analyzed: 10-9-09

Matrix: Water  
 Units: ug/L (ppb)

Lab ID: 10-057-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Arsenic	2200	<b>1940</b>	88	<b>1850</b>	84	5	
Barium	1100	<b>1220</b>	104	<b>1200</b>	103	1	
Cadmium	1100	<b>1030</b>	94	<b>945</b>	86	9	
Chromium	2200	<b>2750</b>	108	<b>2510</b>	97	9	
Lead	5500	<b>5530</b>	101	<b>5150</b>	94	7	
Selenium	2200	<b>2170</b>	99	<b>1980</b>	90	9	
Silver	550	<b>475</b>	86	<b>439</b>	80	8	

Date of Report: October 14, 2009  
Samples Submitted: October 2, 2009  
Laboratory Reference: 0910-039  
Project: 809

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

Date Extracted: 10-6-09  
Date Analyzed: 10-6-09

Matrix: Water  
Units: ug/L (ppb)

Lab ID: 10-044-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Mercury	12.5	<b>11.3</b>	90	<b>11.3</b>	91	1	

Date of Report: October 14, 2009  
Samples Submitted: October 2, 2009  
Laboratory Reference: 0910-039  
Project: 809

**% MOISTURE**

Date Analyzed: 10-5&8-09

Client ID	Lab ID	% Moisture
809A303	10-039-02	7
809B305	10-039-04	3



### 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) 893-3981 • Fax: (425) 895-4603

# Chain of Custody

Page 1 of 1

Turnaround Request (in working days)				Laboratory Number: <b>10-039</b>															
(Check One)				Requested Analysis															
<input type="checkbox"/> Same Day <input type="checkbox"/> 1 Day																			
<input type="checkbox"/> 2 Day <input type="checkbox"/> 3 Day																			
<input checked="" type="checkbox"/> Standard (7 working days) (TPH analysis 5 working days)																			
<input type="checkbox"/> (other)																			
Company:	Riverside Associates	Signature:	Therrell-Living	Company:	CES1	Date:	10/1/09	Time:	1400										
Project Number:	809	Signature:		Company:		Date:		Time:											
Project Name:	Double H	Signature:		Company:		Date:		Time:											
Project Manager:	Ron Hicks	Signature:		Company:		Date:		Time:											
Sampled by:	CES1	Signature:		Company:		Date:		Time:											
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	809A302	10/1/09	0900	Wt	1			X	X				X	X	X	X	X		
2	809A303	10/1/09	1100	S	1								X						
3	809A304	10/1/09	1115	N	3								X						
4	809B305	10/1/09	1140	S	5			X					X						
Comments/Special Instructions:																			
* Product from waste oils																			
Please email results to:																			
cesica@pckinc.com																			
Relinquished by		Signature:		Company:		Date:		Time:											
Received by		Signature:		Company:		Date:		Time:											
Relinquished by		Signature:		Company:		Date:		Time:											
Received by		Signature:		Company:		Date:		Time:											
Relinquished by		Signature:		Company:		Date:		Time:											
Received by		Signature:		Company:		Date:		Time:											
Reviewed by/Date		Signature:		Company:		Date:		Time:											