



June 25, 2014  
Cardno ERI 03116010L.Q142

LUST Coordinator  
Washington State Department of Ecology  
Northwest Regional Office  
3190 160<sup>th</sup> Avenue Southeast  
Bellevue, Washington 98008-5452

**SUBJECT**      **Site Data Transmittal – 2<sup>nd</sup> Quarter 2014**  
Former Mobil Station 99BLV  
1500 145<sup>th</sup> Place Southeast  
Bellevue, Washington

Cardno ERI  
License ENVIRRI044JD

801 Second Avenue  
Suite 700  
Seattle, WA 98104  
USA

Phone 206 269 0104  
Toll-free 877 470 4334  
Fax 206 269 0098  
www.cardno.com

[www.cardnoeri.com](http://www.cardnoeri.com)

LUST Coordinator:

At the request of ExxonMobil Environmental Services (EMES), on behalf of ExxonMobil Oil Corporation, Cardno ERI performs environmental activities at the subject site. Cardno ERI conducted groundwater sampling activities on June 9, 2014. Enclosed please find a generalized site plan and laboratory analytical reports. This data is furnished for the sole purpose of providing groundwater analytical data. No engineering or technical implications are stated or should be inferred from this data.

Please contact Mr. Michael J. Miller, Cardno ERI Project Manager for this site, at 206 767 2360, or Mr. Aaron Thom, EMES Project Manager for this site, at 832 544 3413 with any questions.

Sincerely,

Laina Cole  
Office Manager  
for Cardno ERI  
Direct Line 206 394 7225  
Email: [laina.cole@cardno.com](mailto:laina.cole@cardno.com)

Michael J. Miller  
Project Manager  
for Cardno ERI  
Direct Line 206 767 2360  
Email: [michael.miller@cardno.com](mailto:michael.miller@cardno.com)

June 25, 2014  
Cardno ERI 03116010L.Q142 Former Mobil Station 99BLV, Bellevue, Washington

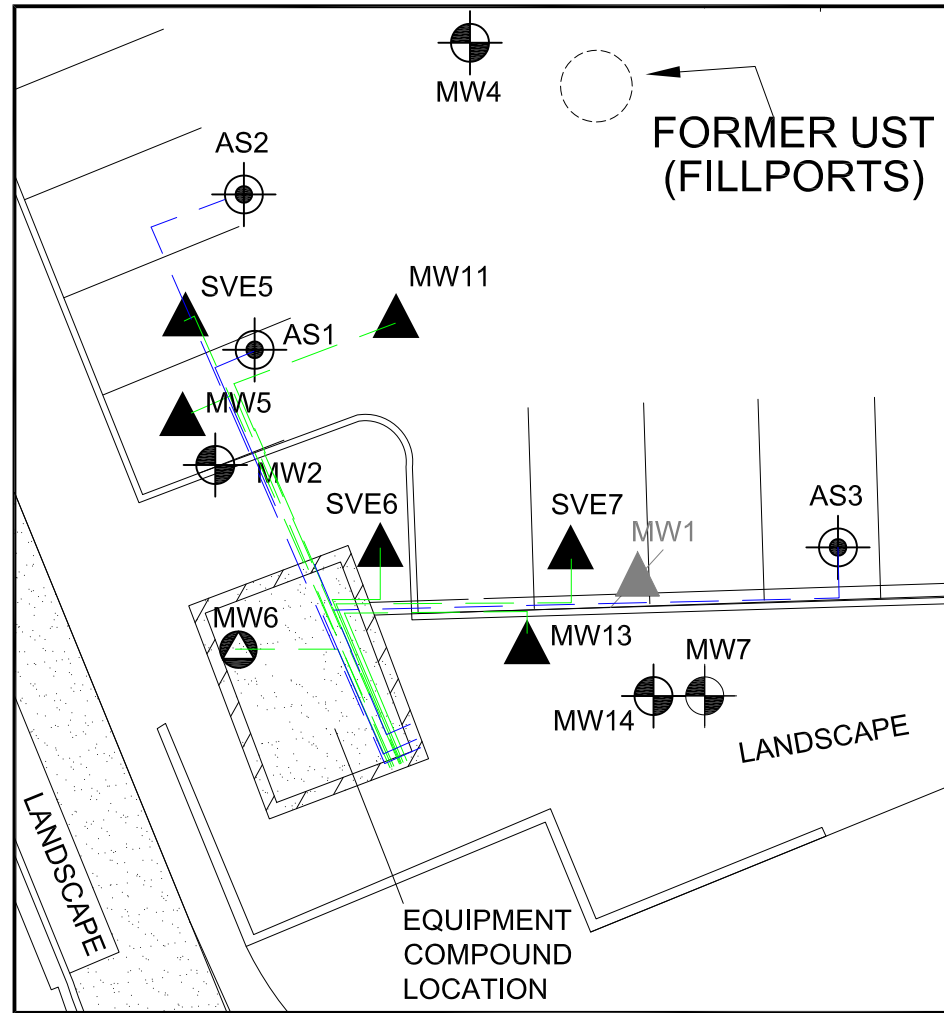


## ENCLOSURES

Plate 1 Generalized Site Plan

Laboratory Analytical Report and Chain of Custody Documentation  
Field Data Records

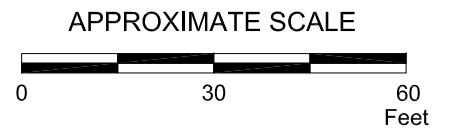
cc: w/ enclosure  
Mr. John T. Margeson, Bank of America, N.A. (*electronic copy*)  
Mr. Arne Swanson, Sunset Hill Memorial Park (*electronic copy*)  
Ms. Joanne Bledsoe, Trust & Bel-East Partners, Inc. (*electronic copy*)  
Mr. Aaron Thom, ExxonMobil Environmental Services (*electronic copy*)



### INSET MAP



SOURCE: Modified from a map provided by ExxonMobil Oil Corporation



## GENERALIZED SITE PLAN

FORMER MOBIL STATION 99BLV  
1500 145th Place Southeast  
Bellevue, Washington

#### EXPLANATION

- |           |   |          |                                      |
|-----------|---|----------|--------------------------------------|
| MW15      | Groundwater Monitoring Well               | Concrete | Concrete                             |
| AS3       | Air Sparging Well                         | MW7      | Covered Groundwater Monitoring Well  |
| SVE7      | Soil Vapor Extraction Well                | MW1      | Destroyed Soil Vapor Extraction Well |
| MW13A,B,C | Vadose Zone Vapor Extraction Well Cluster | MW6      | Dual Phase Extraction Well           |

#### PROJECT NO.

031160

#### PLATE

1

RGH: 10/05/11

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Nashville  
2960 Foster Creighton Drive  
Nashville, TN 37204  
Tel: (615)726-0177

TestAmerica Job ID: 490-54648-1

TestAmerica Sample Delivery Group: 031160CX  
Client Project/Site: 99BLV

For:

Cardno ERI  
801 Second Ave  
Suite 700  
Seattle, Washington 98104

Attn: Michael Miller



Authorized for release by:  
6/23/2014 12:43:26 PM

Leah Klingensmith, Senior Project Manager  
(615)301-5038  
[leah.klingensmith@testamericainc.com](mailto:leah.klingensmith@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

1

2

3

4

5

6

7

8

9

10

11

12

13



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Sample Summary . . . . .	3
Case Narrative . . . . .	4
Definitions . . . . .	5
Client Sample Results . . . . .	6
QC Sample Results . . . . .	12
QC Association . . . . .	17
Chronicle . . . . .	20
Method Summary . . . . .	22
Certification Summary . . . . .	23
Chain of Custody . . . . .	24
Receipt Checklists . . . . .	27

# Sample Summary

Client: Cardno ERI  
Project/Site: 99BLV

TestAmerica Job ID: 490-54648-1  
SDG: 031160CX

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-54648-1	W-46-MW4	Water	06/04/14 12:45	06/05/14 08:45
490-54648-2	W-47-MW5	Water	06/04/14 13:25	06/05/14 08:45
490-54648-3	W-47-MW6	Water	06/04/14 14:00	06/05/14 08:45
490-54648-4	W-48-MW8	Water	06/04/14 11:25	06/05/14 08:45
490-54648-5	W-47-MW9	Water	06/04/14 12:10	06/05/14 08:45
490-54648-6	W-48-MW14	Water	06/04/14 14:45	06/05/14 08:45



# Case Narrative

Client: Cardno ERI  
Project/Site: 99BLV

TestAmerica Job ID: 490-54648-1  
SDG: 031160CX

**Job ID: 490-54648-1**

**Laboratory: TestAmerica Nashville**

## Narrative

### Job Narrative 490-54648-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 6/5/2014 8:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.5° C and 4.9° C.

#### GC/MS VOA

Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with batch 169565.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### GC VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### GC Semi VOA

Method(s) NWTPH-Dx: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with batches 169460, 167985.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

## Definitions/Glossary

Client: Cardno ERI  
Project/Site: 99BLV

TestAmerica Job ID: 490-54648-1  
SDG: 031160CX

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)



# Client Sample Results

Client: Cardno ERI  
Project/Site: 99BLV

TestAmerica Job ID: 490-54648-1  
SDG: 031160CX

**Client Sample ID: W-46-MW4**

**Lab Sample ID: 490-54648-1**

**Date Collected: 06/04/14 12:45**

**Matrix: Water**

**Date Received: 06/05/14 08:45**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.00		ug/L			06/14/14 06:28	1
Toluene	ND		1.00		ug/L			06/14/14 06:28	1
Ethylbenzene	ND		1.00		ug/L			06/14/14 06:28	1
Xylenes, Total	ND		2.00		ug/L			06/14/14 06:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130		06/14/14 06:28	1
Dibromofluoromethane (Surr)	97		70 - 130		06/14/14 06:28	1
1,2-Dichloroethane-d4 (Surr)	105		70 - 130		06/14/14 06:28	1
Toluene-d8 (Surr)	96		70 - 130		06/14/14 06:28	1

**Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		100		ug/L			06/13/14 19:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	108		50 - 150		06/13/14 19:26	1

**Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		94.3		ug/L		06/13/14 16:02	06/17/14 03:53	1
C24-C40	ND		94.3		ug/L		06/13/14 16:02	06/17/14 03:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	105		50 - 150	06/13/14 16:02	06/17/14 03:53	1

**Method: 6010C - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		5.00		ug/L		06/18/14 15:23	06/19/14 17:02	1

**Method: 6010C - Metals (ICP) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		5.00		ug/L		06/19/14 11:11	06/19/14 15:18	1

# Client Sample Results

Client: Cardno ERI  
Project/Site: 99BLV

TestAmerica Job ID: 490-54648-1  
SDG: 031160CX

**Client Sample ID: W-47-MW5**

**Lab Sample ID: 490-54648-2**

**Date Collected: 06/04/14 13:25**

**Matrix: Water**

**Date Received: 06/05/14 08:45**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.00		ug/L			06/14/14 06:54	1
Toluene	ND		1.00		ug/L			06/14/14 06:54	1
Ethylbenzene	ND		1.00		ug/L			06/14/14 06:54	1
Xylenes, Total	ND		2.00		ug/L			06/14/14 06:54	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	95		70 - 130					06/14/14 06:54	1
Dibromofluoromethane (Surr)	96		70 - 130					06/14/14 06:54	1
1,2-Dichloroethane-d4 (Surr)	102		70 - 130					06/14/14 06:54	1
Toluene-d8 (Surr)	96		70 - 130					06/14/14 06:54	1

**Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		100		ug/L			06/13/14 21:36	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	106		50 - 150					06/13/14 21:36	1

**Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		93.9		ug/L		06/13/14 16:02	06/17/14 04:24	1
C24-C40	ND		93.9		ug/L		06/13/14 16:02	06/17/14 04:24	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-Terphenyl	66		50 - 150				06/13/14 16:02	06/17/14 04:24	1

**Method: 6010C - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	26.1		5.00		ug/L		06/18/14 15:23	06/20/14 10:25	1

**Method: 6010C - Metals (ICP) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	5.40		5.00		ug/L		06/19/14 11:11	06/19/14 15:22	1

# Client Sample Results

Client: Cardno ERI  
Project/Site: 99BLV

TestAmerica Job ID: 490-54648-1  
SDG: 031160CX

**Client Sample ID: W-47-MW6**

**Lab Sample ID: 490-54648-3**

**Date Collected: 06/04/14 14:00**

**Matrix: Water**

**Date Received: 06/05/14 08:45**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.00		ug/L			06/14/14 07:20	1
Toluene	ND		1.00		ug/L			06/14/14 07:20	1
Ethylbenzene	ND		1.00		ug/L			06/14/14 07:20	1
Xylenes, Total	ND		2.00		ug/L			06/14/14 07:20	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	93		70 - 130					06/14/14 07:20	1
Dibromofluoromethane (Surr)	97		70 - 130					06/14/14 07:20	1
1,2-Dichloroethane-d4 (Surr)	103		70 - 130					06/14/14 07:20	1
Toluene-d8 (Surr)	96		70 - 130					06/14/14 07:20	1

**Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		100		ug/L			06/13/14 22:09	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	106		50 - 150					06/13/14 22:09	1

**Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		93.9		ug/L		06/13/14 16:02	06/17/14 04:40	1
C24-C40	ND		93.9		ug/L		06/13/14 16:02	06/17/14 04:40	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-Terphenyl	95		50 - 150				06/13/14 16:02	06/17/14 04:40	1

**Method: 6010C - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		5.00		ug/L		06/18/14 15:23	06/19/14 17:09	1

**Method: 6010C - Metals (ICP) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		5.00		ug/L		06/19/14 11:11	06/19/14 15:25	1

# Client Sample Results

Client: Cardno ERI  
Project/Site: 99BLV

TestAmerica Job ID: 490-54648-1  
SDG: 031160CX

**Client Sample ID: W-48-MW8**

**Lab Sample ID: 490-54648-4**

**Date Collected: 06/04/14 11:25**

**Matrix: Water**

**Date Received: 06/05/14 08:45**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.00		ug/L			06/14/14 07:46	1
Toluene	ND		1.00		ug/L			06/14/14 07:46	1
Ethylbenzene	ND		1.00		ug/L			06/14/14 07:46	1
Xylenes, Total	ND		2.00		ug/L			06/14/14 07:46	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	92		70 - 130					06/14/14 07:46	1
Dibromofluoromethane (Surr)	97		70 - 130					06/14/14 07:46	1
1,2-Dichloroethane-d4 (Surr)	103		70 - 130					06/14/14 07:46	1
Toluene-d8 (Surr)	96		70 - 130					06/14/14 07:46	1

**Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		100		ug/L			06/13/14 23:46	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	106		50 - 150					06/13/14 23:46	1

**Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		97.1		ug/L		06/13/14 16:02	06/17/14 04:55	1
C24-C40	ND		97.1		ug/L		06/13/14 16:02	06/17/14 04:55	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-Terphenyl	123		50 - 150				06/13/14 16:02	06/17/14 04:55	1

**Method: 6010C - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		5.00		ug/L		06/18/14 15:23	06/19/14 17:13	1

**Method: 6010C - Metals (ICP) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		5.00		ug/L		06/19/14 11:11	06/19/14 15:28	1

# Client Sample Results

Client: Cardno ERI  
Project/Site: 99BLV

TestAmerica Job ID: 490-54648-1  
SDG: 031160CX

**Client Sample ID: W-47-MW9**

**Lab Sample ID: 490-54648-5**

**Date Collected: 06/04/14 12:10**

**Matrix: Water**

**Date Received: 06/05/14 08:45**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.00		ug/L			06/14/14 08:12	1
Toluene	ND		1.00		ug/L			06/14/14 08:12	1
Ethylbenzene	ND		1.00		ug/L			06/14/14 08:12	1
Xylenes, Total	ND		2.00		ug/L			06/14/14 08:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130		06/14/14 08:12	1
Dibromofluoromethane (Surr)	96		70 - 130		06/14/14 08:12	1
1,2-Dichloroethane-d4 (Surr)	104		70 - 130		06/14/14 08:12	1
Toluene-d8 (Surr)	95		70 - 130		06/14/14 08:12	1

**Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		100		ug/L			06/14/14 00:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	107		50 - 150		06/14/14 00:19	1

**Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		98.0		ug/L		06/09/14 13:51	06/10/14 18:19	1
C24-C40	ND		98.0		ug/L		06/09/14 13:51	06/10/14 18:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	77		50 - 150	06/09/14 13:51	06/10/14 18:19	1

**Method: 6010C - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		5.00		ug/L		06/18/14 15:23	06/19/14 17:16	1

**Method: 6010C - Metals (ICP) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		5.00		ug/L		06/19/14 11:11	06/19/14 15:32	1

# Client Sample Results

Client: Cardno ERI  
Project/Site: 99BLV

TestAmerica Job ID: 490-54648-1  
SDG: 031160CX

**Client Sample ID: W-48-MW14**

**Lab Sample ID: 490-54648-6**

Date Collected: 06/04/14 14:45

Matrix: Water

Date Received: 06/05/14 08:45

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.00		ug/L			06/14/14 08:38	1
Toluene	ND		1.00		ug/L			06/14/14 08:38	1
Ethylbenzene	ND		1.00		ug/L			06/14/14 08:38	1
Xylenes, Total	ND		2.00		ug/L			06/14/14 08:38	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	94		70 - 130					06/14/14 08:38	1
Dibromofluoromethane (Surr)	95		70 - 130					06/14/14 08:38	1
1,2-Dichloroethane-d4 (Surr)	102		70 - 130					06/14/14 08:38	1
Toluene-d8 (Surr)	95		70 - 130					06/14/14 08:38	1

**Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		100		ug/L			06/14/14 00:51	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	106		50 - 150					06/14/14 00:51	1

**Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		93.9		ug/L		06/13/14 16:02	06/17/14 05:11	1
C24-C40	ND		93.9		ug/L		06/13/14 16:02	06/17/14 05:11	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-Terphenyl	87		50 - 150				06/13/14 16:02	06/17/14 05:11	1

**Method: 6010C - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		5.00		ug/L		06/18/14 15:23	06/19/14 17:30	1

**Method: 6010C - Metals (ICP) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		5.00		ug/L		06/19/14 11:11	06/19/14 15:35	1

# QC Sample Results

Client: Cardno ERI  
Project/Site: 99BLV

TestAmerica Job ID: 490-54648-1  
SDG: 031160CX

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 490-169565/7**

**Matrix: Water**

**Analysis Batch: 169565**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.00		ug/L			06/14/14 03:02	1
Toluene	ND		1.00		ug/L			06/14/14 03:02	1
Ethylbenzene	ND		1.00		ug/L			06/14/14 03:02	1
Xylenes, Total	ND		2.00		ug/L			06/14/14 03:02	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130		06/14/14 03:02	1
Dibromofluoromethane (Surr)	98		70 - 130		06/14/14 03:02	1
1,2-Dichloroethane-d4 (Surr)	104		70 - 130		06/14/14 03:02	1
Toluene-d8 (Surr)	95		70 - 130		06/14/14 03:02	1

**Lab Sample ID: LCS 490-169565/3**

**Matrix: Water**

**Analysis Batch: 169565**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	49.25		ug/L		99	80 - 121
Toluene	50.0	50.36		ug/L		101	80 - 126
Ethylbenzene	50.0	50.59		ug/L		101	80 - 130
Xylenes, Total	150	152.5		ug/L		102	80 - 132

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
Dibromofluoromethane (Surr)	98		70 - 130
1,2-Dichloroethane-d4 (Surr)	102		70 - 130
Toluene-d8 (Surr)	95		70 - 130

**Lab Sample ID: LCSD 490-169565/4**

**Matrix: Water**

**Analysis Batch: 169565**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	50.0	51.14		ug/L		102	80 - 121	4	17
Toluene	50.0	51.97		ug/L		104	80 - 126	3	15
Ethylbenzene	50.0	52.80		ug/L		106	80 - 130	4	15
Xylenes, Total	150	158.4		ug/L		106	80 - 132	4	15

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
Dibromofluoromethane (Surr)	97		70 - 130
1,2-Dichloroethane-d4 (Surr)	103		70 - 130
Toluene-d8 (Surr)	96		70 - 130

# QC Sample Results

Client: Cardno ERI  
Project/Site: 99BLV

TestAmerica Job ID: 490-54648-1  
SDG: 031160CX

## Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

**Lab Sample ID: MB 490-169208/19**

**Matrix: Water**

**Analysis Batch: 169208**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		100		ug/L			06/13/14 18:54	1
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac	
a,a,a-Trifluorotoluene	107		50 - 150				06/13/14 18:54	1	

**Lab Sample ID: LCS 490-169208/7**

**Matrix: Water**

**Analysis Batch: 169208**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C6-C12	1000	992.0		ug/L		99	39 - 143
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
a,a,a-Trifluorotoluene	89		50 - 150				

**Lab Sample ID: LCSD 490-169208/8**

**Matrix: Water**

**Analysis Batch: 169208**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C6-C12	1000	994.4		ug/L		99	39 - 143	0	18
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
a,a,a-Trifluorotoluene	90		50 - 150						

**Lab Sample ID: 490-54648-3 MS**

**Matrix: Water**

**Analysis Batch: 169208**

**Client Sample ID: W-47-MW6**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
C6-C12	ND		1000	926.9		ug/L		93	39 - 143
Surrogate	MS %Recovery	MS Qualifier	Limits						
a,a,a-Trifluorotoluene	79		50 - 150						

**Lab Sample ID: 490-54648-3 MSD**

**Matrix: Water**

**Analysis Batch: 169208**

**Client Sample ID: W-47-MW6**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C6-C12	ND		1000	989.9		ug/L		99	39 - 143	7	18
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
a,a,a-Trifluorotoluene	78		50 - 150								

TestAmerica Nashville



# QC Sample Results

Client: Cardno ERI  
Project/Site: 99BLV

TestAmerica Job ID: 490-54648-1  
SDG: 031160CX

## Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC) (Continued)

**Lab Sample ID: 490-54648-1 DU**  
**Matrix: Water**  
**Analysis Batch: 169208**

**Client Sample ID: W-46-MW4**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
C6-C12	ND		ND		ug/L		NC	18
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>					
<i>a,a,a-Trifluorotoluene</i>	106		50 - 150					

## Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

**Lab Sample ID: MB 490-167985/1-A**  
**Matrix: Water**  
**Analysis Batch: 168278**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 167985**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
C10-C24	ND		100		ug/L		06/09/14 13:51	06/10/14 17:48	1
C24-C40	ND		100		ug/L		06/09/14 13:51	06/10/14 17:48	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>o-Terphenyl</i>	75		50 - 150				06/09/14 13:51	06/10/14 17:48	1

**Lab Sample ID: LCS 490-167985/2-A**  
**Matrix: Water**  
**Analysis Batch: 168278**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 167985**

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
C10-C24	1000	758.1		ug/L		76	51 - 132
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				
<i>o-Terphenyl</i>	94		50 - 150				

**Lab Sample ID: 490-54643-N-11-A DU**  
**Matrix: Water**  
**Analysis Batch: 168278**

**Client Sample ID: Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 167985**

Analyte	Sample	Sample	DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
C10-C24	418		363.7		ug/L		14	41
C24-C40	626		481.2		ug/L		26	41
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>					
<i>o-Terphenyl</i>	72		50 - 150					

**Lab Sample ID: MB 490-169460/1-A**  
**Matrix: Water**  
**Analysis Batch: 169807**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 169460**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
C10-C24	ND		100		ug/L		06/13/14 16:02	06/17/14 03:22	1
C24-C40	ND		100		ug/L		06/13/14 16:02	06/17/14 03:22	1

TestAmerica Nashville

# QC Sample Results

Client: Cardno ERI  
Project/Site: 99BLV

TestAmerica Job ID: 490-54648-1  
SDG: 031160CX

## Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

**Lab Sample ID: MB 490-169460/1-A**  
**Matrix: Water**  
**Analysis Batch: 169807**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 169460**

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	98		50 - 150	06/13/14 16:02	06/17/14 03:22	1

**Lab Sample ID: LCS 490-169460/2-A**  
**Matrix: Water**  
**Analysis Batch: 169807**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 169460**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C10-C24	1000	617.1		ug/L		62	51 - 132

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>o</i> -Terphenyl	93		50 - 150

## Method: 6010C - Metals (ICP)

**Lab Sample ID: MB 490-170683/1-A**  
**Matrix: Water**  
**Analysis Batch: 171138**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 170683**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		5.00		ug/L		06/18/14 15:23	06/19/14 16:01	1

**Lab Sample ID: LCS 490-170683/2-A**  
**Matrix: Water**  
**Analysis Batch: 171138**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 170683**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	50.0	50.30		ug/L		101	80 - 120

**Lab Sample ID: 490-54643-K-1-B MS**  
**Matrix: Water**  
**Analysis Batch: 171138**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 170683**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	ND		50.0	52.90		ug/L		99	75 - 125

**Lab Sample ID: 490-54643-K-1-C MSD**  
**Matrix: Water**  
**Analysis Batch: 171138**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 170683**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Lead	ND		50.0	51.40		ug/L		96	75 - 125	3	20

**Lab Sample ID: MB 490-170903/1-B**  
**Matrix: Water**  
**Analysis Batch: 171138**

**Client Sample ID: Method Blank**  
**Prep Type: Dissolved**  
**Prep Batch: 170911**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		5.00		ug/L		06/19/14 11:11	06/19/14 14:05	1

TestAmerica Nashville

# QC Sample Results

Client: Cardno ERI  
Project/Site: 99BLV

TestAmerica Job ID: 490-54648-1  
SDG: 031160CX

## Method: 6010C - Metals (ICP) (Continued)

**Lab Sample ID: LCS 490-170903/2-B**

**Matrix: Water**

**Analysis Batch: 171138**

**Client Sample ID: Lab Control Sample**

**Prep Type: Dissolved**

**Prep Batch: 170911**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	50.0	51.40		ug/L		103	80 - 120

**Lab Sample ID: 490-54643-J-2-E MS**

**Matrix: Water**

**Analysis Batch: 171138**

**Client Sample ID: Matrix Spike**

**Prep Type: Dissolved**

**Prep Batch: 170911**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	ND		50.0	53.70		ug/L		100	75 - 125

**Lab Sample ID: 490-54643-J-2-F MSD**

**Matrix: Water**

**Analysis Batch: 171138**

**Client Sample ID: Matrix Spike Duplicate**

**Prep Type: Dissolved**

**Prep Batch: 170911**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	ND		50.0	54.20		ug/L		101	75 - 125	1	20

# QC Association Summary

Client: Cardno ERI  
Project/Site: 99BLV

TestAmerica Job ID: 490-54648-1  
SDG: 031160CX

## GC/MS VOA

### Analysis Batch: 169565

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-54648-1	W-46-MW4	Total/NA	Water	8260B	
490-54648-2	W-47-MW5	Total/NA	Water	8260B	
490-54648-3	W-47-MW6	Total/NA	Water	8260B	
490-54648-4	W-48-MW8	Total/NA	Water	8260B	
490-54648-5	W-47-MW9	Total/NA	Water	8260B	
490-54648-6	W-48-MW14	Total/NA	Water	8260B	
LCS 490-169565/3	Lab Control Sample	Total/NA	Water	8260B	
LCS D 490-169565/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-169565/7	Method Blank	Total/NA	Water	8260B	

## GC VOA

### Analysis Batch: 169208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-54648-1	W-46-MW4	Total/NA	Water	NWTPH-Gx	
490-54648-1 DU	W-46-MW4	Total/NA	Water	NWTPH-Gx	
490-54648-2	W-47-MW5	Total/NA	Water	NWTPH-Gx	
490-54648-3	W-47-MW6	Total/NA	Water	NWTPH-Gx	
490-54648-3 MS	W-47-MW6	Total/NA	Water	NWTPH-Gx	
490-54648-3 MSD	W-47-MW6	Total/NA	Water	NWTPH-Gx	
490-54648-4	W-48-MW8	Total/NA	Water	NWTPH-Gx	
490-54648-5	W-47-MW9	Total/NA	Water	NWTPH-Gx	
490-54648-6	W-48-MW14	Total/NA	Water	NWTPH-Gx	
LCS 490-169208/7	Lab Control Sample	Total/NA	Water	NWTPH-Gx	
LCS D 490-169208/8	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	
MB 490-169208/19	Method Blank	Total/NA	Water	NWTPH-Gx	

## GC Semi VOA

### Prep Batch: 167985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-54643-N-11-A DU	Duplicate	Total/NA	Water	3510C	
490-54648-5	W-47-MW9	Total/NA	Water	3510C	
LCS 490-167985/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-167985/1-A	Method Blank	Total/NA	Water	3510C	

### Analysis Batch: 168278

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-54643-N-11-A DU	Duplicate	Total/NA	Water	NWTPH-Dx	167985
490-54648-5	W-47-MW9	Total/NA	Water	NWTPH-Dx	167985
LCS 490-167985/2-A	Lab Control Sample	Total/NA	Water	NWTPH-Dx	167985
MB 490-167985/1-A	Method Blank	Total/NA	Water	NWTPH-Dx	167985

### Prep Batch: 169460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-54648-1	W-46-MW4	Total/NA	Water	3510C	
490-54648-2	W-47-MW5	Total/NA	Water	3510C	
490-54648-3	W-47-MW6	Total/NA	Water	3510C	
490-54648-4	W-48-MW8	Total/NA	Water	3510C	
490-54648-6	W-48-MW14	Total/NA	Water	3510C	

TestAmerica Nashville

# QC Association Summary

Client: Cardno ERI  
Project/Site: 99BLV

TestAmerica Job ID: 490-54648-1  
SDG: 031160CX

## GC Semi VOA (Continued)

### Prep Batch: 169460 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 490-169460/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-169460/1-A	Method Blank	Total/NA	Water	3510C	

### Analysis Batch: 169807

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-54648-1	W-46-MW4	Total/NA	Water	NWTPH-Dx	169460
490-54648-2	W-47-MW5	Total/NA	Water	NWTPH-Dx	169460
490-54648-3	W-47-MW6	Total/NA	Water	NWTPH-Dx	169460
490-54648-4	W-48-MW8	Total/NA	Water	NWTPH-Dx	169460
490-54648-6	W-48-MW14	Total/NA	Water	NWTPH-Dx	169460
LCS 490-169460/2-A	Lab Control Sample	Total/NA	Water	NWTPH-Dx	169460
MB 490-169460/1-A	Method Blank	Total/NA	Water	NWTPH-Dx	169460

## Metals

### Prep Batch: 170683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-54643-K-1-B MS	Matrix Spike	Total/NA	Water	3010A	
490-54643-K-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	3010A	
490-54648-1	W-46-MW4	Total/NA	Water	3010A	
490-54648-2	W-47-MW5	Total/NA	Water	3010A	
490-54648-3	W-47-MW6	Total/NA	Water	3010A	
490-54648-4	W-48-MW8	Total/NA	Water	3010A	
490-54648-5	W-47-MW9	Total/NA	Water	3010A	
490-54648-6	W-48-MW14	Total/NA	Water	3010A	
LCS 490-170683/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 490-170683/1-A	Method Blank	Total/NA	Water	3010A	

### Filtration Batch: 170903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-54643-J-2-E MS	Matrix Spike	Dissolved	Water	Filtration	
490-54643-J-2-F MSD	Matrix Spike Duplicate	Dissolved	Water	Filtration	
490-54648-1	W-46-MW4	Dissolved	Water	Filtration	
490-54648-2	W-47-MW5	Dissolved	Water	Filtration	
490-54648-3	W-47-MW6	Dissolved	Water	Filtration	
490-54648-4	W-48-MW8	Dissolved	Water	Filtration	
490-54648-5	W-47-MW9	Dissolved	Water	Filtration	
490-54648-6	W-48-MW14	Dissolved	Water	Filtration	
LCS 490-170903/2-B	Lab Control Sample	Dissolved	Water	Filtration	
MB 490-170903/1-B	Method Blank	Dissolved	Water	Filtration	

### Prep Batch: 170911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-54643-J-2-E MS	Matrix Spike	Dissolved	Water	3005A	170903
490-54643-J-2-F MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	170903
490-54648-1	W-46-MW4	Dissolved	Water	3005A	170903
490-54648-2	W-47-MW5	Dissolved	Water	3005A	170903
490-54648-3	W-47-MW6	Dissolved	Water	3005A	170903
490-54648-4	W-48-MW8	Dissolved	Water	3005A	170903
490-54648-5	W-47-MW9	Dissolved	Water	3005A	170903

TestAmerica Nashville

# QC Association Summary

Client: Cardno ERI  
Project/Site: 99BLV

TestAmerica Job ID: 490-54648-1  
SDG: 031160CX

## Metals (Continued)

### Prep Batch: 170911 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-54648-6	W-48-MW14	Dissolved	Water	3005A	170903
LCS 490-170903/2-B	Lab Control Sample	Dissolved	Water	3005A	170903
MB 490-170903/1-B	Method Blank	Dissolved	Water	3005A	170903

### Analysis Batch: 171138

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-54643-J-2-E MS	Matrix Spike	Dissolved	Water	6010C	170911
490-54643-J-2-F MSD	Matrix Spike Duplicate	Dissolved	Water	6010C	170911
490-54643-K-1-B MS	Matrix Spike	Total/NA	Water	6010C	170683
490-54643-K-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	6010C	170683
490-54648-1	W-46-MW4	Dissolved	Water	6010C	170911
490-54648-1	W-46-MW4	Total/NA	Water	6010C	170683
490-54648-2	W-47-MW5	Dissolved	Water	6010C	170911
490-54648-3	W-47-MW6	Dissolved	Water	6010C	170911
490-54648-3	W-47-MW6	Total/NA	Water	6010C	170683
490-54648-4	W-48-MW8	Dissolved	Water	6010C	170911
490-54648-4	W-48-MW8	Total/NA	Water	6010C	170683
490-54648-5	W-47-MW9	Dissolved	Water	6010C	170911
490-54648-5	W-47-MW9	Total/NA	Water	6010C	170683
490-54648-6	W-48-MW14	Dissolved	Water	6010C	170911
490-54648-6	W-48-MW14	Total/NA	Water	6010C	170683
LCS 490-170683/2-A	Lab Control Sample	Total/NA	Water	6010C	170683
LCS 490-170903/2-B	Lab Control Sample	Dissolved	Water	6010C	170911
MB 490-170683/1-A	Method Blank	Total/NA	Water	6010C	170683
MB 490-170903/1-B	Method Blank	Dissolved	Water	6010C	170911

### Analysis Batch: 171402

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-54648-2	W-47-MW5	Total/NA	Water	6010C	170683

# Lab Chronicle

Client: Cardno ERI  
Project/Site: 99BLV

TestAmerica Job ID: 490-54648-1  
SDG: 031160CX

**Client Sample ID: W-46-MW4**

**Date Collected: 06/04/14 12:45**

**Date Received: 06/05/14 08:45**

**Lab Sample ID: 490-54648-1**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	169565	06/14/14 06:28	WC1	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	169208	06/13/14 19:26	GWM	TAL NSH
Total/NA	Prep	3510C			1060 mL	1 mL	169460	06/13/14 16:02	FXM	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	1060 mL	1 mL	169807	06/17/14 03:53	JPS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	170911	06/19/14 11:11	JBD	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	170903	06/19/14 11:11	JBD	TAL NSH
Dissolved	Analysis	6010C		1	50 mL	50 mL	171138	06/19/14 15:18	LTB	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	170683	06/18/14 15:23	JBD	TAL NSH
Total/NA	Analysis	6010C		1	50 mL	50 mL	171138	06/19/14 17:02	LTB	TAL NSH

**Client Sample ID: W-47-MW5**

**Date Collected: 06/04/14 13:25**

**Date Received: 06/05/14 08:45**

**Lab Sample ID: 490-54648-2**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	169565	06/14/14 06:54	WC1	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	169208	06/13/14 21:36	GWM	TAL NSH
Total/NA	Prep	3510C			1065 mL	1 mL	169460	06/13/14 16:02	FXM	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	1065 mL	1 mL	169807	06/17/14 04:24	JPS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	170911	06/19/14 11:11	JBD	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	170903	06/19/14 11:11	JBD	TAL NSH
Dissolved	Analysis	6010C		1	50 mL	50 mL	171138	06/19/14 15:22	LTB	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	170683	06/18/14 15:23	JBD	TAL NSH
Total/NA	Analysis	6010C		1	50 mL	50 mL	171402	06/20/14 10:25	LTB	TAL NSH

**Client Sample ID: W-47-MW6**

**Date Collected: 06/04/14 14:00**

**Date Received: 06/05/14 08:45**

**Lab Sample ID: 490-54648-3**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	169565	06/14/14 07:20	WC1	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	169208	06/13/14 22:09	GWM	TAL NSH
Total/NA	Prep	3510C			1065 mL	1 mL	169460	06/13/14 16:02	FXM	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	1065 mL	1 mL	169807	06/17/14 04:40	JPS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	170911	06/19/14 11:11	JBD	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	170903	06/19/14 11:11	JBD	TAL NSH
Dissolved	Analysis	6010C		1	50 mL	50 mL	171138	06/19/14 15:25	LTB	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	170683	06/18/14 15:23	JBD	TAL NSH
Total/NA	Analysis	6010C		1	50 mL	50 mL	171138	06/19/14 17:09	LTB	TAL NSH

# Lab Chronicle

Client: Cardno ERI  
Project/Site: 99BLV

TestAmerica Job ID: 490-54648-1  
SDG: 031160CX

## Client Sample ID: W-48-MW8

Lab Sample ID: 490-54648-4

Date Collected: 06/04/14 11:25

Matrix: Water

Date Received: 06/05/14 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	169565	06/14/14 07:46	WC1	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	169208	06/13/14 23:46	GWM	TAL NSH
Total/NA	Prep	3510C			1030 mL	1 mL	169460	06/13/14 16:02	FXM	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	1030 mL	1 mL	169807	06/17/14 04:55	JPS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	170911	06/19/14 11:11	JBD	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	170903	06/19/14 11:11	JBD	TAL NSH
Dissolved	Analysis	6010C		1	50 mL	50 mL	171138	06/19/14 15:28	LTB	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	170683	06/18/14 15:23	JBD	TAL NSH
Total/NA	Analysis	6010C		1	50 mL	50 mL	171138	06/19/14 17:13	LTB	TAL NSH

## Client Sample ID: W-47-MW9

Lab Sample ID: 490-54648-5

Date Collected: 06/04/14 12:10

Matrix: Water

Date Received: 06/05/14 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	169565	06/14/14 08:12	WC1	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	169208	06/14/14 00:19	GWM	TAL NSH
Total/NA	Prep	3510C			1020 mL	1.0 mL	167985	06/09/14 13:51	CLM	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	1020 mL	1.0 mL	168278	06/10/14 18:19	JPS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	170911	06/19/14 11:11	JBD	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	170903	06/19/14 11:11	JBD	TAL NSH
Dissolved	Analysis	6010C		1	50 mL	50 mL	171138	06/19/14 15:32	LTB	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	170683	06/18/14 15:23	JBD	TAL NSH
Total/NA	Analysis	6010C		1	50 mL	50 mL	171138	06/19/14 17:16	LTB	TAL NSH

## Client Sample ID: W-48-MW14

Lab Sample ID: 490-54648-6

Date Collected: 06/04/14 14:45

Matrix: Water

Date Received: 06/05/14 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	169565	06/14/14 08:38	WC1	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	169208	06/14/14 00:51	GWM	TAL NSH
Total/NA	Prep	3510C			1065 mL	1 mL	169460	06/13/14 16:02	FXM	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	1065 mL	1 mL	169807	06/17/14 05:11	JPS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	170911	06/19/14 11:11	JBD	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	170903	06/19/14 11:11	JBD	TAL NSH
Dissolved	Analysis	6010C		1	50 mL	50 mL	171138	06/19/14 15:35	LTB	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	170683	06/18/14 15:23	JBD	TAL NSH
Total/NA	Analysis	6010C		1	50 mL	50 mL	171138	06/19/14 17:30	LTB	TAL NSH

**Laboratory References:**

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177



# Method Summary

Client: Cardno ERI  
Project/Site: 99BLV

TestAmerica Job ID: 490-54648-1  
SDG: 031160CX

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC)	NWTPH	TAL NSH
NWTPH-Dx	Northwest - Semi-Volatile Petroleum Products (GC)	NWTPH	TAL NSH
6010C	Metals (ICP)	SW846	TAL NSH

**Protocol References:**

NWTPH = Northwest Total Petroleum Hydrocarbon

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177



# Certification Summary

Client: Cardno ERI  
Project/Site: 99BLV

TestAmerica Job ID: 490-54648-1  
SDG: 031160CX

## Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Oregon	NELAP	10	TN200001	04-29-15
Washington	State Program	10	C789	07-19-14

1

2

3

4

5

6

7

8

9

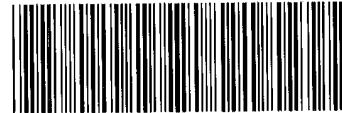
10

11

12

13

## COOLER RECEIPT



490-54648 Chain of Custody

Cooler Received/Opened On 6/5/2014 @ 0845

1. Tracking # 9892 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID Raynger

2. Temperature of rep. sample or temp blank when opened: 4-9 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA  
If yes, how many and where: 1 Side

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) M

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # NA

I certify that I unloaded the cooler and answered questions 7-14 (initial) ⊕

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) ⊕

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) ⊕

I certify that I attached a label with the unique LIMS number to each container (initial) ⊕

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO..#

## COOLER RECEIPT FORM

Cooler Received/Opened On : 06/5/2014 @ 0845

1. Tracking # 9881 (last 4 digits, FedEx)

Courier: Fed-ex IR Gun: 96210146

2. Temperature of rep. sample or temp blank when opened: 3.5 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO  NA

4. Were custody seals on outside of cooler?  YES...NO...NA

If yes, how many and where: 1 Front

5. Were the seals intact, signed, and dated correctly?  YES...NO...NA

6. Were custody papers inside cooler?  YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) [Signature]

7. Were custody seals on containers: YES  NO and Intact YES NO  NA

Were these signed and dated correctly? YES...NO... NA

8. Packing mat'l used?  Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process:  Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)?  YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)?  YES...NO...NA

12. Did all container labels and tags agree with custody papers?  YES...NO...NA

13a. Were VOA vials received?  YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES... NO...NA

14. Was there a Trip Blank in this cooler? YES...NO... NA If multiple coolers, sequence # NA

I certify that I unloaded the cooler and answered questions 7-14 (initial) [Signature]

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO... NA

b. Did the bottle labels indicate that the correct preservatives were used  YES...NO...NA

16. Was residual chlorine present? YES...NO... NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) [Signature]

17. Were custody papers properly filled out (ink, signed, etc)?  YES...NO...NA

18. Did you sign the custody papers in the appropriate place?  YES...NO...NA

19. Were correct containers used for the analysis requested?  YES...NO...NA

20. Was sufficient amount of sample sent in each container?  YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) [Signature]

I certify that I attached a label with the unique LIMS number to each container (initial) [Signature]

21. Were there Non-Conformance issues at login? YES... NO Was a NCM generated? YES... NO.#



## Login Sample Receipt Checklist

Client: Cardno ERI

Job Number: 490-54648-1

SDG Number: 031160CX

**Login Number: 54648**

**List Number: 1**

**Creator: Ford, Easton**

**List Source: TestAmerica Nashville**

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



**FIELD LOG  
DEPTH TO WATER RECORD**

**SITE:** ExxonMobil 99BLV

**CARDNO ERI #:** 031160

**LOCATION:** 1500 145th Place SE, Bellevue, WA

**FIELD CREW:** NAG & KJR

**DATE:** 06/04/14

Well #	Time	DTW (ft)	DOW (ft)	Comments/Repairs
MW2	10:40	DRY	40.2	Gauged only 06/04/14.
MW3	--	--	--	Inaccessible.
MW4	10:44	46.33	60.7	Gauged and sampled 06/04/14.
MW5	12:26	46.55	57.1	Gauged and sampled 06/04/14.
MW6	10:36	46.89	51.4	Gauged and sampled 06/04/14.
MW7	--	--	--	Inaccessible.
MW8	10:08	47.66	59.0	Gauged and sampled 06/04/14.
MW9	10:04	47.31	59.4	Gauged and sampled 06/04/14.
MW10	--	--	--	Not accessed this quarter.
MW11	10:13	DRY	39.1	Gauged only 06/04/14.
MW12	--	--	--	Not accessed this quarter.
MW13A	10:16	DRY	38.1	Gauged only 06/04/14.
MW13B	10:17	DRY	26.0	Gauged only 06/04/14.
MW13C	10:19	DRY	14.4	Gauged only 06/04/14.
MW14	10:22	48.00	59.1	Gauged and sampled 06/04/14.
MW15	--	--	--	Not accessed this quarter.
SVE5	13:03	DRY	17.6	Gauged only 06/04/14.
SVE6	10:24	DRY	39.1	Gauged only 06/04/14.
SVE7	--	--	--	Inaccessible.

**FIELD LOG**  
**PURGING & SAMPLING RECORD AND WELL EQUIPMENT STATUS**

**SITE:** ExxonMobil 99BLV **CARDNO ERI #:** 031160  
**LOCATION:** 1500 145th Place Southeast Bellevue, Washington  
**FIELD CREW:** NAG & KJR **DATE:** 06/04/14 Low-Flow Sampling

WELL #		MW4					
TIME	DTW	PURGE VOLUME	Pump Rate (Q)	Temp	Cond	pH	DO
hr:min	ft	mL	mL/min	deg C	mS/cm	unit	mg/L
				1 deg	3%	0.1	0.3
10:44	46.33						
12:30	46.41	1,020	340	18.38	0.218	7.18	4.74
12:33	46.42	2,040	340	18.36	0.219	7.33	4.42
12:36	46.42	3,060	340	18.38	0.220	7.42	4.13
12:39	46.43	4,080	340	18.40	0.219	7.48	4.00
12:42	46.43	5,100	340	18.46	0.219	7.49	3.88
LID	BOLTS	GASKET	PLUG	LOCK	VAULT SEAL	WATER IN VAULT?	REPLACE VAULT?
OK	OK	OK	OK	OK	OK	YES	NO
SW		12:45	1 gal = 3.79L				
Total Purge Volume		5,100 mL	1.35 gal				

WELL #		MW5					
TIME	DTW	PURGE VOLUME	Pump Rate (Q)	Temp	Cond	pH	DO
hr:min	ft	mL	mL/min	deg C	mS/cm	unit	mg/L
				1 deg	3%	0.1	0.3
12:26	46.55						
13:11	46.66	1,350	450	14.91	0.577	7.75	5.13
13:14	46.67	2,700	450	14.69	0.579	7.77	4.41
13:17	46.68	4,050	450	14.58	0.580	7.78	4.07
13:20	46.68	5,400	450	14.55	0.579	7.76	3.80
13:23	46.69	6,750	450	14.55	0.578	7.76	3.60
LID	BOLTS	GASKET	PLUG	LOCK	VAULT SEAL	WATER IN VAULT?	REPLACE VAULT?
OK	OK	OK	OK	OK	OK	NO	NO
SW		13:25	1 gal = 3.79L				
Total Purge Volume		6,750 mL	1.78 gal				





**FIELD LOG**  
**PURGING & SAMPLING RECORD AND WELL EQUIPMENT STATUS**

**SITE:** ExxonMobil 99BLV **CARDNO ERI #:** 031160  
**LOCATION:** 1500 145th Place Southeast Bellevue, Washington  
**FIELD CREW:** NAG & KJR **DATE:** 06/04/14 Low-Flow Sampling

WELL #		MW9						
TIME	DTW	PURGE VOLUME	Pump Rate (Q)	Temp	Cond	pH	DO	
hr:min	ft	mL	mL/min	deg C	mS/cm	unit	mg/L	
				1 deg	3%	0.1	0.3	
10:04	47.31							
11:53	47.32	1,500	500	15.26	0.246	6.34	5.74	
11:56	47.32	3,000	500	15.35	0.248	6.31	4.80	
11:59	47.32	4,500	500	15.47	0.250	6.34	4.24	
12:02	47.32	6,000	500	15.51	0.251	6.36	4.04	
12:05	47.32	7,500	500	15.53	0.252	6.37	3.95	
LID	BOLTS	GASKET	PLUG	LOCK	VAULT SEAL	WATER IN VAULT?	REPLACE VAULT?	
OK	OK	OK	OK	OK	OK	NO	NO	
SW		12:10	1 gal = 3.79L					
Total Purge Volume		7,500 mL	1.98 gal					

WELL #		MW14						
TIME	DTW	PURGE VOLUME	Pump Rate (Q)	Temp	Cond	pH	DO	
hr:min	ft	mL	mL/min	deg C	mS/cm	unit	mg/L	
				1 deg	3%	0.1	0.3	
10:22	48.00							
14:27	48.00	735	245	14.80	0.262	5.79	3.72	
14:30	48.00	1,470	245	14.85	0.261	5.66	3.24	
14:33	48.00	2,205	245	14.84	0.256	5.68	3.09	
14:36	48.00	2,940	245	14.86	0.252	5.73	3.00	
14:39	48.00	3,675	245	14.86	0.249	5.78	2.94	
LID	BOLTS	GASKET	PLUG	LOCK	VAULT SEAL	WATER IN VAULT?	REPLACE VAULT?	
OK	OK	OK	OK	OK	OK	NO	NO	
SW		14:45	1 gal = 3.79L					
Total Purge Volume		3,675 mL	0.97 gal					