URS

May 14, 2014
Env-Agency Correspondence
CONSENT DECREE 99-2-07176-0SEA
PROGRESS REPORT

Ms. Maura S. O'Brien
Washington Department of Ecology
Northwest Region Office
3190 160th Avenue SE
Bellevue, WA 98008-5452

Dear Ms. O'Brien:

URS Corporation, on behalf of Equilon Enterprises LL dba Shell Oil Products US (Shell), submits the following progress report for its Seattle Terminal MTCA remedial action in accordance with Consent Decree No. 99-2-07176-0SEA Section XI. This progress report covers the period from January 1, 2014 through March 31, 2014.

A. List of Activities That Have Taken Place During the Reporting Period

- On January 16, 2014 groundwater sampling activities were conducted in the TX-03A Area in association with the enhanced bioremediation pilot test. The EHC-O™ sock and canister was removed from MW-304 and monitoring wells TW-01, MW-302, MW-304, MW-310, and ASW-1 were gauged for water levels. Groundwater samples were collected from monitoring wells TW-01, MW-302, ASW-1, MW-304, and MW-310.

- On January 16, 2016 monitoring wells MW-208 through MW-212 were monitored for free product, and hydrophobic socks were installed in monitoring wells MW-209, MW-210, and MW-212. During gauging product was observed in monitoring wells MW-209 (0.05 feet), MW-210 (0.12 feet), and MW-212 (0.04 feet).

- Monitoring wells MW-208 through MW-212 were gauged for water levels on February 27, 2014 and March 25, 2014. Measureable free product was detected in monitoring well MW-210 during both events at 0.67 feet and 1.12 feet, respectively. A trace of product was observed in monitoring well MW-209 and MW-212 during the February gauging event and new socks were installed in monitoring wells MW-209, MW-210, and MW-212.

B. Detailed Description of Any Deviations from Required Tasks Not Otherwise Documented in Project Plans or Amendment Requests

- None

Description of All Deviations From Schedule (Section VI, Work to Be Performed: Task 5) During the Reporting Period and Any Planned Deviations in the Upcoming Reporting Period

- None

URS Corporation
111 SW Columbia, Suite 1500
Portland, OR 97201-5850
Tel: 503.222.7200
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D. For any Deviations in Schedule, a Plan for Recovery Lost Time and Maintaining Compliance with Schedule

- None

E. All Raw Data (including laboratory analysis) Received by Shell During the Past Quarter and an Identification of the Source of the Sample.

- The laboratory data for the enhanced bioremediation pilot test is attached. Groundwater samples were analyzed for one or more of the following: benzene, toluene, ethylbenzene, and total xylenes; gasoline range hydrocarbons; and dissolved lead, manganese, and iron. A data validation report is attached (Appendix A). A discussion of the results will be included in the Focused Feasibility Study currently being prepared.

F. A List of Deliverables for the Upcoming Reporting Period if Different from the Schedule

- Annual Compliance Monitoring Report 2012-2013
- Focused Feasibility Study

If you have any questions regarding this progress report, please call Brian Pletcher at (503) 243-3120.

Sincerely,

Brian Pletcher
Senior Project Manager

cc: Perry Pineda – Shell Oil Products US
Paul Katz, Seattle Terminal Manager – Shell Oil Products US

Attachments:

Attachment A Data Validation Report and Laboratory Report

ATTACHMENT A

Data Validation Report and Laboratory Report

Final Data Review

The data quality review of the five primary groundwater samples and one trip blank, collected January 16th, 2014 at the Harbor Island site in Seattle, Washington has been completed. Samples were submitted to TestAmerica (TA) of Beaverton, Oregon. The samples submitted were analyzed for one or more of the following: benzene, toluene, ethylbenzene, and total xylene (BTEX; EPA Method 8260B); gasoline range hydrocarbons (NWTPH-Gx); and dissolved lead and manganese (EPA Method 6020).

The review included the analytical data presented in TA report 250-J16700-1. The data were reviewed based on *United States Environmental Protection Agency (USEPA) Contract Laboratory Program (CLP) National Functional Guidelines (NFGs) for Organic Data Review*, June 2008, *USEPA CLP NFGs for Inorganic Superfund Data Review*, January 2010, and laboratory quality control criteria. Items reviewed included: chain-of-custody (COC) records, hold times, surrogate recoveries, matrix spike and matrix spike duplicate results, laboratory control and laboratory control duplicate results, laboratory duplicate results, and method blank results. Data qualifiers assigned as a result of this review are included in Table 1.

The following criteria were evaluated during the review:

- COC Records – Acceptable

  The laboratory noted that a trip blank sample was submitted but not included on the COC. The analysis of the trip blank was not required for the project and not completed by the laboratory. No action is required.

  The sample containers for dissolved metals analysis did not indicate if the samples were field filtered. URS confirmed filtration with the laboratory during delivery of the samples. No action is required.

- Temperature – Acceptable
- Preservation – Acceptable
- Hold Times – Acceptable
- Method Blanks – Acceptable
- Surrogates – Acceptable
- Laboratory Control Samples (LCS/LCSD) – Acceptable
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) – Acceptable with the following exception:

  BTEX by EPA Method 8260B: The recoveries of benzene in the MS/MSD analyses were below the laboratory limit of 80% at 72%/67%. The LCS/LCSD recoveries were in control indicating the analytical batch was in control. Therefore, only the benzene

result of the parent sample ASW-1 (250-16700-3) was qualified as estimated and flagged 'J'.

- Reporting Limits – Acceptable

Overall Assessment of Data

The completeness of the analytical reports for this groundwater monitoring event is 100%. The usefulness of the data is based on the USEPA guidance documents referenced in the introduction of this report. Upon consideration of the information presented above, the data are considered usable. Data qualified as estimated, 'J', during this review process are included in Table 1.

Data Qualifier Definitions

U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria.

DNR Do Not Report. Another result is available that is more reliable.

References

USEPA, 2008. U.S. Environmental Protection Agency Contract Laboratory Program National Functional Guidelines for Organic Data Review. June 2008.

USEPA, 2010. U.S. Environmental Protection Agency (USEPA) Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review. January 2010.

Table 1 Sample Qualification Summary

Sample Number	Laboratory ID	Analyte	Data Qualifier	Reason for Qualification
ASW-1	250-16700-3	Benzene	J	MS/MSD recovery

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Portland
9405 SW Nimbus Ave.
Beaverton, OR 97008
Tel: (503)906-9200

TestAmerica Job ID: 250-16700-1
Client Project/Site: Harbor Island
Revision: 1

For:
URS Corporation
111 SW Columbia St
Suite 1500
Portland, Oregon 97201-5850

Attn: Brian Pletcher

Vanessa Berry

Authorized for release by:
2/10/2014 9:20:17 PM

Vanessa Berry, Project Manager I
(503)906-9233
vanessa.berry@testamericainc.com

Table of Contents

Sample Summary

Client: URS Corporation
Project/Site: Harbor Island

TestAmerica Job ID: 250-16700-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
250-16700-1	MW-310	Water	01/16/14 12:46	01/17/14 09:10
250-16700-2	MW-304	Water	01/16/14 13:40	01/17/14 09:10
250-16700-3	ASW-1	Water	01/16/14 14:25	01/17/14 09:10
250-16700-4	MW-302	Water	01/16/14 15:07	01/17/14 09:10
250-16700-5	TW-01	Water	01/16/14 15:48	01/17/14 09:10

Job ID: 250-16700-1

Laboratory: TestAmerica Portland

Narrative

Job Narrative
250-16700-1

Comments
No additional comments.

Receipt
The samples were received on 1/17/2014 9:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.7º C.

Except:

A trip blank was submitted for analysis with these samples; however, it was not listed on the Chain of Custody (COC).

ASW-1 (250-16700-3), MW-302 (250-16700-4), MW-304 (250-16700-2), MW-310 (250-16700-1), TW-01 (250-16700-5) COC and containers do not indicate if HNO3 bottles are field filtered. Client indicated they all are indeed field filtered during drop off at the lab.

The following samples were activated by the client on 2-5-14 for dissoved Iron analysis.

GC/MS VOA
No analytical or quality issues were noted.

GC VOA
No analytical or quality issues were noted.

Metals
Method 200.8, 6020: The following sample(s) was diluted due to the nature of the sample matrix: (250-16709-1 DU), Liquid Acid w/ Metals (250-16709-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

Field Service / Mobile Lab
No analytical or quality issues were noted.

VOA Prep
No analytical or quality issues were noted.

Job ID: 250-16700-2

Laboratory: TestAmerica Portland

Narrative

Job Narrative
250-16700-2

All samples were activated by the client on 2-5-14, for dissoved iron analysis.

Metals
No analytical or quality issues were noted.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery exceeds the control limits

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

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
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)

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

Client Sample ID: MW-310
Date Collected: 01/16/14 12:46
Date Received: 01/17/14 09:10

Lab Sample ID: 250-16700-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	**77.5**		20.0		ug/L			01/23/14 13:00	20
Benzene	**821**		4.00		ug/L			01/23/14 13:00	20
Ethylbenzene	**189**		10.0		ug/L			01/23/14 13:00	20
Toluene	**41.4**		10.0		ug/L			01/23/14 13:00	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*80 - 120*		*01/23/14 13:00*	*20*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*01/23/14 13:00*	*20*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*01/23/14 13:00*	*20*
Toluene-d8 (Surr)	*99*		*80 - 120*		*01/23/14 13:00*	*20*

Client Sample ID: MW-304
Date Collected: 01/16/14 13:40
Date Received: 01/17/14 09:10

Lab Sample ID: 250-16700-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	**57.1**		20.0		ug/L			01/23/14 13:51	20
Benzene	**790**		4.00		ug/L			01/23/14 13:51	20
Ethylbenzene	**47.2**		10.0		ug/L			01/23/14 13:51	20
Toluene	**19.4**		10.0		ug/L			01/23/14 13:51	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*80 - 120*		*01/23/14 13:51*	*20*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*01/23/14 13:51*	*20*
Dibromofluoromethane (Surr)	*98*		*80 - 120*		*01/23/14 13:51*	*20*
Toluene-d8 (Surr)	*98*		*80 - 120*		*01/23/14 13:51*	*20*

Client Sample ID: ASW-1
Date Collected: 01/16/14 14:25
Date Received: 01/17/14 09:10

Lab Sample ID: 250-16700-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		20.0		ug/L			01/23/14 14:15	20
Benzene	**505**		4.00		ug/L			01/23/14 14:15	20
Ethylbenzene	ND		10.0		ug/L			01/23/14 14:15	20
Toluene	ND		10.0		ug/L			01/23/14 14:15	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 120*		*01/23/14 14:15*	*20*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*		*01/23/14 14:15*	*20*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*01/23/14 14:15*	*20*
Toluene-d8 (Surr)	*98*		*80 - 120*		*01/23/14 14:15*	*20*

Client Sample ID: MW-302
Date Collected: 01/16/14 15:07
Date Received: 01/17/14 09:10

Lab Sample ID: 250-16700-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	**50.4**		20.0		ug/L			01/23/14 16:19	20
Benzene	**404**		4.00		ug/L			01/23/14 16:19	20
Ethylbenzene	**84.3**		10.0		ug/L			01/23/14 16:19	20
Toluene	**16.1**		10.0		ug/L			01/23/14 16:19	20

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 120*		*01/23/14 16:19*	*20*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*01/23/14 16:19*	*20*
Dibromofluoromethane (Surr)	*98*		*80 - 120*		*01/23/14 16:19*	*20*
Toluene-d8 (Surr)	*98*		*80 - 120*		*01/23/14 16:19*	*20*

Client Sample ID: TW-01
Date Collected: 01/16/14 15:48
Date Received: 01/17/14 09:10

Lab Sample ID: 250-16700-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	**64.8**		20.0		ug/L			01/23/14 16:43	20
Benzene	**521**		4.00		ug/L			01/23/14 16:43	20
Ethylbenzene	**107**		10.0		ug/L			01/23/14 16:43	20
Toluene	**29.4**		10.0		ug/L			01/23/14 16:43	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*107*		*80 - 120*		*01/23/14 16:43*	*20*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*01/23/14 16:43*	*20*
Dibromofluoromethane (Surr)	*96*		*80 - 120*		*01/23/14 16:43*	*20*
Toluene-d8 (Surr)	*99*		*80 - 120*		*01/23/14 16:43*	*20*

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

Client Sample ID: MW-310
Date Collected: 01/16/14 12:46
Date Received: 01/17/14 09:10

Lab Sample ID: 250-16700-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	5940		500		ug/L			01/20/14 23:37	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*128*		*50 - 150*		*01/20/14 23:37*	*10*

Client Sample ID: MW-304
Date Collected: 01/16/14 13:40
Date Received: 01/17/14 09:10

Lab Sample ID: 250-16700-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	4890		500		ug/L			01/20/14 23:07	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*123*		*50 - 150*		*01/20/14 23:07*	*10*

Client Sample ID: ASW-1
Date Collected: 01/16/14 14:25
Date Received: 01/17/14 09:10

Lab Sample ID: 250-16700-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	2960		500		ug/L			01/20/14 22:36	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*50 - 150*		*01/20/14 22:36*	*10*

Client Sample ID: MW-302
Date Collected: 01/16/14 15:07
Date Received: 01/17/14 09:10

Lab Sample ID: 250-16700-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	3540		500		ug/L			01/20/14 21:05	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*50 - 150*		*01/20/14 21:05*	*10*

Client Sample ID: TW-01
Date Collected: 01/16/14 15:48
Date Received: 01/17/14 09:10

Lab Sample ID: 250-16700-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	5080		500		ug/L			01/20/14 20:35	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*127*		*50 - 150*		*01/20/14 20:35*	*10*

Client: URS Corporation
Project/Site: Harbor Island

TestAmerica Job ID: 250-16700-1

Method: 6020 - Metals (ICP/MS) - Dissolved

Client Sample ID: MW-310 — **Lab Sample ID: 250-16700-1**
Date Collected: 01/16/14 12:46 — **Matrix: Water**
Date Received: 01/17/14 09:10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.00100		mg/L		01/17/14 13:14	01/18/14 02:42	1
Manganese	**0.554**		0.00200		mg/L		01/17/14 13:14	01/18/14 02:42	1
Iron	**31.2**		0.250		mg/L		01/17/14 13:14	02/05/14 17:36	10

Client Sample ID: MW-304 — **Lab Sample ID: 250-16700-2**
Date Collected: 01/16/14 13:40 — **Matrix: Water**
Date Received: 01/17/14 09:10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.00100		mg/L		01/17/14 13:14	01/18/14 02:45	1
Manganese	**0.331**		0.00200		mg/L		01/17/14 13:14	01/18/14 02:45	1
Iron	**30.2**		0.250		mg/L		01/17/14 13:14	02/05/14 17:40	10

Client Sample ID: ASW-1 — **Lab Sample ID: 250-16700-3**
Date Collected: 01/16/14 14:25 — **Matrix: Water**
Date Received: 01/17/14 09:10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.00100		mg/L		01/17/14 13:14	01/18/14 02:48	1
Manganese	**0.513**		0.00200		mg/L		01/17/14 13:14	01/18/14 02:48	1
Iron	**14.9**		0.250		mg/L		01/17/14 13:14	02/05/14 17:43	10

Client Sample ID: MW-302 — **Lab Sample ID: 250-16700-4**
Date Collected: 01/16/14 15:07 — **Matrix: Water**
Date Received: 01/17/14 09:10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.00100		mg/L		01/17/14 13:14	01/18/14 02:52	1
Manganese	**0.410**		0.00200		mg/L		01/17/14 13:14	01/18/14 02:52	1
Iron	**20.8**		0.250		mg/L		01/17/14 13:14	02/05/14 18:13	10

Client Sample ID: TW-01 — **Lab Sample ID: 250-16700-5**
Date Collected: 01/16/14 15:48 — **Matrix: Water**
Date Received: 01/17/14 09:10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.00100		mg/L		01/17/14 13:20	01/17/14 22:26	1
Manganese	**0.373**		0.00200		mg/L		01/17/14 13:20	01/17/14 22:26	1
Iron	**25.8**		0.250		mg/L		01/17/14 13:20	02/05/14 18:46	10

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

Lab Sample ID: MB 250-23898/8
Matrix: Water
Analysis Batch: 23898

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		1.00		ug/L			01/23/14 12:36	1
Benzene	ND		0.200		ug/L			01/23/14 12:36	1
Ethylbenzene	ND		0.500		ug/L			01/23/14 12:36	1
Toluene	ND		0.500		ug/L			01/23/14 12:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*80 - 120*		*01/23/14 12:36*	*1*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*01/23/14 12:36*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*01/23/14 12:36*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*01/23/14 12:36*	*1*

Lab Sample ID: LCS 250-23898/4
Matrix: Water
Analysis Batch: 23898

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Xylenes, Total	60.0	55.10		ug/L		92	80 - 135
Benzene	20.0	18.37		ug/L		92	80 - 120
Ethylbenzene	20.0	18.21		ug/L		91	80 - 120
Toluene	20.0	18.44		ug/L		92	80 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*80 - 120*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*
Dibromofluoromethane (Surr)	*102*		*80 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: LCSD 250-23898/5
Matrix: Water
Analysis Batch: 23898

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
Xylenes, Total	60.0	62.48		ug/L		104	80 - 135	13	25
Benzene	20.0	20.15		ug/L		101	80 - 120	9	25
Ethylbenzene	20.0	20.59		ug/L		103	80 - 120	12	25
Toluene	20.0	20.37		ug/L		102	80 - 125	10	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*80 - 120*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*
Dibromofluoromethane (Surr)	*101*		*80 - 120*
Toluene-d8 (Surr)	*102*		*80 - 120*

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

Lab Sample ID: 250-16700-3 MS
Matrix: Water
Analysis Batch: 23898

Client Sample ID: ASW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Xylenes, Total	ND		1200	1119		ug/L		93	70 - 130
Benzene	505		400	790.9	F1	ug/L		72	80 - 125
Ethylbenzene	ND		400	377.7		ug/L		93	80 - 125
Toluene	ND		400	374.1		ug/L		91	75 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 120*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*80 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: 250-16700-3 MSD
Matrix: Water
Analysis Batch: 23898

Client Sample ID: ASW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Xylenes, Total	ND		1200	1076		ug/L		90	70 - 130	4	25
Benzene	505		400	772.7	F1	ug/L		67	80 - 125	2	25
Ethylbenzene	ND		400	362.0		ug/L		89	80 - 125	4	25
Toluene	ND		400	361.1		ug/L		88	75 - 135	4	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 120*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*80 - 120*
Toluene-d8 (Surr)	*102*		*80 - 120*

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

Lab Sample ID: MB 250-23806/5
Matrix: Water
Analysis Batch: 23806

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		50.0		ug/L			01/20/14 16:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*50 - 150*		*01/20/14 16:31*	*1*

Lab Sample ID: LCS 250-23806/3
Matrix: Water
Analysis Batch: 23806

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Hydrocarbons	500	514.9		ug/L		103	70 - 130

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

Lab Sample ID: LCS 250-23806/3
Matrix: Water
Analysis Batch: 23806

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*107*		*50 - 150*

Lab Sample ID: LCSD 250-23806/4
Matrix: Water
Analysis Batch: 23806

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
Gasoline Range Hydrocarbons			500	505.9		ug/L		101	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	*107*		*50 - 150*

Lab Sample ID: 250-16494-H-2 DU
Matrix: Water
Analysis Batch: 23806

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Gasoline Range Hydrocarbons	ND			ND		ug/L				NC	35

Surrogate	DU %Recovery	DU Qualifier	Limits
4-Bromofluorobenzene (Surr)	*101*		*50 - 150*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 250-23718/1-A
Matrix: Water
Analysis Batch: 23751

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 23718

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.00100		mg/L		01/17/14 13:14	01/18/14 01:10	1
Manganese	ND		0.00200		mg/L		01/17/14 13:14	01/18/14 01:10	1
Iron	ND		0.0250		mg/L		01/17/14 13:14	01/18/14 01:10	1

Lab Sample ID: MB 250-23718/1-A
Matrix: Water
Analysis Batch: 24206

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 23718

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0250		mg/L		01/17/14 13:14	02/05/14 17:11	1

Lab Sample ID: LCS 250-23718/2-A
Matrix: Water
Analysis Batch: 23751

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 23718

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead			0.100	0.1070		mg/L		107	80 - 120		
Manganese			0.100	0.1053		mg/L		105	80 - 120		
Iron			2.00	2.003		mg/L		100	80 - 120		

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 250-23718/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 24206 — **Prep Batch: 23718**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	2.00	2.021		mg/L		101	80 - 120

Lab Sample ID: 250-16663-A-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 23751 — **Prep Batch: 23718**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	ND		0.100	0.09989		mg/L		100	75 - 125
Manganese	0.690		0.100	0.7787	4	mg/L		88	75 - 125

Lab Sample ID: 250-16663-A-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 24206 — **Prep Batch: 23718**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	26.7		2.00	28.22	4	mg/L		78	75 - 125

Lab Sample ID: 250-16709-A-1-B DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 23751 — **Prep Batch: 23718**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Lead	0.870		0.8920		mg/L		3	20
Manganese	ND		ND		mg/L		NC	20
Iron	ND		ND		mg/L		NC	20

Lab Sample ID: MB 250-23719/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 23751 — **Prep Batch: 23719**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.00100		mg/L		01/17/14 13:20	01/17/14 22:19	1
Manganese	ND		0.00200		mg/L		01/17/14 13:20	01/17/14 22:19	1
Iron	ND		0.0250		mg/L		01/17/14 13:20	01/17/14 22:19	1

Lab Sample ID: MB 250-23719/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 24206 — **Prep Batch: 23719**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0250		mg/L		01/17/14 13:20	02/05/14 18:38	1

Lab Sample ID: LCS 250-23719/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 23751 — **Prep Batch: 23719**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	0.100	0.1060		mg/L		106	80 - 120
Manganese	0.100	0.1082		mg/L		108	80 - 120

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 250-23719/2-A
Matrix: Water
Analysis Batch: 23751

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 23719

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	2.00	2.042		mg/L		102	80 - 120

Lab Sample ID: LCS 250-23719/2-A
Matrix: Water
Analysis Batch: 24206

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 23719

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	2.00	2.051		mg/L		102	80 - 120

Lab Sample ID: 250-16683-A-4-B MS
Matrix: Water
Analysis Batch: 23751

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 23719

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	0.0310		0.100	0.1249		mg/L		94	75 - 125
Manganese	0.324		0.100	0.4240		mg/L		100	75 - 125
Iron	1.38		2.00	3.388		mg/L		100	75 - 125

Lab Sample ID: 250-16683-A-4-B MS
Matrix: Water
Analysis Batch: 23751

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 23719

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	1.39		2.00	3.373		mg/L		99	75 - 125

Lab Sample ID: 250-16709-A-1-B DU
Matrix: Water
Analysis Batch: 24206

Client Sample ID: Duplicate
Prep Type: Dissolved
Prep Batch: 23718

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Iron	ND		ND		mg/L		NC	20

Lab Sample ID: 250-16700-5 DU
Matrix: Water
Analysis Batch: 23751

Client Sample ID: TW-01
Prep Type: Dissolved
Prep Batch: 23719

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Lead	ND		ND		mg/L		NC	20
Manganese	0.373		0.3696		mg/L		1	20

Lab Sample ID: 250-16700-5 DU
Matrix: Water
Analysis Batch: 23751

Client Sample ID: TW-01
Prep Type: Dissolved
Prep Batch: 23719

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Iron	25.1		24.53		mg/L		2	20

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 250-16700-5 DU
Matrix: Water
Analysis Batch: 24206

Client Sample ID: TW-01
Prep Type: Dissolved
Prep Batch: 23719

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Iron	25.8			25.14		mg/L				2	20

GC/MS VOA

Analysis Batch: 23898

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
250-16700-1	MW-310	Total/NA	Water	8260B	
250-16700-2	MW-304	Total/NA	Water	8260B	
250-16700-3	ASW-1	Total/NA	Water	8260B	
250-16700-3 MS	ASW-1	Total/NA	Water	8260B	
250-16700-3 MSD	ASW-1	Total/NA	Water	8260B	
250-16700-4	MW-302	Total/NA	Water	8260B	
250-16700-5	TW-01	Total/NA	Water	8260B	
LCS 250-23898/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 250-23898/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 250-23898/8	Method Blank	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 23806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
250-16494-H-2 DU	Duplicate	Total/NA	Water	NWTPH-Gx	
250-16700-1	MW-310	Total/NA	Water	NWTPH-Gx	
250-16700-2	MW-304	Total/NA	Water	NWTPH-Gx	
250-16700-3	ASW-1	Total/NA	Water	NWTPH-Gx	
250-16700-4	MW-302	Total/NA	Water	NWTPH-Gx	
250-16700-5	TW-01	Total/NA	Water	NWTPH-Gx	
LCS 250-23806/3	Lab Control Sample	Total/NA	Water	NWTPH-Gx	
LCSD 250-23806/4	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	
MB 250-23806/5	Method Blank	Total/NA	Water	NWTPH-Gx	

Metals

Prep Batch: 23718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
250-16663-A-1-B MS	Matrix Spike	Total/NA	Water	3005A	
250-16700-1	MW-310	Dissolved	Water	3005A	
250-16700-2	MW-304	Dissolved	Water	3005A	
250-16700-3	ASW-1	Dissolved	Water	3005A	
250-16700-4	MW-302	Dissolved	Water	3005A	
250-16709-A-1-B DU	Duplicate	Dissolved	Water	3005A	
250-16709-A-1-B DU	Duplicate	Total/NA	Water	3005A	
LCS 250-23718/2-A	Lab Control Sample	Total/NA	Water	3005A	
MB 250-23718/1-A	Method Blank	Total/NA	Water	3005A	

Prep Batch: 23719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
250-16683-A-4-B MS	Matrix Spike	Total/NA	Water	3005A	
250-16700-5	TW-01	Dissolved	Water	3005A	
250-16700-5 DU	TW-01	Dissolved	Water	3005A	
LCS 250-23719/2-A	Lab Control Sample	Total/NA	Water	3005A	
MB 250-23719/1-A	Method Blank	Total/NA	Water	3005A	

Analysis Batch: 23751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
250-16663-A-1-B MS	Matrix Spike	Total/NA	Water	6020	23718

Metals (Continued)

Analysis Batch: 23751 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
250-16683-A-4-B MS	Matrix Spike	Total/NA	Water	6020	23719
250-16683-A-4-B MS	Matrix Spike	Total/NA	Water	6020	23719
250-16700-1	MW-310	Dissolved	Water	6020	23718
250-16700-2	MW-304	Dissolved	Water	6020	23718
250-16700-3	ASW-1	Dissolved	Water	6020	23718
250-16700-4	MW-302	Dissolved	Water	6020	23718
250-16700-5	TW-01	Dissolved	Water	6020	23719
250-16700-5 DU	TW-01	Dissolved	Water	6020	23719
250-16700-5 DU	TW-01	Dissolved	Water	6020	23719
250-16709-A-1-B DU	Duplicate	Total/NA	Water	6020	23718
LCS 250-23718/2-A	Lab Control Sample	Total/NA	Water	6020	23718
LCS 250-23719/2-A	Lab Control Sample	Total/NA	Water	6020	23719
MB 250-23718/1-A	Method Blank	Total/NA	Water	6020	23718
MB 250-23719/1-A	Method Blank	Total/NA	Water	6020	23719

Analysis Batch: 24206

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
250-16663-A-1-B MS	Matrix Spike	Total/NA	Water	6020	23718
250-16700-1	MW-310	Dissolved	Water	6020	23718
250-16700-2	MW-304	Dissolved	Water	6020	23718
250-16700-3	ASW-1	Dissolved	Water	6020	23718
250-16700-4	MW-302	Dissolved	Water	6020	23718
250-16700-5	TW-01	Dissolved	Water	6020	23719
250-16700-5 DU	TW-01	Dissolved	Water	6020	23719
250-16709-A-1-B DU	Duplicate	Dissolved	Water	6020	23718
LCS 250-23718/2-A	Lab Control Sample	Total/NA	Water	6020	23718
LCS 250-23719/2-A	Lab Control Sample	Total/NA	Water	6020	23719
MB 250-23718/1-A	Method Blank	Total/NA	Water	6020	23718
MB 250-23719/1-A	Method Blank	Total/NA	Water	6020	23719

Lab Chronicle

Client: URS Corporation
Project/Site: Harbor Island

TestAmerica Job ID: 250-16700-1

Client Sample ID: MW-310

Lab Sample ID: 250-16700-1

Date Collected: 01/16/14 12:46

Matrix: Water

Date Received: 01/17/14 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	23898	01/23/14 13:00	TDB	TAL PRT
Total/NA	Analysis	NWTPH-Gx		10	23806	01/20/14 23:37	TDB	TAL PRT
Dissolved	Analysis	6020		1	23751	01/18/14 02:42	AJH	TAL PRT
Dissolved	Prep	3005A			23718	01/17/14 13:14	TNL	TAL PRT
Dissolved	Analysis	6020		10	24206	02/05/14 17:36	LQN	TAL PRT

Client Sample ID: MW-304

Lab Sample ID: 250-16700-2

Date Collected: 01/16/14 13:40

Matrix: Water

Date Received: 01/17/14 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	23898	01/23/14 13:51	TDB	TAL PRT
Total/NA	Analysis	NWTPH-Gx		10	23806	01/20/14 23:07	TDB	TAL PRT
Dissolved	Analysis	6020		1	23751	01/18/14 02:45	AJH	TAL PRT
Dissolved	Prep	3005A			23718	01/17/14 13:14	TNL	TAL PRT
Dissolved	Analysis	6020		10	24206	02/05/14 17:40	LQN	TAL PRT

Client Sample ID: ASW-1

Lab Sample ID: 250-16700-3

Date Collected: 01/16/14 14:25

Matrix: Water

Date Received: 01/17/14 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	23898	01/23/14 14:15	TDB	TAL PRT
Total/NA	Analysis	NWTPH-Gx		10	23806	01/20/14 22:36	TDB	TAL PRT
Dissolved	Prep	3005A			23718	01/17/14 13:14	TNL	TAL PRT
Dissolved	Analysis	6020		1	23751	01/18/14 02:48	AJH	TAL PRT
Dissolved	Analysis	6020		10	24206	02/05/14 17:43	LQN	TAL PRT

Client Sample ID: MW-302

Lab Sample ID: 250-16700-4

Date Collected: 01/16/14 15:07

Matrix: Water

Date Received: 01/17/14 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	23898	01/23/14 16:19	TDB	TAL PRT
Total/NA	Analysis	NWTPH-Gx		10	23806	01/20/14 21:05	TDB	TAL PRT
Dissolved	Analysis	6020		1	23751	01/18/14 02:52	AJH	TAL PRT
Dissolved	Prep	3005A			23718	01/17/14 13:14	TNL	TAL PRT
Dissolved	Analysis	6020		10	24206	02/05/14 18:13	LQN	TAL PRT

Lab Chronicle

Client: URS Corporation
Project/Site: Harbor Island

TestAmerica Job ID: 250-16700-1

Client Sample ID: TW-01
Date Collected: 01/16/14 15:48
Date Received: 01/17/14 09:10

Lab Sample ID: 250-16700-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	23898	01/23/14 16:43	TDB	TAL PRT
Total/NA	Analysis	NWTPH-Gx		10	23806	01/20/14 20:35	TDB	TAL PRT
Dissolved	Analysis	6020		1	23751	01/17/14 22:26	AJH	TAL PRT
Dissolved	Prep	3005A			23719	01/17/14 13:20	TNL	TAL PRT
Dissolved	Analysis	6020		10	24206	02/05/14 18:46	LQN	TAL PRT

Laboratory References:

TAL PRT = TestAmerica Portland, 9405 SW Nimbus Ave., Beaverton, OR 97008, TEL (503)906-9200

Certification Summary

Client: URS Corporation
Project/Site: Harbor Island

TestAmerica Job ID: 250-16700-1

Laboratory: TestAmerica Portland

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-012	12-26-13 *
California	State Program	9	2597	09-30-15
Oregon	NELAP	10	OR100021	01-09-15
USDA	Federal		P330-11-00092	02-17-14
Washington	State Program	10	C586	06-23-14

* Expired certification is currently pending renewal and is considered valid.

Method Summary

Client: URS Corporation
Project/Site: Harbor Island

TestAmerica Job ID: 250-16700-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PRT
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC)	NWTPH	TAL PRT
6020	Metals (ICP/MS)	SW846	TAL PRT

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 PRT = TestAmerica Portland, 9405 SW Nimbus Ave., Beaverton, OR 97008, TEL (503)906-9200

TestAmerica Portland
9405 SW Nimbus Avenue

Beaverton, OR 97008
phone 503.906.9200 fax 503.906.9210

Chain of Custody Record

250-16700 Chain of Custody

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Brian Pletcher	Site Contact: Bret Waldron	Date: 1-17-14	COC No:
Your Company Name here URS	Tel/Fax: 503-222-7200	Lab Contact:	Carrier:	1 of 1 COCs
Address 111 SW Columbia	Analysis Turnaround Time			For Lab Use Only:
City/State/Zip Portland/OR/97201	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(xxx) xxx-xxxx 503-222-7200 phone	TAT if different from Below			Lab Sampling:
(xxx) xxx-xxxx FAX	☐ 2 weeks			
Project Name: Harbor Island	☒ 1 week			Job / SDG No.:
Site:	☐ 2 days			
PO# 46194348	☐ 1 day			Sampler:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	BTEX - 8260B	TPH-Gx-NWTPH-Gx	Dissolved Pb, Mn EPA 6020	Sample Specific Notes:
MW-310	1-16-14	1246	G	W	7	Y	N	X	X	X	
MW-304	1-16-14	1340	G	W	7	Y	N	X	X	X	
ASW-1	1-16-14	1425	G	W	7	Y	N	X	X	X	
MW-302	1-16-14	1509	G	W	7	Y	N	X	X	X	
TW-01	1-16-14	1548	G	W	7	Y	N	X	X	X	

Preservation Used: 1=Ice, 2=HCl; 3=H2SO4; 4=HNO3; 5=NaOH; 6=Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments: Short Hold – Analyze immediately

5.7 IR/P-R

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd: _____ Corr'd: _____	Therm ID No.: _____

Relinquished by:	Company: URS	Date/Time: 1-17-14/0910	Received by:	Company: TAP	Date/Time: 1/17/14 @ 0910
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TAL-1003 (0413)

Form No. CA-C-WI-002, Rev. 4.1, dated 02/20/2013

2/10/2014

Login Sample Receipt Checklist

Client: URS Corporation

Job Number: 250-16700-1

Login Number: 16700

List Source: TestAmerica Portland

List Number: 1

Creator: Svabik-Seror, Philip M

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
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?	False	No name.
There are no discrepancies between the containers received and the COC.	False	Received Trip Blank(s) not listed on COC.
Samples are received within Holding Time.	True	
Sample containers have legible labels.	False	Containers not labeled field filtered - client verbally indicated they are FF.
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.	True	
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.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	