



Chris Bittner
Utah Division of Water Quality
PO Box 144870
SLC, UT 84114
TEL: (801) 536-4300

RE: MP 44.9

Dear Chris Bittner:

Lab Set ID: 1304247

463 West 3600 South
Salt Lake City, UT 84115

American West Analytical Laboratories received 10 sample(s) on 4/9/2013 for the analyses presented in the following report.

Phone: (801) 263-8686
Toll Free: (888) 263-8686
Fax: (801) 263-8687
e-mail: awal@awal-labs.com
web: www.awal-labs.com

American West Analytical Laboratories (AWAL) is accredited by The National Environmental Laboratory Accreditation Program (NELAP) in Utah and Texas; and is state accredited in Colorado, Idaho, New Mexico, and Missouri.

All analyses were performed in accordance to the NELAP protocols unless noted otherwise. Accreditation scope documents are available upon request. If you have any questions or concerns regarding this report please feel free to call.

Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

The abbreviation "Surr" found in organic reports indicates a surrogate compound that is intentionally added by the laboratory to determine sample injection, extraction, and/or purging efficiency. The "Reporting Limit" found on the report is equivalent to the practical quantitation limit (PQL). This is the minimum concentration that can be reported by the method referenced and the sample matrix. The reporting limit must not be confused with any regulatory limit. Analytical results are reported to three significant figures for quality control and calculation purposes.

Thank You,

Approved by: _____
Laboratory Director or designee

Partial Report



ORGANIC ANALYTICAL REPORT

Client: Utah Division of Water Quality **Contact:** Chris Bittner
Project: MP 44.9
Lab Sample ID: 1304247-001C
Client Sample ID: East of I-15 / 4920392
Collection Date: 4/9/2013 0800h
Received Date: 4/9/2013 1130h

Analytical Results

TPH-DRO (C10-C28) by GC/FID Method 8015D/3510C

Analyzed: 4/9/2013 2202h **Extracted:** 4/9/2013 1708h
Units: mg/L **Dilution Factor:** 1 **Method:** SW8015D

463 West 3600 South
Salt Lake City, UT 84115

Compound	CAS Number	Reporting Limit	Analytical Result	Qual		
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	0.500	< 0.500			
Surrogate	CAS	Result	Amount Spiked	% REC	Limits	Qual
Surr: 4-Bromofluorobenzene	460-00-4	0.188	0.4000	46.9	10-190	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Partial Report



ORGANIC ANALYTICAL REPORT

Client: Utah Division of Water Quality **Contact:** Chris Bittner
Project: MP 44.9
Lab Sample ID: 1304247-002C
Client Sample ID: S. Marina / 4920495
Collection Date: 4/9/2013 0820h
Received Date: 4/9/2013 1130h

Analytical Results

TPH-DRO (C10-C28) by GC/FID Method 8015D/3510C

Analyzed: 4/9/2013 2221h **Extracted:** 4/9/2013 1708h
Units: mg/L **Dilution Factor:** 1 **Method:** SW8015D

463 West 3600 South
Salt Lake City, UT 84115

Compound	CAS Number	Reporting Limit	Analytical Result	Qual		
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	0.500	< 0.500			
Surrogate	CAS	Result	Amount Spiked	% REC	Limits	Qual
Surr: 4-Bromofluorobenzene	460-00-4	0.234	0.4000	58.5	10-190	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Partial Report



ORGANIC ANALYTICAL REPORT

Client: Utah Division of Water Quality **Contact:** Chris Bittner
Project: MP 44.9
Lab Sample ID: 1304247-003C
Client Sample ID: East of Boom / 4920395
Collection Date: 4/9/2013 0845h
Received Date: 4/9/2013 1130h

Analytical Results

TPH-DRO (C10-C28) by GC/FID Method 8015D/3510C

Analyzed: 4/9/2013 2320h **Extracted:** 4/9/2013 1708h
Units: mg/L **Dilution Factor:** 1 **Method:** SW8015D

463 West 3600 South
Salt Lake City, UT 84115

Compound	CAS Number	Reporting Limit	Analytical Result	Qual		
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	0.500	< 0.500			
Surrogate	CAS	Result	Amount Spiked	% REC	Limits	Qual
Surr: 4-Bromofluorobenzene	460-00-4	0.139	0.4000	34.7	10-190	

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Laboratory Director

Jose Rocha
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Partial Report



ORGANIC ANALYTICAL REPORT

Client: Utah Division of Water Quality **Contact:** Chris Bittner
Project: MP 44.9
Lab Sample ID: 1304247-005C
Client Sample ID: Between Weirs Dup / 4920394
Collection Date: 4/9/2013 0935h
Received Date: 4/9/2013 1130h

Analytical Results

TPH-DRO (C10-C28) by GC/FID Method 8015D/3510C

Analyzed: 4/9/2013 2359h **Extracted:** 4/9/2013 1708h
Units: mg/L **Dilution Factor:** 1 **Method:** SW8015D

463 West 3600 South
Salt Lake City, UT 84115

Compound	CAS Number	Reporting Limit	Analytical Result	Qual		
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	0.500	0.823			
Surrogate	CAS	Result	Amount Spiked	% REC	Limits	Qual
Surr: 4-Bromofluorobenzene	460-00-4	0.150	0.4000	37.5	10-190	

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Laboratory Director

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QA Officer

Partial Report



ORGANIC ANALYTICAL REPORT

Client: Utah Division of Water Quality **Contact:** Chris Bittner
Project: MP 44.9
Lab Sample ID: 1304247-006C
Client Sample ID: French Drain / 4920398
Collection Date: 4/9/2013 0900h
Received Date: 4/9/2013 1130h

Analytical Results

TPH-DRO (C10-C28) by GC/FID Method 8015D/3510C

Analyzed: 4/10/2013 0019h **Extracted:** 4/9/2013 1708h
Units: mg/L **Dilution Factor:** 1 **Method:** SW8015D

463 West 3600 South
Salt Lake City, UT 84115

Compound	CAS Number	Reporting Limit	Analytical Result	Qual		
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	0.500	1.11			
Surrogate	CAS	Result	Amount Spiked	% REC	Limits	Qual
Surr: 4-Bromofluorobenzene	460-00-4	0.152	0.4000	37.9	10-190	

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Laboratory Director

Jose Rocha
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Partial Report



ORGANIC ANALYTICAL REPORT

Client: Utah Division of Water Quality **Contact:** Chris Bittner
Project: MP 44.9
Lab Sample ID: 1304247-007C
Client Sample ID: French Drain North / 4920399
Collection Date: 4/9/2013 0910h
Received Date: 4/9/2013 1130h

Analytical Results

TPH-DRO (C10-C28) by GC/FID Method 8015D/3510C

Analyzed: 4/10/2013 0039h **Extracted:** 4/9/2013 1708h
Units: mg/L **Dilution Factor:** 1 **Method:** SW8015D

463 West 3600 South
Salt Lake City, UT 84115

Compound	CAS Number	Reporting Limit	Analytical Result	Qual		
Diesel Range Organics (DRO) (C10-C28)	68476-34-6	0.500	1.28			
Surrogate	CAS	Result	Amount Spiked	% REC	Limits	Qual
Surr: 4-Bromofluorobenzene	460-00-4	0.127	0.4000	31.8	10-190	

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Laboratory Director

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QA Officer

Partial Report

WORK ORDER Summary

Work Order: **1304247** Page 1 of 3

Client: Utah Division of Water Quality

Due Date: 4/10/2013

Client ID: UTD200

Contact: Chris Bittner

Project: MP 44.9

QC Level: III

WO Type: Standard

Comments: Next Day Rush. QC 3. Include TICs on SVOC only. Send partial reports as results become available. Bill accordingly.;

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage	
1304247-001A	East of I-15 / 4920392	4/9/2013 0800h	4/9/2013 1130h	8260-W	Aqueous	<input checked="" type="checkbox"/>	VOCFridge	3
<i>Test Group: 8260-W-Full; # of Analytes: 103 / # of Surr: 4</i>								
1304247-001B				3510-SVOA-PR		<input type="checkbox"/>	Walkin-Semi	2
				8270-W		<input checked="" type="checkbox"/>	Walkin-Semi	
<i>Test Group: 8270-W-Custom; # of Analytes: 138 / # of Surr: 6</i>								
				8270-W-SIM		<input checked="" type="checkbox"/>	Walkin-Semi	
<i>Test Group: 8270-W-PNA-SIM; # of Analytes: 19 / # of Surr:</i>								
1304247-001C				3510-TPH-PR		<input type="checkbox"/>	Walkin-TPH (Liters)	
				8015-W-TPH(1L)		<input checked="" type="checkbox"/>	Walkin-TPH (Liters)	
<i>Test Group: 8015-W-TPH1L; # of Analytes: 1 / # of Surr: 1</i>								
1304247-002A	S. Marina / 4920495	4/9/2013 0820h	4/9/2013 1130h	8260-W	Aqueous	<input checked="" type="checkbox"/>	VOCFridge	3
<i>Test Group: 8260-W-Full; # of Analytes: 103 / # of Surr: 4</i>								
1304247-002B				3510-SVOA-PR		<input type="checkbox"/>	Walkin-Semi	2
				8270-W		<input checked="" type="checkbox"/>	Walkin-Semi	
<i>Test Group: 8270-W-Custom; # of Analytes: 138 / # of Surr: 6</i>								
				8270-W-SIM		<input checked="" type="checkbox"/>	Walkin-Semi	
<i>Test Group: 8270-W-PNA-SIM; # of Analytes: 19 / # of Surr:</i>								
1304247-002C				3510-TPH-PR		<input type="checkbox"/>	Walkin-TPH (Liters)	
				8015-W-TPH(1L)		<input checked="" type="checkbox"/>	Walkin-TPH (Liters)	
<i>Test Group: 8015-W-TPH1L; # of Analytes: 1 / # of Surr: 1</i>								
1304247-003A	East of Boom / 4920395	4/9/2013 0845h	4/9/2013 1130h	8260-W	Aqueous	<input checked="" type="checkbox"/>	VOCFridge	3
<i>Test Group: 8260-W-Full; # of Analytes: 103 / # of Surr: 4</i>								
1304247-003B				3510-SVOA-PR		<input type="checkbox"/>	Walkin-Semi	2
				8270-W		<input checked="" type="checkbox"/>	Walkin-Semi	
<i>Test Group: 8270-W-Custom; # of Analytes: 138 / # of Surr: 6</i>								
				8270-W-SIM		<input checked="" type="checkbox"/>	Walkin-Semi	
<i>Test Group: 8270-W-PNA-SIM; # of Analytes: 19 / # of Surr:</i>								
1304247-003C				3510-TPH-PR		<input type="checkbox"/>	Walkin-TPH (Liters)	
				8015-W-TPH(1L)		<input checked="" type="checkbox"/>	Walkin-TPH (Liters)	
<i>Test Group: 8015-W-TPH1L; # of Analytes: 1 / # of Surr: 1</i>								
1304247-004A	Between Weirs / 4920394	4/9/2013 0930h	4/9/2013 1130h	8260-W	Aqueous	<input checked="" type="checkbox"/>	VOCFridge	3
<i>Test Group: 8260-W-Full; # of Analytes: 103 / # of Surr: 4</i>								
1304247-004B				3510-SVOA-PR		<input type="checkbox"/>	Walkin-Semi	2

WORK ORDER Summary

Work Order: **1304247** Page 2 of 3

Client: Utah Division of Water Quality

Due Date: 4/10/2013

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage			
1304247-004B	Between Weirs / 4920394	4/9/2013 0930h	4/9/2013 1130h	8270-W	Aqueous	<input checked="" type="checkbox"/>	Walkin-Semi	2		
<i>Test Group: 8270-W-Custom; # of Analytes: 138 / # of Surr: 6</i>				8270-W-SIM		<input checked="" type="checkbox"/>	Walkin-Semi			
1304247-004C				3510-TPH-PR		<input type="checkbox"/>	Walkin-TPH (Liters)			
<i>Test Group: 8270-W-PNA-SIM; # of Analytes: 19 / # of Surr:</i>				8015-W-TPH(1L)		<input checked="" type="checkbox"/>	Walkin-TPH (Liters)			
<i>Test Group: 8015-W-TPH1L; # of Analytes: 1 / # of Surr: 1</i>										
1304247-005A	Between Weirs Dup / 4920394	4/9/2013 0935h	4/9/2013 1130h	8260-W	Aqueous	<input checked="" type="checkbox"/>	VOCFridge	3		
<i>Test Group: 8260-W-Full; # of Analytes: 103 / # of Surr: 4</i>				3510-SVOA-PR		<input type="checkbox"/>	Walkin-Semi			
1304247-005B				8270-W		<input checked="" type="checkbox"/>	Walkin-Semi	2		
<i>Test Group: 8270-W-Custom; # of Analytes: 138 / # of Surr: 6</i>				8270-W-SIM		<input checked="" type="checkbox"/>	Walkin-Semi			
<i>Test Group: 8270-W-PNA-SIM; # of Analytes: 19 / # of Surr:</i>				3510-TPH-PR		<input type="checkbox"/>	Walkin-TPH (Liters)			
1304247-005C				8015-W-TPH(1L)		<input checked="" type="checkbox"/>	Walkin-TPH (Liters)			
<i>Test Group: 8015-W-TPH1L; # of Analytes: 1 / # of Surr: 1</i>										
1304247-006A	French Drain / 4920398	4/9/2013 0900h	4/9/2013 1130h	8260-W	Aqueous	<input checked="" type="checkbox"/>	VOCFridge	3		
<i>Test Group: 8260-W-Full; # of Analytes: 103 / # of Surr: 4</i>				3510-SVOA-PR		<input type="checkbox"/>	Walkin-Semi			
1304247-006B				8270-W		<input checked="" type="checkbox"/>	Walkin-Semi	2		
<i>Test Group: 8270-W-Custom; # of Analytes: 138 / # of Surr: 6</i>				8270-W-SIM		<input checked="" type="checkbox"/>	Walkin-Semi			
<i>Test Group: 8270-W-PNA-SIM; # of Analytes: 19 / # of Surr:</i>				3510-TPH-PR		<input type="checkbox"/>	Walkin-TPH (Liters)			
1304247-006C				8015-W-TPH(1L)		<input checked="" type="checkbox"/>	Walkin-TPH (Liters)			
<i>Test Group: 8015-W-TPH1L; # of Analytes: 1 / # of Surr: 1</i>										
1304247-007A	French Drain North / 4920399	4/9/2013 0910h	4/9/2013 1130h	8260-W	Aqueous	<input checked="" type="checkbox"/>	VOCFridge	3		
<i>Test Group: 8260-W-Full; # of Analytes: 103 / # of Surr: 4</i>				3510-SVOA-PR		<input type="checkbox"/>	Walkin-Semi			
1304247-007B				8270-W		<input checked="" type="checkbox"/>	Walkin-Semi	2		
<i>Test Group: 8270-W-Custom; # of Analytes: 138 / # of Surr: 6</i>				8270-W-SIM		<input checked="" type="checkbox"/>	Walkin-Semi			
<i>Test Group: 8270-W-PNA-SIM; # of Analytes: 19 / # of Surr:</i>				3510-TPH-PR		<input type="checkbox"/>	Walkin-TPH (Liters)			
1304247-007C				8015-W-TPH(1L)		<input checked="" type="checkbox"/>	Walkin-TPH (Liters)			
<i>Test Group: 8015-W-TPH1L; # of Analytes: 1 / # of Surr: 1</i>										
1304247-008A	E. of Boom Near #3 / 4920400	4/9/2013 0920h	4/9/2013 1130h	8260-W	Aqueous	<input checked="" type="checkbox"/>	VOCFridge	3		
<i>Test Group: 8260-W-Full; # of Analytes: 103 / # of Surr: 4</i>				3510-SVOA-PR		<input type="checkbox"/>	Walkin-Semi			
1304247-008B								2		

WORK ORDER Summary

Work Order: **1304247** Page 3 of 3

Client: Utah Division of Water Quality

Due Date: 4/10/2013

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage	
1304247-008B	E. of Boom Near #3 / 4920400	4/9/2013 0920h	4/9/2013 1130h	8270-W	Aqueous	<input checked="" type="checkbox"/>	Walkin-Semi	2
<i>Test Group: 8270-W-Custom; # of Analytes: 138 / # of Surr: 6</i>				8270-W-SIM		<input checked="" type="checkbox"/>	Walkin-Semi	
1304247-008C				<i>Test Group: 8270-W-PNA-SIM; # of Analytes: 19 / # of Surr:</i>				
				3510-TPH-PR		<input type="checkbox"/>	Walkin-TPH (Liters)	
				8015-W-TPH(1L)		<input checked="" type="checkbox"/>	Walkin-TPH (Liters)	
				<i>Test Group: 8015-W-TPH1L; # of Analytes: 1 / # of Surr: 1</i>				
1304247-009A	Field Blank	4/9/2013 0945h	4/9/2013 1130h	8260-W	Aqueous	<input checked="" type="checkbox"/>	VOCFridge	3
				<i>Test Group: 8260-W-Full; # of Analytes: 103 / # of Surr: 4</i>				
1304247-010A	Trip Blank	4/9/2013	4/9/2013 1130h	8260-W	Aqueous	<input checked="" type="checkbox"/>	VOCFridge	3
				<i>Test Group: 8260-W-Full; # of Analytes: 103 / # of Surr: 4</i>				

American West Analytical Laboratories

Chain of Custody

Lab Sample Set # 1304247

Client: **Utah Division of Water Quality**
 Address: **195 N. 1950 W.**
Salt Lake City, UT 84115

Contact: **Chris Bittner**
 Phone: **(801) 536-3600**
 Fax :

Page 1 of 1

Project Name: **MP 44.9**
 PO#:

Email: **cbittner@utah.gov**

QC Level: **3**

Turn Around Time
NEXT DAY RUSH

Sample ID:	Date Sampled	Time	# of Containers	Sample Matrix	VOC's (8260C)	Full SVOC - w/ TICs (8270D)	PNA SVOC - SIM (8270D)	DRO (8015D)	Comments	Laboratory Use Only	
										1	2
1 East of I-15 4920392	4/9/2013	8:00	7	w	x	x	x	x		1 Shipped or Hand delivered	<input checked="" type="checkbox"/>
2 S. Marina 4920495	4/9/2013	8:20	7	w	x	x	x	x		2 Ambient or Chilled	<input checked="" type="checkbox"/>
3 CC from N. Boom 4920500	4/9/2013		7	w	x	x	x	x		3 Temperature <u>10</u>	<input checked="" type="checkbox"/>
4 North Boom 4920207	4/9/2013		7	w	x	x	x	x		4 Received Broken/Leaking (Improperly Sealed)	<input type="checkbox"/>
5 W. Boom 5 4920499	4/9/2013		7	w	x	x	x	x		5 Properly Preserved	<input checked="" type="checkbox"/>
6 W. Boom 4 4920498	4/9/2013		7	w	x	x	x	x		6 Received Within Holding Times	<input type="checkbox"/>
7 Field Blank 4920398	4/9/2013		7	w	x	x	x	x		COC Tape Was:	<input checked="" type="checkbox"/>
8 W. Boom 9 4920497	4/9/2013		7	w	x	x	x	x		1 Present on Outer Package	<input type="checkbox"/>
9 W. Boom 2 4920496	4/9/2013		7	w	x	x	x	x		2 Unbroken on Outer Package	<input checked="" type="checkbox"/>
10 CC from W. Boom 4920399	4/9/2013		7	w	x	x	x	x		3 Present on Sample	<input type="checkbox"/>
11 W. Boom 1 4920398	4/9/2013		7	w	x	x	x	x		4 Unbroken on Sample	<input checked="" type="checkbox"/>
12 East of Boom 4920395	4/9/2013	8:45	7	w	x	x	x	x		Discrepancies Between Sample Labels and COC Record?	<input type="checkbox"/>
13 Between Weirs 4920394	4/9/2013	9:30	7	w	x	x	x	x		Y <input checked="" type="checkbox"/>	
14 Between Weirs Dup 4920394	4/9/2013	9:35	7	w	x	x	x	x			
15 French Drain 4920398	4/9/2013	9:00	7	w	x	x	x	x			
16 French Drain North 4920399	4/9/2013	9:10	7	w	x	x	x	x			
17 E. of Boom Near #3 4920400	4/9/2013	9:20	7	w	x	x	x	x			
18 Field Blank	4/9/2013	9:45	3	w	x						
19 Trip Blank	4/9/2013		3	w	x						
20											

Special Instructions: **Release results as they become available**

Relinquished by: Signature <i>[Signature]</i>	Date: <u>4/9/13</u>	Received by: Signature <i>[Signature]</i>	Date: <u>4-9-13</u>
Print Name <i>Alex Anderson</i>	Time: <u>11:30</u>	Print Name <i>Chris Bittner</i>	Time: <u>11:30</u>
Relinquished by: Signature	Date:	Received by: Signature	Date:
Print Name	Time:	Print Name	Time: