August 17, 2016

Mr. Rogelo Riojas
Sea Mar Community Health Centers
1040 South Henderson Street
Seattle, Washington 98108

RE: 2nd Quarter 2016 Groundwater Monitoring Report
Sea Mar Community Health Center
9635 Des Moines Memorial Drive South, Seattle, Washington 98108
RGI Project No. 2016-023A

Dear Mr. Riojas:

The Riley Group, Inc. (RGI) has completed the Second Quarter 2016 Groundwater Monitoring Report pertaining to the Sea Mar Community Health Center, located at 9635 Des Moines Memorial Drive South, Seattle, Washington (hereafter referred to as the Site, Figure 1).

SCOPE OF WORK AND PROJECT OBJECTIVES

The objectives for this project were to perform the following:

- Perform groundwater compliance monitoring for 12 existing groundwater monitoring wells located throughout the Site.

GROUNDWATER SAMPLING EVENT

June 30, 2016, RGI sampled eight groundwater monitoring wells (MW-2, MW-4, MW-8, and MW-11 through MW-15), located throughout the Site. RGI also attempted to sample MW-1, although it appeared to be buried beneath construction debris.

On July 14, 2016, three additional wells, MW-16, MW-17, and MW-18, were installed and also sampled.

The locations of all groundwater monitoring wells are illustrated on Figure 2.

The June 30 and July 14, 2016 groundwater sampling events were performed following the substantial completion of a cleanup action of a former gasoline service station on the northern portion and a residential heating oil underground storage tank (UST) cleanup on the southern portion of the Site. The cleanup action findings, conclusions, and recommendations (if any) will be presented in our forthcoming cleanup action report.

GROUNDWATER ELEVATIONS AND FLOW DIRECTION

On June 30 and July 14, 2016, prior to purging each groundwater monitoring well, depth to static groundwater was measured using an electronic water level meter in all 0.75- to 2-inch-diameter monitoring wells located on the Site. Depth to groundwater ranged from 2.05 to 6.27 feet below top of casing (TOC). Corresponding groundwater elevations ranged from 4.30 feet (MW-11) to 17.27 feet (MW-16) (Table 1 and Figure 2).

Groundwater flow direction was determined to be north beneath the Site. This groundwater flow data is generally consistent with all of previous groundwater sampling events.

GROUNDWATER SAMPLE COLLECTION

Prior to sampling, groundwater monitoring wells were purged using a peristaltic pump and new polyethylene tubing. Well purging continued until at least three well volumes were purged, until field parameters stabilized, or the well pumped dry. During the June 2016 event, water quality parameters (for example, water temperature, dissolved oxygen, pH, and conductivity) were obtained using a Horiba U-52 water quality meter with a flow-through cell. Groundwater was transferred to laboratory-supplied containers using standard low-flow sampling methodology. Sample containers were placed in an ice-chilled cooler and transported to the analytical laboratory using standard chain-of-custody protocols. Groundwater recovery, startup time, and duration of the purging operations were recorded on field data sheets. These field documents are maintained in a permanent project file and are available upon written request.

Purge water was placed in a labeled 55-gallon drum and left on the Site pending profiling and disposal.

LABORATORY ANALYSIS

Groundwater samples were submitted to Friedman and Bruya, Inc. of Seattle, Washington and analyzed for one or more of the following:

- Gasoline-range total petroleum hydrocarbons (TPH) using the Northwest Test Method NWTPH-Gx.
- Diesel-range TPH using Northwest Test Method NWTPH-Dx.
- Benzene, toluene, ethylbenzene, and xylenes (BTEX) using EPA Method 8021B.
- Dissolved metals (Cadmium and Lead) using EPA Method 200.8.
- Volatile Organic Compounds (VOCs) using EPA Method 8260C.
- Halogenated Volatile Organic Compounds (HVOCs) using EPA Method 8260C.

Copies of the analytical laboratory report and associated sample chain-of-custody are included in Appendix A.

GROUNDWATER CLEANUP LEVELS (CULs)

Groundwater analytical results obtained during this project were compared to the following groundwater screening levels:

- Washington State Department of Ecology Model Toxics Control Act (MTCA) Method A Cleanup Levels (CULs) for Ground Water (WAC 173-340-900, Table 720-1).

When no MTCA Method A CULs for Ground Water had been established for a given compound, the most stringent of the following groundwater screening levels were referenced:

- MTCA Method B Standard Formula Values for Ground Water obtained from the Cleanup Levels and Risk Calculations (CLARC) database.

FINDINGS

ANALYTICAL RESULTS

Analytical results and groundwater screening levels for the Site are summarized in Table 1, Figure 2.

Gasoline-range TPH and BTEX were not detected above laboratory detection limits (non-detect) in any of the four samples submitted for analysis (MW-11, MW-12, MW-17, and MW-18).

Oil-range TPH was not detected in any of the eight samples submitted for analysis (MW-2, MW-4, MW-8, MW-11, MW-12, and MW-16 through MW-18).

Diesel-range TPH was either non-detect, or at concentrations below the MTCA Method A CUL of 500 µg/L in the eight samples submitted for analysis (MW-2, MW-4, MW-8, MW-11, MW-12, and MW-16 through MW-18).

Dissolved cadmium and lead were non-detect in MW-13.

Cis-1,2-Dichloroethene (Cis -1,2 DCE) was either non-detect or at a concentration below the MTCA Method B CUL of 16 µg/L in six of the seven sample submitted for analysis (MW-8, MW-13, MW-14, MW-15, MW-17, and MW-18). Cis-1,2 DCE was detected at a concentration of 16 µg/L in MW-4, which is also the MTCA Method B CUL.

Vinyl chloride (VC) was non-detect in six of the seven sample submitted for analysis (MW-8, MW-13, MW-14, MW-15, MW-17, and MW-18). VC was detected in MW-4 at a concentration of 4.9 µg/L, which exceeds the MTCA Method A CUL of 0.2 µg/L.

Trichloroethene (TCE) was either non-detect or at a concentration below the MTCA Method A CUL of 5 µg/L in MW-4 and MW-17. The samples collected from MW-8 and MW-18 contained concentrations of 33 µg/L and 130 µg/L, respectively, which exceed the MTCA Method A CUL of 5 µg/L.

No other VOCs or HVOCs were detected above their respective CULs.

CONCLUSIONS

Based on our findings, RGI draws the following conclusions:

- Groundwater concentrations of gasoline-, diesel, and oil-range TPH, BTEX, cadmium, and lead are below the applicable groundwater CULs throughout the Site.
- HVOCs are below their applicable groundwater CULs with the exceptions of cis-1,2-DCE and VC in MW-4 and TCE in MW-8 and MW-18. Both wells, MW8 and MW18, are located adjacent to the west adjoining property and a HVOC cleanup area associated with a former parts washing area on the west adjoining property.

PROJECT LIMITATIONS

Work for this project was performed, and prepared, in accordance with generally accepted professional practices for the nature and conditions of work completed in same or similar locations at the present time. RGI's results and findings from the select area do not necessarily reflect soil or groundwater conditions underlying other areas of the Site not investigated. RGI reserves the right to modify its conclusions and/or recommendations as new data and information is made available. No legal or other warranty, expressed or implied, is made.

This report is the property of RGI, Sea Mar Community Health Centers, and their representatives

and was prepared in a manner consistent with the level of skill and care ordinarily exercised by members of the profession currently practicing in the same locality and under similar conditions. This report is intended for specific application to 9635 Des Moines Memorial Drive South in Seattle, Washington. No other warranty, expressed or implied, is made.

If you have any questions or need additional information, please contact the undersigned at (425) 415-0551.

Respectfully submitted,

THE RILEY GROUP, INC.

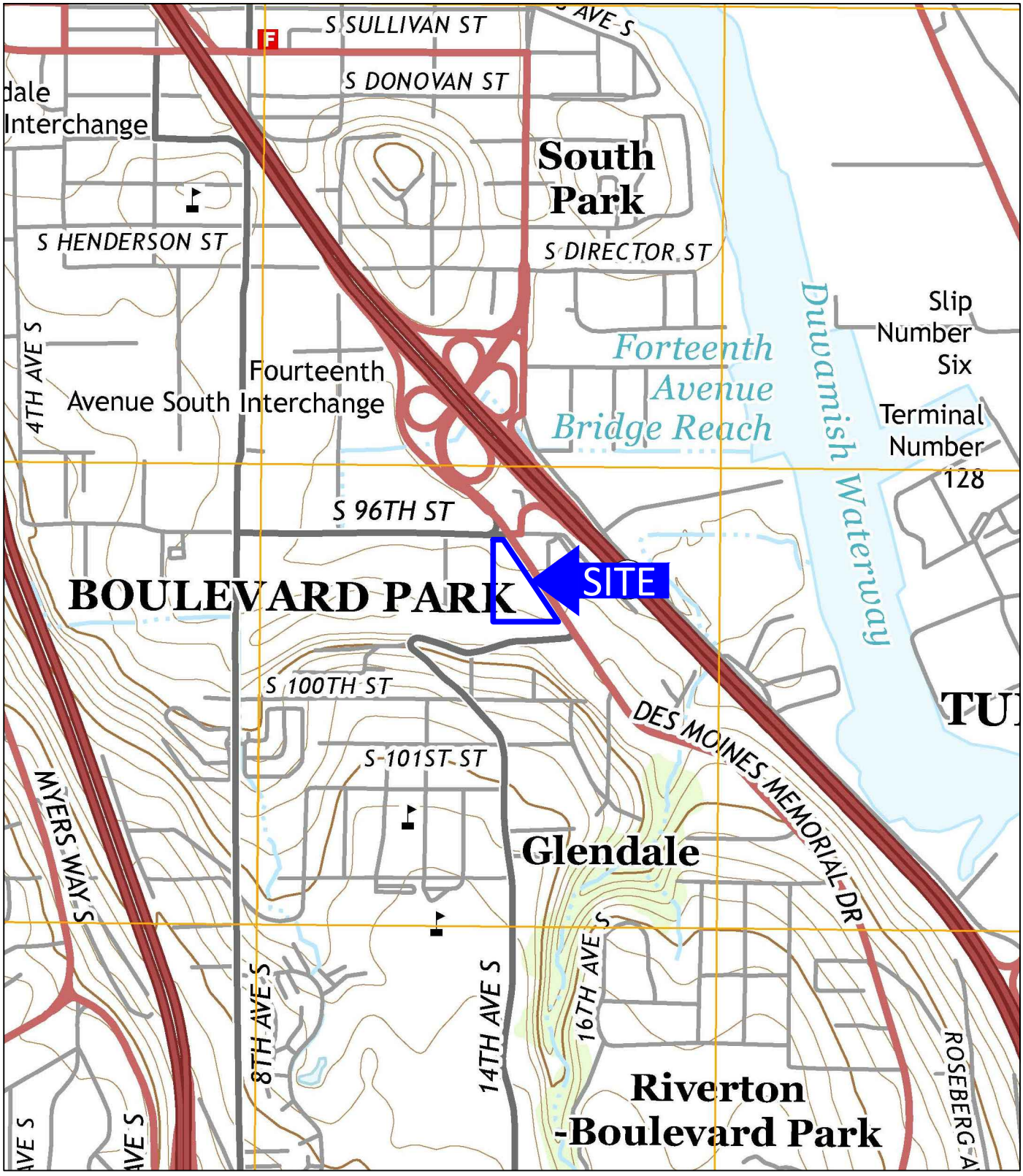
Stafford Larsen
Project Geologist

Anna J. Jordan, LG
Project Geologist

Paul D. Riley, LG, LHG
Principal

Figures *Figure 1, Site Vicinity Map*
Figure 2, Site Plan with Groundwater Elevation Contours and Analytical Laboratory
Results *Table 1, Summary of Groundwater Sample Analytical Results*
Attachments *Appendix A, Analytical Laboratory Report*

Distribution *Mr. Rogelio Riojas, Sea Mar Community Health Centers (PDF)*



USGS, 2014, Seattle South, Washington
7.5-Minute Quadrangle

Approximate Scale: 1"=1000'

0 500 1000 2000

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RILEYGROUP
Corporate Office
17522 Bothell Way Northeast
Bothell, Washington 98011
Phone: 425.415.0551
Fax: 425.415.0311

Sea Mar Community Health Center		Figure 1
RGI Project Number 2016-023A	Site Vicinity Map	Date Drawn: 08/2016
Address: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108		

MW-13											
Date	PCE	TCE	cis-1,2-DCE	Trans-1, 2-DCE	VC	1,1-DCE	HVOCs	Total		Dissolved	
								Cd	Pb	Cd	Pb
6/30/16	ND	ND	ND	ND	ND	ND	ND	----	----	ND	ND
5/6/16	ND	ND	ND	ND	ND	ND	ND	ND	**5.32**	ND	ND

SP-05-H2O							
Date	Gas	B	T	E	X	DSL*	Oil*
10/26/07	**250**	ND	ND	**2**	**10**	**410**	ND

SP-06-H2O					
Date	Gas	B	T	E	X
10/26/07	ND	ND	ND	ND	**4**

MW-6						
Date	Gas	BTEX	DSL	Oil	HVOCs	VOCs
03/07/16	----	----	**200x**	ND	----	----
02/20/14	----	ND	----	----	ND	----
08/16/13	----	ND	----	----	ND	----
01/11/08	ND	ND	**420***	ND*	ND	**Acetone=22**

MW-9								
Date	Gas	DSL	Oil	HVOCs	Dissolved MTCA 5 Metals			
					Cd	Cr	Pb	Hg
03/07/16	ND	**730x**	ND	ND	ND	ND	ND	ND

MW-5					
Date	Gas	BTEX	DSL	Oil	HVOCs
03/07/16	----	----	----	----	ND
05/22/14	----	ND	----	----	ND
02/20/14	----	ND	----	----	ND
05/16/13	----	ND	----	----	ND
01/11/08	ND	ND	ND*	ND*	----

P2-H2O	
Date	HVOCs
03/04/16	ND

SP-08-H2O				
Date	Gas	BTEX	DSL*	Oil*
10/26/07	ND	ND	**67**	ND

MW-12							
Date	Gas	B	T	E	X	DSL	Oil
6/30/16	ND	ND	ND	ND	ND	**220x**	ND
5/6/16	ND	ND	ND	ND	ND	**200x**	ND

SP-07-H2O							
Date	Gas	B	T	E	X	DSL*	Oil*
10/26/07	**1,200**	**17**	**6**	**6**	**30**	**740**	ND

SP-09-H2O					
Date	Gas	BTEX	DSL*	Oil*	HVOCs
10/26/07	ND	ND	**76**	ND	ND

MW-11								
Date	Gas	B	T	E	X	DSL	Oil
6/30/16	ND	ND	ND	ND	ND	ND	**190x**	ND
5/6/16	ND	**1.7**	ND	ND	ND	**200x**	ND

MW-17									
Date	Gas	DSL	Oil	TCE	Cis-1, 2-DCE	1,1-DCE	Other HVOCs	Other VOCs
07/14/16	ND	**230x**	ND	ND	ND	ND	ND	ND

P1-H2O				
Date	Gas	DSL	Oil	HVOCs
03/04/16	ND	**300x**	ND	ND

SP-04-H2O											
Date	Gas	B	T	E	X	DSL*	Oil*	TCE	VC	cis-1,2-DCE	Other HVOCs
10/26/07	**370**	ND	ND	**3**	**15**	**3,700**	**2,900**	**1.9**	**3.8**	**18**	ND

MW-7													
Date	Gas	B	T	E	X	DSL	Oil	HVOCs	Total MTCA 5 Metals				
									As	Cd	Cr	Pb	Hg
03/07/16	**2,500**	**11**	ND	**3.6**	**3.8**	**1,500x**	ND	ND	----	----	----	----	----
02/20/14	----	ND	ND	ND	ND	----	----	ND	----	----	----	----	----
08/16/13	----	ND	ND	ND	ND	----	----	ND	----	----	----	----	----
01/11/08	**5,500**	**61**	**29**	**46**	**45**	**890***	ND*	----	**10.8**	ND	**2.12**	**2.83**	ND

MW-4													
Date	Gas	BTEX	DSL	Oil	TCE	VC	cis-1,2-DCE	Other HVOCs	Other VOCs	Total MTCA 5 Metals			
										Cd	Cr	Pb	Hg
06/30/16	----	----	ND	ND	**3.9**	**4.9**	**16**	ND	ND	----	----	----	----
03/07/16	----	----	**52x**	ND	ND	**4.6**	**7.4**	ND	----	----	----	----	----
08/21/14	----	ND	----	----	**7.02**	**6.43**	**31.9**	ND	ND	----	----	----	----
05/22/14	----	ND	----	----	**5.35**	**7.26**	**16.8**	ND	ND	----	----	----	----
02/14/14	----	ND	----	----	**5.31**	ND	**15.3**	ND	ND	----	----	----	----
08/16/13	----	ND	----	----	**9.05**	**14.6**	**38**	ND	ND	----	----	----	----
01/11/08	ND	ND	ND*	ND*	**150**	**12**	**70**	ND	**EDC=1.1**	ND	**2.44**	**8.98**	ND

SP-10-H2O			
Date	Gas	DSL*	Oil*
10/26/07	ND	**150**	ND

B8-H2O											
Date	Gas	BTEX	DSL*	Oil*	SVOCs	Total MTCA 5 Metals					
						As	Cd	Cr	Pb	Hg	
01/03/08	ND	ND	ND	ND	ND	**6.08**	ND	**1.23**	ND	ND	

MW-8							
Date	DSL	Oil	TCE	Cis-1,2-DCE	1,1-DCE	Other HVOCs	Other VOCs
06/30/16	**100x**	ND	**33**	**7.0**	ND	ND	**1,1-Dichloroethane = 1.7**
03/07/16	**80x**	ND	**20**	**5.5**	**1.9**	ND	----

MW-14							
Date	PCE	TCE	cis-1,2-DCE	Trans-1, 2-DCE	VC	1,1-DCE	HVOCs
6/30/16	ND	ND	ND	ND	ND	ND	ND
5/6/16	ND	ND	ND	ND	ND	ND	ND

MW-15							
Date	PCE	TCE	cis-1,2-DCE	Trans-1, 2-DCE	VC	1,1-DCE	HVOCs
6/30/16	ND	ND	ND	ND	ND	ND	ND
5/6/16	ND	ND	ND	----	ND	ND	ND

MW-18								
Date	Gas	DSL	Oil	TCE	Cis-1,2-DCE	1,1-DCE	Other HVOCs	Other VOCs
07/14/16	ND	**63x**	ND	**130**	**15**	**1.9**	ND	ND

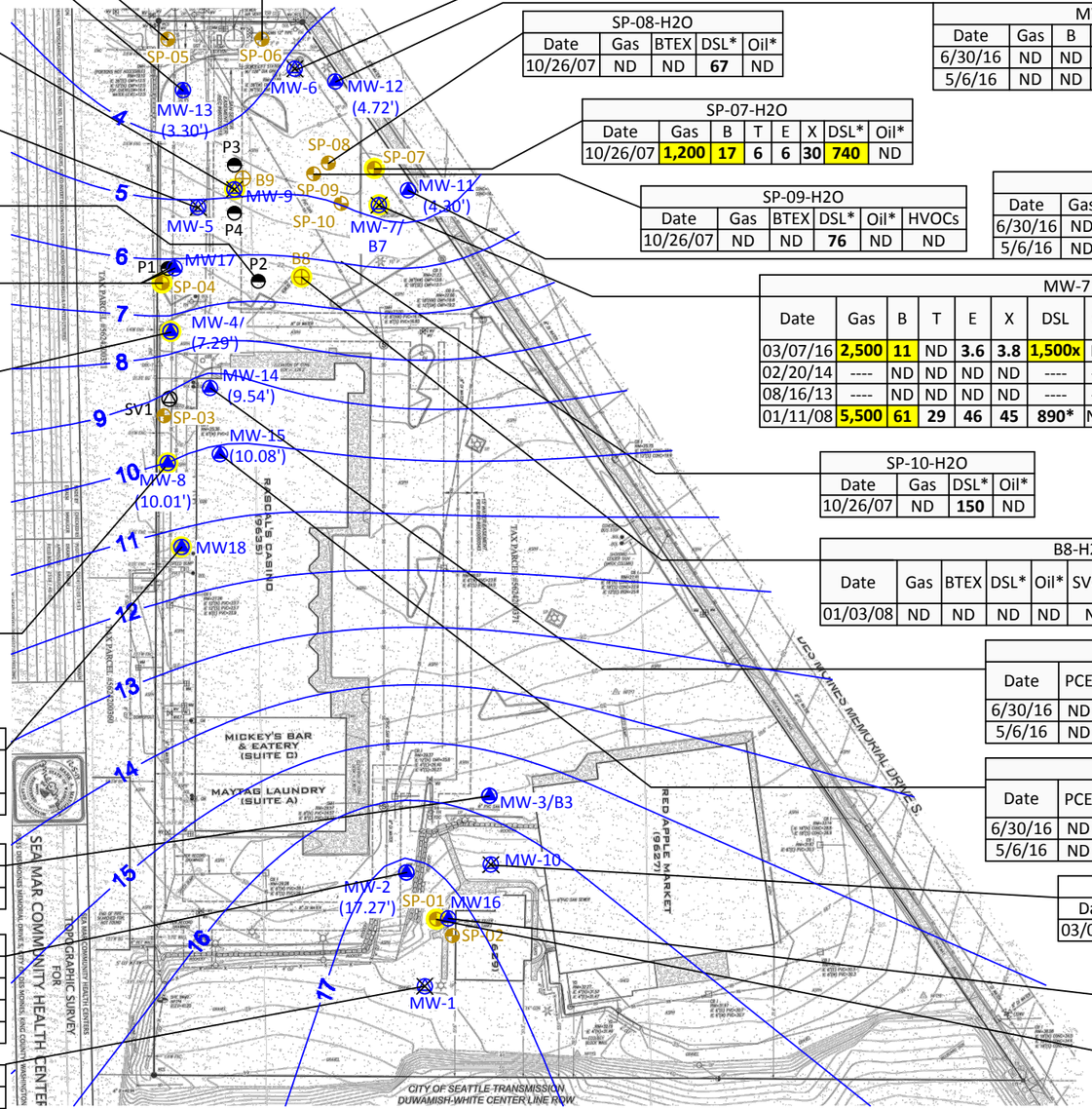
MW-3		
Date	DSL*	Oil*
01/11/08	ND	ND

MW-10		
Date	DSL	Oil
03/07/16	**56x**	ND

MW-2		
Date	DSL	Oil
06/30/16	**290x**	ND
03/07/16	**340x**	ND
01/11/08	ND*	ND*

MW16		
Date	DSL*	Oil*
07/14/16	**150x**	ND
SP-01-H2O		
Date	DSL*	Oil*
10/26/07	**1,500,000**	**37,000**

MW-1		
Date	DSL	Oil
03/07/16	ND	ND
01/11/08	ND*	ND*



= Groundwater Analytical Laboratory Result in ug/L

Gas/DSL/Oil = Gasoline/Diesel/Oil Total Petroleum Hydrocarbons
BTEX = Benzene, Toluene, Ethylbenzene, Xylenes
(H)(S)VOCs = (Halogenated)(Semi-) Volatile Organic Compounds
As = Arsenic, Cd = Cadmium, Cr = Chromium Pb = Lead, Hg = Mercury
PCE/TCE/VC/cis-1,2-DCE = tetrachloroethene, trichloroethene, vinyl chloride, cis-1,2-dichloroethene
EDC = 1,2-dichloroethane
ND = Not Detected Above Laboratory Detection Limits
---- = Not Analyzed
Bold and yellow highlighted results exceed MTCA Cleanup Level.
*With Silica Gel Cleanup

= Decommissioned well
= Soil Vapor Sample Location by RGI in 2016
= Monitoring Well by RGI [MW1 to MW7 in 2008, MW8 to MW18 in 2016]
= Test Probe by RGI in 2016 [P1 to P4]
= Test Probe by RGI in 2008 [B1 to B9]
= Test Probe by RGI in 2007 [SP-01 to SP-10]
= Vent Pipe
= Boring Patch
= Stormwater Catch Basin
= Retaining Wall
= Site Boundary

—21— = Groundwater contours generated using Surfer Software. Contours based on June 30, 2016 measurements.
= Groundwater flow direction

Approximate Scale: 1"=80'
0 40 80 160
N

RILEYGROUP
Corporate Office
17522 Bothell Way Northeast
Bothell, Washington 98011
Phone: 425.415.0551
Fax: 425.415.0311

Sea Mar Community Health Center | Figure 2

RGI Project Number 2016-023A

Site Plan Showing Monitoring Well and Test Probe Locations with Groundwater Analytical Laboratory Results

Date Drawn: 08/2016

Address: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108

Table 1, Page 1 of 3. Summary of Groundwater Analytical Laboratory Results
Sea Mar Community Health Center
9635 Des Moines Memorial Drive South, Seattle, Washington 98108
The Riley Group, Inc. Project No. 2016-023A

Sample Number	Sample Date	Top of Casing (TOC) Elevation	Depth to Water (below TOC)	Groundwater Elevation	Gasoline TPH	BTEX				Diesel TPH	Oil TPH	Diesel TPH	Oil TPH	PCE	TCE	cis-1,2-DCE	Trans-1,2-DCE	VC	1,1-DCE	Other HVOCs	Other VOCs	SVOCs	Total Metals					Dissolved Metals				
						B	T	E	X	w/o silica gel		w/ silica gel											As	Cd	Cr	Pb	Hg	As	Cd	Cr	Pb	Hg
Monitoring Wells																																
MW-1	**Screened Interval 5 - 10 ft bgs, Total boring depth 10 ft bgs, MW-1 decomissioned 06/15/16.**																															
MW1	05/06/16	28.3	5.40	22.9	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MW1-H2O	03/07/16	28.3	4.65	23.6	----	----	----	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MW-1	01/11/08	28.3	5.70	22.59	----	----	----	----	----	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MW-2	**Screened Interval 5 - 10 ft bgs, Total boring depth 8 ft bgs.**																															
MW2	07/15/16	19.30	2.05	17.25	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MW2	06/30/16	19.3	2.02	17.27	----	----	----	----	----	**290x**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MW2-H2O	03/07/16	19.3	1.81	17.5	----	----	----	----	----	**340x**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MW-2	01/11/08	19.3	2.10	17.19	----	----	----	----	----	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MW-3	**Screened Interval 5 - 10 ft bgs, Total boring depth 12 ft bgs.**																															
MW-3	01/11/08	20.3	3.66	16.66	----	----	----	----	----	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MW-4	**Screened Interval 5 - 10 ft bgs, Total boring depth 12 ft bgs.**																															
MW4	07/15/16	13.13	5.88	7.25	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MW4	06/30/16	13.13	5.84	7.29	----	----	----	----	----	ND<50	ND<250	----	----	ND<1	**3.9**	**16**	ND<1	**4.9**	ND<1	ND	ND	----	----	----	----	----	----	----	----	----	----	----
MW4	05/06/16	13.13	5.28	7.85	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MW4-H2O	03/07/16	13.13	4.56	8.57	----	----	----	----	----	**52x**	ND<250	----	----	ND<1	ND<1	**7.4**	ND<1	**4.6**	ND<1	ND	----	----	----	----	----	----	----	----	----	----	----	----
82114OS-2:GW	08/21/14	13.13	----	----	----	ND	ND	ND	ND	----	----	----	----	ND	**7.02**	**31.9**	ND	**6.43**	ND	ND	ND	----	----	----	----	----	----	----	----	----	----	----
52214OS-1:GW	05/22/14	13.13	----	----	----	ND	ND	ND	ND	----	----	----	----	ND	**5.35**	**16.8**	ND	**7.26**	ND	ND	ND	----	----	----	----	----	----	----	----	----	----	----
21414OS-1:GW	02/14/14	13.13	----	----	----	ND	ND	ND	ND	----	----	----	----	ND	**5.31**	**15.3**	ND	ND	ND	ND	ND	----	----	----	----	----	----	----	----	----	----	----
OS-1-81613	08/16/13	13.13	----	----	----	ND	ND	ND	ND	----	----	----	----	ND	**9.05**	**38.0**	ND	**14.6**	ND	ND	ND	----	----	----	----	----	----	----	----	----	----	----
MW-4	01/11/08	13.13	6.8	6.32	ND<100	ND<1	ND<1	ND<1	ND<3	----	----	ND<50	ND<250	ND<1	**150**	**70**	ND<1	**12**	ND<1	ND	**EDC=1.1**	ND<0.1	----	ND<1	**2.44**	**8.98**	ND<0.2	----	----	----	----	----
MW-5	**Screened Interval 5 - 10 ft bgs, Total boring depth 10 ft bgs, MW-5 decomissioned 06/08/16.**																															
MW5	05/06/16	10.00	2.65	7.35	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MW5-H2O	03/07/16	10.00	2.31	7.69	----	----	----	----	----	----	----	----	----	ND<1	ND<1	ND<1	ND<1	ND<0.2	ND<1	ND	----	----	----	----	----	----	----	----	----	----	----	----
52214OS-2:GW	05/22/14	10.00	----	----	----	ND	ND	ND	ND	----	----	----	----	ND	ND	ND	ND	ND	ND	ND	----	----	----	----	----	----	----	----	----	----	----	----
022014OS-2:GW	02/20/14	10.00	----	----	----	ND	ND	ND	ND	----	----	----	----	ND	ND	ND	ND	ND	ND	ND	----	----	----	----	----	----	----	----	----	----	----	----
OS-2-81613	05/16/13	10.00	----	----	----	ND	ND	ND	ND	----	----	----	----	ND	ND	ND	ND	ND	ND	ND	----	----	----	----	----	----	----	----	----	----	----	----
MW-5	01/11/08	10.00	2.02	7.98	ND<100	ND<1	ND<1	ND<1	ND<3	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MW-6	**Screened Interval 5 - 10 ft bgs, Total boring depth 10 ft bgs, MW-6 decomissioned 06/08/16.**																															
MW6	05/06/16	6.78	1.89	4.89	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MW6-H2O	03/07/16	6.78	2.695	4.09	----	----	----	----	----	**200x**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
022014OS-4:GW	02/20/14	6.78	----	----	----	ND	ND	ND	ND	----	----	----	----	ND	ND	ND	ND	ND	ND	ND	----	----	----	----	----	----	----	----	----	----	----	----
OS-4-81613	08/16/13	6.78	----	----	----	ND	ND	ND	ND	----	----	----	----	ND	ND	ND	ND	ND	ND	ND	----	----	----	----	----	----	----	----	----	----	----	----
MW-6	01/11/08	6.78	2.84	3.94	ND<100	ND<1	ND<1	ND<1	ND<3	----	----	420	ND<460	ND<1	ND<1	ND<1	ND<1	ND<0.2	ND<1	ND	**Acetone=22**	----	----	----	----	----	----	----	----	----	----	----
MW-7	**Screened Interval 5 - 10 ft bgs, Total boring depth 10 ft bgs, MW-7 decomissioned 06/08/16.**																															
MW7	05/06/16	9.17	0	9.17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MW7-H2O	03/07/16	9.17	0.0	----	**2,500**	**11**	ND<1	**3.6**	**3.8**	**1,500x**	ND<250	----	----	ND<1	ND<1	ND<1	ND<1	ND<0.2	ND<1	ND	----	----	----	----	----	----	----	----	----	----	----	----
022014OS-3:GW	02/20/14	9.17	----	----	----	ND	ND	ND	ND	----	----	----	----	ND	ND	ND	ND	ND	ND	ND	----	----	----	----	----	----	----	----	----	----	----	----
OS-3-81613	08/16/13	9.17	----	----	----	ND	ND	ND	ND	----	----	----	----	ND	ND	ND	ND	ND	ND	ND	----	----	----	----	----	----	----	----	----	----	----	----
MW-7	01/11/08	9.17	0.83	8.34	**5,500**	**61**	**29**	**46**	**45**	----	----	**890**	ND<250	----	----	----	----	----	----	----	----	----	**10.8**	ND<1	**2.12**	**2.83**	ND<0.2	----	----	----	----	----
MTCA Method A Cleanup Levels for Ground Water					**800/1,000**	**5**	**1,000**	**700**	**1,000**	**500**	**500**	**500**	**500**	**5**	**5**	**----**	**----**	**0.2**	**----**	**Analyte Specific**	**EDC = 5**	**Analyte Specific**	**5**	**5**	**50**	**15**	**2**	**5**	**5**	**50**	**15**	**2**
MTCA Method B Cleanup Levels for Ground Water[2]					**----**	**----**	**----**	**----**	**----**	**----**	**----**	**----**	**----**	**----**	**----**	**16**	**160**	**----**	**400**	**----**	**Acetone = 7,200**	**----**	**----**	**----**	**----**	**----**	**----**	**----**	**----**	**----**	**----**	**----**

Table 1, Page 2 of 3. Summary of Groundwater Analytical Laboratory Results
Sea Mar Community Health Center
9635 Des Moines Memorial Drive South, Seattle, Washington 98108
The Riley Group, Inc. Project No. 2016-023A

Sample Number	Sample Date	Top of Casing (TOC) Elevation	Depth to Water (below TOC)	Groundwater Elevation	Gasoline TPH	BTEX				Diesel TPH	Oil TPH	Diesel TPH	Oil TPH	PCE	TCE	cis-1,2-DCE	Trans-1,2-DCE	VC	1,1-DCE	Other HVOCs	Other VOCs	SVOCs	Total Metals					Dissolved Metals				
						B	T	E	X	w/o silica gel		w/ silica gel											As	Cd	Cr	Pb	Hg	As	Cd	Cr	Pb	Hg
MW-8	**Screened Interval 7.5 - 12.5 ft bgs, Total boring depth 13 ft bgs**																															
MW8	07/15/16	14.79	5.67	9.12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MW8	06/30/16	14.79	4.78	10.01	----	----	----	----	----	**100x**	ND<250	----	----	ND<1	**33**	**7.0**	ND<1	ND<0.2	**1.7**	ND	ND	----	----	----	----	----	----	----	----	----	----	----	----
MW8	05/06/16	14.79	4.53	10.26	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MW8-H2O	03/07/16	14.79	4.675	10.12	----	----	----	----	----	**80x**	ND<330	----	----	ND<1	**20**	**5.5**	ND<1	ND<0.2	**1.9**	ND	----	----	----	----	----	----	----	----	----	----	----	----	----
MW-9	**Screened Interval 5 - 10 ft bgs, Total boring depth 10 ft bgs, MW-9 decomissioned 06/08/16.**																															
MW9	05/06/16	8.64	0	8.64	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MW9-H2O	03/07/16	8.64	0.0	----	ND<100	----	----	----	----	**730x**	ND<300	----	----	ND<1	ND<1	ND<1	ND<1	ND<0.2	ND<1	ND	----	----	----	ND<1	ND<1	ND<1	ND<1	----	----	----	----	----
MW-10	**Screened Interval 9 - 14 ft bgs, Total boring depth 14 ft bgs, MW-10 decomissioned 06/15/16.**																															
MW10	05/06/16	27.36	7.84	19.52	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MW10-H2O	03/07/16	27.36	5.965	21.4	----	----	----	----	----	**56x**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MW-11	**Screened Interval 5 - 15 ft bgs, Total boring depth 15 ft bgs**																															
MW11	07/15/16	9.47	4.51	4.96	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MW11	06/30/16	9.47	5.17	4.30	ND<100	ND<1	ND<1	ND<1	ND<3	**190x**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MW11	05/06/16	9.47	4.77	4.70	ND<100	1.7	ND<1	ND<1	ND<3	**200x**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MW-12	**Screened Interval 5 - 15 ft bgs, Total boring depth 15 ft bgs**																															
MW12	07/15/16	7.64	2.63	5.01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MW12	06/30/16	7.64	2.92	4.72	ND<100	ND<1	ND<1	ND<1	ND<3	**220x**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MW12	05/06/16	7.64	2.41	5.23	ND<100	ND<1	ND<1	ND<1	ND<3	**200x**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MW-13	**Screened Interval 3.25 - 13.25 ft bgs, Total boring depth 15 ft bgs**																															
MW13	07/15/16	7.64	4.50	3.14	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MW13	06/30/16	7.64	4.34	3.30	----	----	----	----	----	----	----	----	----	ND<1	ND<1	ND<1	ND<1	ND<0.2	ND<1	ND	----	----	----	----	----	----	----	----	----	ND<1	----	ND<1	----
MW13	05/06/16	7.64	4.62	3.02	----	----	----	----	----	----	----	----	----	ND<1	ND<1	ND<1	ND<1	ND<0.2	ND<1	ND	----	----	----	ND<1	----	**5.32**	----	----	----	ND<1	----	ND<1	----
MW-14	**Screened Interval 5-15 ft bgs, Total boring depth 15.5 ft bgs**																															
MW14	07/15/16	14.65	5.60	9.05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MW14	06/30/16	14.65	5.11	9.54	----	----	----	----	----	----	----	----	----	ND<1	ND<1	ND<1	ND<1	ND<0.2	ND<1	ND	----	----	----	----	----	----	----	----	----	----	----	----	----
MW14	05/06/16	14.65	4.64	10.01	----	----	----	----	----	----	----	----	----	ND<1	ND<1	ND<1	ND<1	ND<0.2	ND<1	ND	----	----	----	----	----	----	----	----	----	----	----	----	----
MW-15	**Screened Interval 5.75 - 15.75 ft bgs, Total boring depth 17 ft bgs**																															
MW15	07/15/16	14.73	5.04	9.69	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MW15	06/30/16	14.73	4.65	10.08	----	----	----	----	----	----	----	----	----	ND<1	ND<1	ND<1	ND<1	ND<0.2	ND<1	ND	----	----	----	----	----	----	----	----	----	----	----	----	----
MW15	05/06/16	14.73	4.31	10.42	----	----	----	----	----	----	----	----	----	ND<1	ND<1	ND<1	ND<1	ND<0.2	ND<1	ND	----	----	----	----	----	----	----	----	----	----	----	----	----
MW16	**Screened Interval 9 - 19 ft bgs, Total boring depth 20 ft bgs**																															
MW16	07/14/16	4.32	2.10	2.22	----	----	----	----	----	**150x**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MW17	**Screened Interval 5-15 ft bgs, Total boring depth 15 ft bgs**																															
MW17	07/14/16	7.31	3.01	4.30	ND<100	----	----	----	----	**230x**	ND<250	----	----	ND<1	ND<1	ND<1	ND<1	ND<0.2	ND<1	ND	ND	----	----	----	----	----	----	----	----	----	----	----	----
MW18	**Screened Interval 10 - 20 ft bgs, Total boring depth 20 ft bgs**																															
MW18	07/14/16	2.42	6.27	-3.85	ND<100	----	----	----	----	**63x**	ND<250	----	----	ND<1	**130**	**15**	ND<1	ND<0.2	**1.9**	ND	ND	----	----	----	----	----	----	----	----	----	----	----	----
Groundwater Grab Samples																																
3H2O-1	03/04/16	----	----	----	ND<100	ND<1	ND<1	ND<1	ND<3	**190x**	ND<250										----	----	----	----	----	----	----	----	----	----	----	----	----
P1-H2O	03/04/16	----	3	----	ND<100	----	----	----	----	**300x**	ND<250	----	----	ND<1	ND<1	ND<1	ND<1	ND<0.2	ND<1	ND	----	----	----	----	----	----	----	----	----	----	----	----	----
P2-H2O	03/04/16	----	7	----	----	----	----	----	----	----	----	----	----	ND<1	ND<1	ND<1	ND<1	ND<0.2	ND<1	ND	----	----	----	----	----	----	----	----	----	----	----	----	----
P3-H2O	03/04/16	----	7	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MTCA Method A Cleanup Levels for Ground Water					**300/1,000**	**5**	**1,000**	**700**	**1,000**	**500**	**500**	**500**	**500**	**5**	**5**	----	----	**0.2**	----	**Analyte Specific**	**Analyte Specific**	**Analyte Specific**	**5**	**5**	**50**	**15**	**2**	**5**	**5**	**50**	**15**	**2**
MTCA Method B Cleanup Levels for Ground Water[2]					----	----	----	----	----	----	----	----	----	----	----	**16**	**160**	----	**400**	----	----	----	----	----	----	----	----	----	----	----	----	----

Table 1, Page 3 of 3. Summary of Groundwater Analytical Laboratory Results
Sea Mar Community Health Center
9635 Des Moines Memorial Drive South, Seattle, Washington 98108
The Riley Group, Inc. Project No. 2016-023A

Sample Number	Sample Date	Top of Casing (TOC) Elevation	Depth to Water (below TOC)	Groundwater Elevation	Gasoline TPH	BTEX				Diesel TPH	Oil TPH	Diesel TPH	Oil TPH	PCE	TCE	cis-1,2-DCE	Trans-1,2-DCE	VC	1,1-DCE	Other HVOCs	Other VOCs	SVOCs	Total Metals					Dissolved Metals				
						B	T	E	X	w/o silica gel		w/ silica gel											As	Cd	Cr	Pb	Hg	As	Cd	Cr	Pb	Hg
P4-H2O	03/04/16	----	7	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B8-H2O	01/03/08	----	7.00	----	ND<100	ND<1	ND<1	ND<1	ND<3	----	----	ND<54	ND<270	----	----	----	----	----	----	----	----	ND<0.1	**6.08**	ND<1	**1.23**	ND<1	ND<0.2	----	----	----	----	----
SP-01-H2O	10/26/07	----	7.5	----	----	----	----	----	----	----	----	**1,500,000**	**37,000**	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SP-04-H2O	10/26/07	----	6.0	----	**370**	ND<1	ND<1	**3**	**15**	----	----	**3,700**	**2,900**	ND<1	**1.9**	**18**	ND<1	**3.8**	ND<1	ND	----	----	----	----	----	----	----	----	----	----	----	----	----
SP-05-H2O	10/26/07	----	8.0	----	**250**	ND<1	ND<1	**2**	**10**	----	----	**410**	ND<360	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SP-06-H2O	10/26/07	----	8.5	----	ND<100	ND<1	ND<1	ND<1	**4**	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SP-07-H2O	10/26/07	----	3.0	----	**1,200**	**17**	**6**	**6**	**30**	----	----	**740**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SP-08-H2O	10/26/07	----	3.5	----	ND<100	ND<1	ND<1	ND<1	ND<3	----	----	**67**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SP-09-H2O	10/26/07	----	3.5	----	ND<100	ND<1	ND<1	ND<1	ND<3	----	----	**76**	ND<250	ND<1	ND<1	ND<1	ND<1	ND<0.2	ND<1	ND<1	----	----	----	----	----	----	----	----	----	----	----	----
SP-10-H2O	10/26/07	----	3.5	----	ND<200*	----	----	----	----	----	----	**150**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MTCA Method A Cleanup Levels for Ground Water					**800/1,000**	**5**	**1,000**	**700**	**1,000**	**500**	**500**	**500**	**500**	**5**	**5**	**----**	**----**	**0.2**	**----**	**Analyte Specific**	**Analyte Specific**	**Analyte Specific**	**5**	**5**	**50**	**15**	**2**	**5**	**5**	**50**	**15**	**2**
MTCA Method B Cleanup Levels for Ground Water[2]					**----**	**----**	**----**	**----**	**----**	**----**	**----**	**----**	**----**	**----**	**----**	**16**	**160**	**----**	**400**	**----**	**----**	**----**	**----**	**----**	**----**	**----**	**----**	**----**	**----**	**----**	**----**	**----**

Notes:

Samples collected by RGI field staff using a peristaltic pump under low-flow conditions.

Unless otherwise noted, all analytical results are given in micrograms per liter (ug/L), equivalent to parts per billion (ppb).

Gasoline TPH (total petroleum hydrocarbons) determined using Northwest Test Method NWTPH-Gx

BTEX (benzene, toluene, ethylbenzene, and xylenes) determined using EPA Test Method 8021B or 8260C.

Diesel and Oil TPH (total petroleum hydrocarbons) determined using Northwest Test Method NWTPH-Dx with and without silica gel cleanup.

PCE (tetrachloroethene), TCE (trichloroethene), cis-1,2-DCE (cis-1,2-dichloroethene), trans-1,2-DCE (trans-1,2-dichloroethene), VC (vinyl chloride), 1,1-DCE (1,1-dichloroethene), EDC (1,2-dichloroethane), and other HVOCs (halogenated volatile organic compounds) determined using EPA Test Method 8260C.

Other VOCs (volatile organic compounds) determined using EPA Test Method 8260C.

SVOCs (semi-volatile organic compounds) determined using EPA Test Method 8260C.

Dissolved Metals (As = arsenic, Cd = cadmium, Cr = chromium, Pb = lead, Hg = mercury) determined using EPA Method 200.8 and 1631E.

ND = Not detected above the noted analytical detection limit.

---- = Not analyzed or not applicable.

x = The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

Washington State Department of Ecology (Ecology) Model Toxics Control Act (MTCA) Method A Cleanup Levels for Ground Water (WAC 173-340-900, Table 720-1). MTCA Method B Standard Formula Values for Ground Water from Ecology's Cleanup Level and Risk Calculation (CLARC) database.

[1] The higher cleanup level is applicable if no benzene is detected in groundwater.

[2] No MTCA Method A Cleanup Level has been established. Therefore, the MTCA Method B Non-Carcinogenic Standard Formula Value is listed for reference.

*TPH results based on Ecology's petroleum hydrocarbon qualitative test method NWTPH-HCID.

Bold results indicated concentrations above laboratory detection limits.

Bold and yellow highlighted results indicate concentrations (if any) that exceed MTCA Method A or B Cleanup Levels for Ground Water.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 11, 2016

Anna Jordan, Project Manager
The Riley Group, Inc.
17522 Bothell Way NE
Bothell, WA 98011

Dear Ms Jordan:

Included are the results from the testing of material submitted on July 1, 2016 from the 2016-023A, F&BI 607014 project. There are 19 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
TRG0711R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 1, 2016 by Friedman & Bruya, Inc. from the The Riley Group 2016-023A, F&BI 607014 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
607014 -01	MW2
607014 -02	MW4
607014 -03	MW8
607014 -04	MW11
607014 -05	MW12
607014 -06	MW13
607014 -07	MW14
607014 -08	MW15

The 8260C calibration standard for 2,2-dichloropropane did not pass the acceptance criteria. The data were flagged accordingly.

The dissolved metals samples were filtered at Friedman and Bruya on July 01, 2016 at 14:35. The data were flagged accordingly.

All other quality control requirements were acceptable.

Date of Report: 07/11/16
Date Received: 07/01/16
Project: 2016-023A, F&BI 607014
Date Extracted: 07/05/16
Date Analyzed: 07/05/16

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING METHODS 8021B AND NWTPH-Gx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 52-124)
MW11 607014-04	<1	<1	<1	<3	<100	93
MW12 607014-05	<1	<1	<1	<3	<100	91
Method Blank 06-1331 MB	<1	<1	<1	<3	<100	92

Date of Report: 07/11/16
Date Received: 07/01/16
Project: 2016-023A, F&BI 607014
Date Extracted: 07/05/16
Date Analyzed: 07/05/16

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 47-140)
MW2 607014-01	290 x	<250	78
MW4 607014-02	<50	<250	70
MW8 607014-03	100 x	<250	70
MW11 607014-04	190 x	<250	67
MW12 607014-05	220 x	<250	69
Method Blank 06-1351 MB	<50	<250	71

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW13 f	Client:	The Riley Group
Date Received:	07/01/16	Project:	2016-023A, F&BI 607014
Date Extracted:	07/05/16	Lab ID:	607014-06
Date Analyzed:	07/06/16	Data File:	607014-06.042
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Cadmium	<1
Lead	<1

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	Method Blank f	Client:	The Riley Group
Date Received:	NA	Project:	2016-023A, F&BI 607014
Date Extracted:	07/05/16	Lab ID:	I6-433 mb
Date Analyzed:	07/05/16	Data File:	I6-433 mb.027
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Cadmium	<1
Lead	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW13	Client:	The Riley Group
Date Received:	07/01/16	Project:	2016-023A, F&BI 607014
Date Extracted:	07/01/16	Lab ID:	607014-06
Date Analyzed:	07/01/16	Data File:	070136.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	57	121
Toluene-d8	102	63	127
4-Bromofluorobenzene	103	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW14	Client:	The Riley Group
Date Received:	07/01/16	Project:	2016-023A, F&BI 607014
Date Extracted:	07/01/16	Lab ID:	607014-07
Date Analyzed:	07/01/16	Data File:	070137.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	57	121
Toluene-d8	103	63	127
4-Bromofluorobenzene	102	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW15	Client:	The Riley Group
Date Received:	07/01/16	Project:	2016-023A, F&BI 607014
Date Extracted:	07/01/16	Lab ID:	607014-08
Date Analyzed:	07/01/16	Data File:	070138.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	57	121
Toluene-d8	103	63	127
4-Bromofluorobenzene	102	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	The Riley Group
Date Received:	Not Applicable	Project:	2016-023A, F&BI 607014
Date Extracted:	07/01/16	Lab ID:	06-1307 mb
Date Analyzed:	07/01/16	Data File:	070107.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	57	121
Toluene-d8	103	63	127
4-Bromofluorobenzene	103	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW4	Client:	The Riley Group
Date Received:	07/01/16	Project:	2016-023A, F&BI 607014
Date Extracted:	07/01/16	Lab ID:	607014-02
Date Analyzed:	07/01/16	Data File:	070134.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	57	121
Toluene-d8	103	63	127
4-Bromofluorobenzene	103	60	133

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	4.9	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<1	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<1
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1 ca	Bromobenzene	<1
cis-1,2-Dichloroethene	16	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<1
2-Butanone (MEK)	<10	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<1	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<1	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	3.9	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<1	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<1	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<1
trans-1,3-Dichloropropene	<1	Naphthalene	<1
1,1,2-Trichloroethane	<1	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW8	Client:	The Riley Group
Date Received:	07/01/16	Project:	2016-023A, F&BI 607014
Date Extracted:	07/01/16	Lab ID:	607014-03
Date Analyzed:	07/01/16	Data File:	070135.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	57	121
Toluene-d8	102	63	127
4-Bromofluorobenzene	101	60	133

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<1	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<1
1,1-Dichloroethane	1.7	n-Propylbenzene	<1
2,2-Dichloropropane	<1 ca	Bromobenzene	<1
cis-1,2-Dichloroethene	7.0	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<1
2-Butanone (MEK)	<10	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<1	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<1	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	33	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<1	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<1	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<1
trans-1,3-Dichloropropene	<1	Naphthalene	<1
1,1,2-Trichloroethane	<1	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	The Riley Group
Date Received:	Not Applicable	Project:	2016-023A, F&BI 607014
Date Extracted:	07/01/16	Lab ID:	06-1307 mb
Date Analyzed:	07/01/16	Data File:	070107.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	57	121
Toluene-d8	103	63	127
4-Bromofluorobenzene	103	60	133

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<1	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<1
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<1
2-Butanone (MEK)	<10	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<1	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<1	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<1	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<1	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<1	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<1
trans-1,3-Dichloropropene	<1	Naphthalene	<1
1,1,2-Trichloroethane	<1	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

Date of Report: 07/11/16
Date Received: 07/01/16
Project: 2016-023A, F&BI 607014

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Laboratory Code: 607014-05 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Benzene	ug/L (ppb)	<1	<1	nm
Toluene	ug/L (ppb)	<1	<1	nm
Ethylbenzene	ug/L (ppb)	<1	<1	nm
Xylenes	ug/L (ppb)	<3	<3	nm
Gasoline	ug/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	97	65-118
Toluene	ug/L (ppb)	50	96	72-122
Ethylbenzene	ug/L (ppb)	50	95	73-126
Xylenes	ug/L (ppb)	150	92	74-118
Gasoline	ug/L (ppb)	1,000	98	69-134

Date of Report: 07/11/16
Date Received: 07/01/16
Project: 2016-023A, F&BI 607014

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	102	116	61-133	13

Date of Report: 07/11/16
Date Received: 07/01/16
Project: 2016-023A, F&BI 607014

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR DISSOLVED METALS USING EPA METHOD 200.8

Laboratory Code: 606315-04 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Cadmium	ug/L (ppb)	5	<1	112	106	70-130	6
Lead	ug/L (ppb)	10	<1	84	81	70-130	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Cadmium	ug/L (ppb)	5	108	85-115
Lead	ug/L (ppb)	10	105	85-115

Date of Report: 07/11/16
Date Received: 07/01/16
Project: 2016-023A, F&BI 607014

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 606566-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Vinyl chloride	ug/L (ppb)	50	<0.2	98	36-166
Chloroethane	ug/L (ppb)	50	<1	117	46-160
1,1-Dichloroethene	ug/L (ppb)	50	<1	98	60-136
Methylene chloride	ug/L (ppb)	50	5.6	104	67-132
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	100	72-129
1,1-Dichloroethane	ug/L (ppb)	50	<1	93	70-128
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	100	71-127
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	89	69-133
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	95	60-146
Trichloroethene	ug/L (ppb)	50	<1	96	66-135
Tetrachloroethene	ug/L (ppb)	50	<1	98	10-226

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	ug/L (ppb)	50	96	95	50-154	1
Chloroethane	ug/L (ppb)	50	115	114	58-146	1
1,1-Dichloroethene	ug/L (ppb)	50	97	96	67-136	1
Methylene chloride	ug/L (ppb)	50	99	99	39-148	0
trans-1,2-Dichloroethene	ug/L (ppb)	50	96	95	68-128	1
1,1-Dichloroethane	ug/L (ppb)	50	92	92	79-121	0
cis-1,2-Dichloroethene	ug/L (ppb)	50	99	98	80-123	1
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	88	88	73-132	0
1,1,1-Trichloroethane	ug/L (ppb)	50	92	93	83-130	1
Trichloroethene	ug/L (ppb)	50	97	97	80-120	0
Tetrachloroethene	ug/L (ppb)	50	97	98	76-121	1

Date of Report: 07/11/16
Date Received: 07/01/16
Project: 2016-023A, F&BI 607014

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 606566-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Dichlorodifluoromethane	ug/L (ppb)	50	<1	95	10-172
Chloromethane	ug/L (ppb)	50	<10	96	25-166
Vinyl chloride	ug/L (ppb)	50	<0.2	98	36-166
Bromomethane	ug/L (ppb)	50	<1	115	47-169
Chloroethane	ug/L (ppb)	50	<1	117	46-160
Trichlorofluoromethane	ug/L (ppb)	50	<1	96	44-165
Acetone	ug/L (ppb)	250	<10	90	10-182
1,1-Dichloroethene	ug/L (ppb)	50	<1	98	60-136
Hexane	ug/L (ppb)	50	<1	82	52-150
Methylene chloride	ug/L (ppb)	50	5.6	104	67-132
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	<1	96	74-127
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	100	72-129
1,1-Dichloroethane	ug/L (ppb)	50	<1	93	70-128
2,2-Dichloropropane	ug/L (ppb)	50	<1	73	36-154
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	100	71-127
Chloroform	ug/L (ppb)	50	<1	94	65-132
2-Butanone (MEK)	ug/L (ppb)	250	<10	105	10-129
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	89	69-133
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	95	60-146
1,1-Dichloropropene	ug/L (ppb)	50	<1	97	69-133
Carbon tetrachloride	ug/L (ppb)	50	<1	94	56-152
Benzene	ug/L (ppb)	50	<0.35	97	76-125
Trichloroethene	ug/L (ppb)	50	<1	96	66-135
1,2-Dichloropropane	ug/L (ppb)	50	<1	98	78-125
Bromodichloromethane	ug/L (ppb)	50	<1	96	61-150
Dibromomethane	ug/L (ppb)	50	<1	98	66-141
4-Methyl-2-pentanone	ug/L (ppb)	250	<10	106	10-185
cis-1,3-Dichloropropene	ug/L (ppb)	50	<1	97	72-132
Toluene	ug/L (ppb)	50	<1	95	76-122
trans-1,3-Dichloropropene	ug/L (ppb)	50	<1	94	76-130
1,1,2-Trichloroethane	ug/L (ppb)	50	<1	103	68-131
2-Hexanone	ug/L (ppb)	250	<10	103	10-185
1,3-Dichloropropane	ug/L (ppb)	50	<1	97	71-128
Tetrachloroethene	ug/L (ppb)	50	<1	98	10-226
Dibromochloromethane	ug/L (ppb)	50	<1	102	70-139
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	<1	103	69-134
Chlorobenzene	ug/L (ppb)	50	<1	96	77-122
Ethylbenzene	ug/L (ppb)	50	<1	97	69-135
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	<1	95	73-137
m,p-Xylene	ug/L (ppb)	100	<2	97	69-135
o-Xylene	ug/L (ppb)	50	<1	96	60-140
Styrene	ug/L (ppb)	50	<1	99	71-133
Isopropylbenzene	ug/L (ppb)	50	<1	97	65-142
Bromoform	ug/L (ppb)	50	<1	89	65-142
n-Propylbenzene	ug/L (ppb)	50	<1	97	58-144
Bromobenzene	ug/L (ppb)	50	<1	98	75-124
1,3,5-Trimethylbenzene	ug/L (ppb)	50	<1	97	66-137
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	<1	101	51-154
1,2,3-Trichloropropane	ug/L (ppb)	50	<1	95	53-150
2-Chlorotoluene	ug/L (ppb)	50	<1	94	66-127
4-Chlorotoluene	ug/L (ppb)	50	<1	97	65-130
tert-Butylbenzene	ug/L (ppb)	50	<1	98	65-137
1,2,4-Trimethylbenzene	ug/L (ppb)	50	<1	97	59-146
sec-Butylbenzene	ug/L (ppb)	50	<1	98	64-140
p-Isopropyltoluene	ug/L (ppb)	50	<1	96	65-141
1,3-Dichlorobenzene	ug/L (ppb)	50	<1	96	72-123
1,4-Dichlorobenzene	ug/L (ppb)	50	<1	95	69-126
1,2-Dichlorobenzene	ug/L (ppb)	50	<1	97	69-128
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	<10	96	32-164
1,2,4-Trichlorobenzene	ug/L (ppb)	50	<1	96	66-136
Hexachlorobutadiene	ug/L (ppb)	50	<1	89	60-143
Naphthalene	ug/L (ppb)	50	<1	102	44-164
1,2,3-Trichlorobenzene	ug/L (ppb)	50	<1	99	69-148

Date of Report: 07/11/16
Date Received: 07/01/16
Project: 2016-023A, F&BI 607014

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	ug/L (ppb)	50	101	97	25-158	4
Chloromethane	ug/L (ppb)	50	92	91	45-156	1
Vinyl chloride	ug/L (ppb)	50	96	95	50-154	1
Bromomethane	ug/L (ppb)	50	114	115	55-143	1
Chloroethane	ug/L (ppb)	50	115	114	58-146	1
Trichlorofluoromethane	ug/L (ppb)	250	95	90	50-150	5
Acetone	ug/L (ppb)	250	94	94	53-131	0
1,1-Dichloroethene	ug/L (ppb)	50	97	96	67-136	1
Hexane	ug/L (ppb)	50	85	83	57-137	2
Methylene chloride	ug/L (ppb)	50	99	99	39-148	0
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	96	96	64-147	0
trans-1,2-Dichloroethene	ug/L (ppb)	50	96	95	68-128	1
1,1-Dichloroethane	ug/L (ppb)	50	92	92	79-121	0
2,2-Dichloropropane	ug/L (ppb)	50	73	72	55-143	1
cis-1,2-Dichloroethene	ug/L (ppb)	50	99	98	80-123	1
Chloroform	ug/L (ppb)	50	92	92	80-121	0
2-Butanone (MEK)	ug/L (ppb)	250	105	99	57-149	6
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	88	88	73-132	0
1,1,1-Trichloroethane	ug/L (ppb)	50	92	93	83-130	1
1,1-Dichloropropene	ug/L (ppb)	50	95	95	77-129	0
Carbon tetrachloride	ug/L (ppb)	50	92	93	75-158	1
Benzene	ug/L (ppb)	50	96	95	69-134	1
Trichloroethene	ug/L (ppb)	50	97	97	80-120	0
1,2-Dichloropropane	ug/L (ppb)	50	97	97	77-123	0
Bromodichloromethane	ug/L (ppb)	50	95	95	81-133	0
Dibromomethane	ug/L (ppb)	50	97	97	82-125	0
4-Methyl-2-pentanone	ug/L (ppb)	250	108	107	65-138	1
cis-1,3-Dichloropropene	ug/L (ppb)	50	97	99	82-132	2
Toluene	ug/L (ppb)	50	94	93	72-122	1
trans-1,3-Dichloropropene	ug/L (ppb)	50	93	94	80-136	1
1,1,2-Trichloroethane	ug/L (ppb)	50	101	102	75-124	1
2-Hexanone	ug/L (ppb)	250	105	105	60-136	0
1,3-Dichloropropane	ug/L (ppb)	50	95	95	76-126	0
Tetrachloroethene	ug/L (ppb)	50	97	98	76-121	1
Dibromochloromethane	ug/L (ppb)	50	101	103	84-133	2
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	102	102	82-125	0
Chlorobenzene	ug/L (ppb)	50	94	95	83-114	1
Ethylbenzene	ug/L (ppb)	50	96	96	77-124	0
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	91	94	84-127	3
m,p-Xylene	ug/L (ppb)	100	96	97	83-125	1
o-Xylene	ug/L (ppb)	50	95	95	81-121	0
Styrene	ug/L (ppb)	50	99	99	84-119	0
Isopropylbenzene	ug/L (ppb)	50	96	97	85-117	1
Bromoform	ug/L (ppb)	50	91	93	74-136	2
n-Propylbenzene	ug/L (ppb)	50	96	97	74-126	1
Bromobenzene	ug/L (ppb)	50	97	98	80-121	1
1,3,5-Trimethylbenzene	ug/L (ppb)	50	96	97	78-123	1
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	98	99	66-126	1
1,2,3-Trichloropropane	ug/L (ppb)	50	96	96	67-124	0
2-Chlorotoluene	ug/L (ppb)	50	92	94	77-127	2
4-Chlorotoluene	ug/L (ppb)	50	96	96	78-128	0
tert-Butylbenzene	ug/L (ppb)	50	96	98	80-123	2
1,2,4-Trimethylbenzene	ug/L (ppb)	50	95	97	79-122	2
sec-Butylbenzene	ug/L (ppb)	50	96	97	80-125	1
p-Isopropyltoluene	ug/L (ppb)	50	95	97	81-123	2
1,3-Dichlorobenzene	ug/L (ppb)	50	95	96	85-116	1
1,4-Dichlorobenzene	ug/L (ppb)	50	94	95	84-121	1
1,2-Dichlorobenzene	ug/L (ppb)	50	95	95	85-116	0
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	93	93	57-141	0
1,2,4-Trichlorobenzene	ug/L (ppb)	50	95	95	72-130	0
Hexachlorobutadiene	ug/L (ppb)	50	87	89	53-141	2
Naphthalene	ug/L (ppb)	50	99	99	64-133	0
1,2,3-Trichlorobenzene	ug/L (ppb)	50	97	97	65-136	0

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht – The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

607014

ME 7/1/16

SAMPLE CHAIN OF ~~CUSTODY~~

Report To Anna Jordan

Company The Riley Group

Address 17522 Bothell Way NE

City, State, ZIP Bothell WA 98011

Phone _____ Email _____

SAMPLERS (*signature*) Staffan Larsen

PROJECT NAME: 2016-023A

PO #:

REMARKS:

INVOICE TO:

TURNAROUND
- [x] Standard Turnaround
- [ ] RUSH _____
- Rush charges authorized by: _____

SAMPLE DISPOSAL
- [ ] Dispose after 30 days
- [ ] Archive Samples
- [ ] Other _____

V3/AI3/C03

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	NVOC's	Cadmium/Lead			Notes
MW2	01	6/30/16	12:20	H_2O	1		X										
MW4	02A-E		1:00		5		X			X							
MW8	03		12:30		5		X			X							
MW11	04		1:50		5		X	X	X								
MW12	05		2:00		5		X	X	X								
MW13	06		1:20		5								X	X			
MW14	07A-D		11:15		4								X				
MW15	08		11:00		4								X				

Samples received at: 2 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Staffan Larsen	Staffan Larsen	R&E	7/1/16	11:15
Received by: Cody Smith	Cody Smith	Fedex Office	7/01/16	11:15
Relinquished by:				
Received by: Elizabeth Radford	Elizabeth Radford	F&B	7/1/16	12:00

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 20, 2016

Anna Jordan, Project Manager
The Riley Group, Inc.
17522 Bothell Way NE
Bothell, WA 98011

Dear Ms Jordan:

Included are the results from the testing of material submitted on July 15, 2016 from the 2016-023A, F&BI 607229 project. There are 11 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
TRG0720R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 15, 2016 by Friedman & Bruya, Inc. from the The Riley Group 2016-023A, F&BI 607229 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
607229 -01	MW16-7
607229 -02	MW16-11
607229 -03	MW17-W
607229 -04	MW18-W
607229 -05	MW16-W

All quality control requirements were acceptable.

Date of Report: 07/20/16
Date Received: 07/15/16
Project: 2016-023A, F&BI 607229
Date Extracted: 07/15/16
Date Analyzed: 07/15/16

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE USING METHOD NWTPH-Gx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 51-134)
MW17-W 607229-03	<100	95
MW18-W 607229-04	<100	96
Method Blank 06-1419 MB	<100	94

Date of Report: 07/20/16
Date Received: 07/15/16
Project: 2016-023A, F&BI 607229
Date Extracted: 07/18/16
Date Analyzed: 07/18/16

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 51-134)
MW17-W 607229-03	230 x	<250	79
MW18-W 607229-04	63 x	<250	73
MW16-W 607229-05	150 x	<250	77
Method Blank 06-1441 MB	<50	<250	73

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW17-W	Client:	The Riley Group
Date Received:	07/15/16	Project:	2016-023A, F&BI 607229
Date Extracted:	07/15/16	Lab ID:	607229-03
Date Analyzed:	07/15/16	Data File:	071522.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	85	117
Toluene-d8	100	91	108
4-Bromofluorobenzene	99	76	126

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<1	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<1
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<1
2-Butanone (MEK)	<10	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<1	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<1	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<1	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<1	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<1	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<1
trans-1,3-Dichloropropene	<1	Naphthalene	<1
1,1,2-Trichloroethane	<1	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW18-W	Client:	The Riley Group
Date Received:	07/15/16	Project:	2016-023A, F&BI 607229
Date Extracted:	07/15/16	Lab ID:	607229-04
Date Analyzed:	07/15/16	Data File:	071523.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	85	117
Toluene-d8	100	91	108
4-Bromofluorobenzene	99	76	126

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<1	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<1
1,1-Dichloroethane	1.9	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	15	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<1
2-Butanone (MEK)	<10	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<1	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<1	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	130	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<1	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<1	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<1
trans-1,3-Dichloropropene	<1	Naphthalene	<1
1,1,2-Trichloroethane	<1	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	The Riley Group
Date Received:	Not Applicable	Project:	2016-023A, F&BI 607229
Date Extracted:	07/15/16	Lab ID:	06-1431 mb
Date Analyzed:	07/15/16	Data File:	071512.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	85	117
Toluene-d8	100	91	108
4-Bromofluorobenzene	101	76	126

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<1	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<1
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<1
2-Butanone (MEK)	<10	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<1	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<1	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<1	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<1	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<1	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<1
trans-1,3-Dichloropropene	<1	Naphthalene	<1
1,1,2-Trichloroethane	<1	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

Date of Report: 07/20/16
Date Received: 07/15/16
Project: 2016-023A, F&BI 607229

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TPH AS GASOLINE USING METHOD NWTPH-Gx

Laboratory Code: 607205-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Gasoline	ug/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	ug/L (ppb)	1,000	90	69-134

Date of Report: 07/20/16
Date Received: 07/15/16
Project: 2016-023A, F&BI 607229

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	83	84	58-134	1

Date of Report: 07/20/16
Date Received: 07/15/16
Project: 2016-023A, F&BI 607229

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 607212-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Dichlorodifluoromethane	ug/L (ppb)	50	<1	99	55-137
Chloromethane	ug/L (ppb)	50	<10	89	61-120
Vinyl chloride	ug/L (ppb)	50	<0.2	95	61-139
Bromomethane	ug/L (ppb)	50	<1	120	20-265
Chloroethane	ug/L (ppb)	50	<1	104	55-149
Trichlorofluoromethane	ug/L (ppb)	50	<1	98	71-128
Acetone	ug/L (ppb)	250	68	37 b	48-149
1,1-Dichloroethene	ug/L (ppb)	50	<1	93	71-123
Hexane	ug/L (ppb)	50	<1	95	61-127
Methylene chloride	ug/L (ppb)	50	<5	97	61-126
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	<1	87	68-125
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	93	72-122
1,1-Dichloroethane	ug/L (ppb)	50	<1	95	79-113
2,2-Dichloropropane	ug/L (ppb)	50	<1	96	58-132
cis-1,2-Dichloroethene	ug/L (ppb)	50	1.7	91	63-126
Chloroform	ug/L (ppb)	50	<1	92	79-113
2-Butanone (MEK)	ug/L (ppb)	250	350	42 b	69-123
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	96	70-119
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	93	75-121
1,1-Dichloropropene	ug/L (ppb)	50	<1	97	67-121
Carbon tetrachloride	ug/L (ppb)	50	<1	91	70-132
Benzene	ug/L (ppb)	50	<0.35	91	78-108
Trichloroethene	ug/L (ppb)	50	3.3	93	75-109
1,2-Dichloropropane	ug/L (ppb)	50	<1	93	80-111
Bromodichloromethane	ug/L (ppb)	50	<1	93	78-117
Dibromomethane	ug/L (ppb)	50	<1	92	73-125
4-Methyl-2-pentanone	ug/L (ppb)	250	<10	84	79-123
cis-1,3-Dichloropropene	ug/L (ppb)	50	<1	99	76-120
Toluene	ug/L (ppb)	50	<1	96	73-117
trans-1,3-Dichloropropene	ug/L (ppb)	50	<1	100	75-122
1,1,2-Trichloroethane	ug/L (ppb)	50	<1	92	81-116
2-Hexanone	ug/L (ppb)	250	<10	85	74-127
1,3-Dichloropropane	ug/L (ppb)	50	<1	95	80-113
Tetrachloroethene	ug/L (ppb)	50	<1	94	72-113
Dibromochloromethane	ug/L (ppb)	50	<1	100	69-129
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	<1	94	79-120
Chlorobenzene	ug/L (ppb)	50	<1	93	75-115
Ethylbenzene	ug/L (ppb)	50	<1	94	71-120
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	<1	100	76-130
m,p-Xylene	ug/L (ppb)	100	<2	92	63-128
o-Xylene	ug/L (ppb)	50	<1	93	64-129
Styrene	ug/L (ppb)	50	<1	91	56-142
Isopropylbenzene	ug/L (ppb)	50	<1	89	77-122
Bromoform	ug/L (ppb)	50	<1	96	49-138
n-Propylbenzene	ug/L (ppb)	50	<1	94	74-117
Bromobenzene	ug/L (ppb)	50	<1	98	70-121
1,3,5-Trimethylbenzene	ug/L (ppb)	50	<1	90	60-138
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	<1	98	79-120
1,2,3-Trichloropropane	ug/L (ppb)	50	<1	90	62-125
2-Chlorotoluene	ug/L (ppb)	50	<1	94	70-123
4-Chlorotoluene	ug/L (ppb)	50	<1	90	79-113
tert-Butylbenzene	ug/L (ppb)	50	<1	93	78-124
1,2,4-Trimethylbenzene	ug/L (ppb)	50	<1	88	74-118
sec-Butylbenzene	ug/L (ppb)	50	<1	90	77-118
p-Isopropyltoluene	ug/L (ppb)	50	<1	90	64-132
1,3-Dichlorobenzene	ug/L (ppb)	50	<1	93	79-109
1,4-Dichlorobenzene	ug/L (ppb)	50	<1	88	78-110
1,2-Dichlorobenzene	ug/L (ppb)	50	<1	91	81-111
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	<10	89	69-129
1,2,4-Trichlorobenzene	ug/L (ppb)	50	<1	91	66-123
Hexachlorobutadiene	ug/L (ppb)	50	<1	106	67-120
Naphthalene	ug/L (ppb)	50	<1	86	62-140
1,2,3-Trichlorobenzene	ug/L (ppb)	50	<1	88	59-130

Date of Report: 07/20/16
Date Received: 07/15/16
Project: 2016-023A, F&BI 607229

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	ug/L (ppb)	50	106	108	54-149	2
Chloromethane	ug/L (ppb)	50	93	93	67-133	0
Vinyl chloride	ug/L (ppb)	50	96	97	70-119	1
Bromomethane	ug/L (ppb)	50	119	123	62-188	3
Chloroethane	ug/L (ppb)	50	104	103	66-149	1
Trichlorofluoromethane	ug/L (ppb)	50	99	101	70-132	2
Acetone	ug/L (ppb)	250	91	94	44-145	3
1,1-Dichloroethene	ug/L (ppb)	50	95	96	75-119	1
Hexane	ug/L (ppb)	50	97	97	51-153	0
Methylene chloride	ug/L (ppb)	50	99	100	63-132	1
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	96	96	70-122	0
trans-1,2-Dichloroethene	ug/L (ppb)	50	93	94	76-118	1
1,1-Dichloroethane	ug/L (ppb)	50	96	97	80-116	1
2,2-Dichloropropane	ug/L (ppb)	50	108	107	62-141	1
cis-1,2-Dichloroethene	ug/L (ppb)	50	91	93	80-112	2
Chloroform	ug/L (ppb)	50	94	95	81-109	1
2-Butanone (MEK)	ug/L (ppb)	250	95	96	53-140	1
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	99	100	79-109	1
1,1,1-Trichloroethane	ug/L (ppb)	50	97	98	80-116	1
1,1-Dichloropropene	ug/L (ppb)	50	99	100	78-112	1
Carbon tetrachloride	ug/L (ppb)	50	97	97	72-128	0
Benzene	ug/L (ppb)	50	91	92	81-108	1
Trichloroethene	ug/L (ppb)	50	94	94	77-108	0
1,2-Dichloropropane	ug/L (ppb)	50	95	96	82-109	1
Bromodichloromethane	ug/L (ppb)	50	93	94	76-120	1
Dibromomethane	ug/L (ppb)	50	96	97	80-110	1
4-Methyl-2-pentanone	ug/L (ppb)	250	102	100	59-142	2
cis-1,3-Dichloropropene	ug/L (ppb)	50	101	101	76-128	0
Toluene	ug/L (ppb)	50	96	97	83-108	1
trans-1,3-Dichloropropene	ug/L (ppb)	50	102	102	76-128	0
1,1,2-Trichloroethane	ug/L (ppb)	50	94	95	82-110	1
2-Hexanone	ug/L (ppb)	250	92	91	53-145	1
1,3-Dichloropropane	ug/L (ppb)	50	98	98	83-110	0
Tetrachloroethene	ug/L (ppb)	50	94	94	78-109	0
Dibromochloromethane	ug/L (ppb)	50	100	102	63-140	2
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	94	94	82-118	0
Chlorobenzene	ug/L (ppb)	50	93	94	84-108	1
Ethylbenzene	ug/L (ppb)	50	96	96	83-111	0
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	99	101	76-125	2
m,p-Xylene	ug/L (ppb)	100	94	94	84-112	0
o-Xylene	ug/L (ppb)	50	96	95	81-117	1
Styrene	ug/L (ppb)	50	93	94	83-121	1
Isopropylbenzene	ug/L (ppb)	50	92	93	81-122	1
Bromoform	ug/L (ppb)	50	99	100	40-161	1
n-Propylbenzene	ug/L (ppb)	50	97	97	81-115	0
Bromobenzene	ug/L (ppb)	50	98	97	80-113	1
1,3,5-Trimethylbenzene	ug/L (ppb)	50	93	94	83-117	1
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	102	100	79-118	2
1,2,3-Trichloropropane	ug/L (ppb)	50	94	94	74-116	0
2-Chlorotoluene	ug/L (ppb)	50	95	96	79-112	1
4-Chlorotoluene	ug/L (ppb)	50	91	92	81-113	1
tert-Butylbenzene	ug/L (ppb)	50	96	97	81-119	1
1,2,4-Trimethylbenzene	ug/L (ppb)	50	91	92	81-121	1
sec-Butylbenzene	ug/L (ppb)	50	95	95	83-123	0
p-Isopropyltoluene	ug/L (ppb)	50	94	95	81-122	1
1,3-Dichlorobenzene	ug/L (ppb)	50	95	96	82-110	1
1,4-Dichlorobenzene	ug/L (ppb)	50	90	90	81-105	0
1,2-Dichlorobenzene	ug/L (ppb)	50	93	94	83-111	1
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	103	103	62-133	0
1,2,4-Trichlorobenzene	ug/L (ppb)	50	98	100	77-117	2
Hexachlorobutadiene	ug/L (ppb)	50	94	96	70-116	2
Naphthalene	ug/L (ppb)	50	99	99	72-131	0
1,2,3-Trichlorobenzene	ug/L (ppb)	50	96	99	80-114	3

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht – The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

607229

SAMPLE CHAIN OF CUSTODY

ME 07-15-16

C03 / V1

Page # 1 of 1

Report To Anna Jordan

Company The Riley Group

Address

City, State, ZIP

Phone 425.415.0551 Email AJordan@riley-group.com

SAMPLERS (*signature*)	
PROJECT NAME: 2016-023A	PO #
REMARKS	INVOICE TO

TURNAROUND TIME
- ☐ Standard Turnaround
- ☒ RUSH 24 hr
- Rush charges authorized by:

SAMPLE DISPOSAL
- ☒ Dispose after 30 days
- ☐ Archive Samples
- ☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM					Notes
MW16-7	01	7/14/16	8:40	SOIL	1		▨										
MW16-11	02		900	SOIL	1												
MW17-W	03 A-E		1418	WATER	5		X	X		X							
MW18-W	04		1512	WATER	5		X	X		X							
MW16-W	05		1708	WATER	5		X										
																	Samples received at 3 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Annajordan	Anna Jordan	RGI	7/15/16	11:35AM
Received by:	Philip Colling	F&B	7/15/16	1140
Relinquished by:				
Received by:	DO VO	F&B	7-15-16	1.01

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282