



State of Washington
POLLUTION LIABILITY INSURANCE AGENCY
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July 29, 2019

Mr. Timothy Johnson
Geotech Consultants, Inc.
2401 10th Avenue East
Seattle, WA 98102

Re: No Further Action at the Following Site:

- **Facility/Site Name:** Harding's Backhoe
- **Facility/Site Address:** 14441 Carnation Duvall Road NE, Duvall, WA 98019
- **FSID No:** 72016664
- **PTAP Project No:** PNW136

Dear Mr. Johnson:

The Washington State Pollution Liability Insurance Agency (PLIA) received your request for an opinion on your independent cleanup of Harding's Backhoe (Site). This letter provides our opinion. We are providing this opinion under the authority of Chapter 70.149 RCW and the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.

Issue Presented and Opinion

Is further remedial action necessary to clean up contamination at the Site?

No. PLIA has determined that no further remedial action is necessary to clean up contamination at the Site.

This opinion is based on an analysis of whether the remedial action meets the substantive requirements of MTCA, Chapter 70.105D RCW, and its implementing regulations, Chapter 173-340 WAC (collectively "substantive requirements of MTCA"). The analysis is provided below.

Description of the Site

This opinion applies only to the Site located at 14441 Carnation Duvall Road NE, Duvall WA and comprises one King County tax parcel described below (Fig. 1). This opinion does not apply to any other release(s) that may affect the Properties (parcels). Any such releases, if known, are identified separately below.

1. Description of the Properties and Tax Parcels within the Site:

The Property includes the following tax parcel(s) in King County, affected by the Site and addressed by your cleanup (Fig. 1):

- Tax Parcel No. 242606-9058

2. Description of the Site:

The parcel makes up the Site and is defined by the nature and extent of contamination associated with the following release (Figs. 1-4, Tables 1 and 2):

- Total Petroleum Hydrocarbons in the gasoline/diesel/oil range (TPH-g, TPH-d & TPH-o) and associated BTEX impacts in the soil/groundwater/air-vapor.

3. Identification of Other Sites that may affect the Property.

Please note, a parcel of real property can be affected by multiple sites. At this time, we have no information that this Property (single parcel) was affected by other sites.

Enclosure A includes a detailed description and diagram of the Site, as currently known to PLIA.

Basis for the Opinion

This opinion is based on the information contained in the following documents:

1. Underground Storage Tank Decommissioning and Final Cleanup Report, Harding & Sons 14441 Carnation/Duvall Rd NE, Duvall, Washington 98019. Prepared by DLH Environmental Consulting, October 12, 2010.
2. Phase I Environmental Site Assessment, Proposed Duvall Sherlock Self-Storage, 14441 State Route 203, Duvall, Washington. Prepared by The Riley Group, Inc., December 16, 2016.
3. Preliminary Phase II Subsurface Investigation, Proposed Duvall Sherlock Self-Storage, 14441 Carnation-Duvall Road Northeast, Duvall, Washington 98019. Prepared by The Riley Group, Inc., January 26, 2017.
4. Work Plan – Groundwater Sampling, Monitoring, & NFA Request, Proposed Duvall Sherlock Self-Storage, 14441 State Route 203, Duvall, Washington. Prepared by Geotech Consultants, Inc., March 27, 2018.

5. Supplementary Soil & Groundwater Sampling, Duvall Sherlock Self-Storage, 14441 State Route 203, Duvall, Washington. Prepared by Geotech Consultants, Inc., May 3, 2018.
6. Second Quarter Groundwater Sampling, Duvall Sherlock Self-Storage, 14441 State Route 203, Duvall, Washington. Prepared by Geotech Consultants, Inc., August 10, 2018.
7. Third Quarter Groundwater Sampling, Duvall Sherlock Self-Storage, 14441 State Route 203, Duvall, Washington. Prepared by Geotech Consultants, Inc. December 28, 2018.
8. Fourth Quarter Groundwater Sampling, Duvall Self-Storage, 14441 State Route 203, Duvall, Washington. Prepared by Geotech Consultants, Inc. February 6, 2019.
9. Supplementary Soil & Groundwater Sampling, Hardings Backhoe, 14441 Carnation Duvall Road Northeast, Duvall, Washington. Prepared by Geotech Consultants, Inc. May 15, 2019.

Documents submitted to PLIA are subject to the Public Records Act (Chapter 42.56 RCW). To make a request for public records, please email pliamail@plia.wa.gov.

This opinion is void if any information contained in those documents is materially false or misleading.

Analysis of the Cleanup

1. Cleanup of the Site

PLIA has concluded that **no further remedial action** is necessary to clean up contamination associated with the Site. Our conclusion is based on the following analysis:

a. Characterization of the Site.

Conceptual Site Model (CSM)

i. Soil Direct Contact:

Petroleum contaminated soil (PCS) at the Site was associated with two former underground storage tanks (USTs). The two 500-gallon USTs were used for diesel and waste oil storage. The USTs were decommissioned through removal in July 2010. Following excavation of the two USTs, confirmation samples were taken. Residual contamination remained near the foundation of a previously existing building at boring T1-E at concentrations of 4,400 mg/kg TPH-d and 26,000 mg/kg TPH-o above MTCA Method A Cleanup levels of 2,000 mg/kg (Figs. 2 and 4, Table 1). The depth and extent of contamination was located at approximately 7' below ground surface (bgs). In their

Phase II Environmental Assessment Report, Riley Group, Inc. indicated a 3' by 5' area of apparent petroleum staining on surface gravel near the southeastern corner of a previously existing storage building in the vicinity of boring P4. The location of the PCS was within the depths (0 to 15 ft. bgs) that humans (utility workers and property developers) may come into contact.

Result: The direct contact exposure pathway was a concern at this Site.

- ii. **Groundwater:** Perched groundwater was encountered approximately 6'-12' bgs during the 2017 Phase II Environmental Assessment performed by the Riley Group, Inc. Explorations during this assessment indicated petroleum contaminated ground water (PCGW) at boring P1 with concentrations of 1,100 µg/L TPH-g, 15,000 µg/L TPH-d, and 8,800 µg/L TPH-o above the respective MTCA Method A Cleanup levels of 1,000µg/L TPH-g, 500 µg/L TPH-d, and 500 µg/L TPH-o (Fig. 3, Table 2). Geotech Consultants, Inc. installed monitoring wells MW1E, MW2E, and MW3E in May 2018. Perched groundwater was encountered in all borings at approximately 10'-11' bgs during the installation of the monitoring wells. Groundwater flows generally to the northwest.

Result: The groundwater leaching exposure pathway was a concern at this Site.

- iii. **Vapor Exposure:** Residual PCS at boring T1-E (4,400 mg/kg TPH-d and 26,000 mg/kg TPH-o) was within the lateral inclusion zone of former structures existing at the Site (Figs. 2 and 4, Table 1). With proposed redevelopment for the subject Property, future building footprints may be within the lateral inclusion zone of residual PCS. The lateral inclusion zone or separation distance is defined as the area surrounding a contaminant source through which vapor phase contamination might travel and intrude into buildings (ITRC 2018, EPA 2018, Ecology Draft VI Guidance update 2018).

Result: The vapor exposure pathway was a concern at this Site.

- iv. **Surface water:** The nearest body of surface water is the Snoqualmie River approximately 1,100' west of the Site.

Result: The surface exposure pathway is not a concern at this Site.

b. Establishment of cleanup standards.

PLIA has determined the cleanup levels and points of compliance you established for the Site meet the substantive requirements of MTCA.

i. Cleanup Levels

Table 1. The COCs and cleanup levels are:

Contaminants of Concern (COCs)	Soil Cleanup Level mg/kg (Method A) <u>Un-restricted Land Use</u>	Groundwater Cleanup Level ug/l (Method A)	Sub-slab/soil gas Screening Levels ug/m ³ (Method B SL)	Indoor/Air Cleanup Levels ug/m ³ (Method B CUL)
TPH-d	2,000	500	-	-
TPH-o	2,000	500	-	-
TPH-g	100/30	1000/800	-	-
Benzene (carcinogen)	0.03	5	-	0.321
Toluene	7	1000	-	2290
Ethylbenzene	6	700	-	457
Xylenes, -m, -o	9	1000	-	45.7
Naphthalene (carcinogen) (does <u>not</u> include 1-methyl and 2-methyl naphthalene)	-	-		0.0735
Total Petroleum Hydrocarbon	-	-	-	140
APH [EC5-8 Aliphatics]	-	-	-	2,700
APH [EC9-12 Aliphatics]	-	-	-	140
APH [EC9-10 Aromatics]	-	-	-	180

ii. Points of Compliance.

The proposed Points of Compliance are:

Soil-Direct Contact: For soil cleanup levels based on human exposure via direct contact under WAC 173-240-740(6)(d), the point of compliance is established throughout the site from the *ground surface to 15' below the ground surface (bgs)*. This represents a *reasonable estimate of the depth of soil that could be excavated and distributed at the soil surface as a result of site development activities*.

Groundwater: For groundwater, the standard point of compliance as established under WAC 173-340-720(8) is established *throughout the Site from the uppermost level of the saturated zone extending vertically to the lowest most depth which could potentially be affected by the Site.*"

Vapor: For vapor, ambient and indoor, the standard POC under WAC 173-240-740(6)(c), *is established in the soil throughout the Site from the ground surface to the uppermost groundwater saturated zone (water table), where contamination has come to be located.*

c. Selection of cleanup action.

PLIA has determined the cleanup action you selected for the Site meets the substantive requirements of MTCA. The cleanup actions include:

- Decommission, through removal, of two 500-gallon USTs.
- Excavation of PCS at the Site to the extent technically practicable (approximately 12.41 tons).
- Collection of post-excavation soil samples to confirm the effectiveness of remedial actions.
- Installation of monitoring wells MW1E, MW2E, and MW3E, and groundwater monitoring for four consecutive quarters.

d. Cleanup.

PLIA has determined the cleanup action you performed at the Site meets the substantive requirements of MTCA.

i. Soil Direct Contact:

Following the demolition of structures at the Site, the previously inaccessible PCS at boring T1-E at 7' bgs was successfully excavated to levels below MTCA Method A Cleanup levels (Fig. 2, Table 1). An additional soil boring, B4E, taken in the area of petroleum staining on surface gravel in the vicinity of boring P4 indicated no residual PCS contamination.

Points of Compliance:

The limit of the excavation of the two 500-gallon USTs is bounded by the extent of PCS confirmation soil sampling results below cleanup levels: laterally, to the north, the limit of the excavation is bounded by borings B3E at 5' bgs, T2-N at 12' bgs, and T1-N at 11' bgs; to the east it is bounded by borings B2E at 10' bgs and P3 at 10' bgs; to the south it is bounded by borings T1-S at 11' bgs and T2-S at 12' bgs; to the

west it is bounded by boring T2-W at 10' bgs; and at the base by borings T2-B at 12' bgs, T1-T2-E at 9' bgs, B1E at 10' bgs, and P1 at 14' bgs.

Result: The soil direct contact is no longer a concern at this Site.

ii. Groundwater:

Monitoring wells MW1E, MW2E, and MW3E were installed to further characterize historical PCGW detected in perched groundwater at the Site. Groundwater monitoring results illustrate groundwater concentrations below MTCA Method A Cleanup levels for the four quarters monitored from April 2018 to January 2019 (Fig. 3, Table 2). A temporary monitoring well was installed at boring B4E in the vicinity of petroleum staining previously discovered on surface gravel. No groundwater was encountered in the temporary monitoring well.

Result: The groundwater exposure pathway is no longer a concern at this Site.

iii. Vapor Exposure:

The lateral and vertical extent of PCS detected at the Site was successfully excavated (approximately 12.41 tons) and groundwater monitoring results indicated groundwater concentrations below MTCA Method A Cleanup levels for four consecutive quarters.

Result: The vapor exposure pathway is no longer a concern at this Site.

Limitations of the Opinion

1. Opinion does not settle liability with the state.

Under the MTCA, liable persons are strictly liable, jointly and severally, for all remedial action costs and for all natural resource damages resulting from the release(s) of hazardous substances at the Site. This opinion **does not:**

- Change the boundaries of the Site.
- Resolve or alter a person's liability to the state.
- Protect liable persons from contribution claims by third parties.

To settle liability with the state and obtain protection from contribution claims, a person must enter into a consent decree with the Office of the Attorney General and the Department of Ecology under RCW 70.105D.040 (4).

2. Opinion does not constitute a determination of substantial equivalence.

To recover remedial action costs from other liable persons under MTCA, one must demonstrate that the action is the substantial equivalent of an Ecology-conducted or Ecology-supervised action. This opinion does not determine whether the action you performed is equivalent. Courts make that determination (RCW 70.105D.080 and WAC 173-340-545).

3. State is immune from liability.

The state, PLIA, and its officers and employees are immune from all liability, and no cause of action of any nature may arise from any act or omission in providing this opinion.

Termination of Agreement

Thank you for choosing to clean up your Property under the Petroleum Technical Assistance Program (PTAP). This opinion terminates the PTAP Agreement governing project #PNW136.

Contact Information

If you have any questions about this opinion, please contact us by phone at 1-800-822-3905, or by email at kaitlin.lebon@plia.wa.gov.

Sincerely,



Kaitlin Lebon
Environmental Specialist

Enclosure A: Site Description

- Figure 1: Site Vicinity Map
- Figure 2: Historical Soil Results Map
- Figure 3: Historical Groundwater Results Map
- Figure 4: Site Cross-Section
- Table 1: Soil Analytical Results
- Table 2: Groundwater Analytical Results

cc: Mr. Aaron Beal, Sherlock Investments – Duvall, LLC
Ms. Kristin Evered, PLIA (by email)
Mr. Nnamdi Madakor, PLIA (by email)

Enclosure A

Site Description:

The Site was initially developed around 1959 as a maintenance facility for the Washington State Highway Department. Use of the subject Property varied through time, housing Harding's Backhoe and Bulldozing and a woodworking business prior to being unoccupied as recently as 2016. Former structures at the Site included a garage building, mobile home, storage building, and a smaller metal storage shed. The Site is currently undergoing redevelopment for a self-storage facility. Two 500-gallon USTs, used for diesel and waste-oil storage respectively, were decommissioned in 2010.

The Site and surrounding area are generally level with a slight slope to the west. Soil at the Site was consistent with the mapped geology of Recessional Glacial Lake deposits and Outwash sand, described as silt, clayey or silty sand and underlain with a glacial till of dense, heterogeneous mixes of silt, sand, and gravel. Perched groundwater was encountered during subsurface investigations ranging from 6'-12' bgs. Groundwater at the Site flows generally to the northwest.

PCS at the Site was excavated to the extent technically practicable (approximately 12.41 tons). Previously inaccessible residual contamination remaining at boring T1-E was removed following the demolition of existing structures. An additional soil boring was advanced to investigate an area of petroleum surface staining discovered during a 2017 Phase II Environmental Assessment. Monitoring wells MW1E, MW2E, and MW3E were installed to characterize the extent of historical PCGW encountered at the Site. Groundwater monitoring determined PCGW concentrations below MTCA Method A Cleanup levels for four consecutive quarters. A temporary monitoring well was installed at boring B4E in the vicinity of petroleum staining previously discovered on surface gravel. No groundwater was encountered in the temporary monitoring well.

Figure 1: Site Vicinity Map

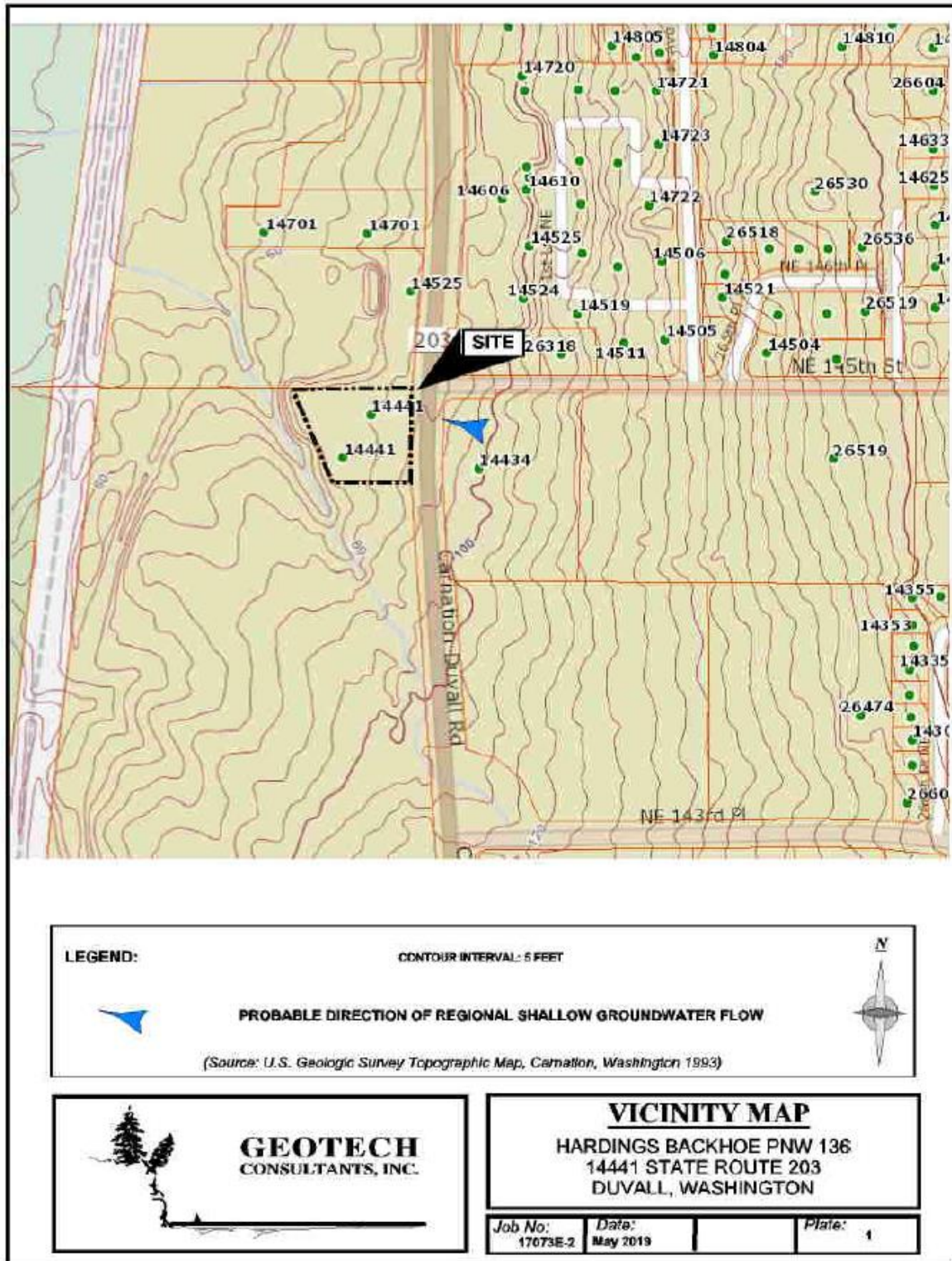


Figure 2: Historical Soil Results Map

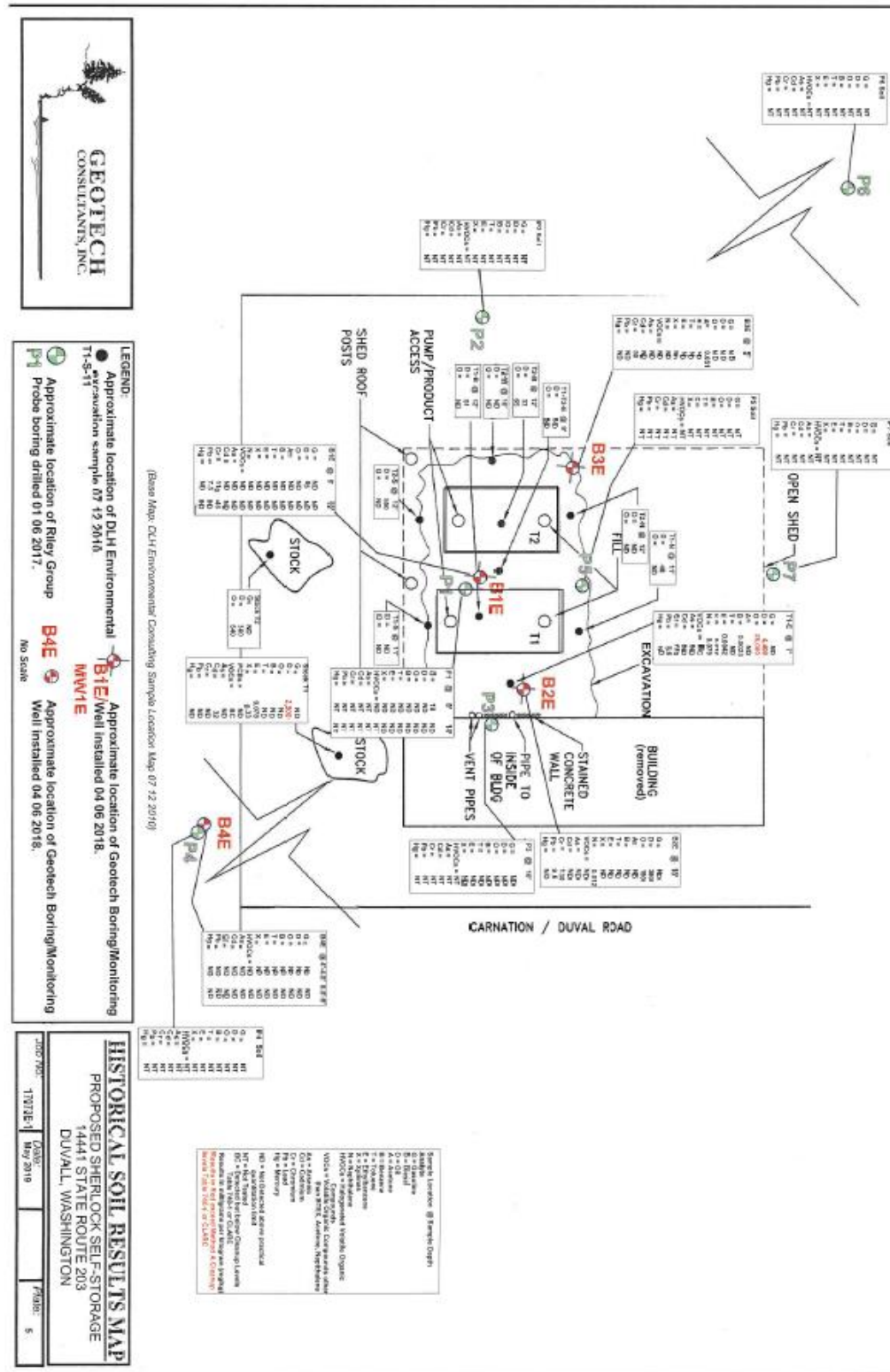


Figure 3: Historical Groundwater Results Map

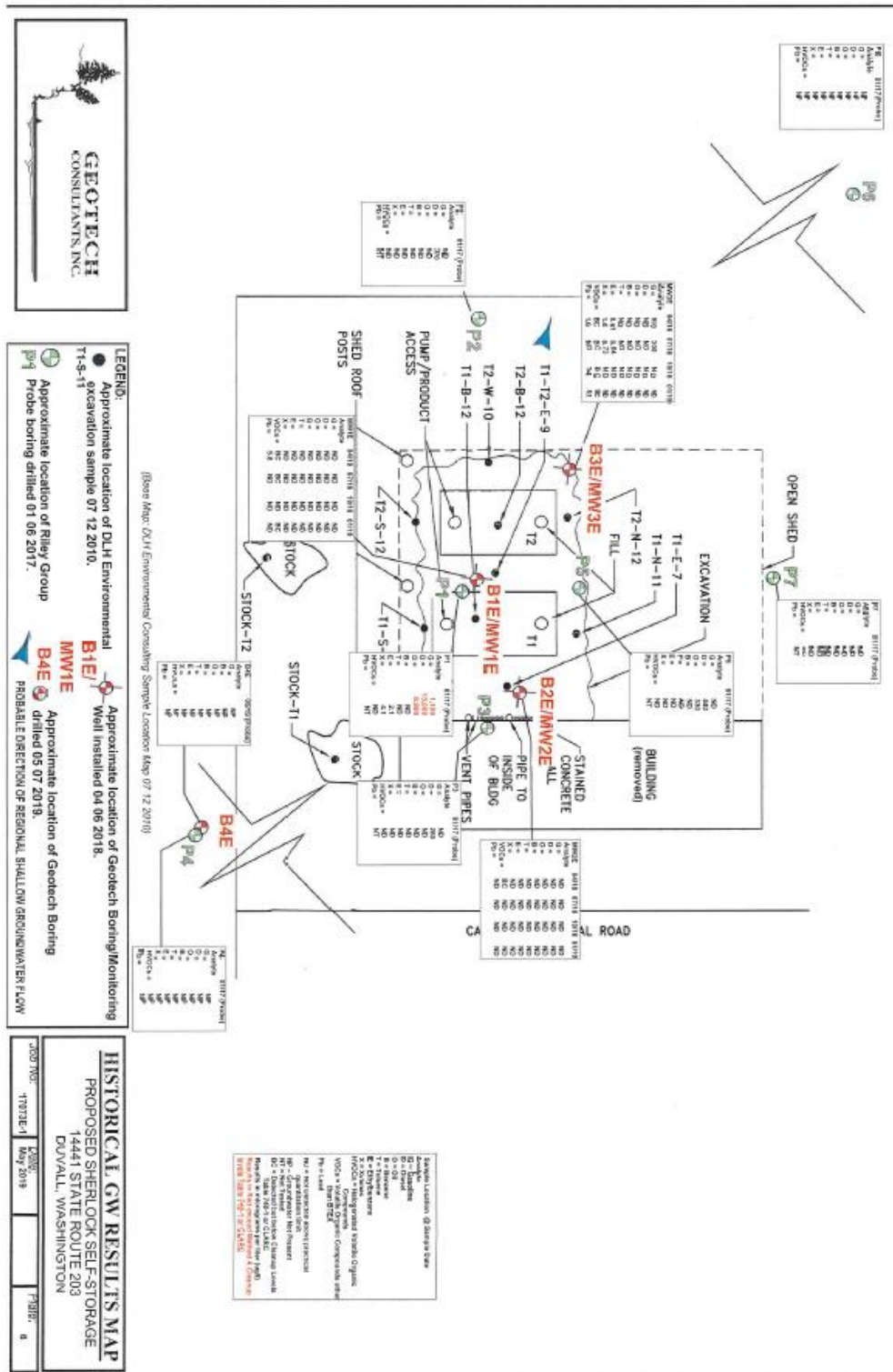


Figure 4: Site Cross-Section

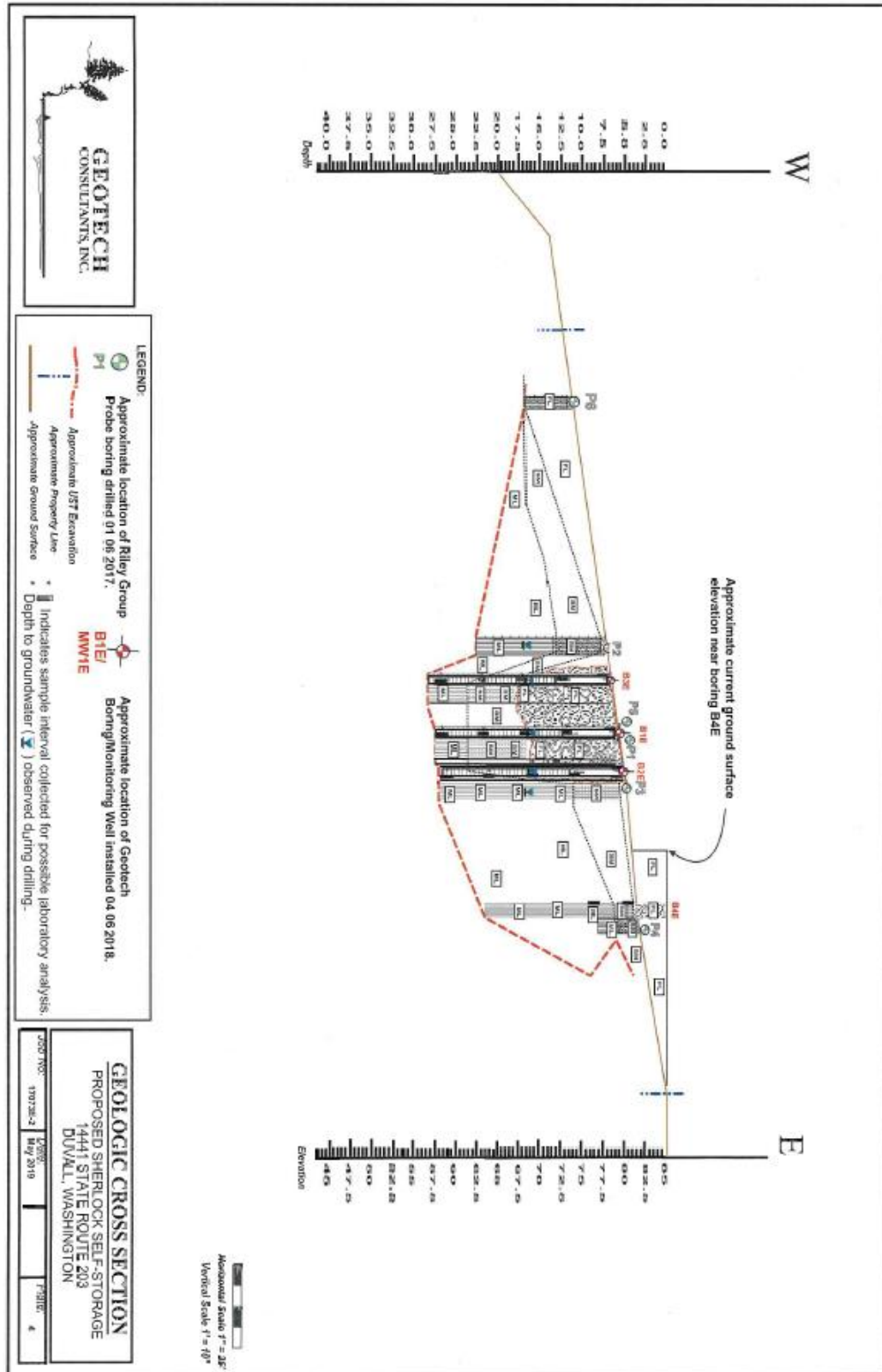


Table 1: Soil Analytical Results

TABLE A
Soil Sampling Analytical Results

SAMPLE NUMBER	LOCATION T1 = Diesel/Waste Oil Tank, T2 = Diesel Tank	ANALYSIS	RESULTS DRO-Diesel Range Organics LORO-Lube Oil Range Organics ND - Non Detected BC -Cleanup
T2-N-12	Tank 2, north wall, 12 ft bgl	NWTPH-DX	DRO- ND LORO -ND
T2-B-12	Tank 2, bottom of excavation, below the tank, 12 ft bgl	NWTPH-DX	DRO- 33 ppm LORO -65 ppm
T2-S-12	Tank 2, south wall, 12 ft bgl	NWTPH-DX	DRO- 550 ppm LORO -ND
T1-T2-E-9	Between Tank 1 and Tank 2, east wall, 9 ft bgl	NWTPH-DX	DRO- ND LORO -ND
T2-W-10	Tank 2, west wall, 10 ft bgl	NWTPH-DX	DRO- ND LORO -ND
Stock T2	Stockpile of overburden soil from Tank 2	NWTPH-HCID	Diesel fuel #2 - 360 ppm Lube Oil - 540 ppm
Stock T1	Stockpile of overburden soils from Tank 1	NWTPH-HCID NWTPH-DX PCBs VOCs 8 Metals	Diesel fuel #2 - 2900 ppm LORO - ND ND BC BC
T1-N-11	Tank 1, north wall, 11 ft bgl	NWTPH-DX	DRO- 48 LORO -ND
T1-S-11	Tank 1, south wall, 11 ft bgl	NWTPH-DX	DRO- ND LORO -ND
T1-B-12	Tank 1, bottom of excavation, below tank, 12 ft bgl	NWTPH-DX	DRO- 51 LORO -ND
T1-E-7	Tank 1, east wall, 7 ft bgl	NWTPH-HCID NWTPH-Dx VOCs	Diesel fuel #2 - 4400 ppm Lube Oil - 26000 ppm BC

Note: Current MTCA cleanup level for diesel is 2000 ppm,
 WTPH = Washington Total Petroleum Hydrocarbon
 Dx = Diesel and heavy oils
 HCID = Hydrocarbon Identification
 PCBs = Polychlorinated Biphenyls
 VOCs = Volatile Organics
 ppm = Parts per million (soil)
 bgl = below ground level

TABLE 2
LABORATORY RESULTS TPH & BTEX
SOIL SAMPLES¹

Sample Number	Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	Diesel	Oil
B1E @ 5'	ND ²	ND	ND	ND	ND	85	ND
B1E @ 10'	ND	ND	ND	ND	ND	ND	ND
B2E @ 10'	ND	ND	ND	ND	ND	380	180
B3E @ 5'	ND	ND	ND	ND	ND	ND	ND
PQL ³	5.0	0.001	0.005	0.001	0.002	25	50
Current Cleanup Level ⁴	100 ⁵ 30 ⁶	0.03	7	6	9	2,000	2,000

Notes:

1. Results are reported in milligrams per kilogram (mg/Kg).
2. ND denotes not detected above the practical quantitation limit.
3. PQL denotes practical quantitation limit.
4. Method A Soil Cleanup Levels for Unrestricted Land Use: MTCA Table 740-1.
5. Gasoline mixtures without benzene and the total of ethylbenzene, toluene, and xylenes are less than 1% of the gasoline mixture.
6. All other gasoline mixtures.

TABLE 3
LABORATORY RESULTS MTCA METALS
SOIL SAMPLES¹

Sample Number	Arsenic	Cadmium	Chromium	Lead	Mercury
B1E @ 5'	ND ²	ND	110	7.3	ND
B1E @ 10'	ND	ND	46	ND	ND
B2E @ 10'	ND	ND	130	9.6	ND
B3E @ 5'	ND	ND	50	ND	ND
Reporting Limits	10	0.5	0.5	5.0	0.25
Current Cleanup Level ³	20	2	2,000	250	2

Notes:

1. Results are reported in milligrams per kilogram (mg/Kg).
2. ND denotes not detected above the practical quantitation limit.
3. Method A Soil Cleanup Levels for Unrestricted Land Use: MTCA Table 740-1.

**TABLE 3
LABORATORY RESULTS MTCA METALS
SOIL SAMPLES¹**

Sample Number	Arsenic	Cadmium	Chromium	Lead	Mercury
B4E @ 4'-4.5'	ND ²	ND	80	ND	ND
B4E @ 8.5-9'	ND	ND	54	9.5	ND
PQL ³	10	0.5	0.5	5.0	0.25
Current Cleanup Level ⁴	20	2	2,000	250	2

Notes:

1. Results are reported in milligrams per kilogram (mg/Kg).
2. ND denotes not detected above the practical quantitation limit.
3. PQL denotes practical quantitation limit.
4. Method A Soil Cleanup Levels for Unrestricted Land Use: MTCA Table 740-1.

**TABLE 2
LABORATORY RESULTS DETECTED VOCs
SOIL SAMPLES¹**

Sample Number	Dichlorodifluoromethane	Acetone	2-Butanone	Isopropylbenzene
B4E @ 4'-4.5'	0.0052	0.024	ND ²	ND
B4E @ 8.5-9'	ND	0.15	0.025	0.0027
PQL ³	0.0010	0.010	0.0050	0.0010
Current Cleanup Level ⁴	16,000 ⁴	72,000 ⁴	48,000 ⁴	8,000 ⁴

**TABLE 1
LABORATORY RESULTS TPH & BTEX
SOIL SAMPLES¹**

Sample Number	Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	Diesel	Oil
B4E @ 4'-4.5'	ND ²	ND	ND	ND	ND	ND	ND
B4E @ 8.5-9'	ND	ND	ND	ND	ND	ND	ND
PQL ³	5.0	0.001	0.005	0.001	0.002	25	50
Current Cleanup Level ⁴	100 ⁵ 30 ⁶	0.03	7	6	9	2,000	2,000

Notes:

1. Results are reported in milligrams per kilogram (mg/Kg).
2. ND denotes not detected above the practical quantitation limit.
3. PQL denotes practical quantitation limit.
4. Method A Soil Cleanup Levels for Unrestricted Land Use: MTCA Table 740-1.
5. Gasoline mixtures without benzene and the total of ethylbenzene, toluene, and xylenes are less than 1% of the gasoline mixture.
6. All other gasoline mixtures.

Table 2: Groundwater Analytical Results

TABLE 2
 LABORATORY RESULTS TOTAL PETROLEUM HYDROCARBONS, BTEX & LEAD
 GROUNDWATER SAMPLES¹

Sample Date	Constituent	MW-1	MW-2	MW-3	Practical Quantitation Limit	Current Cleanup Level ³
04 09 2018	Gasoline	ND ²	ND	510	100	800 ⁴ 1,000 ⁵
07 27 2018	Gasoline	ND	ND	300	100	800 ⁴ 1,000 ⁵
10 26 2018	Gasoline	ND	ND	ND	100	800 ⁴ 1,000 ⁵
01 16 2019	Gasoline	ND	ND	ND	100	800 ⁴ 1,000 ⁵
04 09 2018	Benzene	ND	ND	ND	0.20	5
07 27 2018	Benzene	ND	ND	ND	0.20	5
10 26 2018	Benzene	ND	ND	ND	0.20	5
01 16 2019	Benzene	ND	ND	ND	0.20	5
04 09 2018	Toluene	ND	ND	ND	1.0	1,000
07 27 2018	Toluene	ND	ND	ND	1.0	1,000
10 26 2018	Toluene	ND	ND	ND	1.0	1,000
01 16 2019	Toluene	ND	ND	ND	1.0	1,000
04 09 2018	Ethylbenzene	ND	ND	0.61	0.20	700
07 27 2018	Ethylbenzene	ND	ND	0.64	0.20	700
10 26 2018	Ethylbenzene	ND	ND	ND	0.20	700
01 16 2019	Ethylbenzene	ND	ND	ND	0.20	700
04 09 2018	Xylenes	ND	ND	1.4	0.40	1,000
07 27 2018	Xylenes	ND	ND	0.73	0.40	1,000
10 26 2018	Xylenes	ND	ND	ND	0.40	1,000
01 16 2019	Xylenes	ND	ND	ND	0.40	1,000
04 09 2018	Diesel	ND	ND	ND	250	500
07 27 2018	Diesel	ND	ND	ND	250	500
10 26 2018	Diesel	ND	ND	ND	250	500
01 16 2019	Diesel	ND	ND	ND	250	500
04 09 2018	Lube Oil	ND	ND	ND	400	500
07 27 2018	Lube Oil	ND	ND	ND	400	500
10 26 2018	Lube Oil	ND	ND	ND	400	500
01 16 2019	Lube Oil	ND	ND	ND	400	500
04 09 2018	Lead	5.8	ND	1.6	1.1	15

Sample Date	Constituent	MW-1	MW-2	MW-3	Practical Quantitation Limit	Current Cleanup Level ³
07 27 2018	Lead	ND	ND	ND	1.0	15
10 26 2018	Lead	ND	ND	14	1.0	15
01 16 2019	Lead	ND	ND	5.1	1.0	15

Notes:

1. Results are reported in micrograms per liter (µg/L).
2. ND denotes not detected above the practical quantitation limit.
3. Method A Cleanup Levels for Groundwater: MTCA Table 720-1.
4. Cleanup level where there is benzene present in groundwater.
5. Cleanup level where there is no detectable benzene.

TABLE 3
LABORATORY RESULTS TOTAL VOLATILE ORGANIC COMPOUNDS
GROUNDWATER SAMPLES¹

Sample Date	Constituent	MW1	MW2	MW3	Practical Quantitation Limit	Current Cleanup Level ²
04 09 2018	Trichlorofluoromethane	2.1	ND ³	2.8	0.20	2,400 ²
07 27 2018	Trichlorofluoromethane	0.37	ND	2.8	0.20	7,200 ²
10 26 2018	Trichlorofluoromethane	ND	ND	0.29	0.20	7,200 ²
01 16 2019	Trichlorofluoromethane	0.28	ND	1.0	0.20	7,200 ²
04 09 2018	Acetone	ND	13	16	0.20	7,200 ²
07 27 2018	Acetone	ND	ND	ND	0.20	7,200 ²
10 26 2018	Acetone	ND	ND	ND	0.20	7,200 ²
01 06 2019	Acetone	ND	ND	ND	0.20	7,200 ²
04 09 2018	Isopropylbenzene	ND	ND	0.5	0.20	800 ²
07 27 2018	Isopropylbenzene	ND	ND	0.33	0.20	800 ²
10 26 2018	Isopropylbenzene	ND	ND	ND	0.20	800 ²

Sample Date	Constituent	MW1	MW2	MW3	Practical Quantitation Limit	Current Cleanup Level ²
01 16 2019	Isopropylbenzene	ND	ND	ND	0.20	800 ²
04 09 2018	n-Propylbenzene	ND	ND	1.8	0.20	160 ²
07 27 2018	n-Propylbenzene	ND	ND	0.65	0.20	160 ²
10 26 2018	n-Propylbenzene	ND	ND	ND	0.20	160 ²
01 16 2019	n-Propylbenzene	ND	ND	ND	0.20	160 ²
04 09 2018	1,3,5-Trimethylbenzene	ND	ND	9.5	0.20	80 ²
07 27 2018	1,3,5-Trimethylbenzene	ND	ND	2.9	0.20	80 ²
10 26 2018	1,3,5-Trimethylbenzene	ND	ND	ND	0.20	80 ²
01 16 2019	1,3,5-Trimethylbenzene	ND	ND	ND	0.20	80 ²
04 09 2018	1,2,4-Trimethylbenzene	ND	ND	7.0	0.20	NR ⁴
07 27 2018	1,2,4-Trimethylbenzene	ND	ND	0.36	0.20	NR ⁴
10 26 2018	1,2,4-Trimethylbenzene	ND	ND	ND	0.20	NR ⁴
01 16 2019	1,2,4-Trimethylbenzene	ND	ND	ND	0.20	NR ⁴
04 09 2018	sec-Butylbenzene	ND	ND	0.59	0.20	800 ²
07 27 2018	sec-Butylbenzene	ND	ND	0.63	0.20	800 ²
10 26 2018	sec-Butylbenzene	ND	ND	ND	0.20	800 ²
01 16 2019	sec-Butylbenzene	ND	ND	ND	0.20	800 ²
04 09 2018	p-Isopropyltoluene	ND	ND	0.39	0.20	NR ⁴
07 27 2018	p-Isopropyltoluene	ND	ND	ND	0.20	NR ⁴
10 26 2018	p-Isopropyltoluene	ND	ND	ND	0.20	NR ⁴
01 16 2019	p-Isopropyltoluene	ND	ND	ND	0.20	NR ⁴

01Notes:

1. Results are reported in micrograms per liter (µg/L).
2. Standard Method B Formula Values for Potable Groundwater (CLARC Version 3.0).
3. ND denotes not detected above the practical quantitation limit.
4. NR denotes not reported for compounds where no tabular value exists.