Groundwater Monitoring Report

Safeway #1436 Fueling Station/Former My Uncle's Store
7201 Portland Avenue
Tacoma, Washington

June 11, 2019
Terracon Project No. 81167550
TPCHD UST Permit #0000648

Prepared for:
Albertsons Companies
Boise, Idaho

Prepared by:
Terracon Consultants, Inc.
Mountlake Terrace, Washington

June 11, 2019

Albertsons Companies
250 Parkcenter Blvd
PO Box 20
Boise, Idaho 83726

Attn: Mr. Doug Kasefang

Re: **Groundwater Monitoring Report**
Safeway #1436 Fueling Station/Former My Uncle's Store
7201 Portland Avenue
Tacoma, Pierce County, Washington 98404
TPCHD UST Permit #0000648
Terracon Project No: 81167550

Dear Mr. Kasefang:

Terracon Consultants, Inc. (Terracon) is pleased to submit this Groundwater Monitoring Report for the site referenced above (the Site). The services described herein were performed in general accordance with Terracon's Proposal dated October 24, 2016, *Work Plan for Groundwater Monitoring Well Installations and Quarterly Monitoring* dated November 2, 2016 (Terracon Project No. 81167550), and Project Services Agreement dated October 27, 2016.

Terracon appreciates this opportunity to provide environmental services to Albertsons Companies. Should you have any questions or require additional information, please do not hesitate to contact our office.

Sincerely,
Terracon Consultants, Inc.

State of Washington
2872
Licensed Geologist
Matthew Y. Wheaton

Kyle Bennett, G.I.T.
Staff Geologist

Matt Wheaton, L.G., P.E.
Principal

Groundwater Monitoring Report

Safeway #1436 Fueling Station/Former My Uncle's Store
7201 Portland Avenue
Tacoma, Washington

Terracon Project No. 81167550
June 11, 2019

1.0 SITE DESRIPTION

The Safeway store property is an approximately 4.43-acre tract of land (Pierce County tax parcel 0320274090) located on the southeast corner of Portland Avenue and East 72nd Street in Tacoma, Washington. The Site location is depicted on Exhibit 1 in Appendix A, a portion of the 1994 Tacoma South USGS Topographic map. The Site layout is shown on Exhibit 2 in Appendix A, including the locations of current Site structures, former USTs and dispensers, approximate extents of the former UST removal and remedial excavation, and the current groundwater monitoring wells.

The northwest portion of the property parcel (the Site) was developed as a gasoline station and convenience store around 1953 and operated until the 1970s. A Chevron-branded gasoline station/convenience store (My Uncle's Store) was constructed on the Site in the late 1970s and operated until 2001, when the underground storage tanks (USTs) were removed. According to Washington State Department of Ecology (Ecology) online records, the former Chevron facility was most recently equipped with three 10,000-gallon single-walled steel USTs that were installed in 1982 and upgraded in 1997. A Safeway fueling station was constructed on the Site in 2002. The Safeway fueling station consists of two 20,000-gallon jacketed steel USTs. Double-walled fiberglass piping supplies fuel to dispensers located on seven dispenser islands, which are covered with a canopy.

Between 2000 and 2002, approximately 5,100 tons of petroleum contaminated soil (PCS) were removed from the excavation for offsite disposal. Confirmation soil samples collected from the final northern and western extents of the excavation at depths ranging from 3 to 13 feet below ground surface (bgs) contained gasoline-range total petroleum hydrocarbons (TPH) concentrations ranging from 53 to 6,500 milligrams per kilogram (mg/kg) and/or benzene concentrations ranging from 0.08 to 99 mg/kg, which exceed the Model Toxics Control Act (MTCA) Method A cleanup levels of 30 mg/kg and 0.03 mg/kg, respectively. Soil samples collected from the final extent of the southern and eastern excavation sidewalls and from the excavation bottom reportedly did not contain contaminants exceeding the MTCA Method A cleanup levels.

As detailed in Terracon's *Groundwater Monitoring Well Installation and Sampling Report*, dated February 10, 2017, Terracon advanced four soil borings (MW1 through MW4) to depths of approximately 20 feet bgs along the western and northern property boundaries in order to address a request from the Tacoma-Pierce County Health Department (TPCHD) for additional Site characterization data. All soil borings were converted to permanent groundwater monitoring wells. With the exception of benzene and gasoline-range total petroleum hydrocarbons (TPH) identified at concentrations exceeding MTCA cleanup levels in soil and groundwater samples collected from monitoring well MW2, analytes were not detected above laboratory method reporting limits (MRLs). Additional soil and groundwater sampling results are discussed further in Terracon's February 2017 report.

Between March 2017 and March 2018, quarterly groundwater monitoring has been completed by Terracon on groundwater monitoring wells MW1 through MW4. During each sampling event, groundwater samples were analyzed for gasoline-, diesel-, and oil-range TPH, and for BTEX. The groundwater samples collected from well MW2 have generally contained benzene at concentrations exceeding MTCA Method A cleanup levels during all sampling events, with the exception of one event conducted in September 2017. Gasoline-range TPH was also initially detected at concentrations exceeding the MTCA Method A cleanup level; however, the detected concentrations reported for the June through March 2018 sampling events were below the MTCA cleanup level.

In May 2018, Terracon completed an interim remedial action in the area of MW2 that consisted of advancing a total of five in-situ injection points to allow for the introduction of the remedial compound, ORC-A, at depths ranging from 5 to 15 feet bgs. A total of approximately 480 pounds of ORC-A were injected throughout the approximate 400-square-foot injection area.

Subsequent to the remedial injections, three groundwater monitoring events have been completed on monitoring wells MW1 and MW2. Diesel- and gasoline-range TPH were identified in the groundwater sample collected from MW2 at concentrations exceeding MTCA Method A cleanup levels during the June 2018 sampling event; however, only gasoline-range TPH was identified above the MTCA cleanup level in the subsequent, July 2018 sampling event. Although gasoline-range TPH concentrations decreased, relative to the June and July 2018 sampling events, diesel-range TPH concentration remained above the MTCA cleanup level during the October 2018 sampling event. Regardless, all TPH and benzene concentrations have decreased since the June 2018 sampling event suggesting that ORC-A injections may be contributing to the decline in concentrations of these compounds.

Terracon recommended an additional four quarters of groundwater monitoring from MW1 and MW2 to further monitor the residual TPH and benzene concentrations at MW2, and the ORC-A injections contribution to these compounds' concentrations.

This report presents the results of Terracon's recent quarterly groundwater monitoring event, conducted on March 13, 2019.

2.0 SCOPE OF SERVICES

Terracon's scope of work was conducted in general accordance with our proposal, dated October 24, 2016; *Work Plan for Groundwater Monitoring Well Installations and Quarterly Monitoring,* dated November 2, 2016; and Project Services Agreement, dated October 27, 2016. Our scope of services included completion of the following tasks:

- Collect groundwater samples from two of the on-site groundwater monitoring wells (MW1 and MW2);
- Complete laboratory analyses of groundwater samples; and
- Prepare this Groundwater Monitoring summary report.

2.1 Standard of Care

Terracon's services were performed in a manner consistent with generally accepted practices of the profession undertaken in similar studies in the same geographical area during the same time. Terracon makes no warranties, either express or implied, regarding the findings, conclusions, or recommendations. Please note that Terracon does not warrant the work of laboratories, regulatory agencies, or other third parties supplying information used in the preparation of the report. These services were performed in accordance with the scope of work agreed with you, our client, as reflected in our proposal and work plan.

2.2 Additional Scope Limitations

Findings, conclusions, and recommendations resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of work; such information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, non-detectable, or not present during these services. We cannot represent that the Site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this investigation. Subsurface conditions may vary from those encountered at specific borings or wells or during other surveys, tests, assessments, investigations, or exploratory services. The data, interpretations, findings, and our recommendations are based solely upon data obtained at the time and within the scope of these services.

2.3 Reliance

This report has been prepared for the exclusive use of Albertsons Companies, and any authorization for use or reliance by any other party (except for a governmental entity having jurisdiction over the Site) is prohibited without the express written authorization of Albertsons Companies and Terracon. Any unauthorized distribution or reuse is at Albertsons Companies' sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions, and limitations stated in the proposal, report, and the Master Environmental Services Agreement between Terracon and Albertsons Companies.

3.0 GROUNDWATER SAMPLING

On March 13, 2019, a Terracon representative mobilized to the Site to perform groundwater monitoring activities and collect groundwater samples from wells MW1 and MW2.

Prior to sample collection, monitoring wells MW1 through MW4 were opened and exposed to surficial atmospheric conditions, and static depth to groundwater below the top of the well casing (TOC) was measured in each well. The water level probe was decontaminated using a non-phosphate soap wash and distilled water rinse before use in each well.

Measured depth to water in the wells ranged from 4.68 feet below TOC at MW2 to 5.06 feet below TOC at MW4. Based on depth to water measurements and well TOC survey data, the groundwater elevations at the monitoring wells ranged from 412.43 feet at monitoring well MW1 to 414.92 feet at monitoring well MW4 (see Table 1 in Appendix B). Based on groundwater level measurements collected during Terracon's groundwater sampling event, the groundwater flow direction at the Site is generally toward the west (see Exhibit 3 Groundwater Contour and Flow Map in Appendix A).

The groundwater samples were collected using a peristaltic pump and dedicated tubing. Prior to sample collection, each well was purged at a low flow rate (less than 500 milliliters per minute [mL/min]). During the purging process, groundwater quality parameters, including temperature, electrical conductivity (EC), pH, turbidity, dissolved oxygen (DO), and oxidation-reduction potential (ORP), were measured at regular intervals using a Horiba U-22 or equivalent water quality meter. Purging was considered complete when three consecutive readings for EC, pH, turbidity, DO, and ORP were observed within 10% of one-another.

Samples were collected using the peristaltic pump. The same low flow rate used for purging the wells was used for collecting the samples. The discharge from the peristaltic pump was directed into laboratory-supplied glassware. The sample containers were labeled with the project number, date, time, well number, and sample number and placed in a chilled cooler immediately after

sampling. The sample containers were subsequently transported to ALS Laboratory Group (ALS), a Washington-certified analytical laboratory, under standard chain-of-custody procedures.

4.0 ANALYTICAL RESULTS

Groundwater samples were analyzed for gasoline-range TPH by Northwest Method NWTPH-Gx, diesel- and oil-range TPH by Northwest Method NWTPH-Dx, and benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8260. Reported groundwater concentrations were compared with the MTCA Method A cleanup levels for unrestricted land use, as applicable, established under Chapter 70.105D Revised Code of Washington (RCW) and its implementing regulation, MTCA Chapter 173-340 Washington Administrative Code (WAC).

The laboratory analytical report and chain-of-custody record are attached in Appendix C.

4.1 Groundwater Analytical Results

Diesel- and oil-range TPH were identified in the groundwater sample collected from monitoring well MW2 at concentrations of 580 µg/l and 400 µg/l, respectively. Only the diesel-range TPH concentration exceeded its respective MTCA Method A cleanup level of 500 µg/l for diesel.

In addition, benzene, toluene, ethylbenzene, and xylenes were not identified in the groundwater sample collected from monitoring well MW2 at concentrations above laboratory Method Reporting Limits (MRLs).

The groundwater sample from monitoring well MW1 did not contain concentrations of gasoline-, diesel-, or oil-range TPH, benzene, toluene, ethylbenzene, or xylenes above laboratory MRLs.

The groundwater analytical results are summarized in Table 1 of Appendix B and on Exhibit 4 in Appendix A.

4.2 Quality Assurance/Quality Control Results

The analytical results for the current investigation were checked for completeness upon receipt from the laboratory to ensure that data and quality assurance and quality control (QA/QC) information requested were present. Data quality was assessed by considering hold times, surrogate recovery, method blanks, matrix spike and matrix spike duplicate (MS/MSD) recovery, and detection limits. QA/QC review was completed using guidance described in *USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review* (Draft Final, USEPA, 2005). Our evaluation assumes that the QA/QC is correct as reported by the laboratory, and merely provides an interpretation of the QA/QC results.

Based upon our interpretation of quality control information provided by the laboratories, it is our opinion that the overall dataset is useable as qualified for the purposes of this investigation.

5.0 INVESTIGATION DERIVED WASTES

Investigation derived wastes (IDW) generated during the groundwater monitoring activities, which consisted of equipment decontamination water and well purge water, were containerized in one Department of Transportation (DOT) approved 55-gallon drum, properly labeled, and temporarily staged onsite, pending receipt of laboratory analytical results. The IDW drum was staged on the east side of the grocery store building near the loading dock.

6.0 FINDINGS AND CONCLUSIONS

Based on the scope of services described in this report, and subject to the limitations described herein, Terracon concludes the following:

- Measured depth to groundwater in the monitoring wells MW1 through MW4 ranged from approximately 4.68 to 5.06 feet bgs, with a groundwater gradient toward the west. This gradient is consistent with previously recorded groundwater migration directions.

- Only diesel-range TPH was identified in the groundwater sample collected from monitoring well MW2 at a concentration exceeding the associated MTCA Method A cleanup level.

- Gasoline- and oil-range TPH, and BTEX were not identified above MTCA Method A cleanup levels and/or laboratory MRLs in the groundwater sample collected from MW2.

- TPH and BTEX were not identified in the groundwater sample collected from MW1 at concentrations above laboratory MRLs.

Although gasoline-range TPH and BTEX concentrations have decreased, relative to the June, July, and October 2018 sampling events, the diesel-range TPH concentration remains above MTCA cleanup levels. Regardless, TPH and BTEX concentrations have continued to decrease since the May 2018 ORC-A injections, suggesting they may be contributing to the decline in concentrations of these compounds.

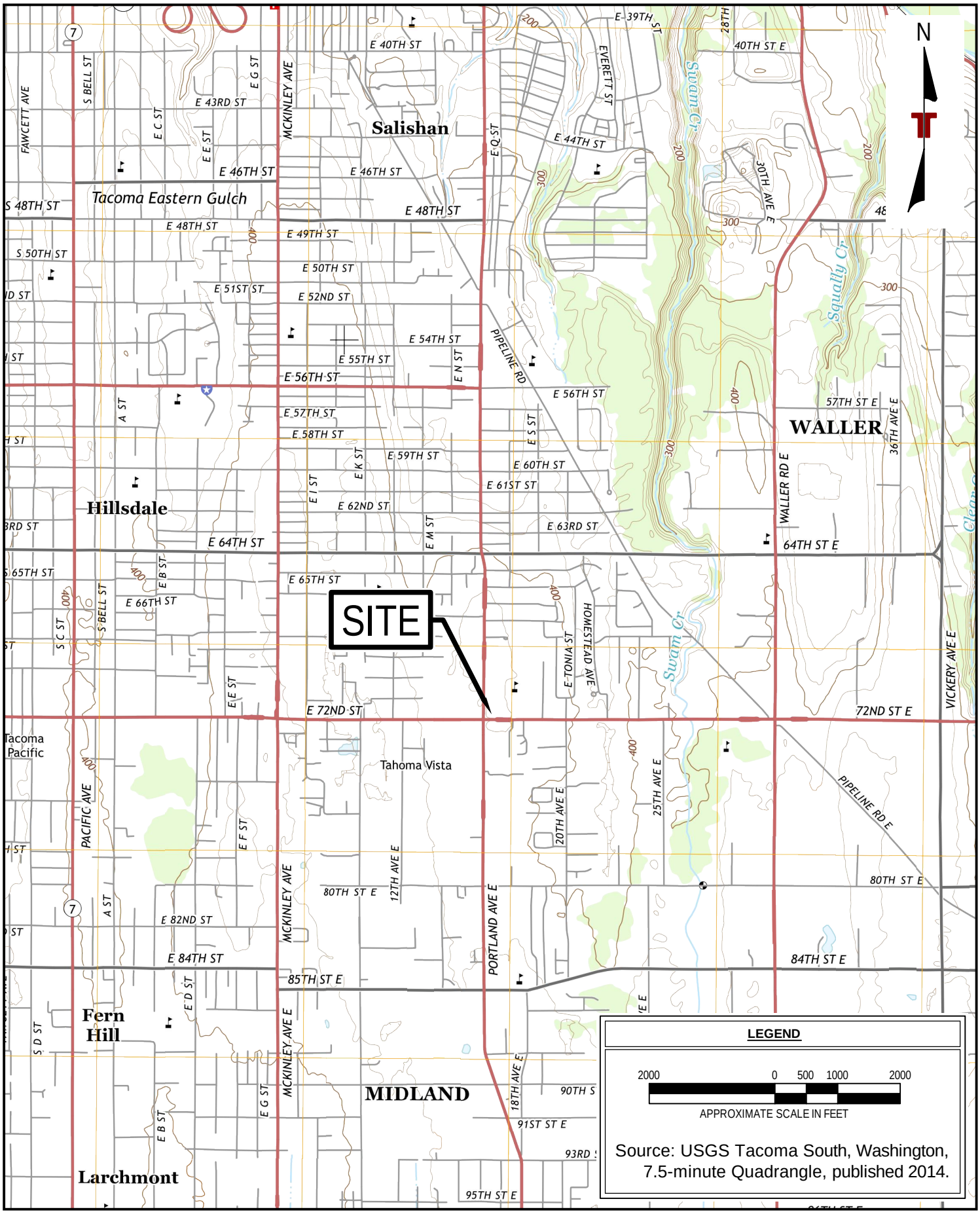
APPENDIX A - EXHIBITS

Exhibit 1 – Topographic Map

Exhibit 2 – Site Diagram

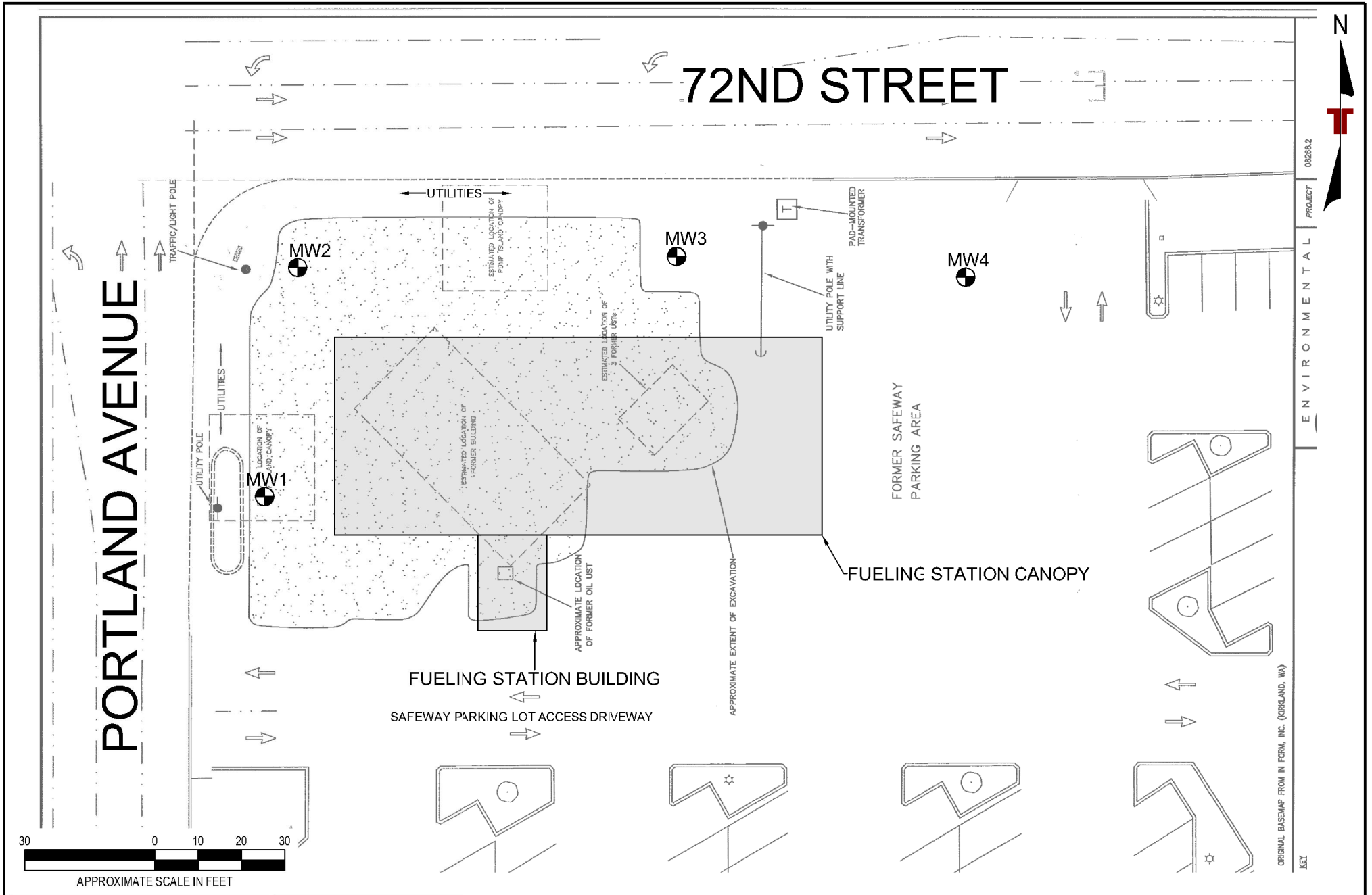
Exhibit 3 – Groundwater Contour & Flow Map – March 2019

Exhibit 4 – Groundwater Sample Concentrations



Project Mngr: MDN	Project No. 81167550	Terracon Consulting Engineers and Scientists	**TOPOGRAPHIC MAP**
Drawn By: AMP	Scale: AS SHOWN	21905 64th Avenue W., Ste 100 Mountlake Terrace, WA 98043	Safeway #1436 Fueling Station
Checked By: MDN	File No. Exhibit 1	PH. (425) 771-3304 FAX. (425) 771-3549	7201 Portland Ave E
Approved By: MDN	Date: March 2018		Tacoma, Pierce County, Washington

EXHIBIT 1



LEGEND

MW1 — APPROXIMATE LOCATION OF MONITORING WELL

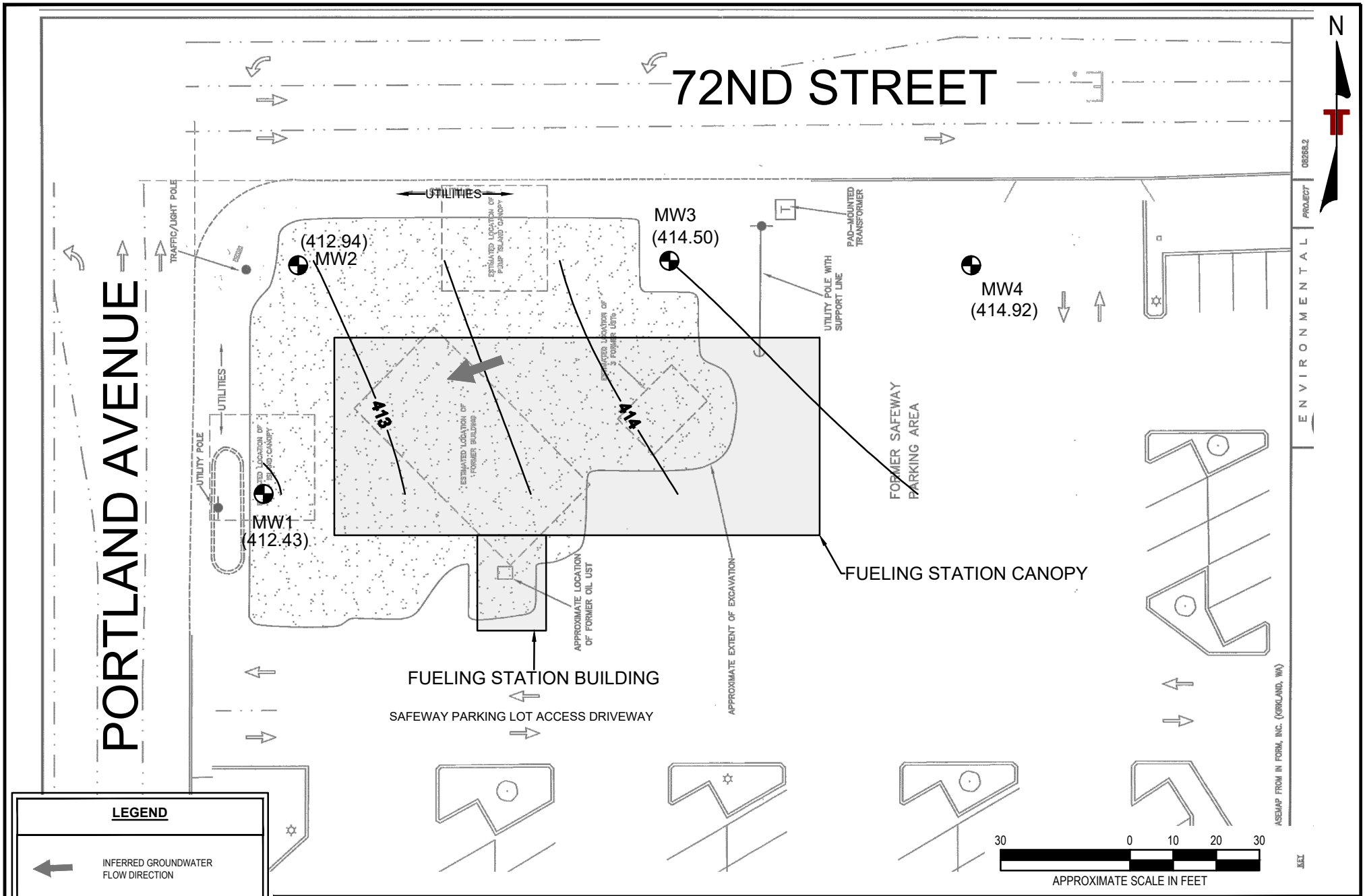
Project Mngr:	MDN
Drawn By:	AMP
Checked By:	MDN
Approved By:	MDN
Project No.	81167550
Scale:	AS SHOWN
File No.	Exhibit 2
Date:	March 2018

Terracon
Consulting Engineers and Scientists
21905 64th Avenue W., Ste 100 Mountlake Terrace, WA 98043
PH. (425) 771-3304 FAX. (425) 771-3549

SITE DIAGRAM

Safeway #1436 Fueling Station
7201 Portland Ave E
Tacoma, Pierce County, Washington

EXHIBIT 2



LEGEND

- INFERRED GROUNDWATER FLOW DIRECTION
- MW1 (400) APPROXIMATE LOCATION AND NUMBER OF PERMANENT GROUNDWATER MONITORING WELL, GROUNDWATER ELEVATION (FEET)
- 400 GROUNDWATER CONTOUR ELEVATION (FEET)

Project Mngr:	MDN
Drawn By:	SPL
Checked By:	KSB
Approved By:	MYW

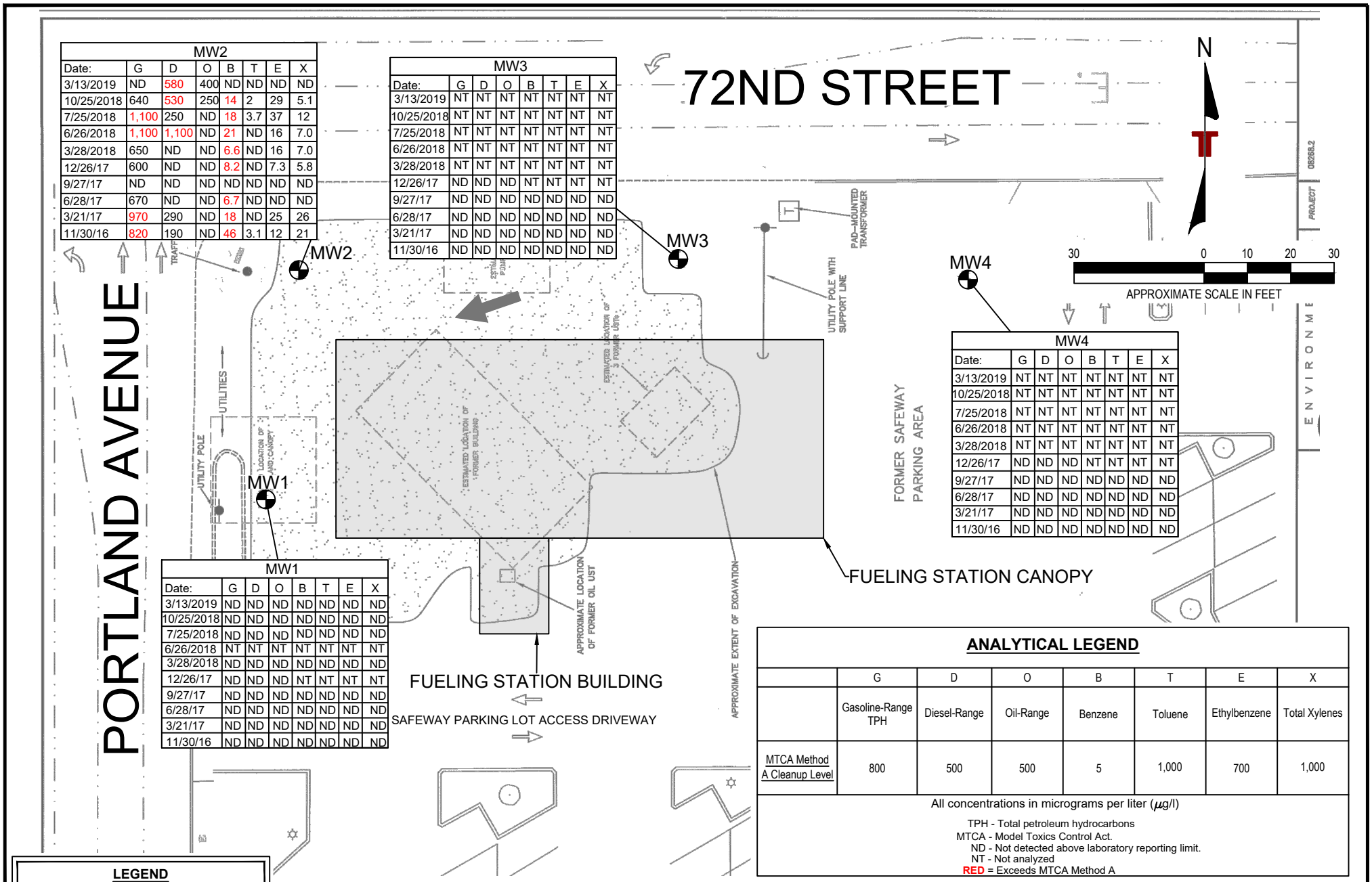
Project No.	81167550
Scale:	AS SHOWN
File No.	Exhibit 3
Date:	March 2019

Terracon
Consulting Engineers and Scientists
21905 64th Avenue W., Ste 100 Mountlake Terrace, WA 98043
PH. (425) 771-3304 FAX. (425) 771-3549

GROUNDWATER CONTOUR & FLOW MAP - MARCH 2019

Safeway #1436 Fueling Station
7201 Portland Ave E
Tacoma, Pierce County, Washington

EXHIBIT 3



MW2							
Date:	G	D	O	B	T	E	X
3/13/2019	ND	580	400	ND	ND	ND	ND
10/25/2018	640	530	250	14	2	29	5.1
7/25/2018	1,100	250	ND	18	3.7	37	12
6/26/2018	1,100	1,100	ND	21	ND	16	7.0
3/28/2018	650	ND	ND	6.6	ND	16	7.0
12/26/17	600	ND	ND	8.2	ND	7.3	5.8
9/27/17	ND	ND	ND	ND	ND	ND	ND
6/28/17	670	ND	ND	6.7	ND	ND	ND
3/21/17	970	290	ND	18	ND	25	26
11/30/16	820	190	ND	46	3.1	12	21

MW3							
Date:	G	D	O	B	T	E	X
3/13/2019	NT	NT	NT	NT	NT	NT	NT
10/25/2018	NT	NT	NT	NT	NT	NT	NT
7/25/2018	NT	NT	NT	NT	NT	NT	NT
6/26/2018	NT	NT	NT	NT	NT	NT	NT
3/28/2018	NT	NT	NT	NT	NT	NT	NT
12/26/17	ND	ND	ND	NT	NT	NT	NT
9/27/17	ND	ND	ND	ND	ND	ND	ND
6/28/17	ND	ND	ND	ND	ND	ND	ND
3/21/17	ND	ND	ND	ND	ND	ND	ND
11/30/16	ND	ND	ND	ND	ND	ND	ND

MW4							
Date:	G	D	O	B	T	E	X
3/13/2019	NT	NT	NT	NT	NT	NT	NT
10/25/2018	NT	NT	NT	NT	NT	NT	NT
7/25/2018	NT	NT	NT	NT	NT	NT	NT
6/26/2018	NT	NT	NT	NT	NT	NT	NT
3/28/2018	NT	NT	NT	NT	NT	NT	NT
12/26/17	ND	ND	ND	NT	NT	NT	NT
9/27/17	ND	ND	ND	ND	ND	ND	ND
6/28/17	ND	ND	ND	ND	ND	ND	ND
3/21/17	ND	ND	ND	ND	ND	ND	ND
11/30/16	ND	ND	ND	ND	ND	ND	ND

MW1							
Date:	G	D	O	B	T	E	X
3/13/2019	ND	ND	ND	ND	ND	ND	ND
10/25/2018	ND	ND	ND	ND	ND	ND	ND
7/25/2018	ND	ND	ND	ND	ND	ND	ND
6/26/2018	NT	NT	NT	NT	NT	NT	NT
3/28/2018	ND	ND	ND	ND	ND	ND	ND
12/26/17	ND	ND	ND	NT	NT	NT	NT
9/27/17	ND	ND	ND	ND	ND	ND	ND
6/28/17	ND	ND	ND	ND	ND	ND	ND
3/21/17	ND	ND	ND	ND	ND	ND	ND
11/30/16	ND	ND	ND	ND	ND	ND	ND

ANALYTICAL LEGEND

	G	D	O	B	T	E	X
	Gasoline-Range TPH	Diesel-Range	Oil-Range	Benzene	Toluene	Ethylbenzene	Total Xylenes
MTCA Method A Cleanup Level	800	500	500	5	1,000	700	1,000

All concentrations in micrograms per liter ($\mu g/l$)

TPH - Total petroleum hydrocarbons
MTCA - Model Toxics Control Act.
ND - Not detected above laboratory reporting limit.
NT - Not analyzed
RED = Exceeds MTCA Method A

LEGEND

MW1 — APPROXIMATE LOCATION OF MONITORING WELL

INFERRED GROUNDWATER FLOW DIRECTION

Project Mngr:	MDN
Drawn By:	SPL
Checked By:	MDN
Approved By:	MDN
Project No.	81167550
Scale:	AS SHOWN
File No.	Exhibit 4
Date:	December 2018

Terracon
Consulting Engineers and Scientists
21905 64th Avenue W., Ste 100 Mountlake Terrace, WA 98043
PH. (425) 771-3304 FAX. (425) 771-3549

GROUNDWATER SAMPLE CONCENTRATIONS

Safeway #1436 Fueling Station
7201 Portland Ave E
Tacoma, Pierce County, Washington

EXHIBIT 4

APPENDIX B - TABLES

Table 1-Summary of Groundwater Analytical Results

TABLE 1

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
Safeway #1436 Fueling Station
7201 Portland Avenue
Tacoma, Washington

all concentrations are in micrograms per liter (µg/l)

Well ID (Top of Casing Elevation [feet])	Sample Date	Depth to Water (feet)	Ground-water Elevation (feet)	TPH			VOCs										
				Gasoline-Range	Diesel-Range	Oil-Range	Benzene	Toluene	Ethylbenzene	Total Xylenes	Isopropylbenzene	N-Propylbenzene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene	S-Butylbenzene	N-Butylbenzene	Naphthalene
MW1 (417.26)	3/13/2019	4.83	412.43	ND (<50)	ND (<130)	ND (<250)	ND (<2)	ND (<2)	ND (<2)	ND (<4)	--	--	--	--	--	--	--
	10/25/2018	6.54	410.72	ND (<50)	ND (<130)	ND (<250)	ND (<2)	ND (<2)	ND (<2)	ND (<4)	--	--	--	--	--	--	--
	7/25/2018	6.32	410.94	ND (<50)	ND (<130)	ND (<250)	ND (<2)	ND (<2)	ND (<2)	ND (<4)	--	--	--	--	--	--	--
	3/28/2018	5.15	412.11	ND (<50)	ND (<130)	ND (<250)	ND (<2)	ND (<2)	ND (<2)	ND (<4)	--	--	--	--	--	--	--
	12/26/2017	4.02	413.24	ND (<50)	ND (<130)	ND (<250)	ND (<2)	ND (<2)	ND (<2)	ND (<4)	--	--	--	--	--	--	--
	9/27/2017	6.65	410.61	ND (<50)	ND (<130)	ND (<250)	ND (<2)	ND (<2)	ND (<2)	ND (<4)	--	--	--	--	--	--	--
	6/28/2017	5.36	411.90	ND (<50)	ND (<130)	ND (<250)	ND (<2)	ND (<2)	ND (<2)	ND (<4)	ND (<2)	ND (<2)	ND (<2)	ND (<2)	ND (<2)	ND (<2)	ND (<2)
	3/21/2017	3.98	413.28	ND (<50)	ND (<130)	ND (<250)	ND (<2)	ND (<2)	ND (<2)	ND (<4)	--	--	--	--	--	--	--
	11/30/2016	5.43	411.83	ND (<50)	ND (<130)	ND (<250)	ND (<2)	ND (<2)	ND (<2)	ND (<2)	--	--	--	--	--	--	--
MW2 (417.62)	3/13/2019	4.68	412.94	ND (<50)	580	400	ND (<2)	ND (<2)	ND (<2)	ND (<4)	--	--	--	--	--	--	--
	10/25/2018	7.62	410.00	640	530	250	14	2	29	5.1	--	--	--	--	--	--	--
	7/25/2018	7.41	410.21	1,100	250	ND (<250)	18	3.7	37	12	--	--	--	--	--	--	--
	6/26/2018	6.79	410.83	1,000	1,100	350	21	3.9	25	12	--	--	--	--	--	--	--
	3/28/2018	5.37	412.25	650	ND (<130)	ND (<250)	6.6	ND (<2)	16	7	--	--	--	--	--	--	--
	12/26/2017	4.64	412.98	600	ND (<130)	ND (<250)	8.2	ND (<2)	7.3	5.8	--	--	--	--	--	--	--
	9/27/2017	4.88	412.74	ND (<50)	ND (<130)	ND (<250)	ND (<2)	ND (<2)	ND (<2)	ND (<4)	--	--	--	--	--	--	--
	6/28/2017	5.46	412.16	670	ND (<130)	ND (<250)	6.7	ND (<2)	ND (<2)	ND (<4)	7.2	24	ND (<2)	ND (<2)	2.6	ND (<2)	2.3
	3/21/2017	4.53	413.09	970	290	ND (<250)	18	ND (<2)	25	26	12	29	3.1	4	3.1	12	4.5
	11/30/2016	5.23	412.39	820	190	ND (<250)	46	3.1	12	21	--	--	--	--	--	--	--
MW3 (419.22)	3/13/2019	4.72	414.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2018	7.16	412.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/28/2018	4.96	414.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/26/2017	4.33	414.89	ND (<50)	ND (<130)	ND (<250)	ND (<2)	ND (<2)	ND (<2)	ND (<4)	--	--	--	--	--	--	--
	9/27/2017	6.88	412.34	ND (<50)	ND (<130)	ND (<250)	ND (<2)	ND (<2)	ND (<2)	ND (<4)	--	--	--	--	--	--	--
	6/28/2017	5.44	413.78	ND (<50)	ND (<130)	ND (<250)	ND (<2)	ND (<2)	ND (<2)	ND (<4)	ND (<2)	ND (<2)	ND (<2)	ND (<2)	ND (<2)	ND (<2)	ND (<2)
	3/21/2017	4.21	415.01	ND (<50)	ND (<130)	ND (<250)	ND (<2)	ND (<2)	ND (<2)	ND (<4)	--	--	--	--	--	--	--
	11/30/2016	5.82	413.40	ND (<50)	ND (<130)	ND (<250)	ND (<2)	ND (<2)	ND (<2)	ND (<2)	--	--	--	--	--	--	--
MW4 (419.98)	3/13/2019	5.06	414.92	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2018	8.10	411.88	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/28/2018	5.34	414.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/26/2017	4.75	415.23	ND (<50)	ND (<130)	ND (<250)	ND (<2)	ND (<2)	ND (<2)	ND (<4)	--	--	--	--	--	--	--
	9/27/2017	7.99	411.99	ND (<50)	ND (<130)	ND (<250)	ND (<2)	ND (<2)	ND (<2)	ND (<4)	--	--	--	--	--	--	--
	6/28/2017	5.91	414.07	ND (<50)	ND (<130)	ND (<250)	ND (<2)	ND (<2)	ND (<2)	ND (<4)	ND (<2)	ND (<2)	ND (<2)	ND (<2)	ND (<2)	ND (<2)	ND (<2)
	3/21/2017	4.64	415.34	ND (<50)	ND (<130)	ND (<250)	ND (<2)	ND (<2)	ND (<2)	ND (<4)	--	--	--	--	--	--	--
	11/30/2016	5.42	414.56	ND (<50)	ND (<130)	ND (<250)	ND (<2)	ND (<2)	ND (<2)	ND (<2)	--	--	--	--	--	--	--
MTCA Method A Cleanup Level				**800**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**NE**	**800***	**80***	**NE**	**800***	**400***	**160**

Notes: Concentrations detected above laboratory method reporting limits (MRLs) are in **BOLD** type. Concentrations above MTCA cleanup levels are in red **BOLD** and shaded.

TPH - total petroleum hydrocarbons
VOCs - volatile organic compounds
MTCA - Model Toxics Control Act
ND - Not detected above laboratory reporting limit.
* - MTCA Method B Cleanup Level - Unrestricted land use. Referenced when a Method A cleanup level has not been established.
-- - Not analyzed and/or sampled

APPENDIX C – ANALYTICAL REPORT

March 20, 2019

Mr. Kyle Bennett
Terracon
21905 - 64th Ave W, Suite 100
Mountlake Terrace, WA 98043

Dear Mr. Bennett,

On March 14th, 2 samples were received by our laboratory and assigned our laboratory project number EV19030091. The project was identified as your 81167550. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Rick Bagan
Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Terracon 21905 - 64th Ave W, Suite 100 Mountlake Terrace, WA 98043	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2019 EV19030091 EV19030091-01
CLIENT CONTACT:	Kyle Bennett	DATE RECEIVED:	03/14/2019
CLIENT PROJECT:	81167550	COLLECTION DATE:	3/13/2019 9:55:00 AM
CLIENT SAMPLE ID	MW1	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	03/17/2019	KLS
TPH-Diesel Range	NWTPH-DX	U	130	1	UG/L	03/19/2019	EBS
TPH-Oil Range	NWTPH-DX	U	250	1	UG/L	03/19/2019	EBS
Benzene	EPA-8260	U	2.0	1	UG/L	03/18/2019	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	03/18/2019	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	03/18/2019	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	03/18/2019	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	03/18/2019	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**88.1**	03/17/2019	KLS
C25	NWTPH-DX	**112**	03/19/2019	EBS
Toluene-d8	EPA-8260	**99.3**	03/18/2019	DLC

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
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CERTIFICATE OF ANALYSIS

CLIENT:	Terracon 21905 - 64th Ave W, Suite 100 Mountlake Terrace, WA 98043	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2019 EV19030091 EV19030091-02
CLIENT CONTACT:	Kyle Bennett	DATE RECEIVED:	03/14/2019
CLIENT PROJECT:	81167550	COLLECTION DATE:	3/13/2019 10:35:00 AM
CLIENT SAMPLE ID	MW2	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	03/17/2019	KLS
TPH-Diesel Range	NWTPH-DX	**580**	130	1	UG/L	03/19/2019	EBS
TPH-Oil Range	NWTPH-DX	**400**	250	1	UG/L	03/19/2019	EBS
Benzene	EPA-8260	U	2.0	1	UG/L	03/18/2019	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	03/18/2019	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	03/18/2019	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	03/18/2019	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	03/18/2019	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**92.6**	03/17/2019	KLS
C25	NWTPH-DX	**110**	03/19/2019	EBS
Toluene-d8	EPA-8260	**96.7**	03/18/2019	DLC

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains an unidentified diesel range product and an unidentified oil range product.

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CERTIFICATE OF ANALYSIS

CLIENT:	Terracon 21905 - 64th Ave W, Suite 100 Mountlake Terrace, WA 98043	DATE:	3/20/2019
		ALS SDG#:	EV19030091
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Kyle Bennett		
CLIENT PROJECT:	81167550		

LABORATORY BLANK RESULTS

MBG-031719W - Batch 138893 - Water by NWTPH-GX

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	UG/L	50	03/17/2019	KLS

U - Analyte analyzed for but not detected at level above reporting limit.

MB-031519W - Batch 138864 - Water by NWTPH-DX

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range	NWTPH-DX	U	UG/L	130	03/18/2019	EBS
TPH-Oil Range	NWTPH-DX	U	UG/L	250	03/18/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

MB-031819W - Batch 138860 - Water by EPA-8260

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
1,1-Dichloroethene	EPA-8260	U	UG/L	2.0	03/18/2019	DLC
Benzene	EPA-8260	U	UG/L	2.0	03/18/2019	DLC
Toluene	EPA-8260	U	UG/L	2.0	03/18/2019	DLC
Ethylbenzene	EPA-8260	U	UG/L	2.0	03/18/2019	DLC
m,p-Xylene	EPA-8260	U	UG/L	4.0	03/18/2019	DLC
o-Xylene	EPA-8260	U	UG/L	2.0	03/18/2019	DLC

U - Analyte analyzed for but not detected at level above reporting limit.

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CERTIFICATE OF ANALYSIS

CLIENT:	Terracon 21905 - 64th Ave W, Suite 100 Mountlake Terrace, WA 98043	DATE:	3/20/2019
		ALS SDG#:	EV19030091
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Kyle Bennett		
CLIENT PROJECT:	81167550		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 138893 - Water by NWTPH-GX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range - BS	NWTPH-GX	**83.5**			66.5	122.7	03/17/2019	KLS
TPH-Volatile Range - BSD	NWTPH-GX	**93.1**	**11**		66.5	122.7	03/17/2019	KLS

ALS Test Batch ID: 138864 - Water by NWTPH-DX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range - BS	NWTPH-DX	**93.1**			67	125.2	03/18/2019	EBS
TPH-Diesel Range - BSD	NWTPH-DX	**89.9**	**4**		67	125.2	03/18/2019	EBS

ALS Test Batch ID: 138860 - Water by EPA-8260

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
1,1-Dichloroethene - BS	EPA-8260	**101**			72.5	136	03/18/2019	DLC
1,1-Dichloroethene - BSD	EPA-8260	**95.7**	**5**		72.5	136	03/18/2019	DLC
Benzene - BS	EPA-8260	**119**			74.7	143	03/18/2019	DLC
Benzene - BSD	EPA-8260	**115**	**4**		74.7	143	03/18/2019	DLC
Toluene - BS	EPA-8260	**106**			71.7	139	03/18/2019	DLC
Toluene - BSD	EPA-8260	**102**	**4**		71.7	139	03/18/2019	DLC
Ethylbenzene - BS	EPA-8260	**112**			50	150	03/18/2019	DLC
Ethylbenzene - BSD	EPA-8260	**108**	**4**		50	150	03/18/2019	DLC
m,p-Xylene - BS	EPA-8260	**113**			50	150	03/18/2019	DLC
m,p-Xylene - BSD	EPA-8260	**109**	**4**		50	150	03/18/2019	DLC
o-Xylene - BS	EPA-8260	**112**			50	150	03/18/2019	DLC
o-Xylene - BSD	EPA-8260	**109**	**3**		50	150	03/18/2019	DLC

APPROVED BY

Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental
8620 Holly Drive, Suite 100
Everett, WA 98208
Phone (425) 356-2600
Fax (425) 356-2626
http://www.alsglobal.com

Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only): EV1903-0091

Date: 3/13/19 Page 1 Of 1

PROJECT ID: 81167550
REPORT TO COMPANY: Terracon
PROJECT MANAGER: Kyle Bennett
ADDRESS: 21905 64th Ave W, Ste 100 Mountlake Terrace, WA 98043
PHONE: 425-771-3304 P.O. #:
E-MAIL: kyle.bennett@terracon.com
INVOICE TO COMPANY: SAME
ATTENTION:
ADDRESS:

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA 8021 ☐ BTEX by EPA 8260 ☒	MTBE by EPA 8021 ☐ MTBE by EPA 8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM	PCB by EPA 8082 ☐ Pesticides by EPA 8081 ☐	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	OTHER (Specify)	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. MW1	3/13/19	0955	GW	1		X	X	X													6	
2. MW2	3/13/19	1035	GW	2		X	X	X													6	
3.																						
4.																						
5.																						
6.																						
7.																						
8.																						
9.																						
10.																						

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Scott LaBelle, Terracon, 3/14/19, 9:15 AM
   Received By: ALS 3/14/19 9:15
2. Relinquished By:
   Received By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: 10 Standard ☒ 5 ☐ 3 ☐ 2 ☐ 1 ☐ SAME DAY ☐

Fuels & Hydrocarbon Analysis: ☒ 5 Standard ☐ 3 ☐ 1 ☐ SAME DAY ☐

OTHER: Specify:

*Turnaround request less than standard may incur Rush Charges