



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

August 21, 2009

Ron Hicks
Riverside Associates
1123 Pomona Road
Yakima, WA 98901

Re: Analytical Data for Project 809
Laboratory Reference No. 0907-152

Dear Ron:

Enclosed are the analytical results and associated quality control data for samples submitted on July 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: August 21, 2009
Samples Submitted: July 22, 2009
Laboratory Reference: 0907-152
Project: 809

Case Narrative

Samples were collected on July 20, 2009, and received by the laboratory on July 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.

BTEX by EPA 8021B Analysis

Per EPA method 5035A, samples were received by the laboratory in pre-weighed 40 ml VOA vials preserved with either Methanol or Sodium Bisulfate.

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: August 21, 2009
 Samples Submitted: July 22, 2009
 Laboratory Reference: 0907-152
 Project: 809

NWTPH-Dx

Date Extracted: 7-23-09
 Date Analyzed: 7-23-09

Matrix: Soil
 Units: mg/kg (ppm)

Client ID:	809001	809002	809003
Lab ID:	07-152-01	07-152-02	07-152-03
Diesel Range:	ND	ND	ND
PQL:	31	35	33
Identification:	---	---	---
Lube Oil Range:	ND	ND	ND
PQL:	63	69	65
Identification:	---	---	---
Surrogate Recovery			
o-Terphenyl:	99%	95%	95%
Flags:	Y	Y	Y

Date of Report: August 21, 2009
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NWTPH-Dx

Date Extracted: 7-23-09
 Date Analyzed: 7-23-09

Matrix: Soil
 Units: mg/kg (ppm)

Client ID:	809004	809005	809006
Lab ID:	07-152-04	07-152-05	07-152-06
Diesel Range:	ND	ND	ND
PQL:	33	31	31
Identification:	---	---	---
Lube Oil Range:	ND	ND	ND
PQL:	65	62	63
Identification:	---	---	---
Surrogate Recovery			
o-Terphenyl:	70%	83%	82%
Flags:	Y	Y	Y

Date of Report: August 21, 2009
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 Project: 809

NWTPH-Dx

Date Extracted: 7-23-09
 Date Analyzed: 7-23-09

Matrix: Soil
 Units: mg/kg (ppm)

Client ID:	809007	809008	809009
Lab ID:	07-152-07	07-152-08	07-152-09
Diesel Range:	ND	ND	ND
PQL:	33	32	33
Identification:	---	---	---
Lube Oil Range:	ND	ND	ND
PQL:	65	64	67
Identification:	---	---	---
Surrogate Recovery			
o-Terphenyl:	84%	72%	76%
Flags:	Y	Y	Y

Date of Report: August 21, 2009
Samples Submitted: July 22, 2009
Laboratory Reference: 0907-152
Project: 809

NWTPH-Dx
METHOD BLANK QUALITY CONTROL

Date Extracted: 7-23-09
Date Analyzed: 7-23-09

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB0723S1

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

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

Surrogate Recovery
o-Terphenyl: 101%

Flags: Y

Date of Report: August 21, 2009
Samples Submitted: July 22, 2009
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Project: 809

NWTPH-Dx
DUPLICATE QUALITY CONTROL

Date Extracted: 7-23-09
Date Analyzed: 7-23-09

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 07-152-01 07-152-01 DUP

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

RPD: N/A

Surrogate Recovery
o-Terphenyl: 99% 91%

Flags: Y Y

Date of Report: August 21, 2009
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Project: 809

NWTPH-Dx

Date Extracted: 7-24-09
Date Analyzed: 7-24-09

Matrix: Water
Units: mg/L (ppm)

Client ID: 809100FB
Lab ID: 07-152-10

Diesel Range: **ND**
PQL: 0.24
Identification: ---

Lube Oil Range: **ND**
PQL: 0.39
Identification: ---

Surrogate Recovery
o-Terphenyl: 100%

Flags: Y

Date of Report: August 21, 2009
Samples Submitted: July 22, 2009
Laboratory Reference: 0907-152
Project: 809

NWTPH-Dx
METHOD BLANK QUALITY CONTROL

Date Extracted: 7-24-09
Date Analyzed: 7-24-09

Matrix: Water
Units: mg/L (ppm)

Lab ID: MB0724W1

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

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

Surrogate Recovery
o-Terphenyl: 122%

Flags: Y

Date of Report: August 21, 2009
Samples Submitted: July 22, 2009
Laboratory Reference: 0907-152
Project: 809

NWTPH-Dx
DUPLICATE QUALITY CONTROL

Date Extracted: 7-24-09
Date Analyzed: 7-24-09

Matrix: Water
Units: mg/L (ppm)

Spike Level: 1.00 ppm

Lab ID: SB0724W1 SB0724W1 DUP

Diesel Range: 1.12 1.07

PQL: 0.25 0.25

Percent Recovery: 112 107

RPD: 5

Surrogate Recovery

o-Terphenyl: 115% 109%

Flags: Y Y

Date of Report: August 21, 2009
 Samples Submitted: July 22, 2009
 Lab Traveler: 0907-152
 Project: 809

**BTEX
 EPA 8021B**

Date Extracted: 7-23-09
 Date Analyzed: 7-23-09

Matrix: Soil
 Units: mg/kg (ppm)

Client ID:	809001	809002
Lab ID:	07-152-01	07-152-02

	Result	Flags	PQL	Result	Flags	PQL
Benzene	ND		0.020	ND		0.020
Toluene	ND		0.083	ND		0.066
Ethyl Benzene	ND		0.083	ND		0.066
m,p-Xylene	ND		0.083	ND		0.066
o-Xylene	ND		0.083	ND		0.066
Surrogate Recovery:						
Fluorobenzene	91%			95%		

Date of Report: August 21, 2009
 Samples Submitted: July 22, 2009
 Lab Traveler: 0907-152
 Project: 809

**BTEX
 EPA 8021B**

Date Extracted: 7-23-09
 Date Analyzed: 7-23-09

Matrix: Soil
 Units: mg/kg (ppm)

Client ID:	809003	809004
Lab ID:	07-152-03	07-152-04

	Result	Flags	PQL	Result	Flags	PQL
Benzene	ND		0.020	ND		0.020
Toluene	ND		0.085	ND		0.080
Ethyl Benzene	ND		0.085	ND		0.080
m,p-Xylene	ND		0.085	ND		0.080
o-Xylene	ND		0.085	ND		0.080
Surrogate Recovery:						
Fluorobenzene	86%			88%		

Date of Report: August 21, 2009
 Samples Submitted: July 22, 2009
 Lab Traveler: 0907-152
 Project: 809

**BTEX
 EPA 8021B**

Date Extracted: 7-23-09
 Date Analyzed: 7-23-09

Matrix: Soil
 Units: mg/kg (ppm)

Client ID:	809005	809006
Lab ID:	07-152-05	07-152-06

	Result	Flags	PQL	Result	Flags	PQL
Benzene	ND		0.020	ND		0.020
Toluene	ND		0.080	ND		0.095
Ethyl Benzene	ND		0.080	ND		0.095
m,p-Xylene	ND		0.080	ND		0.095
o-Xylene	ND		0.080	ND		0.095
Surrogate Recovery:						
Fluorobenzene	86%			81%		

Date of Report: August 21, 2009
 Samples Submitted: July 22, 2009
 Lab Traveler: 0907-152
 Project: 809

**BTEX
 EPA 8021B**

Date Extracted: 7-23-09
 Date Analyzed: 7-23-09

Matrix: Soil
 Units: mg/kg (ppm)

Client ID:	809007	809008
Lab ID:	07-152-07	07-152-08

	Result	Flags	PQL	Result	Flags	PQL
Benzene	ND		0.020	ND		0.020
Toluene	ND		0.076	ND		0.057
Ethyl Benzene	ND		0.076	ND		0.057
m,p-Xylene	ND		0.076	ND		0.057
o-Xylene	ND		0.076	ND		0.057
Surrogate Recovery:						
Fluorobenzene	86%			91%		

Date of Report: August 21, 2009
Samples Submitted: July 22, 2009
Lab Traveler: 0907-152
Project: 809

**BTEX
EPA 8021B**

Date Extracted: 7-23-09
Date Analyzed: 7-23-09

Matrix: Soil
Units: mg/kg (ppm)

Client ID: **809009**
Lab ID: 07-152-09

	Result	Flags	PQL
Benzene	ND		0.020
Toluene	ND		0.053
Ethyl Benzene	ND		0.053
m,p-Xylene	ND		0.053
o-Xylene	ND		0.053

Surrogate Recovery:
Fluorobenzene 93%

Date of Report: August 21, 2009
Samples Submitted: July 22, 2009
Lab Traveler: 0907-152
Project: 809

**BTEX
EPA 8021B
METHOD BLANK QUALITY CONTROL**

Date Extracted: 7-23-09
Date Analyzed: 7-23-09

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB0723S1

	Result	Flags	PQL
Benzene	ND		0.020
Toluene	ND		0.050
Ethyl Benzene	ND		0.050
m,p-Xylene	ND		0.050
o-Xylene	ND		0.050

Surrogate Recovery:
Fluorobenzene 88%

Date of Report: August 21, 2009
Samples Submitted: July 22, 2009
Lab Traveler: 0907-152
Project: 809

**BTEX
EPA 8021B
DUPLICATE QUALITY CONTROL**

Date Extracted: 7-23-09
Date Analyzed: 7-23-09

Matrix: Soil
Units: mg/kg (ppm)

Lab ID:	07-152-01 Original	07-152-01 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	91%	92%		

Date of Report: August 21, 2009
 Samples Submitted: July 22, 2009
 Lab Traveler: 0907-152
 Project: 809

**BTEX
 EPA 8021B
 MS/MSD QUALITY CONTROL**

Date Extracted: 7-23-09

Date Analyzed: 7-23-09

Matrix: Soil

Units: mg/kg (ppm)

Spike Level (ppm): 3.33

Lab ID:	07-152-01 MS	Percent Recovery	07-152-01 MSD	Percent Recovery	RPD	Flags
Benzene	3.27	98	2.95	89	10	
Toluene	3.27	98	2.94	88	11	
Ethyl Benzene	3.33	100	3.00	90	11	
m,p-Xylene	3.32	100	2.99	90	11	
o-Xylene	3.31	99	2.96	89	11	

Surrogate Recovery:

Fluorobenzene	95%	92%
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Date of Report: August 21, 2009
Samples Submitted: July 22, 2009
Lab Traveler: 0907-152
Project: 809

**BTEX
EPA 8021B**

Date Extracted: 7-23-09
Date Analyzed: 7-23-09

Matrix: Water
Units: ug/L (ppb)

Client ID: **809100 FB**
Lab ID: 07-152-10

	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 96%

Date of Report: August 21, 2009
Samples Submitted: July 22, 2009
Lab Traveler: 0907-152
Project: 809

**BTEX
EPA 8021B
METHOD BLANK QUALITY CONTROL**

Date Extracted: 7-23-09
Date Analyzed: 7-23-09

Matrix: Water
Units: ug/L (ppb)

Lab ID: MB0723W1

	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 99%

Date of Report: August 21, 2009
 Samples Submitted: July 22, 2009
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 Project: 809

**BTEX
 EPA 8021B
 DUPLICATE QUALITY CONTROL**

Date Extracted: 7-23-09
 Date Analyzed: 7-23-09

Matrix: Water
 Units: ug/L (ppb)

Lab ID:	07-125-15 Original	07-125-15 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	89%	91%		

Date of Report: August 21, 2009
 Samples Submitted: July 22, 2009
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 Project: 809

**BTEX
 EPA 8021B
 MS/MSD QUALITY CONTROL**

Date Extracted: 7-23-09
 Date Analyzed: 7-23-09

Matrix: Water
 Units: ug/L (ppb)

Spike Level: 50.0 ppb

Lab ID:	07-125-15 MS	Percent Recovery	07-125-15 MSD	Percent Recovery	RPD	Flags
Benzene	48.5	97	45.8	92	6	
Toluene	48.7	97	45.7	92	6	
Ethyl Benzene	49.8	100	46.7	93	6	
m,p-Xylene	49.7	100	46.6	93	7	
o-Xylene	48.9	98	46.0	92	6	
Surrogate Recovery: Fluorobenzene	91%		90%			

Date of Report: August 21, 2009
Samples Submitted: July 22, 2009
Laboratory Reference: 0907-152
Project: 809

**TOTAL ARSENIC
EPA 6010B**

Date Extracted: 7-23-09
Date Analyzed: 7-24-09

Matrix: Soil
Units: mg/kg (ppm)

Client ID	Lab ID	Result	PQL
809001	07-152-01	ND	13
809002	07-152-02	ND	14
809003	07-152-03	ND	13
809004	07-152-04	ND	13
809005	07-152-05	ND	12
809006	07-152-06	ND	13
809007	07-152-07	ND	13
809008	07-152-08	ND	13
809009	07-152-09	ND	13

Date of Report: August 21, 2009
Samples Submitted: July 22, 2009
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Project: 809

**TOTAL ARSENIC
EPA 6010B
METHOD BLANK QUALITY CONTROL**

Date Extracted: 7-23-09
Date Analyzed: 7-24-09

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB0723S1

Analyte	Method	Result	PQL
Arsenic	6010B	ND	10

Date of Report: August 21, 2009
Samples Submitted: July 22, 2009
Laboratory Reference: 0907-152
Project: 809

**TOTAL ARSENIC
EPA 6010B
DUPLICATE QUALITY CONTROL**

Date Extracted: 7-23-09

Date Analyzed: 7-24-09

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: 07-152-01

Analyte	Sample Result	Duplicate Result	RPD	Flags	PQL
Arsenic	ND	ND	NA		10

Date of Report: August 21, 2009
Samples Submitted: July 22, 2009
Laboratory Reference: 0907-152
Project: 809

**TOTAL ARSENIC
EPA 6010B
MS/MSD QUALITY CONTROL**

Date Extracted: 7-23-09

Date Analyzed: 7-24-09

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 07-152-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Arsenic	100	90.8	91	87.2	87	4	

Date of Report: August 21, 2009
Samples Submitted: July 22, 2009
Laboratory Reference: 0907-152
Project: 809

TOTAL ARSENIC
EPA 200.8

Date Extracted: 7-27-09
Date Analyzed: 7-27-09

Matrix: Water
Units: ug/L (ppb)

Client ID	Lab ID	Result	PQL
809100FB	07-152-10	ND	3.3

Date of Report: August 21, 2009
Samples Submitted: July 22, 2009
Laboratory Reference: 0907-152
Project: 809

TOTAL ARSENIC
EPA 200.8
METHOD BLANK QUALITY CONTROL

Date Extracted: 7-27-09
Date Analyzed: 7-27-09

Matrix: Water
Units: ug/L (ppb)

Lab ID: MB0727W1

Analyte	Method	Result	PQL
Arsenic	200.8	ND	3.3

Date of Report: August 21, 2009
Samples Submitted: July 22, 2009
Laboratory Reference: 0907-152
Project: 809

TOTAL ARSENIC
EPA 200.8
DUPLICATE QUALITY CONTROL

Date Extracted: 7-27-09

Date Analyzed: 7-27-09

Matrix: Water

Units: ug/L (ppb)

Lab ID: 07-132-03

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Arsenic	ND	ND	NA	3.3	

Date of Report: August 21, 2009
Samples Submitted: July 22, 2009
Laboratory Reference: 0907-152
Project: 809

TOTAL ARSENIC
EPA 200.8
MS/MSD QUALITY CONTROL

Date Extracted: 7-27-09

Date Analyzed: 7-27-09

Matrix: Water

Units: ug/L (ppb)

Lab ID: 07-132-03

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Arsenic	110	112	102	111	101	1	

Date of Report: August 21, 2009
Samples Submitted: July 22, 2009
Lab Traveler: 0907-152
Project: 809

% MOISTURE

Date Analyzed: 7-23-09

Client ID	Lab ID	% Moisture
809001	07-152-01	20
809002	07-152-02	28
809003	07-152-03	23
809004	07-152-04	23
809005	07-152-05	19
809006	07-152-06	20
809007	07-152-07	23
809008	07-152-08	22
809009	07-152-09	25



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.

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



**MVA OnSite
Environmental Inc.**

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

Chain of Custody

Page 1 of 1

Company:	Riverside Associates
Project Number:	809
Project Name:	Double H
Project Manager:	Ron Hicks
Sampled by:	CESI

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)

Laboratory Number:

Requested Analysis

07-152

(Check One)					Requested Analysis																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
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OnSite Environmental, Inc.
14648 NE 95th Street
Redmond, WA 98052

Report Number: P090492
Report Date: August 21, 2009
Client Project ID: 809

Analytical Report

Client Sample ID: 809001

Matrix: soil

PAL Sample ID: P090492-01

Sample Date: 7/20/09

Extraction Date	Analysis Date	Analyte	Amount Detected	Method Reporting Limit	Notes
Method: Modified EPA 8141B (GC-FPD)					
7/29/09	8/1/09	Dimethoate	Not Detected	0.017 mg/kg	
Surrogate Recovery: 85 %					
Surrogate Recovery Range: 51-147					
(TPP used as Surrogate)					
Method: Modified EPA 8321B (HPLC-MS)					
7/29/09	8/3/09	Carbaryl	Not Detected	0.0017 mg/kg	
Method: Monsanto Method (HPLC-FLD)					
8/03/09	8/13/09	AMPA	Not Detected	0.099 mg/kg	
8/03/09	8/13/09	Glyphosate	Not Detected	0.099 mg/kg	

Client Sample ID: 809002

Matrix: soil

PAL Sample ID: P090492-02

Sample Date: 7/20/09

Extraction Date	Analysis Date	Analyte	Amount Detected	Method Reporting Limit	Notes
Method: Modified EPA 8141B (GC-FPD)					
7/29/09	8/1/09	Dimethoate	Not Detected	0.016 mg/kg	
Surrogate Recovery: 81 %					
Surrogate Recovery Range: 51-147					
(TPP used as Surrogate)					
Method: Modified EPA 8321B (HPLC-MS)					
7/29/09	8/3/09	Carbaryl	Not Detected	0.0016 mg/kg	
Method: Monsanto Method (HPLC-FLD)					
8/03/09	8/13/09	AMPA	Not Detected	0.099 mg/kg	
8/03/09	8/13/09	Glyphosate	Not Detected	0.099 mg/kg	



Rick Jordan For Steve Thun, Laboratory Director

OnSite Environmental, Inc.
14648 NE 95th Street
Redmond, WA 98052

Report Number: P090492
Report Date: August 21, 2009
Client Project ID: 809

Analytical Report

Client Sample ID: 809003
Matrix: soil

PAL Sample ID: P090492-03
Sample Date: 7/20/09

Extraction Date	Analysis Date	Analyte	Amount Detected	Method Reporting Limit	Notes
Method: Modified EPA 8141B (GC-FPD)					
7/29/09	8/1/09	Dimethoate	Not Detected	0.017 mg/kg	
Surrogate Recovery: 83 %					
Surrogate Recovery Range: 51-147					
(TPP used as Surrogate)					
Method: Modified EPA 8321B (HPLC-MS)					
7/29/09	8/3/09	Carbaryl	Not Detected	0.0017 mg/kg	
Method: Monsanto Method (HPLC-FLD)					
8/03/09	8/13/09	AMPA	Not Detected	0.099 mg/kg	
8/03/09	8/13/09	Glyphosate	Not Detected	0.099 mg/kg	

Client Sample ID: 809004
Matrix: soil

PAL Sample ID: P090492-04
Sample Date: 7/20/09

Extraction Date	Analysis Date	Analyte	Amount Detected	Method Reporting Limit	Notes
Method: Modified EPA 8141B (GC-FPD)					
7/29/09	8/1/09	Dimethoate	Not Detected	0.017 mg/kg	
Surrogate Recovery: 84 %					
Surrogate Recovery Range: 51-147					
(TPP used as Surrogate)					
Method: Modified EPA 8321B (HPLC-MS)					
7/29/09	8/3/09	Carbaryl	Not Detected	0.0017 mg/kg	
Method: Monsanto Method (HPLC-FLD)					
8/03/09	8/13/09	AMPA	Not Detected	0.098 mg/kg	
8/03/09	8/13/09	Glyphosate	Not Detected	0.098 mg/kg	



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Analytical Report

Client Sample ID: 809005

Matrix: soil

PAL Sample ID: P090492-05

Sample Date: 7/20/09

Extraction Date	Analysis Date	Analyte	Amount Detected	Method Reporting Limit	Notes
Method: Modified EPA 8141B (GC-FPD)					
7/29/09	8/1/09	Dimethoate	Not Detected	0.017 mg/kg	
Surrogate Recovery: 89 %					
Surrogate Recovery Range: 51-147					
(TPP used as Surrogate)					
Method: Modified EPA 8321B (HPLC-MS)					
7/29/09	8/3/09	Carbaryl	Not Detected	0.0017 mg/kg	
Method: Monsanto Method (HPLC-FLD)					
8/03/09	8/13/09	AMPA	Not Detected	0.098 mg/kg	
8/03/09	8/13/09	Glyphosate	Not Detected	0.098 mg/kg	

Client Sample ID: 809006

Matrix: soil

PAL Sample ID: P090492-06

Sample Date: 7/20/09

Extraction Date	Analysis Date	Analyte	Amount Detected	Method Reporting Limit	Notes
Method: Modified EPA 8141B (GC-FPD)					
7/29/09	8/1/09	Dimethoate	Not Detected	0.017 mg/kg	
Surrogate Recovery: 88 %					
Surrogate Recovery Range: 51-147					
(TPP used as Surrogate)					
Method: Modified EPA 8321B (HPLC-MS)					
7/29/09	8/3/09	Carbaryl	Not Detected	0.0017 mg/kg	
Method: Monsanto Method (HPLC-FLD)					
8/03/09	8/13/09	AMPA	Not Detected	0.097 mg/kg	
8/03/09	8/13/09	Glyphosate	Not Detected	0.097 mg/kg	



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Report Number: P090492
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Client Project ID: 809

Analytical Report

Client Sample ID: 809007

Matrix: soil

PAL Sample ID: P090492-07

Sample Date: 7/20/09

Extraction Date	Analysis Date	Analyte	Amount Detected	Method Reporting Limit	Notes
Method: Modified EPA 8141B (GC-FPD)					
7/29/09	8/1/09	Dimethoate	0.13 mg/kg	0.017 mg/kg	
Surrogate Recovery: 85 %					
Surrogate Recovery Range: 51-147					
(TPP used as Surrogate)					
Method: Modified EPA 8321B (HPLC-MS)					
7/29/09	8/3/09	Carbaryl	Not Detected	0.0017 mg/kg	
Method: Monsanto Method (HPLC-FLD)					
8/03/09	8/13/09	AMPA	Not Detected	0.099 mg/kg	
8/03/09	8/13/09	Glyphosate	Not Detected	0.099 mg/kg	

Client Sample ID: 809008

Matrix: soil

PAL Sample ID: P090492-08

Sample Date: 7/20/09

Extraction Date	Analysis Date	Analyte	Amount Detected	Method Reporting Limit	Notes
Method: Modified EPA 8141B (GC-FPD)					
7/29/09	8/1/09	Dimethoate	Not Detected	0.016 mg/kg	
Surrogate Recovery: 82 %					
Surrogate Recovery Range: 51-147					
(TPP used as Surrogate)					
Method: Modified EPA 8321B (HPLC-MS)					
7/29/09	8/3/09	Carbaryl	Not Detected	0.0016 mg/kg	
Method: Monsanto Method (HPLC-FLD)					
8/03/09	8/13/09	AMPA	Not Detected	0.099 mg/kg	
8/03/09	8/13/09	Glyphosate	Not Detected	0.099 mg/kg	



Rick Jordan For Steve Thun, Laboratory Director

OnSite Environmental, Inc.
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Report Number: P090492
Report Date: August 21, 2009
Client Project ID: 809

Analytical Report

Client Sample ID: 809009

Matrix: soil

PAL Sample ID: P090492-09

Sample Date: 7/20/09

Extraction Date	Analysis Date	Analyte	Amount Detected	Method Reporting Limit	Notes
Method: Modified EPA 8141B (GC-FPD)					
7/29/09	8/1/09	Dimethoate	Not Detected	0.017 mg/kg	
Surrogate Recovery: 79 %					
Surrogate Recovery Range: 51-147					
(TPP used as Surrogate)					
Method: Modified EPA 8321B (HPLC-MS)					
7/29/09	8/3/09	Carbaryl	Not Detected	0.0017 mg/kg	
Method: Monsanto Method (HPLC-FLD)					
8/03/09	8/13/09	AMPA	Not Detected	0.098 mg/kg	
8/03/09	8/13/09	Glyphosate	Not Detected	0.098 mg/kg	

Client Sample ID: 809100FB

Matrix: water

PAL Sample ID: P090492-20

Sample Date: 7/20/09

Extraction Date	Analysis Date	Analyte	Amount Detected	Method Reporting Limit	Notes
Method: EPA 547 (HPLC-FLD)					
8/07/09	8/7/09	AMPA	Not Detected	10 ug/L	
8/07/09	8/7/09	Glyphosate	Not Detected	10 ug/L	
Method: Modified EPA 8141B (GC-FPD)					
7/27/09	7/31/09	Dimethoate	Not Detected	0.30 ug/L	
Surrogate Recovery: 93 %					
Surrogate Recovery Range:					
(TPP used as Surrogate)					
Method: Modified EPA 8321B (HPLC-MS)					
7/27/09	8/3/09	Carbaryl	Not Detected	0.030 ug/L	



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Report Date: August 21, 2009
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Quality Assurance

Method Blank Data Matrix: water

Extraction Date	Analysis Date	Batch QC Sample #	Analyte	% Recovery	Expected % Recovery	Notes
7/27/09	8/3/09	9072501-BLK1	Carbaryl	Not Detected	< 0.030 ug/L	
7/27/09	7/31/09	9072501-BLK1	Dimethoate	Not Detected	< 0.30 ug/L	

Method Blank Data Matrix: soil

Extraction Date	Analysis Date	Batch QC Sample #	Analyte	% Recovery	Expected % Recovery	Notes
7/29/09	8/3/09	9072903-BLK1	Carbaryl	Not Detected	< 0.0017 mg/kg	
7/29/09	7/31/09	9072903-BLK1	Dimethoate	Not Detected	< 0.017 mg/kg	

Method Blank Data Matrix: soil

Extraction Date	Analysis Date	Batch QC Sample #	Analyte	% Recovery	Expected % Recovery	Notes
7/31/09	8/13/09	9073102-BLK1	AMPA	Not Detected	< 0.017 mg/kg	
7/31/09	8/13/09	9073102-BLK1	Glyphosate	Not Detected	< 0.017 mg/kg	

Method Blank Data Matrix: water

Extraction Date	Analysis Date	Batch QC Sample #	Analyte	% Recovery	Expected % Recovery	Notes
8/7/09	8/7/09	9080703-BLK1	AMPA	Not Detected	< 10 ug/L	
8/7/09	8/7/09	9080703-BLK1	Glyphosate	Not Detected	< 10 ug/L	



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Blank Spike Data **Matrix:** water

Extraction Date	Analysis Date	Batch QC Sample #	Analyte	% Recovery	Expected % Recovery	Notes
7/27/09	8/3/09	9072501-BS1	Carbaryl	73	46-126	
7/27/09	8/3/09	9072501-BSD1	Carbaryl	89	46-126	
7/27/09	7/31/09	9072501-BS1	Dimethoate	103	40-120	
7/27/09	7/31/09	9072501-BSD1	Dimethoate	95	40-120	

Blank Spike Data **Matrix:** soil

Extraction Date	Analysis Date	Batch QC Sample #	Analyte	% Recovery	Expected % Recovery	Notes
7/31/09	8/13/09	9073102-BS1	AMPA	80	38-128	
7/31/09	8/13/09	9073102-BS1	Glyphosate	90	52-125	

Blank Spike Data **Matrix:** water

Extraction Date	Analysis Date	Batch QC Sample #	Analyte	% Recovery	Expected % Recovery	Notes
8/7/09	8/7/09	9080703-BS1	AMPA	101	40-120	
8/7/09	8/7/09	9080703-BS1	Glyphosate	91	87-112	



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Matrix Spike Data **Matrix:** soil

Extraction Date	Analysis Date	Batch QC Sample #	Analyte	% Recovery	Expected % Recovery	Notes
7/29/09	8/3/09	9072903-MS1	Carbaryl	96	20-123	
7/29/09	8/3/09	9072903-MSD1	Carbaryl	96	20-123	
7/29/09	7/31/09	9072903-MS1	Dimethoate	78	40-120	
7/29/09	7/31/09	9072903-MSD1	Dimethoate	79	40-120	

Matrix Spike Data **Matrix:** soil

Extraction Date	Analysis Date	Batch QC Sample #	Analyte	% Recovery	Expected % Recovery	Notes
7/31/09	8/13/09	9073102-MS1	AMPA	89	0-142	
7/31/09	8/13/09	9073102-MS1	Glyphosate	105	0-151	

Matrix Spike Data **Matrix:** water

Extraction Date	Analysis Date	Batch QC Sample #	Analyte	% Recovery	Expected % Recovery	Notes
8/7/09	8/8/09	9080703-MS1	AMPA	99	40-120	
8/7/09	8/8/09	9080703-MS1	Glyphosate	80	66-127	

Analyte Information

Method: EPA 547 (HPLC-FLD)

AMPA is the primary metabolite of Glyphosate. Glyphosate is quantitated as the free acid.

Method: Monsanto Method (HPLC-FLD)

AMPA is the primary metabolite of Glyphosate.



Rick Jordan For Steve Thun, Laboratory Director



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Pacific Agricultural Lab
503 626-7943

CHAIN OF CUSTODY RECORD (FOR SUBCONTRACT LABORATORY)

Lab Reference Number: **07-152**

Project Manager: David Baumeister

Project Number: 809

Project Name: Double H

chain	Sample Number/Name	Date Sampled	Matrix	# Jars	Analysis Requested	Comments
1	809001	7/20/2009	Soil	1	Dimethoate, Carbaryl, Glyphosate	090492-01
2	809002	7/20/2009	Soil	1	"	02
3	809003	7/20/2009	Soil	1	"	03
4	809004	7/20/2009	Soil	1	"	04
5	809005	7/20/2009	Soil	1	"	05
6	809006	7/20/2009	Soil	1	"	06
7	809007	7/20/2009	Soil	1	"	07
8	809008	7/20/2009	Soil	1	"	08
9	809009	7/20/2009	Soil	1	"	09
10	809100FB	7/20/2009	Water	1	"	20
Received by: <i>John McDowell</i>						date: 7/23/09
Firm: <i>OnSite Inc.</i>						time: 1045
Submitted:						date:
Firm:						time:

090492