



SOIL BORING INSTALLATION REPORT

Miller's Market

Colony Insurance Claim #21164

3152 Washington Way

Longview, Washington

VCP #SW1380

Antea® Group Project No. STCG-0472.0070

April 17, 2017

Prepared for:

Millers Market

3152 Washington Way

Longview, Washington 98632

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3152 Washington Way, Longview, WA 98632

Antea®Group (Antea Group) has prepared this report to summarize soil boring installation activities performed at 3152 Washington Way in Longview, Washington (Figures 1 & 2). The assessment work was performed on February 27, 2017 to further document soil and groundwater conditions with respect to petroleum hydrocarbons beneath the property. The purpose of the soil borings and confirmation sampling is to address data gaps that were noted in the Further Action Letter issued by the Pollution Liability Insurance Agency (PLIA) on October 5, 2016. The Further Action letter is included in Appendix A. The Site Location Map and Site layout is shown on Figures 1 and 2.

1.0 EXECUTIVE SUMMARY

On February 27, 2017 Antea Group personnel directed the advancement of six soil borings at the property (Figure 3), hereinafter referred to as the Site. Soil borings B-1 through B-6 were each installed to a total depth up to 15 feet below ground surface (bgs), with the exception of B-2 which encountered refusal at 8 feet bgs. Soil samples were collected continuously from 5 feet bgs to the maximum depth explored for the purpose of field screening and recording lithology, and to analyze soil on Site for the constituents of concern (COCs). Select soil samples were submitted for quantitative laboratory analysis from shallower zones to complete the vertical delineation of soil impacts. Groundwater samples were collected from all six borings. Upon completion, the borings were abandoned by backfilling with hydrated bentonite chips, and capping the boreholes with concrete.

Laboratory analytical results indicate concentrations of petroleum hydrocarbons in excess of respective Washington State Department of Ecology (Ecology) Model Toxics Control Act (MTCA) Method A cleanup levels and/or laboratory method reporting limits (MRLs). Concentrations of total petroleum hydrocarbons as gasoline (TPH-G) above MTCA Method A cleanup levels were detected in the 5 and 7.5 foot samples collected from Boring B-2; the 2.5, 5, and 10 foot samples from Boring B-3; the 3, 6 and 10 foot samples from Boring B-4; and the 5 and 10 foot samples collected from Boring B-5. None of the soil samples collected from Borings B-1 or B-6 exceeded the respective MTCA Method A cleanup levels. Concentrations of TPH-G above MTCA Method A cleanup levels were detected in water samples collected from Borings B-2, B-3, B-4 and B-5.

As allowed under MTCA (WAC 173-340-705), Antea Group collected samples for analyses of extractable petroleum hydrocarbons (EPH) and volatile petroleum hydrocarbons (VPH) in order to develop modified Method-B cleanup levels for soil for the Site in the future. Antea Group may utilize the Method B Cleanup Levels and Risk Calculation



(CLARC) tables for COCs at the Site once groundwater has been completely delineated and the compliance monitoring points do not exceed MTCA Method A cleanup levels.

2.0 SITE DESCRIPTION AND BACKGROUND

2.1 Site Description

The Site is currently an active gasoline fueling station with above ground structures that include a station building in the central portion of the property and one dispenser-island located south of the station building. Five underground storage tanks (USTs) were decommissioned and removed from the Site in 1991. The USTs were replaced by one 12,000-gallon, one 8,000-gallon, and one 6,000-gallon UST in the southeastern portion of the property. The locations of the decommissioned and operational USTs on the property are shown on Figure 2. Remediation activities have been performed at the Site and documented in other reports and the RI document. None of the groundwater monitoring wells on Site have exceeded the MTCA Method A cleanup levels for TPH-G or benzene, toluene, ethylbenzene, and xylenes (BTEX) compounds for four consecutive quarters. Most of the wells on Site have been below laboratory reporting limits and the MTCA Method A cleanup levels since installation.

Land use in the vicinity of the property consists primarily of commercial and residential developments. The property is bound to the south by Washington Way with residential houses across the street. To the north and to the west (across 32nd Ave) are residential houses. The adjacent property to the east is a paved parking lot and restaurant.

According to USGS topography map, the property is situated approximately less than 20 feet above mean sea level in the Columbia River Basin. The area directly around the Site and the City of Longview is relatively flat. The Columbia River is located approximately 4,500 feet southwest of the Site. The property is paved with asphalt and concrete.

2.2 Geologic and Hydrogeologic Conditions

Geologic information for the Site was obtained from the United States Geological Survey website. According to the geological map found on the website, the City of Longview is located in an area of predominately Quaternary Alluvium that was transported and deposited by the Columbia and Cowlitz Rivers. Alluvium consists of mostly unconsolidated silt, sand, and gravel valley fill with some clay. The alluvium ranges from loose to medium density and may contain interbeds of marsh, peat, artificial fill, and glacial deposits. This soil description is consistent with the lithology observed during the most recent well installation activities.

Groundwater-bearing zones in the Longview area are generally confined to the most recent glacial outwash alluvial deposits comprised of sands and gravels. These materials are commonly underlain, and occasionally overlain, by relatively impermeable glacial till deposits. Lateral and vertical migration of the groundwater is impeded by the dense and relatively impermeable nature of the till and the commonly discontinuous lateral continuity of the

groundwater-bearing materials. Perched and discontinuous zones of shallow groundwater may be seasonally and locally present above the impervious till.

Groundwater has been encountered at the Site between 1.93 feet to 7.51 feet bgs. The direction of groundwater flow is predominantly to the southeast. The groundwater monitoring data indicate that the gradient ranges between 0.005 to 0.03 feet per linear foot.

3.0 SCOPE OF WORK

The scope of work performed by Antea Group included the following tasks:

- Developed a site-specific Health and Safety Plan;
- Contracted One-Call and a private underground utility locator to delineate the location and marking of underground utilities and other potential subsurface obstructions in the vicinity of the proposed boring locations;
- Hand cleared for utilities to a minimum depth of 5 feet bgs using an air knife and vacuum truck;
- Advanced six soil borings to total depths of 15 feet bgs using a direct push probe rig;
- Collected soil samples using a clean, disposable acetate sleeve driven into the undisturbed formation to obtain discrete soil samples;
- Performed examination and description of each sample using the Unified Soil Classification System (USCS) and standard geologic techniques;
- Collected groundwater samples from each probe location with a peristaltic pump;
- Abandoned the soil borings by backfilling with hydrated bentonite chips and patched the surface with concrete to match the surrounding drive slab;
- Submitted soil and groundwater samples for quantitative chemical analysis from each boring interval;
- Performed profiling, removal, and proper disposal of investigation derived waste; and
- Prepared a report summarizing the findings of the investigation.

4.0 SOIL BORING INSTALLATION

On February 27, 2017, Antea Group personnel directed the advancement of six soil borings in the western and southeastern portion of the Site. Prior to the drilling activities, Antea Group coordinated the location and marking of underground utilities in the vicinity of the proposed boring locations. The utilities survey included contacting the local public utility locating service and contracting a private locating service.

Prior to drilling, the boring locations were cleared to a depth of at least five feet bgs using an air knife and vacuum truck. Shallow soil samples were collected in the first 5 feet bgs using a hand auger advanced approximately 18 inches ahead of the vacuum cleared borehole. Following utility clearing, the borings were advanced using

hydraulically driven probe rig operated by Holocene Drilling, Inc. (Holocene) to a total depth of 15 feet bgs. Soil samples were collected continuously from 5 feet bgs to the maximum depth explored by advancing a clean, disposable acetate sleeve into the undisturbed formation to obtain discrete soil samples. Select soil samples were submitted to ALS Laboratory in Everett, Washington using chain-of-custody procedures for quantitative chemical analysis.

Boring B-2 was positioned just west of the former UST complex where soil impacts were previously detected. Antea Group worked with Cascade Natural Gas (CNG) to locate the optimal location for Boring B-2. We were informed that there was a gas line more than three feet to the west at a depth of approximately 5.5 feet bgs. Antea Group cleared the boring to 7.5 feet bgs, and was given approval to continue the boring by the field representative from CNG who was on site. Holocene advanced the probe but encountered an obstruction at approximately 8 feet bgs. All work was stopped until we could confirm what the obstruction was. A crew from CNG came out the next day and expanded the borehole so they could verify if their pipe was encountered. CNG confirmed that we encountered their 8-inch gas line, but no damage was done to the pipe. The borehole was then backfilled, compacted and capped with concrete.

Groundwater was encountered in the borings between 3.5 and 4.5 feet bgs. Clean ¾-inch PVC casing was installed in each probe location in order to collect groundwater samples. Clean disposable tubing was inserted into the PVC casing and was purged of approximately 3 casing volumes with a peristaltic pump. The samples were collected directly from the peristaltic pump tubing into laboratory supplied bottles. Following completion, the borings were abandoned by backfilling with hydrated bentonite chips to approximately 1.5 feet bgs. The top 1.5 feet of the borings was patched with concrete to match the surrounding drive slab.

Down-hole drilling and sampling equipment was pressure-washed in a water-alconox solution and rinsed after installing each soil boring. Boring logs, soil sampling intervals, lithology descriptions, and boring completion details are included in Appendix B.

Soils observed during the boring installation was consistent with the area geology. The subsurface consisted of low to moderate plasticity silt with varying amounts of clay to the total depth explored of 15 feet bgs. Sandy gravel fill was observed in the top 4 to 20 inches of each boring.

5.0 WASTE MANAGEMENT

Soil cuttings and decontamination fluids generated during probe activities were temporarily stored in labeled 55-gallon drums on Site. Analytical data for soil and water samples will be used for disposal profiling. The drums will be removed upon receipt of analytical results and disposal approval. The waste will be disposed at an Ecology approved disposal facility.

6.0 SAMPLE COLLECTION AND ANALYSIS

6.1 Soil Sampling

Field screening of soils included inspecting the samples for signs of petroleum staining or sheens, odors, and screening soils using a photo-ionization detector. Select soil samples exhibited signs of petroleum contamination. A total of 22 soil samples were selected for submittal for laboratory analysis based on depth, soil type, and potential for contamination. Each sample collected was individually labeled, registered on a Chain-of-Custody form, and placed in a chilled cooler pending delivery to a certified analytical laboratory. Summaries of soil analytical results are presented in Tables 1 and 2 and Figure 3.

6.2 Laboratory Analysis

Soil and groundwater samples were submitted to ALS Laboratories of Everett, WA, for quantitative chemical analysis. All soil samples were analyzed for the following parameters:

- TPH-G using Northwest Method NWTPH-Gx; and
- BTEX and MTBE using EPA Method 8021.

Select soil samples were also analyzed for the following parameters for calculation of site-specific cleanup levels:

- Extractable Petroleum Hydrocarbons (EPH) using Northwest Method NWEPH; and
- Volatile Petroleum Hydrocarbons (VPH) using Northwest Method NWVPH.

For waste disposal profiling purposes, one additional composite soil sample was analyzed for RCRA 8 metals using EPA Method 200.8.

7.0 ANALYTICAL RESULTS

7.1 Soil Results

The laboratory analytical report for soil indicated concentrations of TPH-G in excess of MTCA Method A cleanup levels in samples B-2 at 5 and 7.5 feet bgs; B-3 at 2.5, 5 and 10 feet bgs; B-4 at 3, 6 and 10 feet bgs; and B-5 at 5 and 10 feet bgs. The 2.5 foot sample collected from boring B-1 was the only sample that exceeded the MTCA Method A cleanup level for benzene at 0.056 mg/kg. Soil analytical results are presented in Tables 1 and 2 and on Figure 3. Soil analytical reports are included in Appendix C.

7.2 Groundwater Results

The laboratory analytical report for groundwater indicated concentrations of TPH-G in excess of MTCA Method A cleanup levels in samples B-2 through B-5. The groundwater sample collected from boring B-3 was the only sample

that exceeded the MTCA Method A cleanup level for benzene. Groundwater analytical results are presented in Table 3 and Figure 4. Groundwater analytical reports are included in Appendix C.

7.3 MTCA Method B Cleanup Levels

As allowed under MTCA (WAC 173-340-705), Antea Group plans to develop modified Method-B cleanup levels for soil and utilize the CLARC tables for COCs at the Site. Antea Group will use Ecology's *Workbook Tools for Calculating Soil and Ground Water Cleanup Levels* in order to develop the Method B cleanup levels.

During the soil sampling activities, soil samples B-2-5ft, B-3-2.5ft, B-4-6ft, and B-5-10ft were analyzed for EPH and VPH along with TPH-G, BTEX compounds, and MTBE. These analytes will be used to calculate a site specific Method B cleanup level. The median of the four calculated values will be proposed as the Site specific Method B cleanup level once groundwater has been completely delineated and no longer exceeds MTCA Method A cleanup levels. The results of the EPH/VPH analyses are shown on Table 2 and the laboratory results are presented in Appendix C.

8.0 CONCLUSIONS AND RECOMMENDATIONS

Antea Group directed the advancement of six soil borings (B-1 through B-6) at the Site on February 27, 2017. The purpose of the work was further delineate soil and groundwater conditions in the subsurface. Concentrations of TPH-G and/or benzene were detected above MTCA Method A cleanup levels in soil samples collected from borings B-1, B-2, B-3, B-4, and B-5. Vertical and lateral delineation of soil impacts has been achieved in the southeast corner of the Site, as confirmed by the results in Boring B-6. The shallow soil sample (B-1-2.5') collected in the northwest corner of the Site slightly exceeded the MTCA Method A cleanup level for benzene at 0.56 mg/kg, but does not exceed the CLARC (Cleanup Levels and Risk Calculation) value of 18.2 mg/kg for benzene. As such, Antea Group does not plan to do further assessment north of B-1. As previously mentioned, boring B-2 did not extend past 7.5 feet bgs, and exceeded the MTCA Method A cleanup level for TPH-G in the 5 foot and 7.5 foot bgs samples. Borings B-3, B-4 and B-5 all exceeded MTCA Method A cleanup levels between approximately 2.5 and 10 feet bgs. Borings B-3 through B-5 were all non-detect (ND) for TPH-G and BTEX compounds in the bottom samples collected at 15 feet bgs and have completed vertical delineation to depth. Antea Group will propose additional well installation off-property to the west and south to complete the lateral delineation of soil impacts at the Site.

Concentrations of TPH-G and/or benzene were detected above MTCA Method A cleanup levels in the groundwater samples collected from borings B-2, B-3, B-4, and B-5. Grab groundwater samples collected from direct push probes are often biased high, as evidenced by the ND concentrations observed in properly constructed groundwater monitoring wells located adjacent to the probe locations. One to two groundwater monitoring wells will be proposed to be installed to the west of the Site, and one additional well will be proposed to be installed to the south of the Site. These borings/wells will serve to delineate soil and groundwater laterally at the Site.

Antea Group recommends that modified Method B cleanup levels be established for the Site, as allowed under MTCA (WAC 173-340-705). Once groundwater concentrations are below MTCA Method A cleanup levels for four

consecutive quarters, the Method B soil cleanup levels will be applicable for the Site and closure will be requested if the calculated TPH levels are not exceeded. None of the historical soil samples analyzed from the Site have exceeded the CLARC values for BTEX compounds and MTBE has never been detected above laboratory reporting limits or MTCA Method A cleanup levels.

Antea Group will prepare a workplan for an additional investigation in order to complete the lateral delineation of soil and groundwater conditions on Site.

9.0 REFERENCES

Model Toxics Control Act Regulation and Statute – Washington State Department of Ecology (Ecology), Toxics Cleanup Program, Publication No. 94-06, Revised 2013

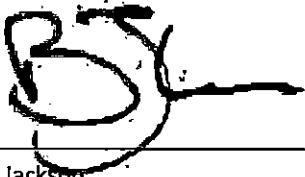
Workbook Tools for Calculating Soil and Ground Water Cleanup Levels – Ecology, Publication No. 01-09-073, Revised 2007

10.0 REMARKS

The recommendations contained in this report represent Antea USA, Inc.'s professional opinions based upon the currently available information and are arrived at in accordance with currently accepted professional standards. This report is based upon a specific scope of work requested by the client. The contract between Antea USA, Inc. and its client outlines the scope of work, and only those tasks specifically authorized by that contract or outlined in this report were performed. This report is intended only for the use of Antea USA, Inc.'s client and anyone else specifically identified in writing by Antea USA, Inc. as a user of this report. Antea USA, Inc. will not and cannot be liable for unauthorized reliance by any other third party. Other than as contained in this paragraph, Antea USA, Inc. makes no express or implied warranty as to the contents of this report.

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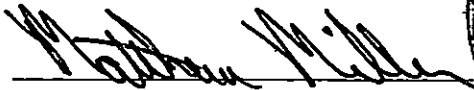
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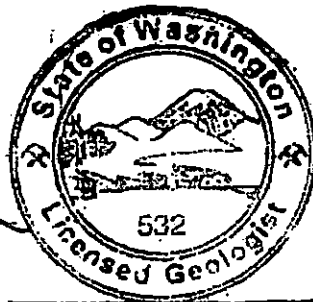
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Tables

Table 1	Summary of Historical Soil Analytical Results
Table 2	EPH/VPH Soil Analytical Results
Table 3	Summary of Groundwater Analytical Results

TABLE 1
SUMMARY OF HISTORICAL SOIL ANALYTICAL RESULTS
MILLER'S MARKET
3152 Washington Way
Longview, Washington

Sample ID	Sample Date	Depth BGS (feet)	Gasoline Range (mg/kg)	Diesel Range (mg/kg)	Oil Range (mg/kg)	MTBE (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)
P-1(3)	06/25/03	3	ND	--	--	ND	ND	ND	ND	ND
P-2(2)	06/25/03	2	ND	--	--	ND	ND	ND	ND	ND
P-2(6)	06/25/03	6	42	--	--	ND	1.1	3.0	0.5	4.5
RW-1-2.5	11/06/03	2.5	78	--	--	<0.1	0.2	0.3	0.2	1.8
RW-1-5	11/06/03	5	230	--	--	<0.2	0.5	<0.1	1.8	5.0
B-6	02/27/17	1.5	<3.0	--	--	<0.10	<0.030	<0.050	<0.050	<0.20
B-6	02/27/17	2.5	23	--	--	<0.10	<0.030	<0.050	<0.050	<0.20
B-6	02/27/17	5	3.9	--	--	<0.10	<0.030	<0.050	<0.050	<0.20
B-6	02/27/17	6	<3.0	--	--	<0.10	<0.030	<0.050	<0.050	<0.20
P-3(1.5)	07/09/03	1.5	ND	--	--	ND	ND	ND	ND	ND
P-3(4.5)	07/09/03	4.5	ND	--	--	ND	ND	ND	ND	ND
P-4(5)	07/09/03	5	ND	--	--	ND	ND	ND	ND	ND
P-6(5)	06/25/03	5	220	--	--	ND	ND	0.6	2.3	6.4
B-2	02/27/17	2.5	21	--	--	<0.10	<0.030	<0.050	<0.050	<0.20
B-2	02/27/17	5	500	--	--	<0.50	<0.015	<0.25	<0.25	<1.0
B-2	02/27/17	7.5	67	--	--	<0.10	<0.030	<0.050	<0.050	<0.20
P-7A(6.5)	07/09/03	6.5	ND	--	--	ND	ND	ND	ND	ND
P-8(1.5)	07/09/03	1.5	ND	--	--	ND	ND	ND	ND	ND
P-8(4.5)	07/09/03	4.5	ND	--	--	ND	ND	ND	ND	ND
P-9(1.5)	07/09/03	1.5	ND	--	--	ND	ND	ND	ND	ND
P-9(4.5)	07/09/03	4.5	ND	--	--	ND	ND	ND	ND	ND
MW-1-6	11/06/03	6	ND	--	--	<0.1	<0.04	<0.06	<0.06	<0.2
MW-2-5	11/05/03	5	ND	--	--	<0.1	<0.04	<0.06	<0.06	<0.2
MW-3-3	11/05/03	3	190	--	--	<0.4	<0.1	<0.2	0.6	0.9
MW-3-6	11/05/03	6	380	--	--	<0.4	0.6	0.7	2.4	3.5
B-4	02/27/17	1.5	<3.0	--	--	<0.10	<0.030	<0.050	<0.050	<0.20
B-4	02/27/17	3	220	--	--	<0.20	<0.060	<0.10	0.41	<0.40
B-4	02/27/17	6	710	--	--	<0.50	<0.15	<0.25	5.3	2.0
B-4	02/27/17	10	450	--	--	<0.50	<0.15	<0.25	2.9	<1.0
B-4	02/27/17	15	<3.0	--	--	<0.10	<0.030	<0.050	<0.050	<0.20
B-3	02/27/17	2.5	740	--	--	<1.0	<0.30	<0.50	2.8	<2.0
B-3	02/27/17	5	310	--	--	<0.20	<0.060	<0.10	<0.10	<0.40
B-3	02/27/17	10	34	--	--	<0.10	<0.030	<0.050	<0.050	<0.20
B-3	02/27/17	15	<3.0	--	--	<0.10	<0.030	<0.050	<0.050	<0.20
MW-4-5	10/27/05	5	15	<26	<52	<2	<0.03	<0.05	0.05	<0.2
MW-5-5	11/21/06	5	<4	<26	<51	--	<0.04	<0.07	<0.07	<0.2
MW-6-5	11/21/06	5	320	<28	<56	--	<0.07	<0.1	1.2	0.6
B-5	02/27/17	2.5	<3.0	--	--	<0.10	<0.030	<0.050	<0.050	<0.20

TABLE 1
SUMMARY OF HISTORICAL SOIL ANALYTICAL RESULTS
MILLER'S MARKET
3152 Washington Way
Longview, Washington

Sample ID	Sample Date	Depth BGS (feet)	Gasoline Range (mg/kg)	Diesel Range (mg/kg)	Oil Range (mg/kg)	MTBE (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)
B-5	02/27/17	5	96	--	--	<0.10	<0.030	<0.050	<0.050	<0.20
B-5	02/27/17	10	290	--	--	<0.20	<0.060	<0.10	<0.10	<0.40
B-5	02/27/17	15	<3.0	--	--	<0.10	<0.030	<0.050	<0.050	<0.20
MW-7-5	11/21/06	5	<3	<25	<50	--	<0.03	<0.05	<0.05	<0.2
MW-8-5	11/21/06	5	<3	<25	<50	--	<0.03	<0.05	<0.05	<0.2
B-1	02/27/17	2.5	4.2	--	--	<0.10	0.056	0.060	0.069	0.21
B-1	02/27/17	5	4.0	--	--	<0.10	<0.030	<0.050	<0.050	<0.20
MTCA Method A Cleanup Levels:			100/30^a	2,000	2,000	0.1	0.03	7	6	9
MTCA Method B Cleanup Levels^b:						556	18.2	6,400	8,000	16,000

NOTES:

mg/kg = milligrams per kilogram

Depth in feet below ground surface

Benzene, toluene, ethylbenzene, and xylenes and MTBE = Aromatic compounds by EPA Method 8260

TPH-G = Total Petroleum Hydrocarbons as Gasoline by Northwest Method NWTPH-Gx

TPH-D = Total Petroleum Hydrocarbons as Diesel by Northwest Method NWTPH-Dx

TPH-O = Total Petroleum Hydrocarbons as Oil by Northwest Method NWTPH-Dx

< = Less than the stated laboratory reporting limit

"--" - Data not available

Bolded values equal or exceed MTCA Method A Cleanup Levels

MTCA = Model Toxics Control Act

^a MTCA Method A Cleanup levels for TPH-G are 100 mg/kg when no benzene is present and 30 mg/kg when benzene is present.

^b MTCA Method B Cleanup levels have not yet been calculated for Total TPH. Clark Values are shown for MTBE and BTEX compounds.

-Borings B-2 through B-6 assessed current soil conditions adjacent to documented soil detection in the previous sample on the table.

-Boring B-1 was installed in order to delineate groundwater to the north of well MW-8.

TABLE 2
EPH/VPH SOIL ANALYTICAL RESULTS
MILLER'S MARKET
3152 Washington Way
Longview, Washington

Sample ID	B-2-5ft		B-3-2.5ft		B-4-6ft		B-5-10ft	
	NWEPH	NWVPH	NWEPH	NWVPH	NWEPH	NWVPH	NWEPH	NWVPH
Sample Date	2/27/2017		2/27/2017		2/27/2017		2/27/2017	
C5-C6 Aliphatics (mg/kg)	NA	<5.0	NA	<5.0	NA	5.7	NA	<5.0
C6-C8 Aliphatics (mg/kg)	NA	21	NA	73	NA	110	NA	31
C8-C10 Aliphatics (mg/kg)	NA	30	NA	55	NA	34	NA	20
C10-C12 Aliphatics (mg/kg)	35	NA	44	NA	45	NA	35	NA
C12-C16 Aliphatics (mg/kg)	<5.0	NA	7.2	NA	6.5	NA	6.4	NA
C16-C21 Aliphatics (mg/kg)	<5.0	NA	<5.0	NA	<5.0	NA	<5.0	NA
C21-C34 Aliphatics (mg/kg)	<5.0	NA	<5.0	NA	<5.0	NA	<5.0	NA
C8-C10 Aromatics (mg/kg)	NA	67	NA	140	NA	140	NA	51
C10-C12 Aromatics (mg/kg)	<5.0	NA	25	NA	40	NA	15	NA
C12-C16 Aromatics (mg/kg)	<5.0	NA	10	NA	10	NA	<5.0	NA
C16-C21 Aromatics (mg/kg)	<5.0	NA	<5.0	NA	<5.0	NA	<5.0	NA
C21-C34 Aromatics (mg/kg)	<5.0	NA	<5.0	NA	<5.0	NA	<5.0	NA

NOTES:

mg/kg = milligrams per kilogram

NA = Not analyzed

< = Less than the stated laboratory reporting limit

Bold = Detections

TABLE 3
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
MILLER'S MARKET
 3152 Washington Way
 Longview, Washington

Sample ID	Sample Date	Gasoline Range (µg/L)	MTBE (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
B-1	02/27/17	290	<3.0	<1.0	<1.0	<1.0	<3.0
B-2	02/27/17	830	<3.0	<1.0	5.4	4.2	<3.0
B-3	02/27/17	15000	<30	60	<10	190	38
B-4	02/27/17	9500	<30	<10	<10	220	60
B-5	02/27/17	1000	<3.0	<1.0	<1.0	6.6	5.2
B-6	02/27/17	<50	<3.0	<1.0	1.2	<1.0	<3.0
MTCA Method A Cleanup Levels:		1,000/800^a	20	5	1,000^b	700	1,000^c

NOTES:

µg/L = micrograms per Liter

TPH-G = Total Petroleum Hydrocarbons as Gasoline by Northwest Method NWTPH-Gx

BTEX Compounds - Analysis by EPA Method 8021B

Methyl-tert-Butyl Ether Analysis by EPA Method 8021B or 8260B

Bolded values equal or exceed MTCA Method A Cleanup Levels

MTCA = Model Toxics Control Act

^a MTCA Method A Cleanup levels for TPH-G are 1,000 µg/L when no benzene is present and 800 µg/L when benzene is present

Figures

- Figure 1 Site Location Map
- Figure 2 Site Map
- Figure 3 Soil Analytical Concentration Map
- Figure 4 Groundwater Analytical Concentration Map

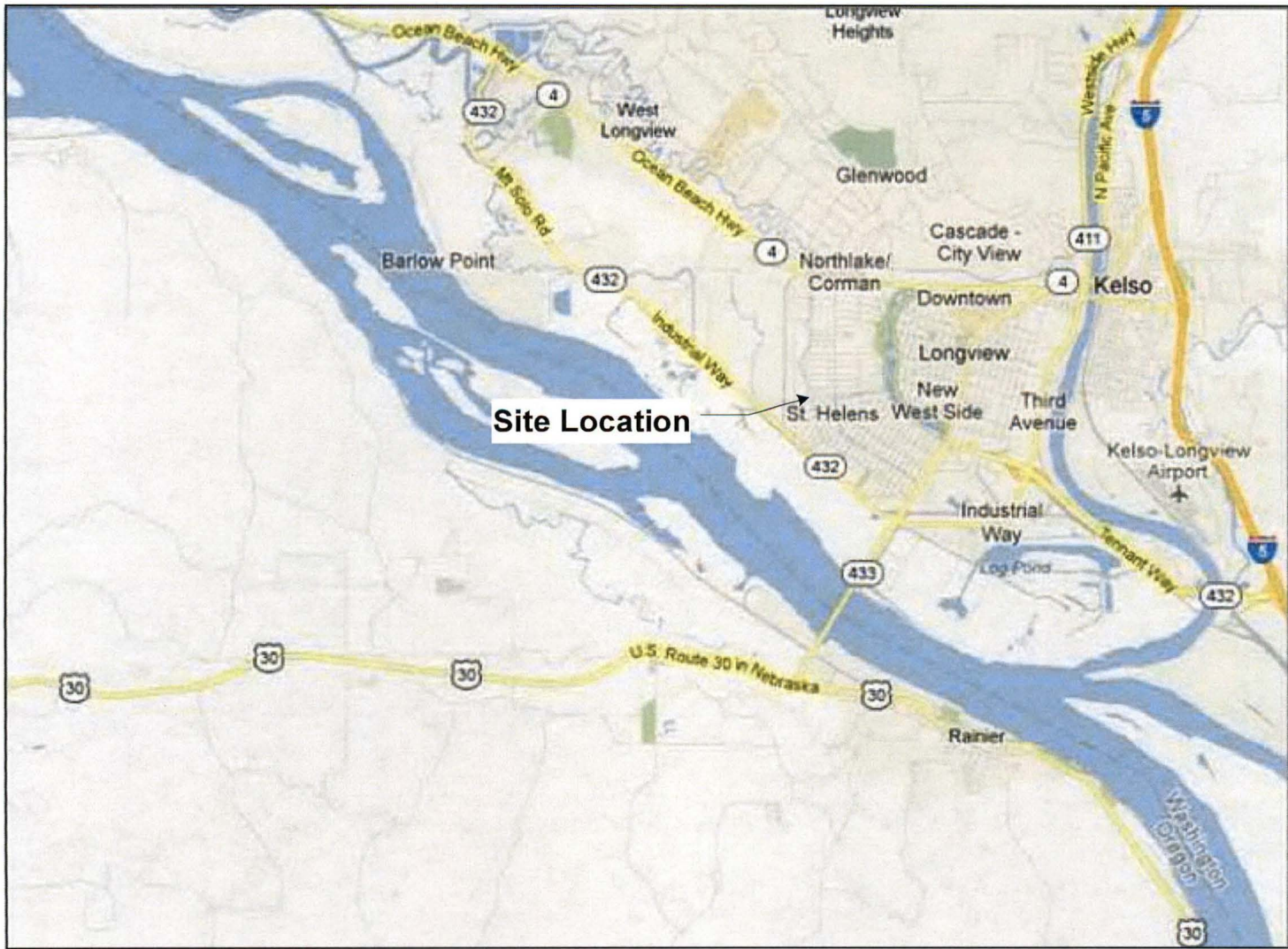
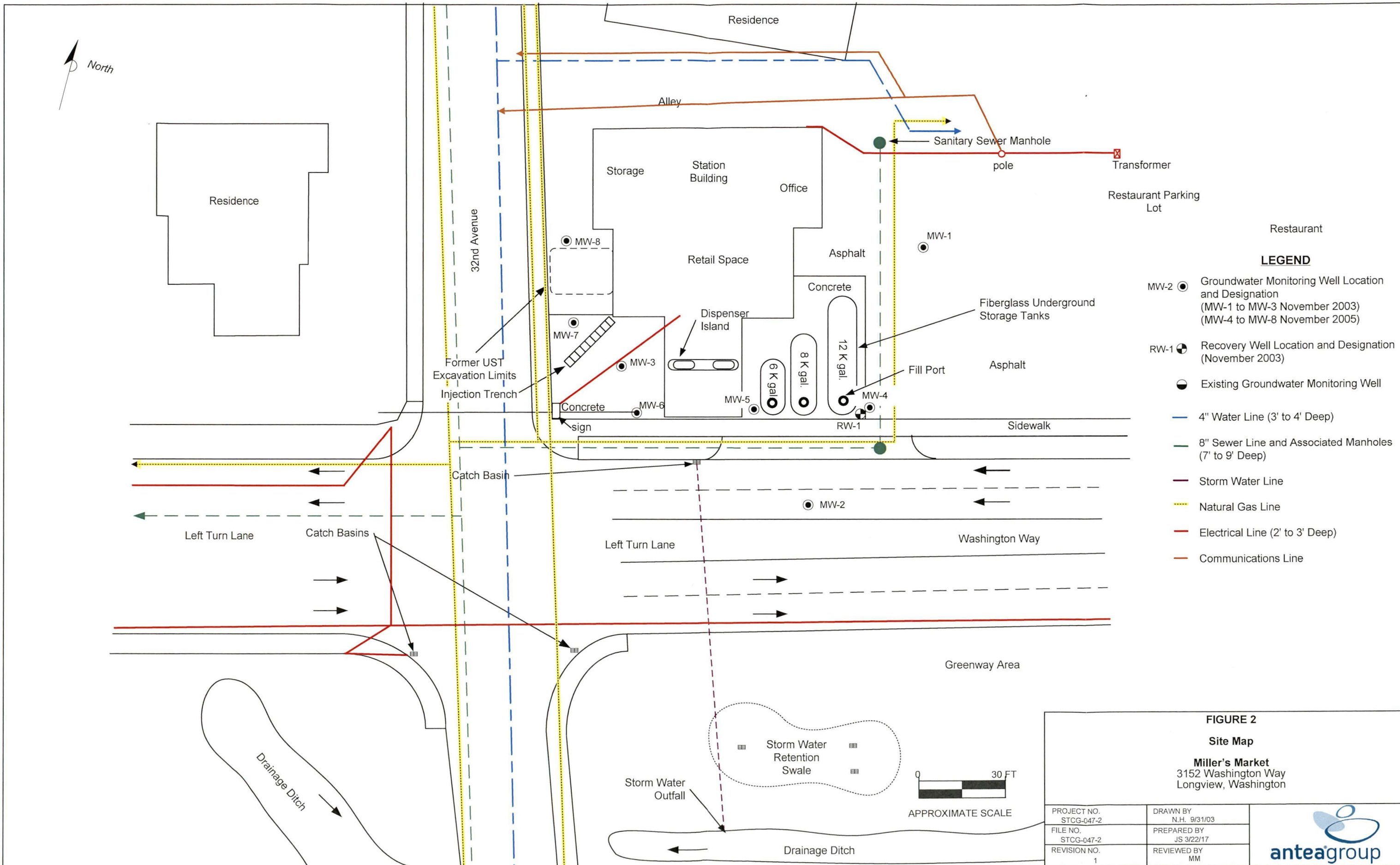


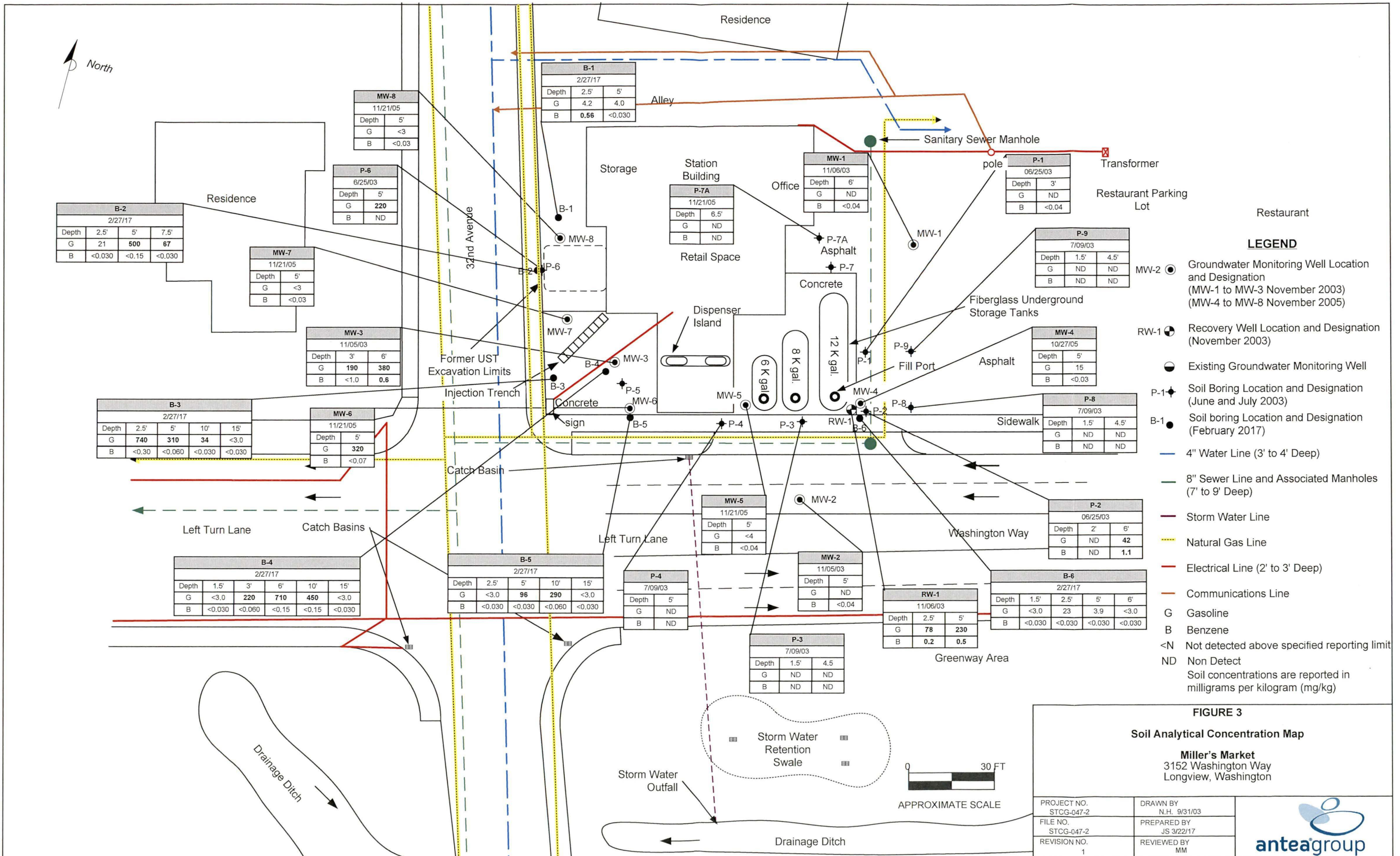
FIGURE 1
SITE LOCATION MAP

MILLER'S MARKET
3152 WASHINGTON WAY
LONGVIEW, WASHINGTON

PROJECT NO. STCG-047-2	DRAWN BY JK 5-12-12
FILE NO. STCG-047-2	PREPARED BY JK
REVISION NO.	REVIEWED BY MM







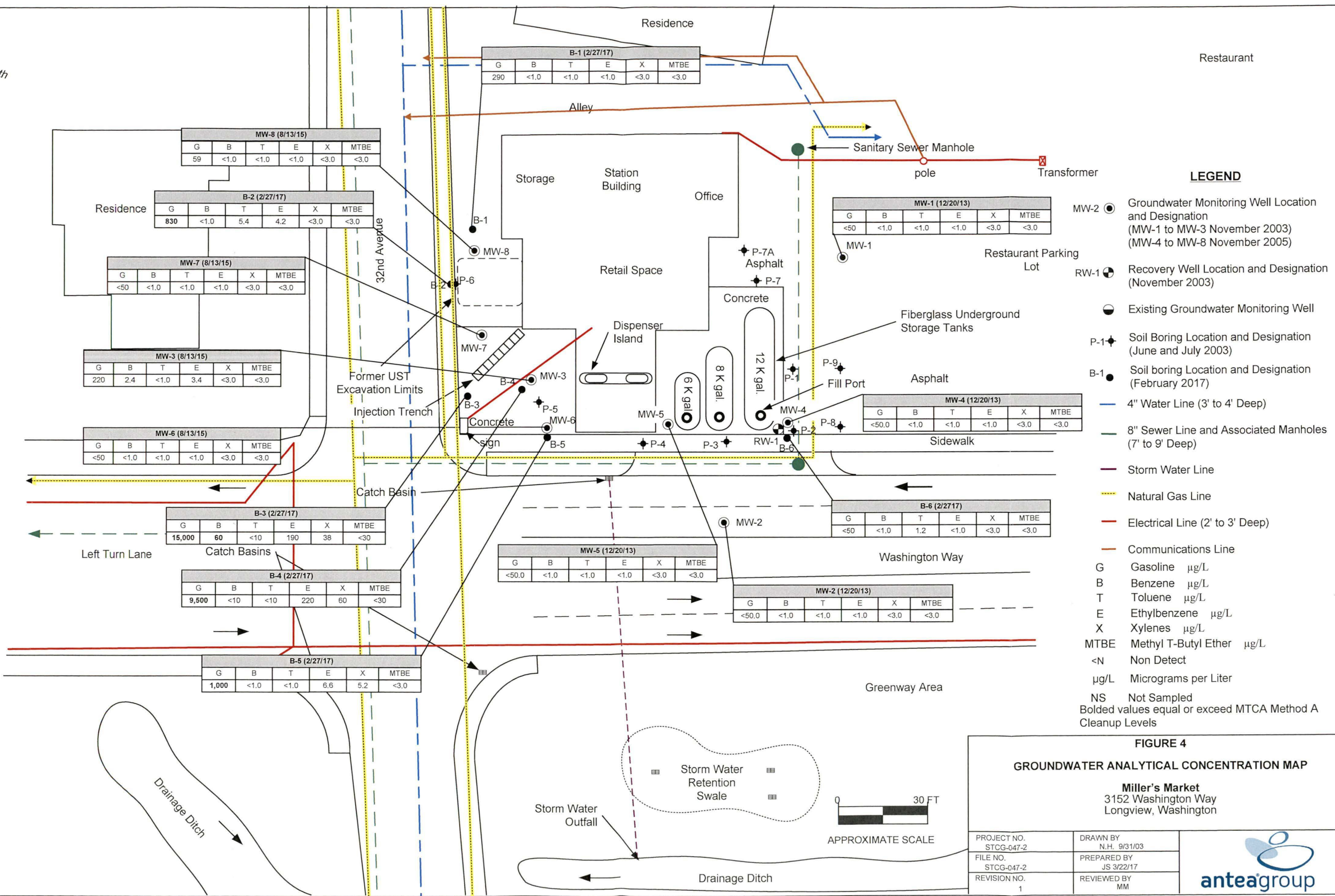



FIGURE 4
GROUNDWATER ANALYTICAL CONCENTRATION MAP
Miller's Market
 3152 Washington Way
 Longview, Washington

PROJECT NO. STCG-047-2	DRAWN BY N.H. 9/31/03
FILE NO. STCG-047-2	PREPARED BY JS 3/22/17
REVISION NO. 1	REVIEWED BY MM



B-3 (2/27/17)

G	B	T	E	X	MTBE
15,000	60	<10	190	38	<30

B-4 (2/27/17)

G	B	T	E	X	MTBE
9,500	<10	<10	220	60	<30

B-5 (2/27/17)

G	B	T	E	X	MTBE
1,000	<1.0	<1.0	6.6	5.2	<3.0

MW-5 (12/20/13)

G	B	T	E	X	MTBE
<50.0	<1.0	<1.0	<1.0	<3.0	<3.0

MW-2 (12/20/13)

G	B	T	E	X	MTBE
<50.0	<1.0	<1.0	<1.0	<3.0	<3.0

B-6 (2/27/17)

G	B	T	E	X	MTBE
<50	<1.0	1.2	<1.0	<3.0	<3.0

MW-4 (12/20/13)

G	B	T	E	X	MTBE
<50.0	<1.0	<1.0	<1.0	<3.0	<3.0

MW-3 (8/13/15)

G	B	T	E	X	MTBE
220	2.4	<1.0	3.4	<3.0	<3.0

MW-6 (8/13/15)

G	B	T	E	X	MTBE
<50	<1.0	<1.0	<1.0	<3.0	<3.0

MW-7 (8/13/15)

G	B	T	E	X	MTBE
<50	<1.0	<1.0	<1.0	<3.0	<3.0

B-2 (2/27/17)

G	B	T	E	X	MTBE
830	<1.0	5.4	4.2	<3.0	<3.0

MW-8 (8/13/15)

G	B	T	E	X	MTBE
59	<1.0	<1.0	<1.0	<3.0	<3.0

B-1 (2/27/17)

G	B	T	E	X	MTBE
290	<1.0	<1.0	<1.0	<3.0	<3.0

*Soil Boring Installation Report
Miller's Market
3152 Washington Way, Longview, Washington 98632*



Appendix A

Further Action Letter – Pollution Liability Insurance Agency



State of Washington
POLLUTION LIABILITY INSURANCE AGENCY
300 Desmond Drive SE • PO Box 40930 • Olympia, Washington 98504-0930
(360) 407-0520 • (800) 822-3905 • FAX (360) 407-0509
www.plia.wa.gov

October 5, 2016

Mr. Matt Miller
Antea USA, Inc.
4006 148th Avenue NE
Redmond, Washington 98052

Re: Further Action at the Following Site:

- **Name:** Miller's Market
- **Property Address:** 3152 Washington Way, Longview, WA 98632
- **Facility/Site No.:** 91861675
- **VCP Project No.:** SW1380
- **Cleanup Site ID No.:** 11051

Dear Mr. Miller:

I have completed my review of the RI and the Soil Vapor and Ambient Air Monitoring Reports by Antea Group USA Inc. This letter constitutes an advisory opinion regarding a review of submitted documents/reports listed below pursuant to the substantive requirements of the Model Toxics Control Act (MTCA) and its implementing regulations, chapter 70.105D RCW and Chapter 173-340-515 WAC (Independent Remedial Actions), for characterizing and addressing releases discussed below at the Site.

Issue Presented and Opinion

Do the submitted RI/FS/Interim Action and Soil Vapor Reports completed for this site contain sufficient information to define the site, set points of compliance, collect and develop sufficient information to select cleanup action and make a no further action (NFA) determination at this site?

NO. PLIA has determined that 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 Property and the Site described below. This opinion does not apply to any other sites that may affect the Property. At this time we have no information that this property is affected by any other releases.

The Site is defined by the nature and extent of contamination associated with the following releases which occurred at parcel #06240

- Total gasoline-range petroleum hydrocarbons (TPH-G) and associated benzene, toluene, ethylbenzene, xylenes (BTEX) and MTBE into the soil/groundwater and air

Description of the Property

The Property includes the following tax parcel in Cowlitz County affected by the Site and addressed by your cleanup:

- Tax Parcel: 06240: Miller's Market - Attn. Mr. Mike Bauman. 3152 Washington Way, Longview WA 98632.

Enclosure A includes a diagram of the Site that illustrates the location of the Property within the Site.

Basis of the Opinion

1. Remedial Investigation Report: Miller's Market, Colony Insurance Claim #21164. 3152 Washington Way, Longview WA 98632, Project #STCG-047-2 by Antea Group Inc. of July 28, 2015
2. Soil Vapor and Ambient Air Monitoring Report: Miller's Market, Colony Insurance Claim #21164. 3152 Washington Way, Longview WA 98632, Project #STCG-047-2 by Antea Group Inc. of August 26, 2016

These documents are kept on file with PLIA and are subject to the Public Records Act (Chapter 42.56 RCW). In-person review of the files may be done by appointment only. Appointments can be made by contacting PLIA at 1-800-822-3905 or pliamail@plia.wa.gov.

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

Analysis of the Cleanup

PLIA has determined that the characterization of the property and site is not sufficient to establish cleanup standards and select a cleanup action. The Site is described above and in Attachment A.

The Site is defined by the extent of contamination caused by the releases of Gasoline Range hydrocarbons & MTBE into the soil/groundwater and air at the Site.

1a. Characterization of the Property

Conceptual Site Model (CSM)

Soil Direct Contact: Sections Section 7.3, p. 16; *“Groundwater results on the Site are now non-detect or below MTCA Method A cleanup levels and empirically demonstrate that the previous soil impacts are not leaching into the groundwater and therefore not affecting human health or the environment. Boring P-6 was located on the up-gradient side of the Site in relation to groundwater flow, and the previous concentrations detected in soil were relatively low. Based on this data and the fact that there are no potential off-Site source areas to the west or northwest, Antea Group concludes that additional soil delineation on the west side of the Site is not warranted.”*

Comment: PLIA **disagrees.** Per the RI Report, p. 16, 1st paragraph, “The subsurface investigations performed to date indicate that petroleum hydrocarbons were present within the shallow soils adjacent to the former USTs in the western portion of the property, and the current USTs in the southeast corner of the property.”

Data-gap; Please provide empirical confirmation soil sampling data to validate this conclusion post remedial action implementation for releases that occurred west and southeast of the property. Post remedial action implementation confirmation soil samples are needed west in the vicinity of P6, southwest in the vicinity of MW-3, MW-6 and southeast in the vicinity of P-2 and RW-1.

Groundwater: No Data-gap; Groundwater was encountered at the property between 1.93 and 7.51 feet bgs and predominantly flows in a southeast direction with a gradient of 0.005 to 0.03 ft per ft.

Currently, groundwater monitoring wells MW-1, MW-2, MW-4, MW-5 and MW-6 have been non-detect or below MTCA Method A cleanup levels since installation. Monitoring well MW-3 has not exceeded the MTCA Method A cleanup level for TPH-G since December 2013 or the MTCA Method A cleanup level for benzene since September 2014. Well MW-3 did not exceed any constituent cleanup levels during the fourth quarter of 2014, the first quarter of 2015, or the second quarter of 2015 groundwater monitoring and sampling events.

Surface Water: No Data-gap; There is no surface water within the property boundary. Columbia River the nearest surface water is located about 4,500 feet southwest of the property.

Vapor Exposure: Inconclusive: Short of the Data-gaps (unknowns) identified in the above sections, it appears that evaluated data does not pose a threat to human health based on the following analysis;

Detected indoor benzene concentration (3.4 ug/m^3) at the Retail Store building exceeds the MTCA Method B benzene-carcinogenic cleanup levels (0.321 ug/m^3); however, benzene was detected at background ambient (outdoor-up-wind) location at 3.7 ug/m^3 .

In accordance with Ecology's Guidance, contaminant concentrations for indoor air are adjusted by subtracting the ambient background concentration from the indoor concentration to account for background contribution to the indoor. As a result of this adjustment ($3.7 - 3.4 = 0.3 \text{ ug/m}^3$) and when compared to the indoor cleanup level of 0.321 ug/m^3 vapor exposure pathway it appears that vapor is not a concern at this site.

1b. Characterization of the Site

Soil Direct Contact: Data-gap; The lateral and vertical extents of TPH-g, BETX and MTBE impacts in the soil to the west and southwest of the site have not been defined. As a result, points of compliance for the Site (off property soil impacts) cannot be established for an NFA determination beyond P6, MW3 and MW6 general locations with historical detections above MTCA soil cleanup levels.

Groundwater: Data-gap; The lateral and vertical extents of TPH-g, BETX and MTBE impacts to the groundwater, west and southwest of the site have not been defined. As a result, points of compliance for the Site (off property groundwater impacts) cannot be established for an NFA determination beyond MW3, MW6, MW7 and MW8 general locations with historic impacts above groundwater cleanup levels.

Surface Water: Section 9.4, p. 18, 1st paragraph, last sentence: "*Based on the fact that groundwater is below MTCA Method A cleanup levels and the perimeter wells on Site have been non-detect for years, impact to the Columbia River and the drainage ditch across the street is not likely and no action is required*"

Comment: Data-gap; PLIA disagrees. This is speculative, Columbia River, the nearest surface water is located about 4,500 feet southwest of the site, please delineate the extent of groundwater plume off property limits to validate your conclusion.

Vapor Exposure: Inconclusive: The extent of vapor impact off property limits is unknown at this time given the data gaps identified in the above sections.

Please Note:

RI/FS. To ensure completeness of the substantive requirements of the MTCA as you develop the RI and feasibility study (FS) per WAC 173-340-350, please see the Ecology Checklist publication numbers 16-09-006 and 16-08-007 May 2016 for the RI/FS respectively.

CAP: Also for the cleanup action plan (CAP) per WAC 173-340-360 through 450; additionally, to ensure that cleanup standards have been appropriately set and applied, incorporating all potential exposure pathways and receptors, in accordance with WAC 173-340-700 through 760; please see the Ecology CAP Checklist publication No. 16-09-008 May 2016.

Report Template: Your Reporting must meet the substantive requirements of the MTCA described in WAC 173-340-350(7) and WAC 173-340-840 and for a suggested reporting template including the rest of the publications mentioned above, please follow this link:

<http://www.ecy.wa.gov/programs/tcp/policies/checklists.html>

Closure of Low Risks Petroleum Sites in the State: To expedite and streamline the closure of low risks petroleum sites in the State of Washington, please see Ecology's published Model Remedies for soil, groundwater, vapor and empirical demonstration (to demonstrate that soil concentrations measured at a contaminated site have not caused, and will not cause, an exceedance of the applicable groundwater cleanup levels) guidelines at the following link: <http://www.ecy.wa.gov/programs/tcp/policies/model-remedies/index.html>

Natural Attenuation Guidance: This link also provides guidance and calculation tools for demonstrating natural attenuation of groundwater is occurring and enable prediction of when groundwater cleanup levels will be met as part of your multiple lines of evidence to support, streamline and expedite site closures. <http://www.ecy.wa.gov/programs/tcp/tools/toolmain.html>

Limitations of the Opinion

1. Opinion does not settle liability with the state.

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 Ecology under RCW 70.105D.040(4).

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

Mr. Miller
Further Action Required
Miller's Market SW1380
October 5, 2016
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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).

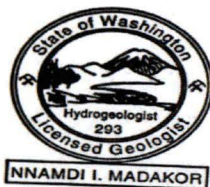
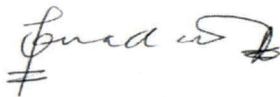
3. State is immune from liability.

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.

Contact Information

Thank you for choosing to clean up your property under the PLIA Heating Oil Insurance Program. If you have any questions about this opinion, please contact me by phone at 1-800-822-3905, or by email at nnamdi.madakor@plia.wa.gov.

Sincerely,



Nnamdi Madakor P.HG, P.G.,
Senior Hydrogeologist
Statewide Technical Coordinator
Pollution Liability Insurance Agency

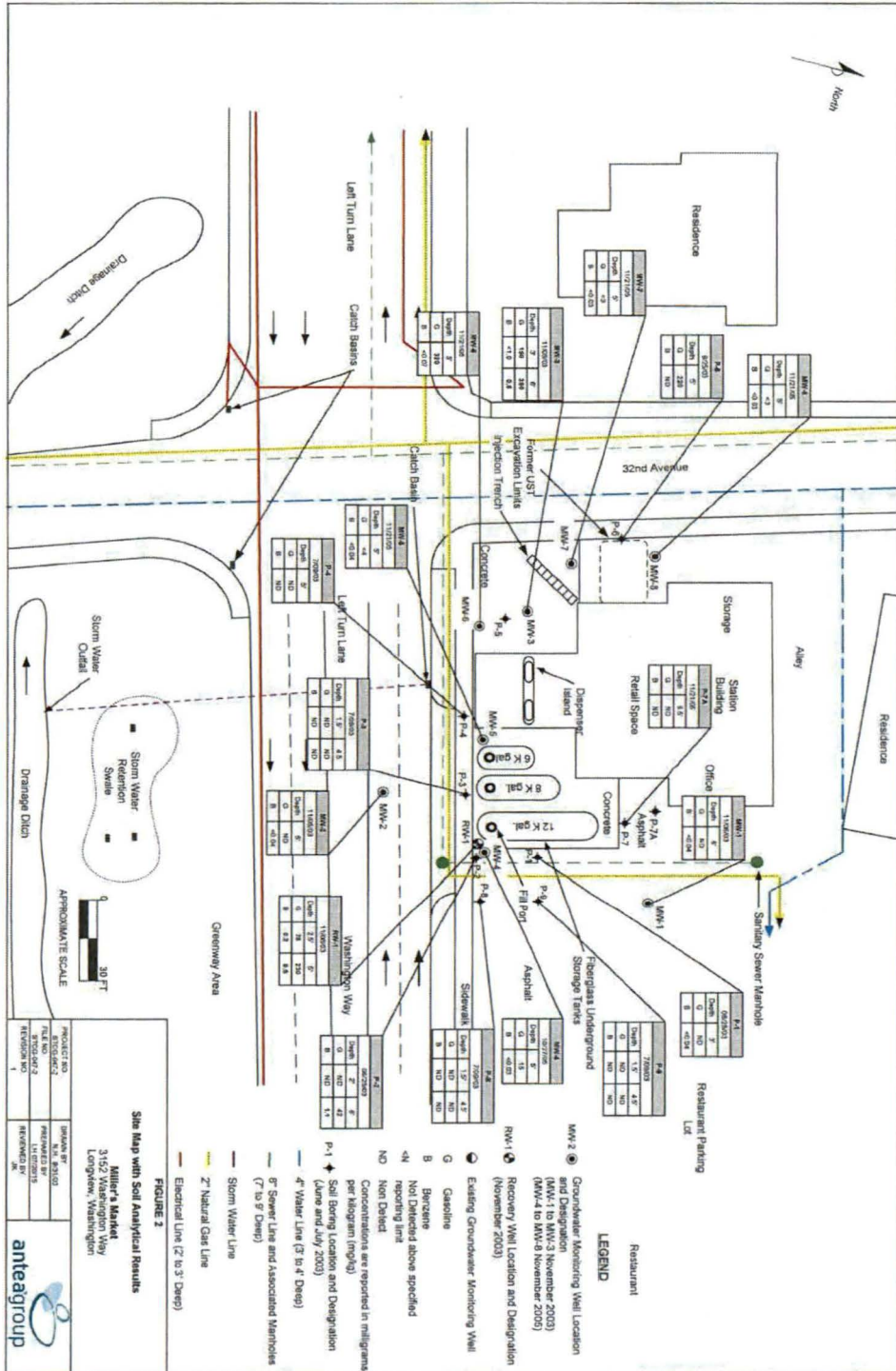
Nm:nm

Enclosures: Site diagram;

cc Carrie Pederson, PLIA
Annica Brown, Vertex (email only)
Mike Bauman (Property Owner)

Mr. Miller
Further Action Required
Miller's Market SW1380
October 5, 2016
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Enclosure A:
Miller's Market Site SW1380



*Soil Boring Installation Report
Miller's Market
3152 Washington Way, Longview, Washington 98632*



Appendix B

Boring Logs



BORING LOG

Client: **Colony**
 Project Number: **STCG0472**

Boring/Well No.

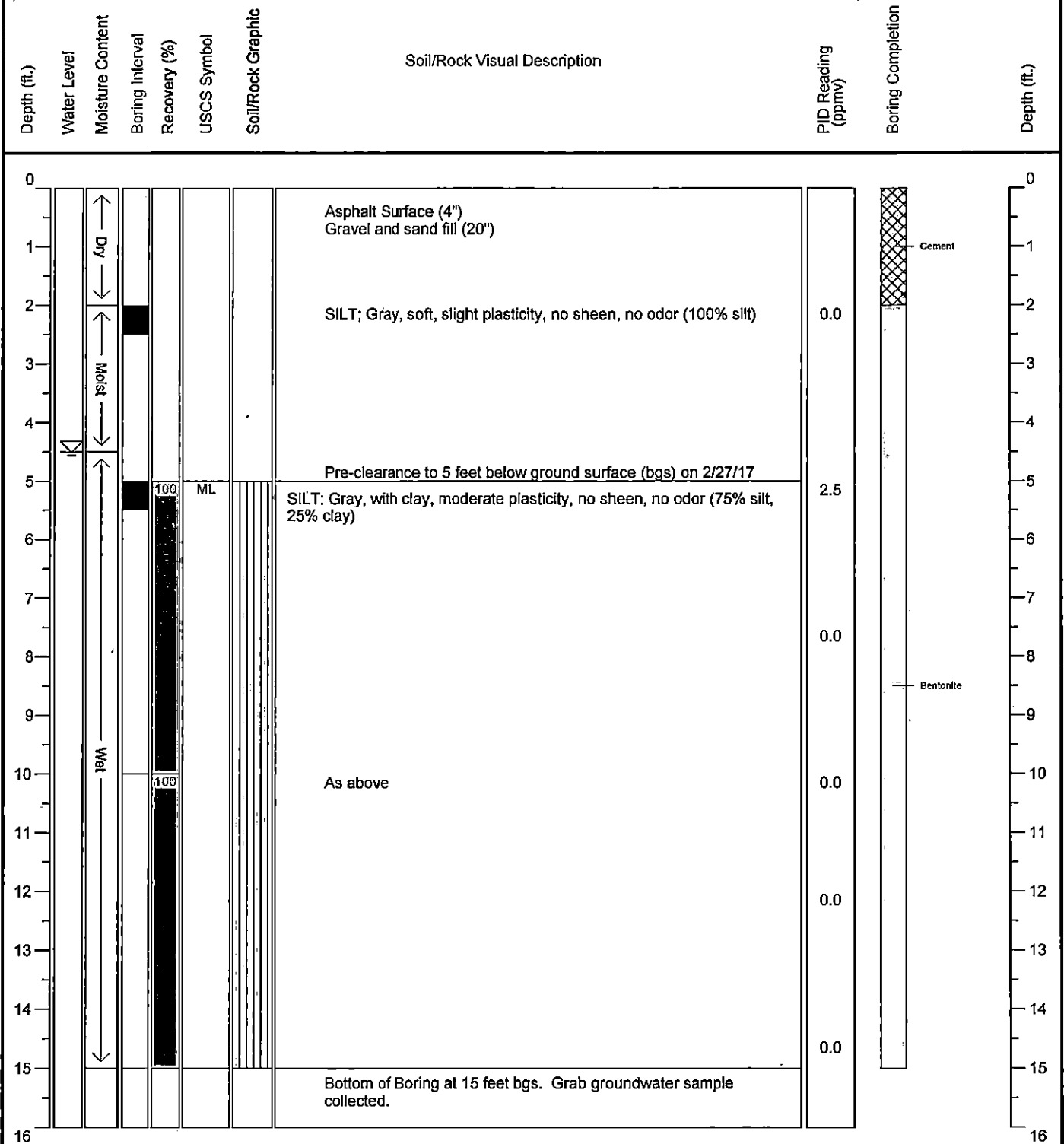
B-1

Site Address:
3152 Washington Way
Longview, WA
 Logged By: **0-15 ft.**

Drilling Date(s): **2/27/17**
 Drilling Company: **Holocene**
 Drilling Method: **Direct Push**
 Sampling Method: **Continuous**

Boring diameter (in.): **2.25**
 Casing Diameter (in.): **3/4**
 Boring Depth (ft): **15**
 Well Depth (ft.): **15**

Casing Material: **PVC**
 Screen Interval: **10-15 ft**
 Screen slot size: **N/A**
 Sand Pack: **N/A**





BORING LOG

Client: **Colony**
 Project Number: **STCG0472**

Boring/Well No.

B-2

Site Address:
3152 Washington Way
Longview, WA
 Logged By: **B. Jackson**

Drilling Date(s): **2/27/17**
 Drilling Company: **Holocene**
 Drilling Method: **Direct Push**
 Sampling Method: **Continuous**

Boring diameter (in.): **2.25**
 Casing Diameter (in.): **3/4**
 Boring Depth (ft): **8.1**
 Well Depth (ft.): **8.1**

Casing Material: **PVC**
 Screen Interval: **3-8 ft.**
 Screen slot size: **N/A**
 Sand Pack: **N/A**

Depth (ft.)	Water Level	Moisture Content	Boring Interval	Recovery (%)	USCS Symbol	Soil/Rock Graphic	Soil/Rock Visual Description	PID Reading (ppmv)	Boring Completion	Depth (ft.)
0							Concrete surface with sand and gravel fill (8") Sand and gravel fill (4")			0
1		Dry							Cement	1
2							SILT: Olive-gray, with clay, soft, low plasticity, no sheen, no odor (70% silt, 30% clay)	7.7		2
3		Moist								3
4										4
5								117	Bentonite	5
6		Wet					Refusal encountered at 8.1 feet below ground surface (bgs). Natural gas pipe (8" diameter) at 8'-1"			6
7										7
8					ML		Pre-clearance to 7.5 feet below ground surface (bgs) on 2/27/17 SILT: Olive-gray, with clay, soft, low plasticity, no sheen, no odor (70% silt, 30% clay)	14.7		8
9							Boring refusal at 8.1 feet bgs. Grab groundwater sample collected.			9



BORING LOG

Client: **Colony**
 Project Number: **STCG0472**

Boring/Well No.
B-3

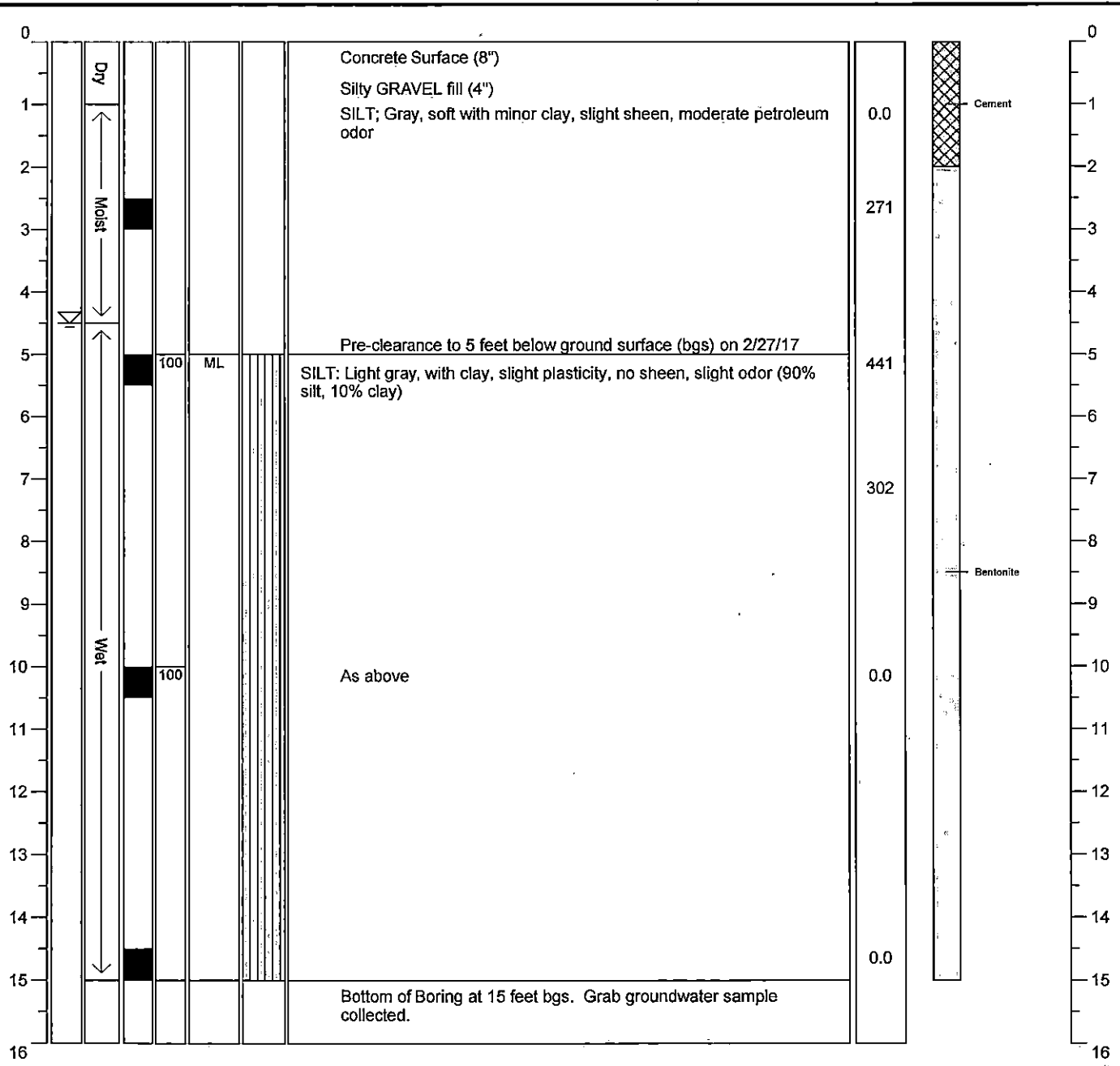
Site Address:
3152 Washington Way
Longview, WA
 Logged By: **B. Jackson**

Drilling Date(s): **2/27/17**
 Drilling Company: **Holocene**
 Drilling Method: **Direct Push**
 Sampling Method: **Continuous**

Boring diameter (in.): **2.25**
 Casing Diameter (in.): **3/4**
 Boring Depth (ft): **15**
 Well Depth (ft.): **15**

Casing Material: **PVC**
 Screen Interval: **10-15 ft.**
 Screen slot size: **N/A**
 Sand Pack: **N/A**

Depth (ft.)	Water Level	Moisture Content	Boring Interval	Recovery (%)	USCS Symbol	Soil/Rock Graphic	Soil/Rock Visual Description	PID Reading (ppmv)	Boring Completion	Depth (ft.)
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BORING LOG

Client: **Colony**
 Project Number: **STCG0472**

Boring/Well No.

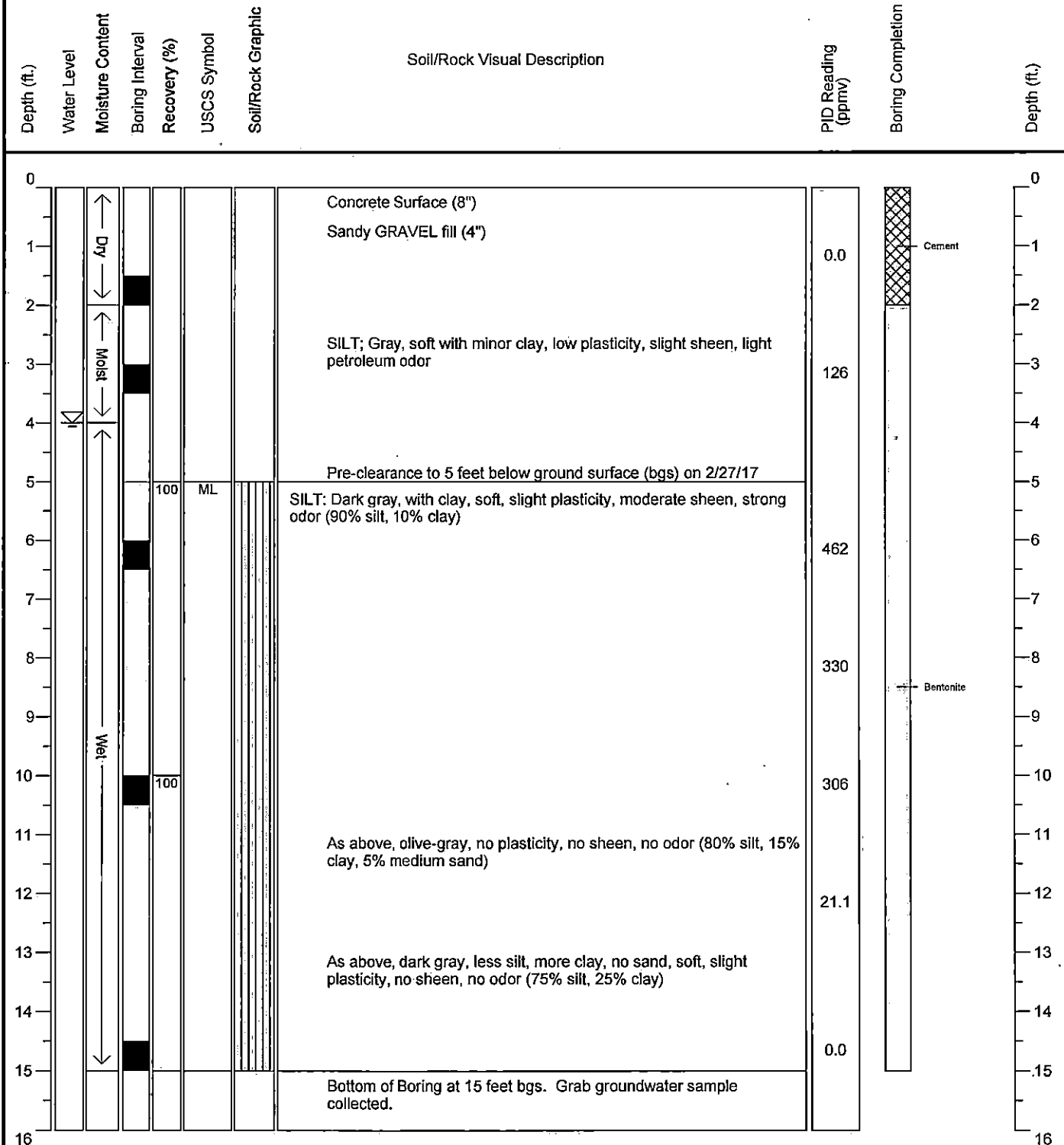
B-4

Site Address:
3152 Washington Way
Longview, WA
 Logged By: **B. Jackson**

Drilling Date(s): **2/27/17**
 Drilling Company: **Holocene**
 Drilling Method: **Direct Push**
 Sampling Method: **Continuous**

Boring diameter (in.): **2.25**
 Casing Diameter (in.): **3/4**
 Boring Depth (ft): **15**
 Well Depth (ft.): **15**

Casing Material: **PVC**
 Screen Interval: **10-15 ft.**
 Screen slot size: **N/A**
 Sand Pack: **N/A**





BORING LOG

Client: **Colony**
 Project Number: **STCG0472**

Boring/Well No.

B-5

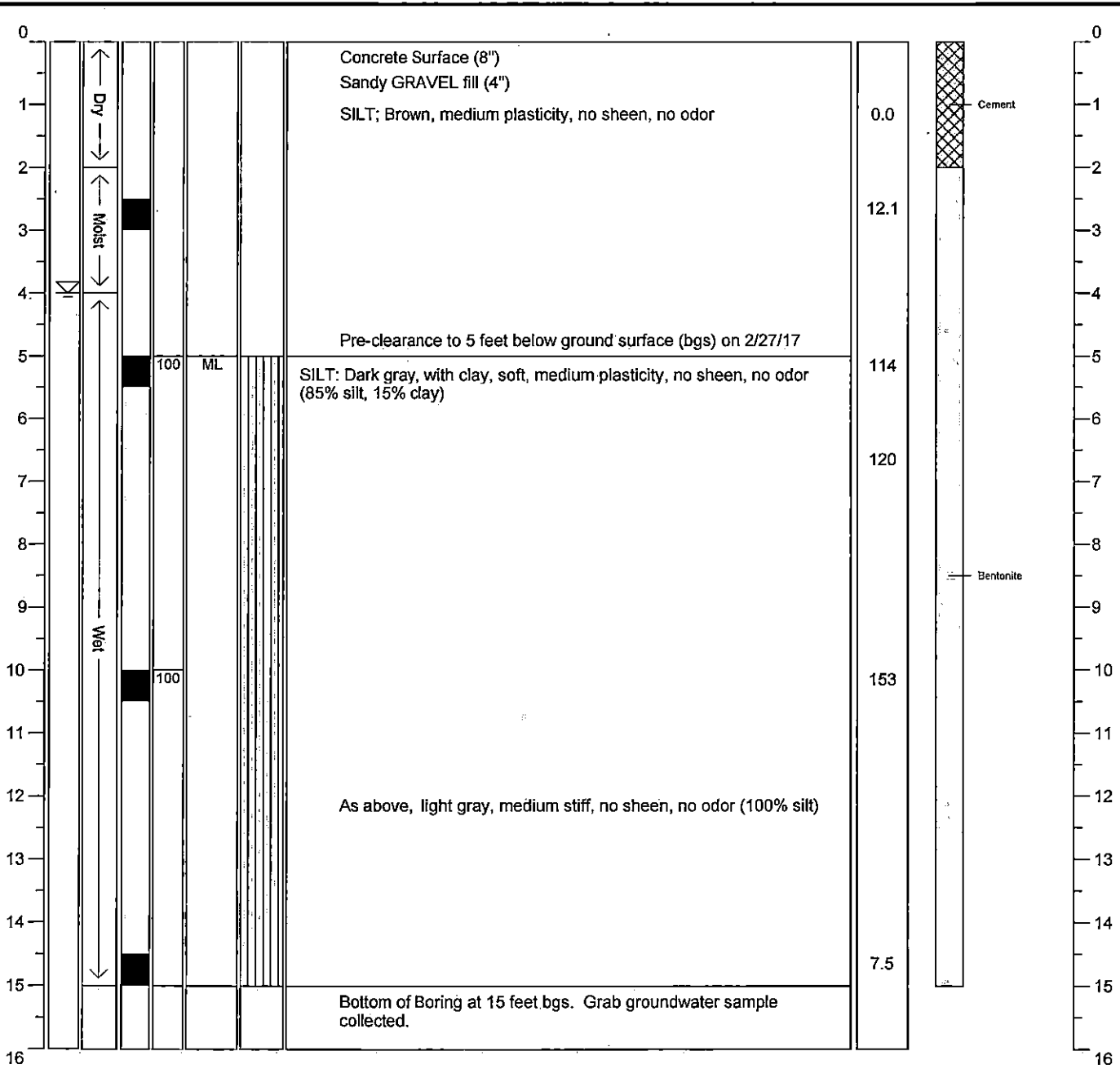
Site Address:
3152 Washington Way
Longview, WA
 Logged By: **B. Jackson**

Drilling Date(s): **2/27/17**
 Drilling Company: **Holocene**
 Drilling Method: **Direct Push**
 Sampling Method: **Continuous**

Boring diameter (in.): **2.25**
 Casing Diameter (in.): **3/4**
 Boring Depth (ft): **15**
 Well Depth (ft.): **15**

Casing Material: **PVC**
 Screen Interval: **10-15 ft.**
 Screen slot size: **N/A**
 Sand Pack: **N/A**

Depth (ft.)	Water Level	Moisture Content	Boring Interval	Recovery (%)	USCS Symbol	Soil/Rock Graphic	Soil/Rock Visual Description	PID Reading (ppmv)	Boring Completion	Depth (ft.)
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BORING LOG

Client: **Colony**
 Project Number: **STCG0472**

Boring/Well No.

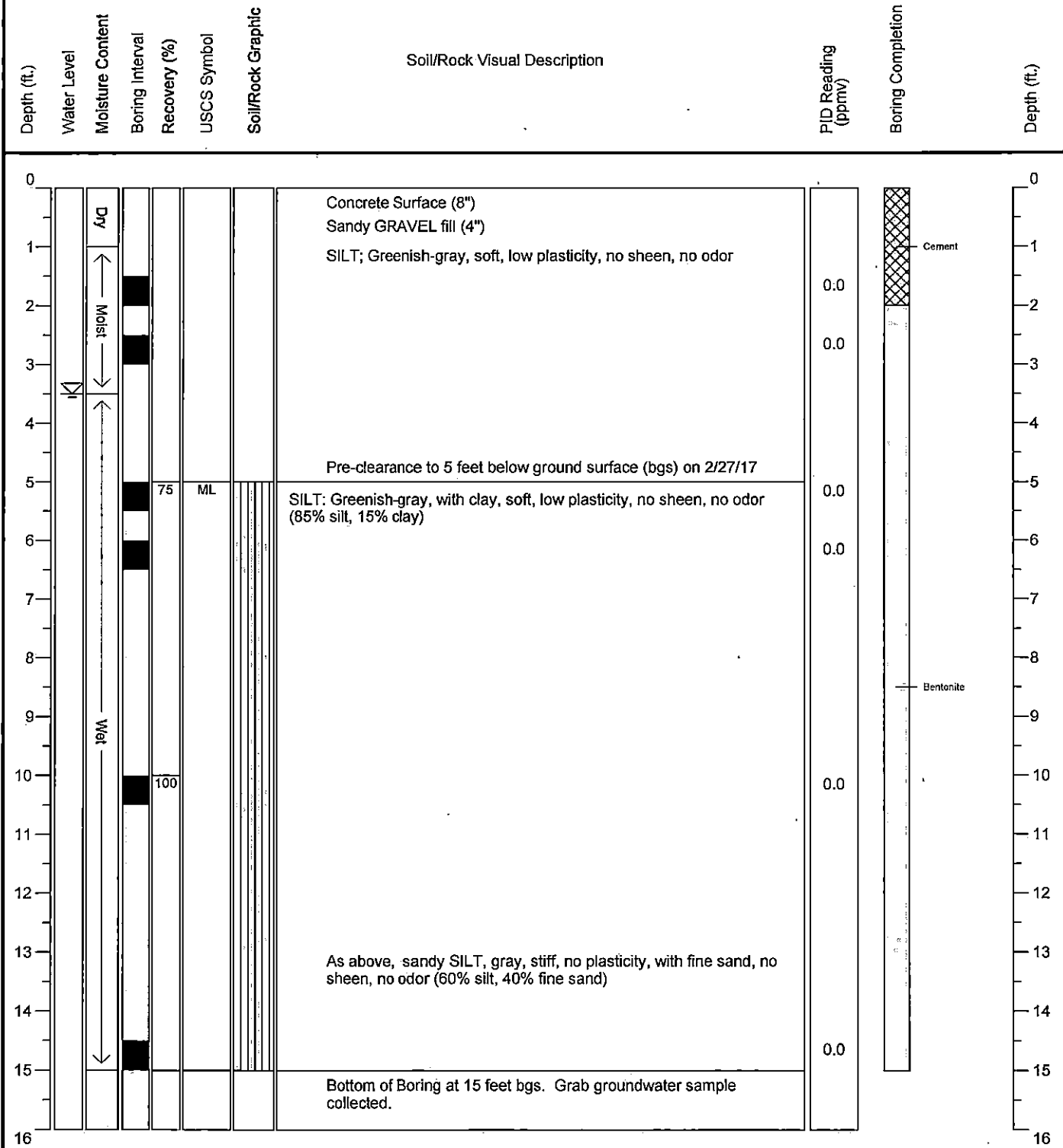
B-6

Site Address:
3152 Washington Way
Longview, WA
 Logged By: **B. Jackson**

Drilling Date(s): **2/27/17**
 Drilling Company: **Holocene**
 Drilling Method: **Direct Push**
 Sampling Method: **Continuous**

Boring diameter (in.): **2.25**
 Casing Diameter (in.): **3/4**
 Boring Depth (ft): **15**
 Well Depth (ft.): **15**

Casing Material: **PVC**
 Screen Interval: **10-15 ft.**
 Screen slot size: **N/A**
 Sand Pack: **N/A**



*Soil Boring Installation Report
Miller's Market
3152 Washington Way, Longview, Washington 98632*



Appendix C

Analytical Laboratory Reports and Chain-of-Custody Documentation



March 16, 2017

Mr. Matt Miller
Antea Group
4006 - 148th Ave NE
Redmond, WA 98052

Dear Mr. Miller,

On March 1st, 32 samples were received by our laboratory and assigned our laboratory project number EV17030010. The project was identified as your STCG-0472 Millers Market. 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

Page 1

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626

ALS Group USA, Corp dba ALS Environmental

Environmental

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



CERTIFICATE OF ANALYSIS

CLIENT:	Antea Group	DATE:	3/16/2017
	4006 - 148th Ave NE	ALS JOB#:	EV17030010
	Redmond, WA 98052	ALS SAMPLE#:	EV17030010-01
CLIENT CONTACT:	Matt Miller	DATE RECEIVED:	03/01/2017
CLIENT PROJECT:	STCG-0472 Millers Market	COLLECTION DATE:	2/27/2017 1:50:00 PM
CLIENT SAMPLE ID	B-1-2.5ft	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	4.2	3.0	1	MG/KG	03/02/2017	SNC
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	03/02/2017	SNC
Benzene	EPA-8021	0.056	0.030	1	MG/KG	03/02/2017	SNC
Toluene	EPA-8021	0.060	0.050	1	MG/KG	03/02/2017	SNC
Ethylbenzene	EPA-8021	0.069	0.050	1	MG/KG	03/02/2017	SNC
Xylenes	EPA-8021	0.21	0.20	1	MG/KG	03/02/2017	SNC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	66.0	03/02/2017	SNC
TFT	EPA-8021	62.7	03/02/2017	SNC

U - Analyte analyzed for but not detected at level above reporting limit.
 Chromatogram indicates that it is likely that sample contains weathered gasoline.



ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Antea Group 4006 - 148th Ave NE Redmond, WA 98052	DATE:	3/16/2017
CLIENT CONTACT:	Matt Miller	ALS JOB#:	EV17030010
CLIENT PROJECT:	STCG-0472 Millers Market	ALS SAMPLE#:	EV17030010-02
CLIENT SAMPLE ID	B-1-5ft	DATE RECEIVED:	03/01/2017
		COLLECTION DATE:	2/27/2017 1:55:00 PM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	4.0	3.0	1	MG/KG	03/02/2017	SNC
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	03/02/2017	SNC
Benzene	EPA-8021	U	0.030	1	MG/KG	03/02/2017	SNC
Toluene	EPA-8021	U	0.050	1	MG/KG	03/02/2017	SNC
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	03/02/2017	SNC
Xylenes	EPA-8021	U	0.20	1	MG/KG	03/02/2017	SNC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	68.4	03/02/2017	SNC
TFT	EPA-8021	66.6	03/02/2017	SNC

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





CERTIFICATE OF ANALYSIS

CLIENT:	Antea Group 4006 - 148th Ave NE Redmond, WA 98052	DATE:	3/16/2017
		ALS JOB#:	EV17030010
		ALS SAMPLE#:	EV17030010-05
CLIENT CONTACT:	Matt Miller	DATE RECEIVED:	03/01/2017
CLIENT PROJECT:	STCG-0472 Millers Market	COLLECTION DATE:	2/27/2017 1:00:00 PM
CLIENT SAMPLE ID	B-2-2.5ft	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	21	3.0	1	MG/KG	03/02/2017	SNC
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	03/02/2017	SNC
Benzene	EPA-8021	U	0.030	1	MG/KG	03/02/2017	SNC
Toluene	EPA-8021	U	0.050	1	MG/KG	03/02/2017	SNC
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	03/02/2017	SNC
Xylenes	EPA-8021	U	0.20	1	MG/KG	03/02/2017	SNC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	72.0	03/02/2017	SNC
TFT	EPA-8021	71.4	03/02/2017	SNC

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



CERTIFICATE OF ANALYSIS

CLIENT:	Antea Group 4006 - 148th Ave NE Redmond, WA 98052	DATE:	3/16/2017
CLIENT CONTACT:	Matt Miller	ALS JOB#:	EV17030010
CLIENT PROJECT:	STCG-0472 Millers Market	ALS SAMPLE#:	EV17030010-06
CLIENT SAMPLE ID	B-2-5ft	DATE RECEIVED:	03/01/2017
		COLLECTION DATE:	2/27/2017 1:10:00 PM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS ANALYSIS	
						DATE	BY
TPH-Volatile Range	NWTPH-GX	500	15	5	MG/KG	03/07/2017	SNC
Methyl T-Butyl Ether	EPA-8021	U	0.50	5	MG/KG	03/07/2017	SNC
Benzene	EPA-8021	U	0.15	5	MG/KG	03/07/2017	SNC
Toluene	EPA-8021	U	0.25	5	MG/KG	03/07/2017	SNC
Ethylbenzene	EPA-8021	U	0.25	5	MG/KG	03/07/2017	SNC
Xylenes	EPA-8021	U	1.0	5	MG/KG	03/07/2017	SNC
C5-C6 Aliphatics	NWVPH	U	5.0	1	MG/KG	03/13/2017	PAB
>C6-C8 Aliphatics	NWVPH	21	5.0	1	MG/KG	03/13/2017	PAB
>C8-C10 Aliphatics	NWVPH	30	5.0	1	MG/KG	03/13/2017	PAB
>C8-C10 Aromatics	NWVPH	67	5.0	1	MG/KG	03/13/2017	PAB
>C10-C12 Aliphatics	NWEPH	35	5.0	1	MG/KG	03/13/2017	EBS
>C12-C16 Aliphatics	NWEPH	U	5.0	1	MG/KG	03/13/2017	EBS
>C16-C21 Aliphatics	NWEPH	U	5.0	1	MG/KG	03/13/2017	EBS
>C21-C34 Aliphatics	NWEPH	U	5.0	1	MG/KG	03/13/2017	EBS
>C10-C12 Aromatics	NWEPH	U	5.0	1	MG/KG	03/13/2017	EBS
>C12-C16 Aromatics	NWEPH	U	5.0	1	MG/KG	03/13/2017	EBS
>C16-C21 Aromatics	NWEPH	U	5.0	1	MG/KG	03/13/2017	EBS
>C21-C34 Aromatics	NWEPH	U	5.0	1	MG/KG	03/13/2017	EBS

SURROGATE	METHOD	%REC	ANALYSIS ANALYSIS	
			DATE	BY
TFT 5X Dilution	NWTPH-GX	77.3	03/07/2017	SNC
TFT 5X Dilution	EPA-8021	52.1 GS2	03/07/2017	SNC
TFT - Aliphatic	NWVPH	54.2 GS1	03/13/2017	PAB
TFT - Aromatic	NWVPH	59.8 GS1	03/13/2017	PAB
C25	NWEPH	99.2	03/13/2017	EBS
p-Terphenyl	NWEPH	81.6	03/13/2017	EBS

GS1 - Surrogate outside of control limits due to matrix effect.
 GS2 - Surrogate outside of control limits due to dilution.
 U - Analyte analyzed for but not detected at level above reporting limit.
 Chromatogram indicates that it is likely that sample contains an unidentified gasoline range product.



CERTIFICATE OF ANALYSIS

CLIENT:	Antea Group 4006 - 148th Ave NE Redmond, WA,98052	DATE:	3/16/2017
CLIENT CONTACT:	Matt Miller	ALS JOB#:	EV17030010
CLIENT PROJECT:	STCG-0472 Millers Market	ALS SAMPLE#:	EV17030010-07
CLIENT SAMPLE ID	B-2-7.5ft	DATE RECEIVED:	03/01/2017
		COLLECTION DATE:	2/27/2017 1:30:00 PM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	67	3.0	1	MG/KG	03/02/2017	SNC
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	03/02/2017	SNC
Benzene	EPA-8021	U	0.030	1	MG/KG	03/02/2017	SNC
Toluene	EPA-8021	U	0.050	1	MG/KG	03/02/2017	SNC
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	03/02/2017	SNC
Xylenes	EPA-8021	U	0.20	1	MG/KG	03/02/2017	SNC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	78.2	03/02/2017	SNC
TFT	EPA-8021	75.5	03/02/2017	SNC

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





CERTIFICATE OF ANALYSIS

CLIENT:	Antea Group 4006 - 148th Ave NE Redmond, WA 98052	DATE:	3/16/2017
CLIENT CONTACT:	Matt Miller	ALS JOB#:	EV17030010
CLIENT PROJECT:	STCG-0472 Millers Market	ALS SAMPLE#:	EV17030010-08
CLIENT SAMPLE ID	B-3-2.5ft	DATE RECEIVED:	03/01/2017
		COLLECTION DATE:	2/27/2017 9:40:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS ANALYSIS	
						DATE	BY
TPH-Volatile Range	NWTPH-GX	740	30	10	MG/KG	03/03/2017	SNC
Methyl T-Butyl Ether	EPA-8021	U	1.0	10	MG/KG	03/03/2017	SNC
Benzene	EPA-8021	U	0.30	10	MG/KG	03/03/2017	SNC
Toluene	EPA-8021	U	0.50	10	MG/KG	03/03/2017	SNC
Ethylbenzene	EPA-8021	2.8	0.50	10	MG/KG	03/03/2017	SNC
Xylenes	EPA-8021	U	2.0	10	MG/KG	03/03/2017	SNC
C5-C6 Aliphatics	NWVPH	U	5.0	1	MG/KG	03/13/2017	PAB
>C6-C8 Aliphatics	NWVPH	73	5.0	1	MG/KG	03/13/2017	PAB
>C8-C10 Aliphatics	NWVPH	55	5.0	1	MG/KG	03/13/2017	PAB
>C8-C10 Aromatics	NWVPH	140	5.0	1	MG/KG	03/13/2017	PAB
>C10-C12 Aliphatics	NWEPH	44	5.0	1	MG/KG	03/14/2017	EBS
>C12-C16 Aliphatics	NWEPH	7.2	5.0	1	MG/KG	03/14/2017	EBS
>C16-C21 Aliphatics	NWEPH	U	5.0	1	MG/KG	03/14/2017	EBS
>C21-C34 Aliphatics	NWEPH	U	5.0	1	MG/KG	03/14/2017	EBS
>C10-C12 Aromatics	NWEPH	25	5.0	1	MG/KG	03/14/2017	EBS
>C12-C16 Aromatics	NWEPH	10	5.0	1	MG/KG	03/14/2017	EBS
>C16-C21 Aromatics	NWEPH	U	5.0	1	MG/KG	03/14/2017	EBS
>C21-C34 Aromatics	NWEPH	U	5.0	1	MG/KG	03/14/2017	EBS

SURROGATE	METHOD	%REC	ANALYSIS ANALYSIS	
			DATE	BY
TFT 10X Dilution	NWTPH-GX	137	03/03/2017	SNC
TFT 10X Dilution	EPA-8021	110	03/03/2017	SNC
TFT - Aliphatic	NWVPH	46.0 GS1	03/13/2017	PAB
TFT - Aromatic	NWVPH	68.0	03/13/2017	PAB
C25	NWEPH	99.2	03/14/2017	EBS
p-Terphenyl	NWEPH	85.6	03/14/2017	EBS

GS1 - Surrogate outside of control limits due to matrix effect.
 U - Analyte analyzed for but not detected at level above reporting limit.
 Chromatogram indicates that it is likely that sample contains an unidentified gasoline range product.





CERTIFICATE OF ANALYSIS

CLIENT:	Antea Group 4006 - 148th Ave NE Redmond, WA 98052	DATE:	3/16/2017
CLIENT CONTACT:	Matt Miller	ALS JOB#:	EV17030010
CLIENT PROJECT:	STCG-0472 Millers Market	ALS SAMPLE#:	EV17030010-09
CLIENT SAMPLE ID	B-3-5ft	DATE RECEIVED:	03/01/2017
		COLLECTION DATE:	2/27/2017 9:45:00 AM
		WDOE ACCREDITATION:	C601

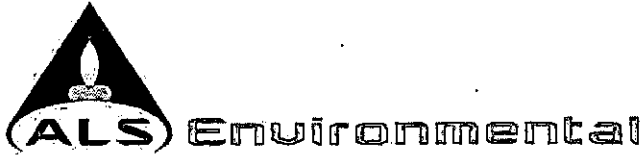
SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	310	30	10	MG/KG	03/03/2017	SNC
Methyl T-Butyl Ether	EPA-8021	U	0.20	2	MG/KG	03/06/2017	SNC
Benzene	EPA-8021	U	0.060	2	MG/KG	03/06/2017	SNC
Toluene	EPA-8021	U	0.10	2	MG/KG	03/06/2017	SNC
Ethylbenzene	EPA-8021	U	0.10	2	MG/KG	03/06/2017	SNC
Xylenes	EPA-8021	U	0.40	2	MG/KG	03/06/2017	SNC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 10X Dilution	NWTPH-GX	93.7	03/03/2017	SNC
TFT 2X Dilution	EPA-8021	60.1	03/06/2017	SNC

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





CERTIFICATE OF ANALYSIS

CLIENT:	Antea Group 4006 - 148th Ave NE Redmond, WA 98052	DATE:	3/16/2017
CLIENT CONTACT:	Matt Miller	ALS JOB#:	EV17030010
CLIENT PROJECT:	STCG-0472 Millers Market	ALS SAMPLE#:	EV17030010-10
CLIENT SAMPLE ID:	B-3-10ft	DATE RECEIVED:	03/01/2017
		COLLECTION DATE:	2/27/2017 10:30:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	34	3.0	1	MG/KG	03/02/2017	SNC
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	03/02/2017	SNC
Benzene	EPA-8021	U	0.030	1	MG/KG	03/02/2017	SNC
Toluene	EPA-8021	U	0.050	1	MG/KG	03/02/2017	SNC
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	03/02/2017	SNC
Xylenes	EPA-8021	U	0.20	1	MG/KG	03/02/2017	SNC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	83.4	03/02/2017	SNC
TFT	EPA-8021	81.8	03/02/2017	SNC

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





CERTIFICATE OF ANALYSIS

CLIENT:	Antea Group 4006 - 148th Ave NE Redmond, WA 98052	DATE:	3/16/2017
CLIENT CONTACT:	Matt Miller	ALS JOB#:	EV17030010
CLIENT PROJECT:	STCG-0472 Millers Market	ALS SAMPLE#:	EV17030010-11
CLIENT SAMPLE ID	B-3-15ft	DATE RECEIVED:	03/01/2017
		COLLECTION DATE:	2/27/2017 10:35:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	03/10/2017	SNC
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	03/10/2017	SNC
Benzene	EPA-8021	U	0.030	1	MG/KG	03/10/2017	SNC
Toluene	EPA-8021	U	0.050	1	MG/KG	03/10/2017	SNC
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	03/10/2017	SNC
Xylenes	EPA-8021	U	0.20	1	MG/KG	03/10/2017	SNC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	84.1	03/10/2017	SNC
TFT	EPA-8021	77.3	03/10/2017	SNC

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





CERTIFICATE OF ANALYSIS

CLIENT:	Antea Group 4006 - 148th Ave NE Redmond, WA 98052	DATE:	3/16/2017
CLIENT CONTACT:	Matt Miller	ALS JOB#:	EV17030010
CLIENT PROJECT:	STCG-0472 Millers Market	ALS SAMPLE#:	EV17030010-12
CLIENT SAMPLE ID	B-4-1.5ft	DATE RECEIVED:	03/01/2017
		COLLECTION DATE:	2/27/2017 10:00:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	03/02/2017	SNC
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	03/02/2017	SNC
Benzene	EPA-8021	U	0.030	1	MG/KG	03/02/2017	SNC
Toluene	EPA-8021	U	0.050	1	MG/KG	03/02/2017	SNC
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	03/02/2017	SNC
Xylenes	EPA-8021	U	0.20	1	MG/KG	03/02/2017	SNC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	91.1	03/02/2017	SNC
TFT	EPA-8021	86.5	03/02/2017	SNC

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





CERTIFICATE OF ANALYSIS

CLIENT:	Antea Group 4006 - 148th Ave NE Redmond, WA 98052	DATE:	3/16/2017
CLIENT CONTACT:	Matt Miller	ALS JOB#:	EV17030010
CLIENT PROJECT:	STCG-0472 Millers Market	ALS SAMPLE#:	EV17030010-13
CLIENT SAMPLE ID	B-4-3ft	DATE RECEIVED:	03/01/2017
		COLLECTION DATE:	2/27/2017 10:10:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	220	6.0	2	MG/KG	03/06/2017	SNC
Methyl T-Butyl Ether	EPA-8021	U	0.20	2	MG/KG	03/06/2017	SNC
Benzene	EPA-8021	U	0.060	2	MG/KG	03/06/2017	SNC
Toluene	EPA-8021	U	0.10	2	MG/KG	03/06/2017	SNC
Ethylbenzene	EPA-8021	0.41	0.10	2	MG/KG	03/06/2017	SNC
Xylenes	EPA-8021	U	0.40	2	MG/KG	03/06/2017	SNC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 2X Dilution	NWTPH-GX	62.0	03/06/2017	SNC
TFT 2X Dilution	EPA-8021	52.3 GS2	03/06/2017	SNC

GS2 - Surrogate outside of control limits due to dilution.
 U - Analyte analyzed for but not detected at level above reporting limit.
 Chromatogram indicates that it is likely that sample contains an unidentified gasoline range product.





CERTIFICATE OF ANALYSIS

CLIENT:	Antea Group 4006 - 148th Ave NE Redmond, WA 98052	DATE:	3/16/2017
CLIENT CONTACT:	Matt Miller	ALS JOB#:	EV17030010
CLIENT PROJECT:	STCG-0472 Millers Market	ALS SAMPLE#:	EV17030010-14
CLIENT SAMPLE ID	B-4-6ft	DATE RECEIVED:	03/01/2017
		COLLECTION DATE:	2/27/2017 11:05:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS	ANALYSIS
						DATE	BY
TPH-Volatile Range	NWTPH-GX	710	15	5	MG/KG	03/06/2017	SNC
Methyl T-Butyl Ether	EPA-8021	U	0.50	5	MG/KG	03/06/2017	SNC
Benzene	EPA-8021	U	0.15	5	MG/KG	03/06/2017	SNC
Toluene	EPA-8021	U	0.25	5	MG/KG	03/06/2017	SNC
Ethylbenzene	EPA-8021	5.3	0.25	5	MG/KG	03/06/2017	SNC
Xylenes	EPA-8021	2.0	1.0	5	MG/KG	03/06/2017	SNC
C5-C6 Aliphatics	NWVPH	5.7	5.0	1	MG/KG	03/13/2017	PAB
>C6-C8 Aliphatics	NWVPH	110	5.0	1	MG/KG	03/13/2017	PAB
>C8-C10 Aliphatics	NWVPH	34	5.0	1	MG/KG	03/13/2017	PAB
>C8-C10 Aromatics	NWVPH	140	5.0	1	MG/KG	03/13/2017	PAB
>C10-C12 Aliphatics	NWEPH	45	5.0	1	MG/KG	03/14/2017	EBS
>C12-C16 Aliphatics	NWEPH	6.5	5.0	1	MG/KG	03/14/2017	EBS
>C16-C21 Aliphatics	NWEPH	U	5.0	1	MG/KG	03/14/2017	EBS
>C21-C34 Aliphatics	NWEPH	U	5.0	1	MG/KG	03/14/2017	EBS
>C10-C12 Aromatics	NWEPH	40	5.0	1	MG/KG	03/14/2017	EBS
>C12-C16 Aromatics	NWEPH	10	5.0	1	MG/KG	03/14/2017	EBS
>C16-C21 Aromatics	NWEPH	U	5.0	1	MG/KG	03/14/2017	EBS
>C21-C34 Aromatics	NWEPH	U	5.0	1	MG/KG	03/14/2017	EBS

SURROGATE	METHOD	%REC	ANALYSIS	ANALYSIS
			DATE	BY
TFT 5X Dilution	NWTPH-GX	146	03/06/2017	SNC
TFT 5X Dilution	EPA-8021	123	03/06/2017	SNC
TFT - Aliphatic	NWVPH	47.0 GS1	03/13/2017	PAB
TFT - Aromatic	NWVPH	75.0	03/13/2017	PAB
C25	NWEPH	94.5	03/14/2017	EBS
p-Terphenyl	NWEPH	87.3	03/14/2017	EBS

GS1 - Surrogate outside of control limits due to matrix effect.
 U - Analyte analyzed for but not detected at level above reporting limit.
 Chromatogram indicates that it is likely that sample contains an unidentified gasoline range product.



CERTIFICATE OF ANALYSIS

CLIENT:	Antea Group 4006 - 148th Ave NE Redmond, WA 98052	DATE:	3/16/2017
CLIENT CONTACT:	Matt Miller	ALS JOB#:	EV17030010
CLIENT PROJECT:	STCG-0472 Millers Market	ALS SAMPLE#:	EV17030010-15
CLIENT SAMPLE ID	B-4-10ft	DATE RECEIVED:	03/01/2017
		COLLECTION DATE:	2/27/2017 11:10:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	450	15	5	MG/KG	03/06/2017	SNC
Methyl T-Butyl Ether	EPA-8021	U	0.50	5	MG/KG	03/06/2017	SNC
Benzene	EPA-8021	U	0.15	5	MG/KG	03/06/2017	SNC
Toluene	EPA-8021	U	0.25	5	MG/KG	03/06/2017	SNC
Ethylbenzene	EPA-8021	2.9	0.25	5	MG/KG	03/06/2017	SNC
Xylenes	EPA-8021	U	1.0	5	MG/KG	03/06/2017	SNC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 5X Dilution	NWTPH-GX	147 GS3	03/06/2017	SNC
TFT 5X Dilution	EPA-8021	121	03/06/2017	SNC

U - Analyte analyzed for but not detected at level above reporting limit.
 GS3 - Surrogate outside of control limits due to coeluting compounds.
 Chromatogram indicates that it is likely that sample contains an unidentified gasoline range product.



ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: Antea Group DATE: 3/16/2017
 4006 - 148th Ave NE ALS JOB#: EV17030010
 Redmond, WA 98052 ALS SAMPLE#: EV17030010-16
 CLIENT CONTACT: Matt Miller DATE RECEIVED: 03/01/2017
 CLIENT PROJECT: STCG-0472 Millers Market COLLECTION DATE: 2/27/2017 11:15:00 AM
 CLIENT SAMPLE ID B-4-15ft WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	03/10/2017	SNC
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	03/10/2017	SNC
Benzene	EPA-8021	U	0.030	1	MG/KG	03/10/2017	SNC
Toluene	EPA-8021	U	0.050	1	MG/KG	03/10/2017	SNC
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	03/10/2017	SNC
Xylenes	EPA-8021	U	0.20	1	MG/KG	03/10/2017	SNC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	91.6	03/10/2017	SNC
TFT	EPA-8021	78.8	03/10/2017	SNC

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





CERTIFICATE OF ANALYSIS

CLIENT:	Antea Group 4006 - 148th Ave NE Redmond, WA 98052	DATE:	3/16/2017
CLIENT CONTACT:	Matt Miller	ALS JOB#:	EV17030010
CLIENT PROJECT:	STCG-0472 Millers Market	ALS SAMPLE#:	EV17030010-17
CLIENT SAMPLE ID	B-5-2.5ft	DATE RECEIVED:	03/01/2017
		COLLECTION DATE:	2/27/2017 10:50:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	03/02/2017	SNC
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	03/02/2017	SNC
Benzene	EPA-8021	U	0.030	1	MG/KG	03/02/2017	SNC
Toluene	EPA-8021	U	0.050	1	MG/KG	03/02/2017	SNC
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	03/02/2017	SNC
Xylenes	EPA-8021	U	0.20	1	MG/KG	03/02/2017	SNC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	75.0	03/02/2017	SNC
TFT	EPA-8021	70.5	03/02/2017	SNC

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





ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: Antea Group DATE: 3/16/2017
 4006 - 148th Ave NE ALS JOB#: EV17030010
 Redmond, WA 98052 ALS SAMPLE#: EV17030010-18
 CLIENT CONTACT: Matt Miller DATE RECEIVED: 03/01/2017
 CLIENT PROJECT: STCG-0472 Millers Market COLLECTION DATE: 2/27/2017 10:55:00 AM
 CLIENT SAMPLE ID B-5-5ft WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	96	3.0	1	MG/KG	03/06/2017	SNC
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	03/06/2017	SNC
Benzene	EPA-8021	U	0.030	1	MG/KG	03/06/2017	SNC
Toluene	EPA-8021	U	0.050	1	MG/KG	03/06/2017	SNC
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	03/06/2017	SNC
Xylenes	EPA-8021	U	0.20	1	MG/KG	03/06/2017	SNC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	48.4 GS1	03/06/2017	SNC
TFT	EPA-8021	47.1 GS1	03/06/2017	SNC

GS1 - Surrogate outside of control limits due to matrix effect.
 U - Analyte analyzed for but not detected at level above reporting limit.
 Chromatogram indicates that it is likely that sample contains an unidentified gasoline range product.





CERTIFICATE OF ANALYSIS

CLIENT:	Antea Group 4006 - 148th Ave NE Redmond, WA 98052	DATE:	3/16/2017
CLIENT CONTACT:	Matt Miller	ALS JOB#:	EV17030010
CLIENT PROJECT:	STCG-0472 Millers Market	ALS SAMPLE#:	EV17030010-19
CLIENT SAMPLE ID	B-5-10ft	DATE RECEIVED:	03/01/2017
		COLLECTION DATE:	2/27/2017 11:50:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	290	15	5	MG/KG	03/07/2017	SNC
Methyl T-Butyl Ether	EPA-8021	U	0.20	2	MG/KG	03/06/2017	SNC
Benzene	EPA-8021	U	0.060	2	MG/KG	03/06/2017	SNC
Toluene	EPA-8021	U	0.10	2	MG/KG	03/06/2017	SNC
Ethylbenzene	EPA-8021	U	0.10	2	MG/KG	03/06/2017	SNC
Xylenes	EPA-8021	U	0.40	2	MG/KG	03/06/2017	SNC
C5-C6 Aliphatics	NWVPH	U	5.0	1	MG/KG	03/13/2017	PAB
>C6-C8 Aliphatics	NWVPH	31	5.0	1	MG/KG	03/13/2017	PAB
>C8-C10 Aliphatics	NWVPH	20	5.0	1	MG/KG	03/13/2017	PAB
>C8-C10 Aromatics	NWVPH	51	5.0	1	MG/KG	03/13/2017	PAB
>C10-C12 Aliphatics	NWEPH	35	5.0	1	MG/KG	03/14/2017	EBS
>C12-C16 Aliphatics	NWEPH	6.4	5.0	1	MG/KG	03/14/2017	EBS
>C16-C21 Aliphatics	NWEPH	U	5.0	1	MG/KG	03/14/2017	EBS
>C21-C34 Aliphatics	NWEPH	U	5.0	1	MG/KG	03/14/2017	EBS
>C10-C12 Aromatics	NWEPH	15	5.0	1	MG/KG	03/14/2017	EBS
>C12-C16 Aromatics	NWEPH	U	5.0	1	MG/KG	03/14/2017	EBS
>C16-C21 Aromatics	NWEPH	U	5.0	1	MG/KG	03/14/2017	EBS
>C21-C34 Aromatics	NWEPH	U	5.0	1	MG/KG	03/14/2017	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 5X Dilution	NWTPH-GX	70.9	03/07/2017	SNC
TFT 2X Dilution	EPA-8021	57.3 GS2	03/06/2017	SNC
TFT - Aliphatic	NWVPH	49.9 GS1	03/13/2017	PAB
TFT - Aromatic	NWVPH	64.7	03/13/2017	PAB
C25	NWEPH	101	03/14/2017	EBS
p-Terphenyl	NWEPH	78.6	03/14/2017	EBS

GS2 - Surrogate outside of control limits due to dilution.
 U - Analyte analyzed for but not detected at level above reporting limit.
 GS1 - Surrogate outside of control limits due to matrix effect.
 Chromatogram indicates that it is likely that sample contains an unidentified gasoline range product.



CERTIFICATE OF ANALYSIS

CLIENT:	Antea Group 4006 - 148th Ave NE Redmond, WA 98052	DATE:	3/16/2017
CLIENT CONTACT:	Matt Miller	ALS JOB#:	EV17030010
CLIENT PROJECT:	STCG-0472 Millers Market	ALS SAMPLE#:	EV17030010-20
CLIENT SAMPLE ID	B-5-15ft	DATE RECEIVED:	03/01/2017
		COLLECTION DATE:	2/27/2017 11:55:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	03/10/2017	SNC
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	03/10/2017	SNC
Benzene	EPA-8021	U	0.030	1	MG/KG	03/10/2017	SNC
Toluene	EPA-8021	U	0.050	1	MG/KG	03/10/2017	SNC
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	03/10/2017	SNC
Xylenes	EPA-8021	U	0.20	1	MG/KG	03/10/2017	SNC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	78.4	03/10/2017	SNC
TFT	EPA-8021	75.8	03/10/2017	SNC

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





CERTIFICATE OF ANALYSIS

CLIENT:	Antea Group 4006 - 148th Ave NE Redmond, WA 98052	DATE:	3/16/2017
CLIENT CONTACT:	Matt Miller	ALS JOB#:	EV17030010
CLIENT PROJECT:	STCG-0472 Millers Market	ALS SAMPLE#:	EV17030010-21
CLIENT SAMPLE ID	B-6-1.5ft	DATE RECEIVED:	03/01/2017
		COLLECTION DATE:	2/27/2017 4:00:00 PM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	03/02/2017	SNC
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	03/02/2017	SNC
Benzene	EPA-8021	U	0.030	1	MG/KG	03/02/2017	SNC
Toluene	EPA-8021	U	0.050	1	MG/KG	03/02/2017	SNC
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	03/02/2017	SNC
Xylenes	EPA-8021	U	0.20	1	MG/KG	03/02/2017	SNC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	73.0	03/02/2017	SNC
TFT	EPA-8021	71.2	03/02/2017	SNC

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



ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Antea Group	DATE:	3/16/2017
	4006 - 148th Ave NE	ALS JOB#:	EV17030010
	Redmond, WA 98052	ALS SAMPLE#:	EV17030010-22
CLIENT CONTACT:	Matt Miller	DATE RECEIVED:	03/01/2017
CLIENT PROJECT:	STCG-0472 Millers Market	COLLECTION DATE:	2/27/2017 4:15:00 PM
CLIENT SAMPLE ID	B-6-2.5ft	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	23	3.0	1	MG/KG	03/02/2017	SNC
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	03/02/2017	SNC
Benzene	EPA-8021	U	0.030	1	MG/KG	03/02/2017	SNC
Toluene	EPA-8021	U	0.050	1	MG/KG	03/02/2017	SNC
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	03/02/2017	SNC
Xylenes	EPA-8021	U	0.20	1	MG/KG	03/02/2017	SNC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	70.2	03/02/2017	SNC
TFT	EPA-8021	69.3	03/02/2017	SNC

U - Analyte analyzed for but not detected at level above reporting limit.
 Chromatogram indicates that it is likely that sample contains highly weathered gasoline.





CERTIFICATE OF ANALYSIS

CLIENT:	Antea Group 4006 - 148th Ave NE Redmond, WA 98052	DATE:	3/16/2017
CLIENT CONTACT:	Matt Miller	ALS JOB#:	EV17030010
CLIENT PROJECT:	STCG-0472 Millers Market	ALS SAMPLE#:	EV17030010-23
CLIENT SAMPLE ID	B-6-5ft	DATE RECEIVED:	03/01/2017
		COLLECTION DATE:	2/27/2017 4:20:00 PM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	3.9	3.0	1	MG/KG	03/02/2017	SNC
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	03/02/2017	SNC
Benzene	EPA-8021	U	0.030	1	MG/KG	03/02/2017	SNC
Toluene	EPA-8021	U	0.050	1	MG/KG	03/02/2017	SNC
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	03/02/2017	SNC
Xylenes	EPA-8021	U	0.20	1	MG/KG	03/02/2017	SNC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	68.9	03/02/2017	SNC
TFT	EPA-8021	64.7	03/02/2017	SNC

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





CERTIFICATE OF ANALYSIS

CLIENT:	Antea Group 4006 - 148th Ave NE Redmond, WA 98052	DATE:	3/16/2017
CLIENT CONTACT:	Matt Miller	ALS JOB#:	EV17030010
CLIENT PROJECT:	STCG-0472 Millers Market	ALS SAMPLE#:	EV17030010-24
CLIENT SAMPLE ID	B-6-6ft	DATE RECEIVED:	03/01/2017
		COLLECTION DATE:	2/27/2017 4:30:00 PM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS	
						DATE	BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	03/02/2017	SNC
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	03/02/2017	SNC
Benzene	EPA-8021	U	0.030	1	MG/KG	03/02/2017	SNC
Toluene	EPA-8021	U	0.050	1	MG/KG	03/02/2017	SNC
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	03/02/2017	SNC
Xylenes	EPA-8021	U	0.20	1	MG/KG	03/02/2017	SNC

SURROGATE	METHOD	%REC	ANALYSIS	
			DATE	BY
TFT	NWTPH-GX	77.2	03/02/2017	SNC
TFT	EPA-8021	69.1	03/02/2017	SNC

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





CERTIFICATE OF ANALYSIS

CLIENT:	Antea Group 4006 - 148th Ave NE Redmond, WA 98052	DATE:	3/16/2017
CLIENT CONTACT:	Matt Miller	ALS JOB#:	EV17030010
CLIENT PROJECT:	STCG-0472 Millers Market	ALS SAMPLE#:	EV17030010-27
CLIENT SAMPLE ID	B-1	DATE RECEIVED:	03/01/2017
		COLLECTION DATE:	2/27/2017 2:45:00 PM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	290	50	1	UG/L	03/01/2017	SNC
Methyl T-Butyl Ether	EPA-8021	U	3.0	1	UG/L	03/01/2017	SNC
Benzene	EPA-8021	U	1.0	1	UG/L	03/01/2017	SNC
Toluene	EPA-8021	U	1.0	1	UG/L	03/01/2017	SNC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	03/01/2017	SNC
Xylenes	EPA-8021	U	3.0	1	UG/L	03/01/2017	SNC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	109	03/01/2017	SNC
TFT	EPA-8021	105	03/01/2017	SNC

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains highly weathered gasoline.





ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Antea Group 4006 - 148th Ave NE Redmond, WA 98052	DATE:	3/16/2017
CLIENT CONTACT:	Matt Miller	ALS JOB#:	EV17030010
CLIENT PROJECT:	STCG-0472 Millers Market	ALS SAMPLE#:	EV17030010-28
CLIENT SAMPLE ID	B-2	DATE RECEIVED:	03/01/2017
		COLLECTION DATE:	2/27/2017 1:45:00 PM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	830	50	1	UG/L	03/01/2017	SNC
Methyl T-Butyl Ether	EPA-8021	U	3.0	1	UG/L	03/01/2017	SNC
Benzene	EPA-8021	U	1.0	1	UG/L	03/01/2017	SNC
Toluene	EPA-8021	5.4	1.0	1	UG/L	03/01/2017	SNC
Ethylbenzene	EPA-8021	4.2	1.0	1	UG/L	03/01/2017	SNC
Xylenes	EPA-8021	U	3.0	1	UG/L	03/01/2017	SNC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	108	03/01/2017	SNC
TFT	EPA-8021	105	03/01/2017	SNC

U - Analyte analyzed for but not detected at level above reporting limit.
 Chromatogram indicates that it is likely that sample contains highly weathered gasoline.





CERTIFICATE OF ANALYSIS

CLIENT:	Antea Group 4006 - 148th Ave NE Redmond, WA 98052	DATE:	3/16/2017
CLIENT CONTACT:	Matt Miller	ALS JOB#:	EV17030010
CLIENT PROJECT:	STCG-0472 Millers Market	ALS SAMPLE#:	EV17030010-29
CLIENT SAMPLE ID	B-3	DATE RECEIVED:	03/01/2017
		COLLECTION DATE:	2/27/2017 11:00:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	15000	500	10	UG/L	03/01/2017	SNC
Methyl T-Butyl Ether	EPA-8021	U	30	10	UG/L	03/01/2017	SNC
Benzene	EPA-8021	60	10	10	UG/L	03/01/2017	SNC
Toluene	EPA-8021	U	10	10	UG/L	03/01/2017	SNC
Ethylbenzene	EPA-8021	190	10	10	UG/L	03/01/2017	SNC
Xylenes	EPA-8021	38	30	10	UG/L	03/01/2017	SNC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 10X Dilution	NWTPH-GX	123	03/01/2017	SNC
TFT 10X Dilution	EPA-8021	127	03/01/2017	SNC

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains highly weathered gasoline.



CERTIFICATE OF ANALYSIS

CLIENT:	Antea Group 4006 - 148th Ave NE Redmond, WA 98052	DATE:	3/16/2017
CLIENT CONTACT:	Matt Miller	ALS JOB#:	EV17030010
CLIENT PROJECT:	STCG-0472 Millers Market	ALS SAMPLE#:	EV17030010-30
CLIENT SAMPLE ID	B-4	DATE RECEIVED:	03/01/2017
		COLLECTION DATE:	2/27/2017 11:45:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	9500	500	10	UG/L	03/01/2017	SNC
Methyl T-Butyl Ether	EPA-8021	U	30	10	UG/L	03/01/2017	SNC
Benzene	EPA-8021	U	10	10	UG/L	03/01/2017	SNC
Toluene	EPA-8021	U	10	10	UG/L	03/01/2017	SNC
Ethylbenzene	EPA-8021	220	10	10	UG/L	03/01/2017	SNC
Xylenes	EPA-8021	60	30	10	UG/L	03/01/2017	SNC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 10X Dilution	NWTPH-GX	124	03/01/2017	SNC
TFT 10X Dilution	EPA-8021	129	03/01/2017	SNC

U - Analyte analyzed for but not detected at level above reporting limit.
 Chromatogram indicates that it is likely that sample contains highly weathered gasoline.





CERTIFICATE OF ANALYSIS

CLIENT:	Antea Group 4006 - 148th Ave NE Redmond, WA 98052	DATE:	3/16/2017
CLIENT CONTACT:	Matt Miller	ALS JOB#:	EV17030010
CLIENT PROJECT:	STCG-0472 Millers Market	ALS SAMPLE#:	EV17030010-31
CLIENT SAMPLE ID	B-5	DATE RECEIVED:	03/01/2017
		COLLECTION DATE:	2/27/2017 12:30:00 PM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	1000	100	2	UG/L	03/02/2017	SNC
Methyl T-Butyl Ether	EPA-8021	U	3.0	1	UG/L	03/01/2017	SNC
Benzene	EPA-8021	U	1.0	1	UG/L	03/01/2017	SNC
Toluene	EPA-8021	U	1.0	1	UG/L	03/01/2017	SNC
Ethylbenzene	EPA-8021	6.6	1.0	1	UG/L	03/01/2017	SNC
Xylenes	EPA-8021	5.2	3.0	1	UG/L	03/01/2017	SNC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 2X Dilution	NWTPH-GX	122	03/02/2017	SNC
TFT	EPA-8021	121	03/01/2017	SNC

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains highly weathered gasoline.





ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Antea Group 4006 - 148th Ave NE Redmond, WA 98052	DATE:	3/16/2017
CLIENT CONTACT:	Matt Miller	ALS JOB#:	EV17030010
CLIENT PROJECT:	STCG-0472 Millers Market	ALS SAMPLE#:	EV17030010-32
CLIENT SAMPLE ID	B-6	DATE RECEIVED:	03/01/2017
		COLLECTION DATE:	2/27/2017 5:00:00 PM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS	
						DATE	BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	03/02/2017	SNC
Methyl T-Butyl Ether	EPA-8021	U	3.0	1	UG/L	03/02/2017	SNC
Benzene	EPA-8021	U	1.0	1	UG/L	03/02/2017	SNC
Toluene	EPA-8021	1.2	1.0	1	UG/L	03/02/2017	SNC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	03/02/2017	SNC
Xylenes	EPA-8021	U	3.0	1	UG/L	03/02/2017	SNC

SURROGATE	METHOD	%REC	ANALYSIS	
			DATE	BY
TFT	NWTPH-GX	110	03/02/2017	SNC
TFT	EPA-8021	112	03/02/2017	SNC

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





CERTIFICATE OF ANALYSIS

CLIENT: Antea Group
 4006 - 148th Ave NE
 Redmond, WA 98052
DATE: 3/16/2017
ALS SDG#: EV17030010
WDOE ACCREDITATION: C601
CLIENT CONTACT: Matt Miller
CLIENT PROJECT: STCG-0472 Millers Market

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 112885 - Soil by NWTPH-GX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
TPH-Volatile Range - BS	NWTPH-GX	91.7			66.5	122.7	03/02/2017	SNC
TPH-Volatile Range - BSD	NWTPH-GX	89.7	2		66.5	122.7	03/02/2017	SNC

ALS Test Batch ID: 113130 - Soil by NWTPH-GX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
TPH-Volatile Range - BS	NWTPH-GX	93.5			66.5	122.7	03/10/2017	SNC
TPH-Volatile Range - BSD	NWTPH-GX	91.4	2		66.5	122.7	03/10/2017	SNC

ALS Test Batch ID: 112975 - Water by NWTPH-GX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
TPH-Volatile Range - BS	NWTPH-GX	91.4			66.5	122.7	03/01/2017	SNC
TPH-Volatile Range - BSD	NWTPH-GX	91.1	0		66.5	122.7	03/01/2017	SNC

ALS Test Batch ID: 112885 - Soil by EPA-8021

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
Methyl T-Butyl Ether - BS	EPA-8021	86.4			66	116	03/02/2017	SNC
Methyl T-Butyl Ether - BSD	EPA-8021	84.6	2		66	116	03/02/2017	SNC
Benzene - BS	EPA-8021	78.3			67.7	124	03/02/2017	SNC
Benzene - BSD	EPA-8021	76.9	2		67.7	124	03/02/2017	SNC
Toluene - BS	EPA-8021	80.1			71	123	03/02/2017	SNC
Toluene - BSD	EPA-8021	79.5	1		71	123	03/02/2017	SNC
Ethylbenzene - BS	EPA-8021	84.7			69.8	117	03/02/2017	SNC
Ethylbenzene - BSD	EPA-8021	83.5	1		69.8	117	03/02/2017	SNC
Xylenes - BS	EPA-8021	82.8			70	119	03/02/2017	SNC
Xylenes - BSD	EPA-8021	81.9	1		70	119	03/02/2017	SNC

ALS Test Batch ID: 113130 - Soil by EPA-8021

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
Methyl T-Butyl Ether - BS	EPA-8021	84.1			66	116	03/09/2017	SNC
Methyl T-Butyl Ether - BSD	EPA-8021	85.3	1		66	116	03/09/2017	SNC
Benzene - BS	EPA-8021	74.3			67.7	124	03/09/2017	SNC
Benzene - BSD	EPA-8021	75.5	2		67.7	124	03/09/2017	SNC
Toluene - BS	EPA-8021	75.6			71	123	03/09/2017	SNC
Toluene - BSD	EPA-8021	77.5	2		71	123	03/09/2017	SNC
Ethylbenzene - BS	EPA-8021	80.2			69.8	117	03/09/2017	SNC





ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: Antea Group
4006 - 148th Ave NE
Redmond, WA 98052
CLIENT CONTACT: Matt Miller
CLIENT PROJECT: STCG-0472 Millers Market

DATE: 3/16/2017
ALS SDG#: EV17030010
WDOE ACCREDITATION: C601

LABORATORY CONTROL SAMPLE RESULTS

Table with 9 columns: SPIKED COMPOUND, METHOD, %REC, RPD, QUAL, LIMITS (MIN, MAX), ANALYSIS DATE, ANALYSIS BY. Rows include Ethylbenzene - BSD, Xylenes - BS, Xylenes - BSD.

ALS Test Batch ID: 112975 - Water by EPA-8021

Table with 9 columns: SPIKED COMPOUND, METHOD, %REC, RPD, QUAL, LIMITS (MIN, MAX), ANALYSIS DATE, ANALYSIS BY. Rows include Methyl T-Butyl Ether - BS, Benzene - BS, Toluene - BS, Ethylbenzene - BS, Xylenes - BS.

ALS Test Batch ID: R291224 - Soil by NWVPH

Table with 9 columns: SPIKED COMPOUND, METHOD, %REC, RPD, QUAL, LIMITS (MIN, MAX), ANALYSIS DATE, ANALYSIS BY. Rows include C5-C6 Aliphatics - BS, >C6-C8 Aliphatics - BS, >C8-C10 Aliphatics - BS.

ALS Test Batch ID: R291217 - Soil by NWEPH

Table with 9 columns: SPIKED COMPOUND, METHOD, %REC, RPD, QUAL, LIMITS (MIN, MAX), ANALYSIS DATE, ANALYSIS BY. Rows include >C10-C12 Aliphatics - BS, >C12-C16 Aliphatics - BS, >C16-C21 Aliphatics - BS.





CERTIFICATE OF ANALYSIS

CLIENT:	Antea Group 4006 - 148th Ave NE Redmond, WA 98052	DATE:	3/16/2017
		ALS SDG#:	EV17030010
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Matt Miller		
CLIENT PROJECT:	STCG-0472 Millers Market		

LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
>C21-C34 Aliphatics - BSD	NWEPH	96.3	5		70	130	03/13/2017	EBS
>C10-C12 Aromatics - BS	NWEPH	89.3			70	130	03/13/2017	EBS
>C10-C12 Aromatics - BSD	NWEPH	91.2	2		70	130	03/13/2017	EBS
>C12-C16 Aromatics - BS	NWEPH	90.9			70	130	03/13/2017	EBS
>C12-C16 Aromatics - BSD	NWEPH	92.5	2		70	130	03/13/2017	EBS
>C16-C21 Aromatics - BS	NWEPH	92.7			70	130	03/13/2017	EBS
>C16-C21 Aromatics - BSD	NWEPH	93.9	1		70	130	03/13/2017	EBS
>C21-C34 Aromatics - BS	NWEPH	74.9			70	130	03/13/2017	EBS
>C21-C34 Aromatics - BSD	NWEPH	76.8	3		70	130	03/13/2017	EBS

APPROVED BY

Laboratory Director





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)

EV17030010

Date 2/27/17 Page 1 Of 4

PROJECT ID: <u>STC6 0472</u> <u>Millers Market</u>					ANALYSIS REQUESTED										OTHER (Specify)																					
REPORT TO COMPANY: <u>Antea Group</u>					<input type="checkbox"/> NWTPH-HCID <input type="checkbox"/> NWTPH-DX <input type="checkbox"/> NWTPH-GX <input checked="" type="checkbox"/> BTEX by EPA 8021 <input type="checkbox"/> BTEX by EPA 8260 <input type="checkbox"/> <input checked="" type="checkbox"/> MTBE by EPA 8021 <input type="checkbox"/> MTBE by EPA 8260 <input type="checkbox"/> <input type="checkbox"/> Halogenated Volatiles by EPA 8260 <input type="checkbox"/> Volatile Organic Compounds by EPA 8260 <input type="checkbox"/> EDB / EDC by EPA 8260 SIM (water) <input type="checkbox"/> EDB / EDC by EPA 8260 (soil) <input type="checkbox"/> Semivolatile Organic Compounds by EPA 8270 <input type="checkbox"/> Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM <input type="checkbox"/> PCB by EPA 8082 <input type="checkbox"/> Pesticides by EPA 8061 <input type="checkbox"/> <input type="checkbox"/> Metals-MTCA-5 <input type="checkbox"/> RCRA-9 <input type="checkbox"/> PFI <input type="checkbox"/> TAL <input type="checkbox"/> <input type="checkbox"/> Metals Other (Specify) <input type="checkbox"/> TCLP-Metals <input type="checkbox"/> VOA <input type="checkbox"/> Semi-Vol <input type="checkbox"/> Pest <input type="checkbox"/> Herbs <input type="checkbox"/>										(Hold) Pending analysis EPH/VPH (Hold pending analysis)																					
PROJECT MANAGER: <u>Matt Miller</u>																																				
ADDRESS: <u>4006 148th AVE NE</u>																																				
<u>Redmond WA 98052</u>																																				
PHONE: <u>425-269-7178</u> FAX: <u>425-869-1892</u>																																				
P.O. #: _____ E-MAIL: <u>matt.miller@anteagroup.com</u>																																				
INVOICE TO COMPANY: <u>Antea Group (S) Colony claim # 021164</u>																																				
ATTENTION: <u>See above</u>																																				
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 8061	Metals-MTCA-5	RCRA-9	PFI	TAL	Metals Other (Specify)	TCLP-Metals	VOA	Semi-Vol	Pest	Herbs	(Hold) Pending analysis	EPH/VPH (Hold pending analysis)	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?			
1. B-1-2.5ft	2/27/17	1350	Soil	1			X	X	X																								2			
2. B-1-5ft		1355		2																																
3. B-1-10ft		1410		3																																
4. B-1-15ft		1430		4																																
5. B-2-2.5ft		1300		5																																
6. B-2-5ft		1310		6																																
7. B-2-7.5ft		1330		7																																
8. B-3-2.5ft		0940		8																																
9. B-3-5ft		0945		9																																
10. B-3-10ft	2/27/17	1030	Soil	10			X	X	X																											

SPECIAL INSTRUCTIONS

(X) Added 3/9/17 standard TAT per Matt

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: [Signature] Antea Group, 2/28/17, 1400
 Received By: [Signature] ALS 3/1/17 2:15
 2. Relinquished By: _____
 Received By: _____

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis

10 5 3 2 1 SAME DAY

Fuels & Hydrocarbon Analysis

3 1 SAME DAY

OTHER: _____

Specify: _____

*Turnaround request less than standard may incur Rush Charges



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)

EVI7030010

Date 2/27/17 Page 3 Of 4

PROJECT ID: <u>STCG-0472</u> <u>Millers Market</u>					ANALYSIS REQUESTED										OTHER (Specify)						
REPORT TO COMPANY: <u>Antea Group</u>					<input type="checkbox"/> NWTPH-HCID <input type="checkbox"/> NWTPH-DX <input type="checkbox"/> NWTPH-GX <input checked="" type="checkbox"/> BTEX by EPA 8021 <input checked="" type="checkbox"/> MTBE by EPA 8021 <input type="checkbox"/> BTEX by EPA 8260 <input type="checkbox"/> MTBE by EPA 8260 <input type="checkbox"/> Halogenated Volatiles by EPA 8260 <input type="checkbox"/> Volatile Organic Compounds by EPA 8260 <input type="checkbox"/> EDB / EDC by EPA 8260 SIM (water) <input type="checkbox"/> EDB / EDC by EPA 8260 (soil) <input type="checkbox"/> Semivolatile Organic Compounds by EPA 8270 <input type="checkbox"/> Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM <input type="checkbox"/> PCB by EPA 8082 <input type="checkbox"/> Pesticides by EPA 8081 <input type="checkbox"/> Metals-MTCA-5 <input type="checkbox"/> RCRA-8 <input type="checkbox"/> PFI <input type="checkbox"/> TAL <input type="checkbox"/> Metals Other (Specify) <input type="checkbox"/> TCLP-Metals <input type="checkbox"/> VOA <input type="checkbox"/> Semi-Vol <input type="checkbox"/> Pest <input type="checkbox"/> Herbs	Hold Pending Analysis EPH / VPH (Hold pending analysis)		NUMBER OF CONTAINERS RECEIVED IN GOOD CONDITION?													
PROJECT MANAGER: <u>Matt Miller</u>																					
ADDRESS: <u>4006 148th Ave NE</u> <u>Redmond WA</u>																					
PHONE: <u>425-269-7178</u> FAX: <u>425-869-1892</u>																					
P.O. #: _____ E-MAIL: <u>mattmiller@anteagroup.com</u>																					
INVOICE TO COMPANY: <u>Colony claim # 021164</u>																					
ATTENTION: _____																					
ADDRESS: _____																					
SAMPLE I.D.	DATE	TIME	TYPE	LAB#																	
1. B-6-1.5ft	2/27/17	1600	Soil	21								X	X	X							
2. B-6-2.5ft		1615		22			X	X	X												
3. B-6-5ft		1620		23			X	X	X												
4. B-6-6ft		1630		24			X	X	X												
5. B-6-10ft		1635		25										X							
6. B-6-15ft		1640	Soil	24										X							
7. B-1		1445	AQ	27			X	X	X												
8. B-2		1345		28			X	X	X												
9. B-3		1100		29			X	X	X												
10. B-4	2/27/17	1145	AQ	30			X	X	X								2				

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: [Signature] Antea Group, 2/28/17, 1400
 Received By: [Signature] ALS 2/17 2:15

2. Relinquished By: _____
 Received By: _____

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis

10 5 3 2 1 SAME DAY

Fuels & Hydrocarbon Analysis

3 1 SAME DAY

OTHER:

Specify: _____

*Turnaround request less than standard may incur Rush Charges

