PARTNER
Engineering and Science, Inc.®

ADDITIONAL SUBSURFACE INVESTIGATION REPORT

Cascade Village
16950-17060 116th Avenue Southeast
Renton, Washington 98058

November 24, 2015
Partner Project Number: 15-139176.4

Prepared for:

City of Renton
1055 South Grady Way
Renton, Washington 98057

Engineers who understand your business

PARTNER
Engineering and Science, Inc.

November 24, 2015

Lawrence J. Warren
City of Renton
1055 South Grady Way
Renton, Washington 98057

Subject: Additional Subsurface Investigation Report
Cascade Village
16950-17060 116th Avenue Southeast
Renton, Washington 98058
Partner Project Number: 15-139176.4

Dear Mr. Warren:

Partner Engineering and Science, Inc. (Partner) is pleased to provide the results of the assessment performed on the above-referenced property. The following report describes the field activities, methods, and findings of the Additional Subsurface Investigation conducted at the above-referenced property.

This assessment was performed utilizing methods and procedures consistent with good commercial or customary practices designed to conform to acceptable industry standards. The independent conclusions represent Partner's best professional judgment based upon existing conditions and the information and data available to us during the course of this assignment.

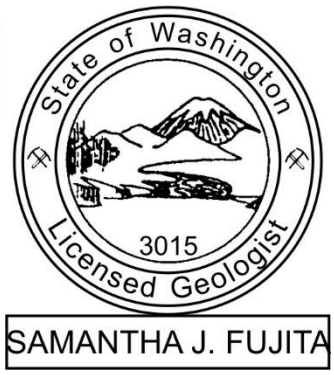
We appreciate the opportunity to provide these services. If you have any questions concerning this report, or if we can assist you in any other matter, please contact Summer Gell at (214) 666-6800.

Sincerely,

Partner Engineering and Science, Inc.

Hunter White
Project Assessor

Eric Englehart
Project Geologist



Samantha J. Fujita, PG
Regional Manager – Subsurface Investigation

Summer Gell
Principal

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1.0 INTRODUCTION

1.1 Purpose

The purpose of the investigation was to evaluate the potential impact of chlorinated hydrocarbons to soil and/or groundwater as a consequence of a release or releases from the former dry cleaning facility. The City of Renton provided project authorization of Partner Proposal Number P15-139176.4.

1.2 Limitations

This report presents a summary of work conducted by Partner. The work includes observations of site conditions encountered and the analytical results provided by an independent third party laboratory of samples collected during the course of the project. The number and location of samples were selected to provide the required information. However, it cannot be assumed that the limited available data are representative of subsurface conditions in areas not sampled.

Conclusions and/or recommendations are based on the observations, laboratory analyses, and the governing regulations. Conclusions and/or recommendations beyond those stated and reported herein should not be inferred from this document.

Partner warrants that the environmental consulting services contained herein were accomplished in accordance with generally-accepted practices in the environmental engineering, geology, and hydrogeology fields that existed at the time and location of work. No other warranties are implied or expressed.

1.3 User Reliance

Partner was engaged by The City of Renton (the Addressee), or their authorized representative, to perform this investigation. The engagement agreement specifically states the scope and purpose of the investigation, as well as the contractual obligations and limitations of both parties. This report and the information therein, are for the exclusive use of the Addressee. This report has no other purpose and may not be relied upon, or used, by any other person or entity without the written consent of Partner. Third parties that obtain this report, or the information therein, shall have no rights of recourse or recovery against Partner, its officers, employees, vendors, successors or assigns. Any such unauthorized user shall be responsible to protect, indemnify and hold Partner, the Addressee and their respective officers, employees, vendors, successors and assigns harmless from any and all claims, damages, losses, liabilities, expenses (including reasonable attorneys' fees) and costs attributable to such use. Unauthorized use of this report shall constitute acceptance of, and commitment to, these responsibilities, which shall be irrevocable and shall apply regardless of the cause of action or legal theory pled or asserted.

This report has been completed under specific Terms and Conditions relating to scope, relying parties, limitations of liability, indemnification, dispute resolution, and other factors relevant to any reliance on this report. Any parties relying on this report do so having accepted the Terms and Conditions for which this report was completed.

2.0 SITE BACKGROUND

2.1 Site Description

The subject property consists of one parcel of land totaling approximately 13.63 acres located on the east side of 116th Avenue Southeast and the southwest side of 119th Street Southeast within a mixed residential and commercial area of King County, Washington. The subject property is currently developed with five structures totaling approximately 102,000 square feet, which were constructed in between 1959 and 1985 and are occupied by Cascade Village for commercial and retail use. Current tenants include Barber Shop, Pantel Tactical, Iglesia Pentecostal Bethel, Khalsa Gurmat School, Uhaul, and Only a Dollar Plus. In addition to the structures, the subject property is also improved with asphalt-paved parking areas and associated landscaping.

The subject property is bound by baseball fields to the north, single-family residences and a learning center to the east, a commercial shopping center and apartments to the south, and single-family residences and apartments to the west. Refer to Figure 1 for a site plan showing site features and surrounding properties.

2.2 Site History

Partner completed a Phase I Environmental Site Assessment (Phase I) Report, dated May 22, 2015, prepared on behalf of AMERCO Real Estate Company. Based on the information reviewed and the site reconnaissance, the subject property consists of one parcel of land totaling approximately 13.63 acres located on the east side of 116th Avenue Southeast and the southwest side of 119th Street Southeast within a mixed residential and commercial area of King County, Washington. The subject property is currently developed with five structures totaling approximately 102,000 square feet, which were constructed in between 1959 and 1985 and are occupied by Cascade Village for commercial and retail use. Current tenants include Barber Shop, Pantel Tactical, Iglesia Pentecostal Bethel, Khalsa Gurmat School, Uhaul, and Only a Dollar Plus. In addition to the structures, the subject property is also improved with asphalt-paved parking areas and associated landscaping.

According to available historical sources, the subject property was formerly undeveloped as early as 1924; and developed with the current structures in 1959, 1960, 1961, 1985, and 1986. Tenants on the subject property have included various retail and commercial tenants (1959-Present).

During the on-site reconnaissance, Partner observed a vacant tenant space (17028 116th Avenue Southeast) that was a former dry cleaning facility. The dry cleaning facility, Cascade Cleaner, occupied the subject property from at least 1977 until approximately 2010. According to a prior report prepared by Surveys Inc. in 2007, separator water and spent solvents were stored in 30-gallon drums and recycled through a licensed hazardous waste disposal company. The drums and solvent were stored on a secondary spill containment pallet during the 2007 assessment. Since the 1930s, dry cleaning operations have typically used chlorinated solvents, particularly tetrachloroethylene (PCE), during the dry cleaning process. These solvents, even when properly stored and disposed of, can be released from these facilities in small, frequent releases through floor drains, cracked concrete, and sewer systems. Chlorinated solvents are highly mobile chemicals that can easily accumulate in soil and migrate to groundwater beneath a facility. It should be noted that the dry cleaner operated during a time of little to no regulatory oversight. In 2008, a pre-existing monitoring well located presumably down-gradient of the dry cleaning facility was sampled

for volatile organic compounds (VOCs). Based on Partner's site reconnaissance, the monitoring well appears to be within approximately 20 feet of the entrance to the former dry cleaning facility. While the sample analyzed was below the reportable limit for VOCs, a recommendation to conduct additional assessments was noted to evaluate whether impacts to soil had occurred. Based on the nature of chemicals used, the long duration of occupancy, and the lack of a subsurface investigation, the presence of the former dry cleaning facility represented a recognized environmental condition (REC).

Partner completed a Phase II Environmental Site Assessment (Phase II) Report, dated July 22, 2015, prepared on behalf of AMERCO Real Estate Company. Three borings were advanced for the collection of soil and soil gas samples. Soil gas samples contained concentrations of trans-1,2,-dichloroethylene (DCE); cis-1,2-DCE; PCE; and trichloroethylene (TCE) at levels exceeding Washington Department of Ecology (DOE) regulatory guidelines. Soil samples contained concentrations of PCE and TCE at levels exceeding DOE regulatory guidelines. Drilling refusal was encountered at depths ranging from 5.5 to seven feet below ground surface (bgs).

Partner completed an additional Phase II Report, dated October 13, 2015, prepared on behalf of the City of Renton. Three exterior borings were advanced for the collection of soil and/or groundwater samples. Refusal was encountered at an approximate depth of 12 feet bgs in each boring advanced using a Geoprobe Model 9500 direct push rig. Groundwater was not encountered in the borings; however, a groundwater sample was collected from the on-site monitoring well (MW-5), which was presumed to represent a localized perched zone. Soil samples contained concentrations of PCE at levels exceeding DOE regulatory guidelines. The analyzed groundwater sample did not contain detectable concentrations of VOCs.

In an email chain dated October 13, 2015, the City of Renton requested that Partner conduct an additional investigation to include the installation of three permanent monitor wells at pre-determined locations to investigate the potential impact of VOCs to groundwater.

2.3 Geology and Hydrogeology

Based on a review of the United States Geological Survey (USGS) Renton, Washington Quadrangle topographic map, the subject property is situated at an elevation approximately 450 feet above mean sea level, and the local topography is sloping gently to the southeast. Refer to Figure 2 for a topographic map of the site vicinity.

The subject property lies in the Puget Sound Lowland, a series of north to south trending valleys ranging from British Columbia to Eugene, Oregon and bordered by the Cascade Range and Olympic Mountains. Surfical soils in the Puget Sound Lowland are mainly formed in glacial drift deposits from the last period of glaciation, about 10-14,000 years ago. Underlying the young glacial deposits is sediment deposited during previous or interglacial periods.

Based on borings advanced during this investigation, the underlying subsurface consists predominantly of glacial till from the ground surface to approximately 82 feet below ground surface (bgs). Refer to Appendix A for boring logs from this investigation.

Groundwater was initially encountered during this investigation in two zones. The shallow groundwater zone was initially encountered at depths ranging from 25 to 35 feet bgs, and rose to depths ranging from

12.01 to 13.91 feet bgs. The deep groundwater zone was initially encountered at a depth of approximately 72 feet bgs, and rose to a depth of 64.67 feet bgs.

3.0 FIELD ACTIVITIES

Refer to Table 1 for a summary of the borings, sampling schedule and laboratory analyses for this investigation. The scope of the Additional Subsurface Investigation included the installation of three monitoring wells and the collection and analysis of representative soil and groundwater samples.

3.1 Preparatory Activities

3.1.1 Utility Clearance

Partner notified Washington One-Call to clear public utility lines as required by law at least 48 hours prior to drilling activities. Washington One-Call issued ticket number 15177550 for the project.

In addition, Partner subcontracted with Applied Professional Services, Inc. (APS) on November 3, 2015 to clear locations of MW-2 and MW-3 of utilities. The location of monitoring well MW-1 had been cleared during a previous investigation. APS systematically free-traversed each proposed boring location with a radio detection receiver. Monitoring well placement was modified as necessary based on the geophysical survey results to avoid damaging underground features.

3.1.2 Health and Safety Plan

Partner reviewed the site-specific Health and Safety Plan with on-site personnel involved in the project prior to the commencement of drilling activities.

3.2 Drilling Equipment

On November 2, 3, and 9, 2015, Partner subcontracted with Cascade Drilling (Cascade) to provide and operate drilling equipment. Cascade, under the direction of Partner, installed monitoring wells MW-1, MW-2, and MW-3 with a truck-mounted CME 75 hollow-stem auger (HSA) rig. Sampling equipment was decontaminated between sample intervals and boring locations to prevent cross-contamination.

3.3 Boring Locations

Monitoring wells MW-1 and MW-2 were installed down-gradient of the former dry cleaning facility to the southeast and southwest, respectively. Monitoring well MW-3 was installed up-gradient and to the northeast of the former dry cleaning facility. Monitoring well placement was limited/modified due to utility conflicts. Refer to Figure 3 for a map indicating boring locations.

3.4 Soil Sampling

Monitoring wells MW-1 through MW-3 were overlain by asphalt, which was penetrated using a coring attachment advanced by the HSA drill. Monitoring wells MW-1 through MW-3 were advanced to terminal depths of 82, 40, and 35 feet bgs, respectively.

Monitoring wells MW-1 through MW-3 were completed using five-foot long, 4.25-inch inner diameter hollow augers advanced by the HSA rig. Soil was penetrated by a cutting bit attached to the lead auger, generating loose soil that is lifted to the surface along the exterior auger flights. Loose soils encountered within the augers were released by driving the augers vertically up and down. At the desired sampling depth, a split spoon sampler was driven into the soil using a hammer system to allow undisturbed soil to

enter the sampler liner a maximum distance of 18 inches or until refusal. The sampler was retrieved from the subsurface and the soil-filled liner was removed.

Samples were collected from stainless steel liner using a disposable plastic syringe and retained in two methanol-preserved volatile organics analysis (VOA) vials in accordance with United States Environmental Protection Agency (EPA) Method 5035 sampling protocol. The VOA vials were labeled for identification and stored in an iced cooler. The soil was visually inspected for discoloration, monitored for odors, classified in accordance with the Unified Soil Classification System, placed in a sealable plastic bag, and field-screened with a photoionization detector (PID). PID readings taken from soils collected from ten to 40 feet bgs in MW-2 suggested the presence of elevated VOC concentrations.

Soil samples were collected from each boring at five foot intervals from five feet bgs to the terminal depth.

3.5 Groundwater Monitoring Well Construction

The groundwater monitoring wells consisted of 2-inch diameter 0.010-inch slotted schedule 40 polyvinyl chloride (PVC) screens with a bottom cap and sufficient 2-inch diameter schedule 40 PVC riser to reach the ground surface. The PVC sections were attached with threaded connections and the wellhead was capped with a locking cap.

The groundwater monitoring wells were constructed within the hollow augers. The well casing and screen were inserted within the augers to approximately one foot above the terminal depth at each boring and 10-20 mesh filter pack sand was poured into the annulus from the boring terminus to approximately two feet above the screen intervals to form a filter pack. Dry granular bentonite was placed atop the filter pack and the remainder of the annulus to approximately one foot bgs was backfilled with pre-mixed cement-bentonite grout to form a seal. The augers were withdrawn from the subsurface as the well was constructed and the depth to the annulus materials was periodically measured to verify that bridging was not occurring. The wellheads were enclosed in eight-inch diameter, flush-mounted, traffic-rated well boxes.

Monitoring wells MW-1 through MW-3 were screened from 67 to 82 feet bgs, 25 to 40 feet bgs, and 20 to 35 feet bgs, respectively.

After monitoring wells were constructed, the wells were developed using the surge and purge method until relatively clear groundwater was produced.

3.6 Groundwater Sampling

On November 12, 2015, Partner subcontracted with Blaine Tech Services, Inc. (BlaineTech) to provide and operate well sampling equipment. Refer to Appendix C for a discussion of general field procedures for the groundwater elevation measurements, well purging, and sampling and to Appendix D for the groundwater monitoring field sheets. Low-flow purging and sampling was performed for this site. Purge water parameters were measured using a YSI 556 multi-parameter water quality meter. One groundwater sample was collected in replicate and a trip blank sample was prepared for each day of fieldwork for QA/QC to evaluate the precision of the laboratory analysis and to evaluate the potential for cross-contamination during sample handling and/or transportation, respectively.

Groundwater samples were collected from each monitoring well.

3.7 Post-Sampling Activities

Generated soil cuttings and decontamination water were containerized in properly labeled and sealed 55-gallon drums and stored on-site. The derived waste will be profiled and transported under proper waste manifest to an appropriate licensed off-site facility for recycling and/or disposal pending the necessary laboratory analysis results for waste profiling.

4.0 LABORATORY ANALYSIS

4.1 Laboratory Analysis

Partner collected 27 soil samples on November 2, 3, and 9, 2015 and three groundwater samples on November 12, 2015, which were transported in an iced cooler under proper chain-of-custody protocol to ESN-NW, a state-certified laboratory (Washington Department of Ecology Environmental Laboratory Accreditation Program certificate number C076) in the City of Bellevue, Washington, for analysis on November 4, 10, and 12, 2015. Based on field-screening results, visual observations, and/or olfactory observations, two soil samples per boring (six soil samples total) and each groundwater sample was analyzed for VOCs in accordance with EPA Method 8260. The remaining soil samples were placed on hold at the laboratory.

4.2 Laboratory Analytical Results

Laboratory analytical results are included in Appendix B and discussed below.

4.2.1 Soil Sample Analytical Results

PCE was detected in soil samples MW2-15 and MW2-25 at concentrations of 9.8 milligrams per kilogram (mg/kg) and 4.8 mg/kg, respectively.

TCE was detected in soil sample MW2-15 at a concentration of 0.13 mg/kg.

cis-1,2-DCE was detected in soil sample MW2-15 at a concentration of 0.12 mg/kg.

No other VOCs were detected at concentrations above the laboratory reporting limits (RLs)

Refer to Table 3 for a summary of the soil sample VOCs laboratory analysis results.

4.2.2 Groundwater Sample Analytical Results

PCE; TCE; 1,1-DCE; cis-1,2-DCE; and vinyl chloride were detected in groundwater sample MW-2 at concentrations of 6,700 micrograms per liter (μg/L), 77 μg/L, 6.3 μg/L, 22 μg/L, and 12 μg/L, respectively.

PCE was detected in groundwater samples MW-1 and MW-3 at concentrations of 2.5 μg/L and 1.7 μg/L, respectively.

No other VOCs were detected at concentrations above the laboratory RLs.

Refer to Table 4 for a summary of the groundwater sample VOCs laboratory analysis results.

5.0 DISCUSSION AND CONCLUSIONS

5.1 Regulatory Agency Guidance

The DOE promulgated the Model Toxics Control Act (MTCA) Cleanup Regulation (Chapter 173-340 of the Washington Administrative Code [WAC]) to establish administrative processes and standards for identifying, investigating, and cleaning up facilities where there has been a release or threatened release of a hazardous substance or substances that may pose a threat to human health and/or the environment. The MTCA Cleanup Regulation provides Method A for establishing cleanup levels for groundwater and soil for unrestricted land use.

5.2 Discussion

PCE was detected in soil samples MW2-15 and MW2-25 at concentrations exceeding the applicable MTCA Method A soil cleanup level of 0.05 mg/kg. TCE was detected in soil sample MW2-15 at a concentration exceeding the applicable MTCA Method A soil cleanup level of 0.03 mg/kg. VOCs were not detected in soil samples collected from MW-1 and MW-3.

PCE; TCE; 1,1-DCE; cis-1,2-DCE; and vinyl chloride were detected in groundwater sample MW-2 at concentrations exceeding the applicable MTCA Method A groundwater cleanup levels. VOCs were not detected in groundwater samples MW-1 and MW-3 above applicable DOE cleanup levels for groundwater.

MW-2 and MW-3 were screened in the shallower perched groundwater zone and MW-1 was screened in the deeper regional aquifer, with MW-2 presumed to be located hydrologically down-gradient of the former dry cleaner.

5.3 Summary and Conclusions

Partner conducted an Additional Subsurface Investigation at the subject property to investigate the potential impact of VOCs to soil and/or groundwater as a consequence of a release or releases from the former dry cleaning facility. The scope of the Additional Subsurface Investigation included the installation of three monitoring wells. Six soil samples and three groundwater samples were analyzed for VOCs.

Subsurface lithology encountered in the upper 20 feet bgs consisted of clay (CL), silt (ML), and sand (SP), followed by sand (SP) and silt (ML) to 82 feet bgs. Groundwater was initially encountered during this investigation in two zones. The shallow groundwater zone was initially encountered at depths ranging from 25 to 35 feet bgs, and rose to depths ranging from 12.01 to 13.91 feet bgs. The deep groundwater zone was initially encountered at a depth of approximately 72 feet bgs, and rose to a depth of 64.67 feet bgs.

Based on field observations and analysis of soil and groundwater samples, there is evidence that soil and groundwater is impacted with VOCs. The highest concentrations of VOCs are isolated hydrologically down-gradient of the former dry cleaning facility, with the shallow groundwater zone exhibiting a significantly higher concentration of PCE than the deep groundwater zone.

Based on the Subsurface Investigation, there is evidence of the release of VOCs to soil and groundwater, in addition to the impact to soil gas identified during Partner's former investigations. Partner recommends that a site mitigation plan be developed to address the on-site impacts.

TABLES

PARTNER

Table 1: Summary of Investigation Scope
16950-17060 116th Avenue Southeast
Renton, Washington 98058
Partner Project Number 15-139176.4
July 2015-November 2015

Boring Identification	Location	Terminal Depth (feet bgs)	Matrix Sampled	Sampling Depths* (feet bgs)	Target Analytes
B1***	Interior; northeast portion of the former dry cleaning facility	7**	Soil Gas	4	VOCs
			Soil	5	VOCs
B2***	Interior; central portion of the former dry cleaning facility	7**	Soil Gas	4	VOCs
			Soil	5, 7	VOCs
B3***	Interior; southwest portion of the former dry cleaning facility	5.5**	Soil Gas	4	VOCs
			Soil	5.5	VOCs
B4***	Exterior; southwest of former dry cleaning facility	12**	Soil	5, 9, 12	VOCs
B5***	Exterior; northeast of former dry cleaning facility	12**	Soil	5, 9, 12	VOCs
B6***	Exterior; southwest of former dry cleaning facility	9**	Soil	5, 9	VOCs
MW-1	Exterior; southwest of former dry cleaning facility	82	Groundwater	64.67	VOCs
			Soil	5, 10, 15, 20, 25, 30, 35, 40, 45, 55, 60, 70, 75	
MW-2	Exterior; southwest of Building C	40	Groundwater	13.91	VOCs
			Soil	5, 10, 15, 20, 25, 30, 35	
MW-3	Exterior; northeast of former dry cleaning facility	35	Groundwater	12.01	VOCs
			Soil	5, 10, 15, 20, 25, 30, 35	
MW-5***	Exterior; northeast of former dry cleaning facility	NA	Groundwater	NA	VOCs

Notes:

*Depths in bold analyzed for for volatile organic compounds (VOCs) in accordance with United States Environmental Protection Agency (EPA) Methods 8260B (soil/groundwater) or TO-15 (soil gas).

**Refusal encountered at the terminal depth

***= Samples from previous subsurface investigation performed by Partner

bgs = below ground surface

Table 2: Previous Soil Gas Sample VOCs Laboratory Results
16950-17060 116th Avenue Southeast
Renton, Washington 98058
Partner Project Number 15-139176.2
July 2015

EPA Method	VOCs via 8260B					
Units	µg/m³					
Analyte	MTCA Method B	MTCA Method C	EPA RSLs (Commercial)	SG1-4	SG2-4	SG3-4
Vinyl Chloride	2.8	28	NA	<53	<53	<53
trans-1,2,-Dichloroethene	320	700	NA	<100	1,400	150
cis-1,2-Dichloroethene	160	350	NA	<100	26,000	6,700
Tetrachloroethene (PCE)	4.2	42	NA	<170	530,000	19,000
Trichloroethene (TCE)	1.0	10	NA	<140	12,000	4,900
Benzene	3.2	32	NA	1,500	1,000	2,700
Toluene	22,000	49,000	NA	24,000	17,000	38,000
Ethylbenzene	4,600	10,000	NA	3,900	3,400	6,400
Total Xylenes	460	1,000	NA	21,200	20,100	35,200
Ethanol	NA	NA	NA	3,100	2,300	7,400
Hexane	3,200	7,000	N/A	2,400	1,800	5,200
Cyclohexane	NA	NA	876,000	1,000	900	2,100
2,2,4-Trimethylpentane	NA	NA	NA	2,300	660	1,700
Heptane	NA	NA	NA	2,700	1,700	4,600
Cumene	1,800	4,000	N/A	160	<100	280
Propylbenzene	NA	NA	NA	850	780	1,500
4-Ethyltoluene	NA	NA	NA	3,800	3,600	6,800
1,3,5-Trimethylbenzene	27	60	NA	860	860	1,500
1,2,4-Trimethylbenzene	27	60	NA	3,100	3,000	5,500
1,3-Butadiene	NA	NA	14	<56	<56	180
Acetone	NA	NA	4,526,000	<600	<600	1,300
4-Methyl-2-pentanone	NA	NA	438,000	<100	<100	130

Notes:

VOCs = volatile organic compounds

< = not detected above indicated laboratory reporting limit (RL)

EPA = United States Environmental Protection Agency

Table 2: Previous Soil Gas Sample VOCs Laboratory Results
16950-17060 116th Avenue Southeast
Renton, Washington 98058
Partner Project Number 15-139176.2
July 2015

μg/m³ = micrograms per cubic meter

EPA RSLs= Risk based Regional Screening Levels for EPA Region 9

Method B= Unrestricted Use Screening Levels (Washington State Department of Ecology, Model Toxics Control Act-May 2014)

Method C=Industrial Screening Levels (Washington State Department of Ecology, Model Toxics Control Act-May 2014)

ND = not detected above laboratory RLs

NA = not applicable

Highlighted values exceed one or more regulatory guideline

Table 3: Soil Sample VOCs Laboratory Results
16950-17060 116th Avenue Southeast
Renton, Washington 98058
Partner Project Number 15-139176.2
July 2015-November 2015

EPA Method	VOCs via 8260B																	
Units	(mg/kg)																	
Analyte	MTCA Method A	B1-5*	B2-7*	B3-5.5*	B4-5*	B4-9*	B4-12*	B5-5*	B5-9*	B5-12*	B6-5*	B6-9*	MW1-15	MW1-45	MW2-15	MW2-25	MW3-10	MW3-25
Vinyl Chloride	0.24	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
trans-1,2,-Dichloroethene	1,600	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
cis-1,2-Dichloroethene	160	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.12	<0.05	<0.05	<0.05
Tetrachloroethene (PCE)	0.05	0.04	2.5	4.2	6.7	14	78	<0.02	<0.02	<0.02	0.06	0.19	<0.02	<0.02	9.8	4.8	<0.02	<0.02
Trichloroethene (TCE)	0.03	<0.02	<0.02	0.06	<0.02	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.13	<0.02	<0.02	<0.02
Other VOCs	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

VOCs = volatile organic compounds

EPA = United States Environmental Protection Agency

*= Samples from previous subsurface investigation performed by Partner

mg/kg = miligrams per kilogram

Method A= Soil cleanup levels for unrestricted land use (Washington State Department of Ecology, Model Toxics Control Act-May 2014)

< = not detected above indicated laboratory reporting limit (RL)

ND = not detected above laboratory RLs

NA = not applicable

Highlighted values exceed the regulatory guideline

Table 4: Groundwater Sample VOCs Laboratory Results
16950-17060 116th Avenue Southeast
Renton, Washington 98058
Partner Project Number 15-139176.3
October 2015-November 2015

EPA Method	VOCs via 8260B				
Units	(µg/L)				
Analyte	MTCA Method A	MW-1	MW-2	MW-3	MW-5*
Vinyl Chloride	0.2	<0.2	12	<0.2	<0.2
1,1-Dichloroethane	1,600	<1.0	6	<1.0	<1.0
cis-1,2-Dichloroethene	16	<1.0	22	<1.0	<1.0
PCE	5	2.5	6,700	1.7	<1.0
TCE	5	<1.0	77	<1.0	<1.0
Other VOCs	NA	ND	ND	ND	ND

Notes:

VOCs = volatile organic compounds

EPA = United States Environmental Protection Agency

µg/L = micrograms per liter

Method A= Soil cleanup levels for unrestricted land use (Washington State Department of Ecology, Model Toxics Control Act-May 2014)

< = not detected above indicated laboratory reporting limit (RL)

ND = not detected above laboratory RLs

NA = not applicable

*= Samples from previous subsurface investigation performed by Partner

FIGURES

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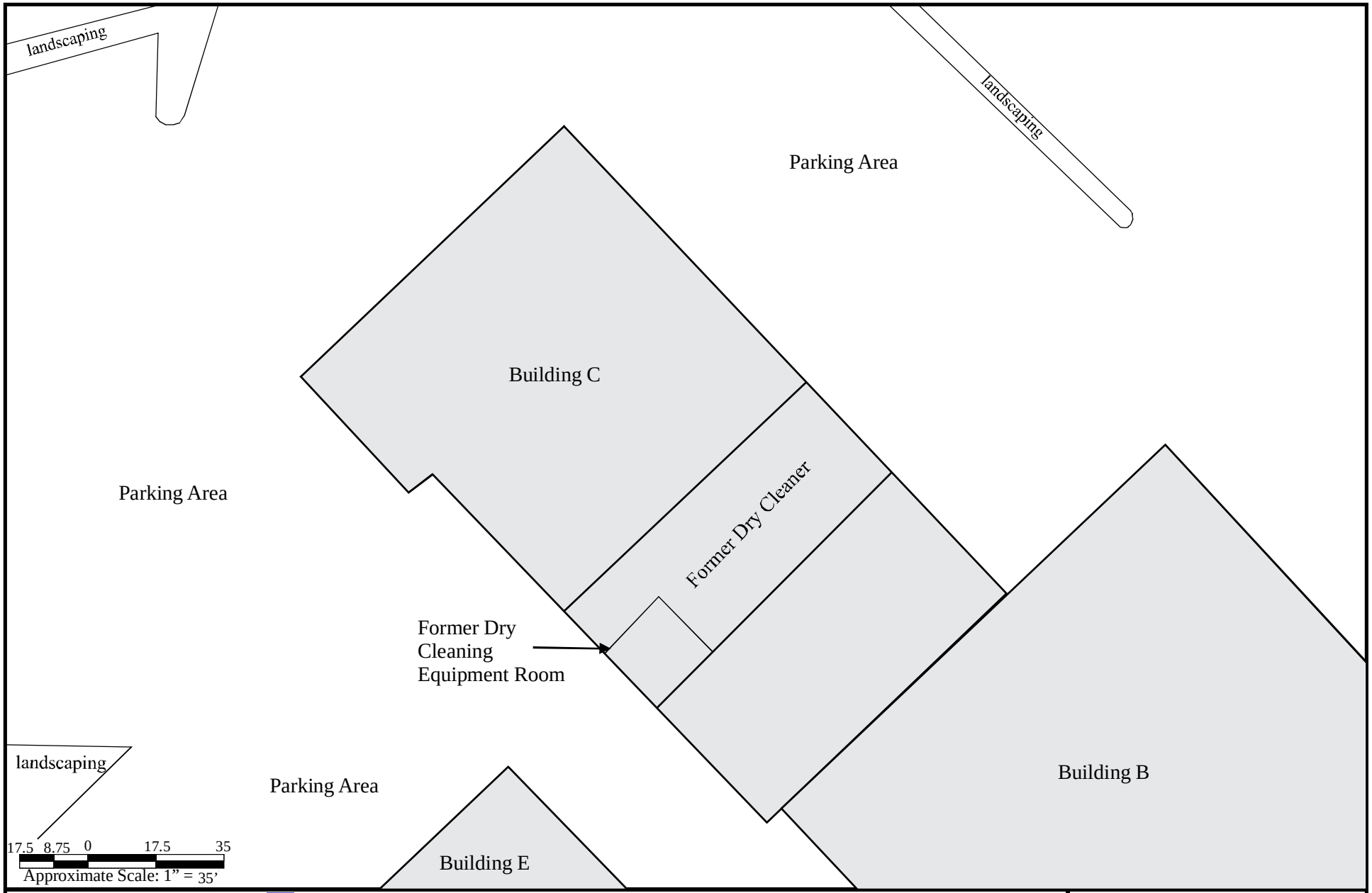


Legend

Subject Site

N

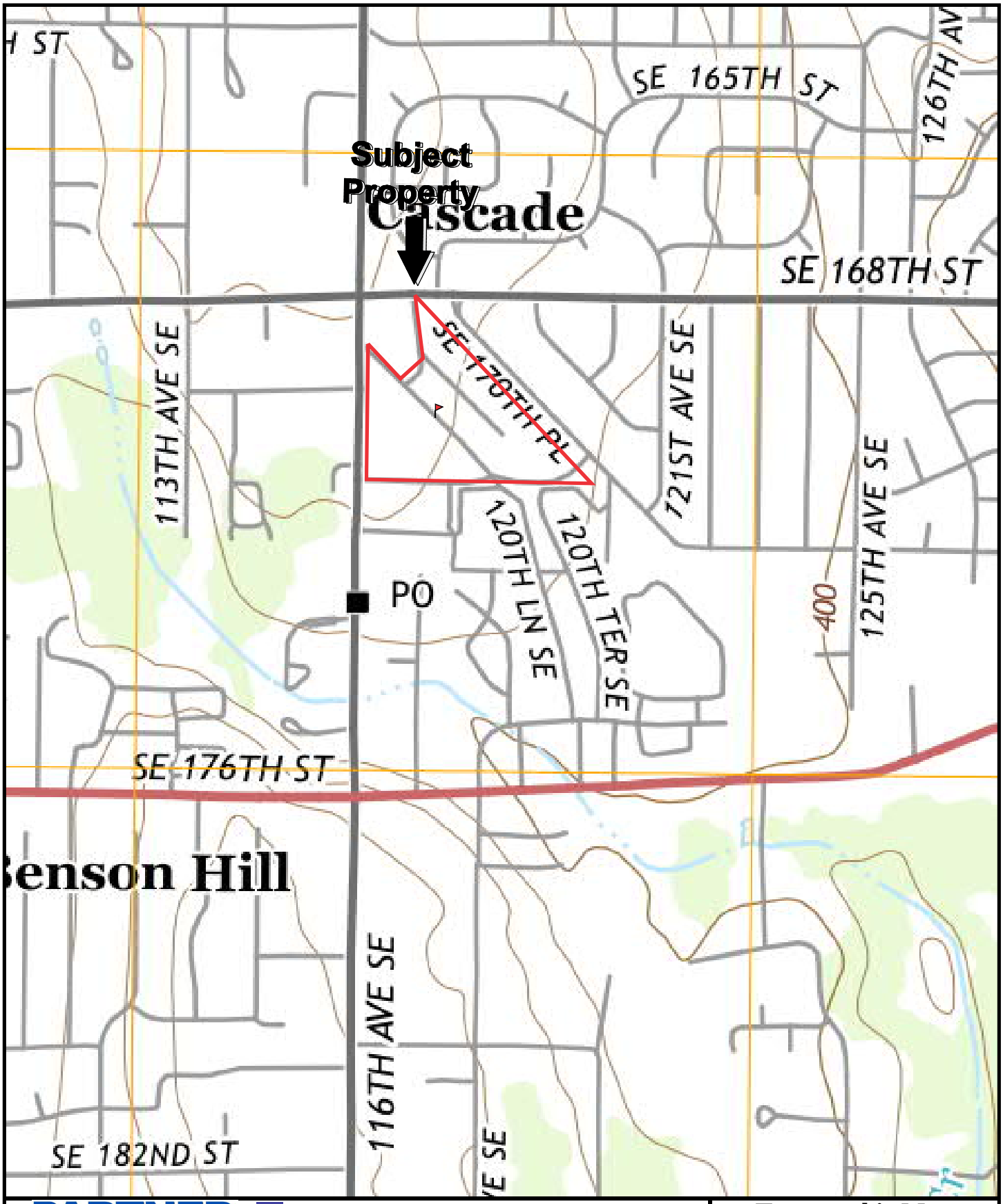
PARTNER
Engineering and Science, Inc.
2154 Torrance Boulevard, Suite 200
Torrance, California 90501

Project Number: 15-139176.4

Site Plan

Figure	Prepared By	Date
1	H. White	November 2015

16950-17060 116th Avenue Southeast
Renton, Washington 98058



PARTNER
Engineering and Science, Inc.
2154 Torrance Boulevard, Suite 200
Torrance, California 90501

Project Number: 15-139176.4

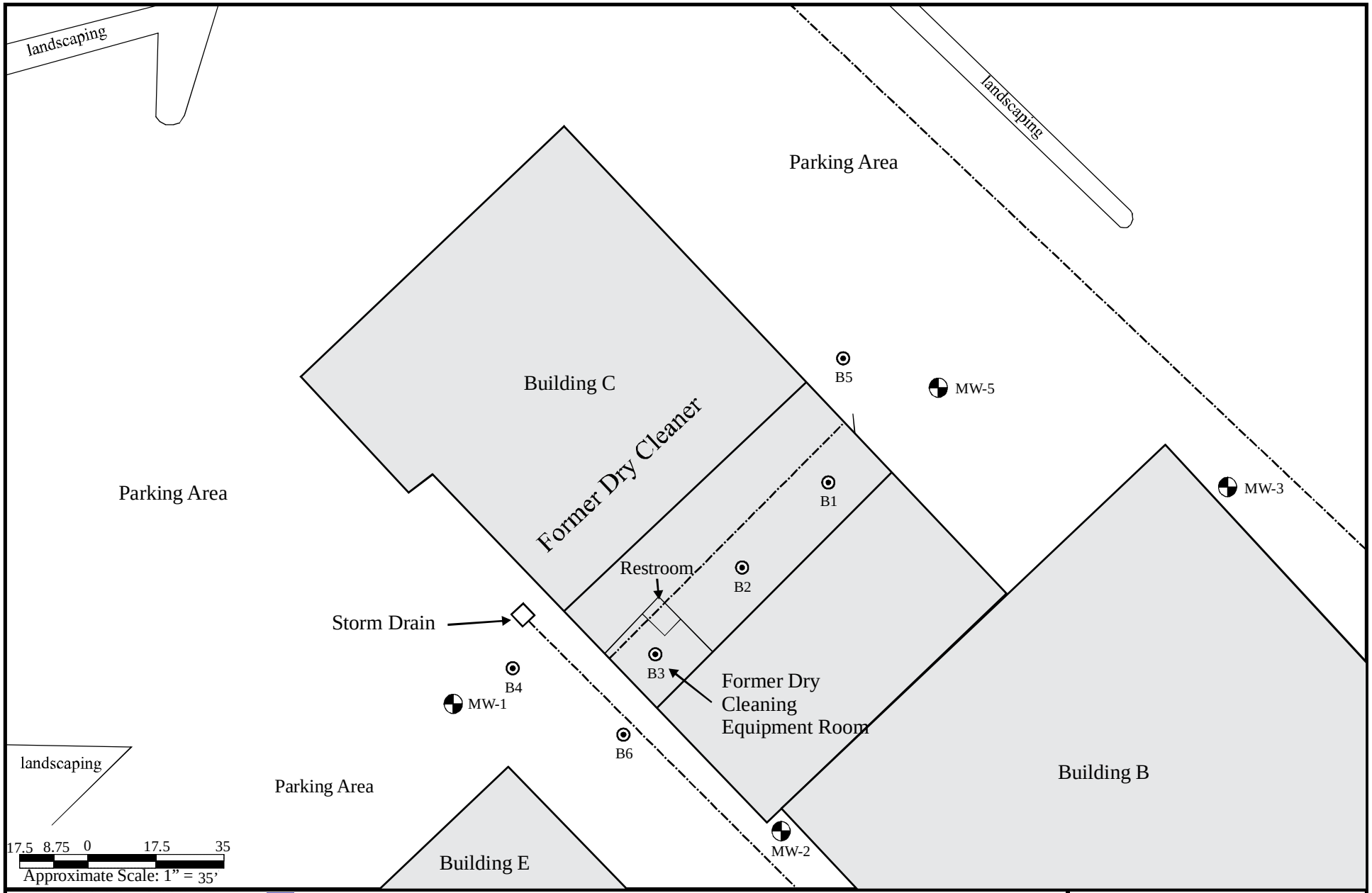
N

USGS Renton, WA Quadrangle
Version: 2014

Topographic Map

Figure	Prepared By	Date
2	H. White	November 2015

16950-17060 116th Avenue Southeast
Renton, Washington 98058



Legend

Sewer Line

Monitoring Well

Former Boring Location

N

PARTNER
Engineering and Science, Inc.
2154 Torrance Boulevard, Suite 200
Torrance, California 90501

Project Number: 15-139176.4

Sample Location Map

Figure	Prepared By	Date
3	H. White	November 2015

16950-17060 116th Avenue Southeast
Renton, Washington 98058

APPENDIX A: BORING LOGS

PARTNER

Boring Number:	MW-1				Page 1 of 1
Location:	Southeast of former dry cleaning facility			Date Started:	11/2/2015
Site Address:	16950-17060 116th Avenue Southeast			Date Completed:	11/2/2015
	Renton, Washington 98058			Depth to Groundwater:	72 feet bgs
Project Number:	15-139176.4			Field Technician:	H. White
Drill Rig Type:	Hollow Stem Auger			Partner Engineering and Science	
Sampling Equipment:	Split Spoon			2154 Torrance Boulevard, Suite 200	
Borehole Diameter:	8.25-inches			Torrance, California 90501	

Depth	Sample	PID	USCS	Description	Notes
3			SP	0.5'-5.0' Brown medium-fine SAND, little fine Gravel, trace Clay; Dry.	6-inches of asphalt at surface
6	MW1-5	1.9			
9			SP	5.0'-10.0' Gray and brown medium-fine SAND, some Clay, little fine Gravel; Dry.	2" PVC riser from 0 to 67 feet bgs
12	MW1-10	0.9			0.010" Slotted PVC Screen from 67 to 82 feet bgs
15	MW1-15	0.0	SP	10.0'-20.0' Gray medium-fine SAND, little fine Gravel; Dry.	
18					
21	MW1-20	0.0	SP	20.0'-25.0' Gray medium-fine SAND, some fine Gravel, trace Clay; Dry.	
24					
27	MW1-25	0.9	SP/GP	25.0'-30.0' Gray medium-fine SAND and fine GRAVEL, little Clay; Dry.	
30	MW1-30	0.0			
33	MW1-35	1.5	SC	30.0'-35.0' Gray Clayey SAND, little fine Gravel; Dry.	
36			SC	35.0'-40.0' Gray Clayey SAND, trace fine Gravel; Dry.	
39					
42	MW1-40	1.2	SP/GP	40.0'-45.0' Gray medium-fine SAND and fine GRAVEL, trace Clay; Dense; Moist.	
45	MW1-45	0.0			
48				45.0'-50.0' Soil unrecovered	
51			SP/CL	50.0'-55.0' Dark gray medium-fine SAND and CLAY; Moist.	
54					
57	MW1-55	0.0	SP/CL	55.0'-60.0' Dark gray medium-fine SAND and CLAY, little fine Gravel; Moist.	
60					
63	MW1-60	0.0	SC	60.0'-65.0' Tan Clayey SAND, some fine Gravel; Dry.	
66			CL	65.0'-70.0' Tan CLAY, little fine Gravel, little coarse-medium-fine SAND; Moist.	
69					
72	MW1-70	1.1			
75	MW1-75	0.9			
78			GP	70.0'-82.0' Tan fine GRAVEL, trace medium-fine Sand, trace Clay; Wet at 72' bgs.	Water at 72' bgs
81		0.0			Boring terminated at 82 feet below ground surface (bgs). Monitoring well was installed.
82					

Boring Number:	MW-2		Page 1 of 1
Location:	Southeast corner of Building C	Date Started:	11/3/2015
Site Address:	16950-17060 116th Avenue Southeast	Date Completed:	11/3/2015
	Renton, Washington 98058	Depth to Groundwater:	32 feet bgs
Project Number:	15-139176.4	Field Technician:	H. White
Drill Rig Type:	Hollow Stem Auger	Partner Engineering and Science	
Sampling Equipment:	Split Spoon	2154 Torrance Boulevard, Suite 200	
Borehole Diameter:	8.25-inches	Torrance, California 90501	

Depth	Sample	PID	USCS	Description	Notes
2			SP	0.5'-5.0' Brown medium-fine SAND, some Clay; Dry.	6-inches of asphalt at surface
4	MW2-5	0.0			
6					2" PVC riser from 0 to 25 feet bgs
8			SP	5.0'-10.0' Brown medium-fine SAND, some Clay, little fine Gravel; Dry.	0.010" Slotted PVC Screen from 25 to 40 feet bgs
10	MW2-10	53.8			
12			SC	10.0'-15.0' Brown Clayey SAND, some fine Gravel; Dry.	
14	MW2-15	180			
16					
18			CL	15.0'-20.0' Brown and gray CLAY, some fine Sand, trace fine Gravel; Dry.	
20	MW2-20	113			
22					
24					
26	MW2-25	359.0	SP	20.0'-30.0' Gray medium-fine SAND, little Clay, trace fine Gravel; Dry.	
28					
30	MW2-30	23.8			
32					
34					
36	MW2-35	19.6	SP	30.0'-40.0' Gray medium-fine SAND, some fine Gravel, little Clay; Wet at 32' bgs.	
38					
40					
42					Boring terminated at 40 feet below ground surface (bgs). Monitoring well was installed.
44					
46					
48					
50					

Boring Number:	MW-3				Page 1 of 1
Location:	Southeast corner of Building C			Date Started:	11/9/2015
Site Address:	16950-17060 116th Avenue Southeast			Date Completed:	11/9/2015
	Renton, Washington 98058			Depth to Groundwater:	25-30 feet bgs
Project Number:	15-139176.4			Field Technician:	H. White
Drill Rig Type:	Hollow Stem Auger			Partner Engineering and Science	
Sampling Equipment:	Split Spoon			2154 Torrance Boulevard, Suite 200	
Borehole Diameter:	8.25-inches			Torrance, California 90501	

Depth	Sample	PID	USCS	Description	Notes
2			CL	0.5'-5.0' Brown and gray CLAY, some medium-fine sand, little fine Gravel; Dry.	6-inches of asphalt at surface
4	MW3-5	0.0			
6					2" PVC riser from 0 to 20 feet bgs
8					0.010" Slotted PVC Screen from 20 to 35 feet bgs
10	MW3-10	0.0	SP	5.0'-15.0' Brown medium-fine SAND, little fine Gravel, trace Clay; Dry.	
12					
14					
16	MW3-15	0.8			
18					
20	MW3-20	0.0	SP	15.0'-25.0' Brown and gray meduim-fine SAND, little Silt, little fine Gravel; Dry.	
22					
24					
26	MW3-25	0.0			
28			SP	25.0'-30.0' Gray medium-fine SAND, some fine Gravel, trace Clay; Wet.	
30	MW3-30	0.0			
32			SM	30.0'-35.0' Gray Silty SAND, little Clay, trace fine Gravel; Moist.	
34	MW3-35	0.0			
36					Boring terminated at 35 feet below ground surface (bgs). Monitoring well was installed.
38					
40					
42					
44					
46					
48					
50					

APPENDIX B: LABORATORY ANALYTICAL REPORTS

PARTNER

ESN Northwest, Inc. | Environmental Services Network

S151164.4

CHAIN-OF-CUSTODY RECORD

CLIENT: Partner Engineering & Science, Inc.
ADDRESS: 3607 1st Ave NW, Seattle, WA
PHONE: 206-947-8875 FAX: —
CLIENT PROJECT #: 15-139176.4 PROJECT MANAGER: E. Englehart

DATE: 11/2-11/3/15 PAGE 1 OF 2
PROJECT NAME: Cascade Village
LOCATION: Renton, WA
COLLECTOR: Hunter White DATE OF COLLECTION 11/2 11/3

Sample Number	Depth	Time	Sample Type	Container Type	VOC 8260C L	Total Number of Containers	Laboratory Note Number	NOTES
1. MW1-5	5	1000	Soil	VOA	X	2		hold
2. MW1-10	10	1030			X			hold
3. MW1-15	15	1040			X			RUN
4. MW1-20	20	1050			X			hold
5. MW1-25	25	1055			X			hold
6. MW1-30	30	1100			X			hold
7. MW1-35	35	1115			X			hold
8. MW1-40	40	1125			X			hold
9. MW1-45	45	1140			X			RUN
10. MW1-55	55	1215			X			hold
11. MW1-60	60	1235			X			hold
12. MW1-70	70	1340			X			hold
13. MW1-75	75	1400			X			hold
14. MW2-5	5	0855			X			hold
15. MW2-10	10	0900			X			hold
16. MW2-15	15	0905			X			RUN (HOT)
17. MW2-20	20	0915			X			hold
18. MW2-25	25	0930			X			RUN (HOT)

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
[signature]	11/4/15 1:21	[signature]	11/4/15 1:21
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME

SAMPLE DISPOSAL INSTRUCTIONS

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	
NOTES:	

LABORATORY NOTES:
hwhite@partneresi.com

Turn Around Time: 24 HR 48 HR (5 DAY)

ESN NORTHWEST, INC. Environmental Services Network

CHAIN-OF-CUSTODY RECORD

CLIENT: Partner Engineering & Science, Inc.
ADDRESS: 3607 1st Ave NW, Seattle, WA
PHONE: 206-947-8875 FAX:
CLIENT PROJECT #: 15-139176.4 PROJECT MANAGER: E-Englehart

DATE: 11/2-11/3/15 PAGE 2 OF 2
PROJECT NAME: Cascade Village
LOCATION: Renton, WA
COLLECTOR: Hunter White DATE OF COLLECTION: 11/2-11/3

Sample Number	Depth	Time	Sample Type	Container Type	VOC 8260CL	NOTES	Total Number of Containers	Laboratory Note Number
1. MW2-30	30	0945	Soil	Voa	X	Hold	2	
2. MW2-35	35	1045	Soil	Voa	X	Hold	2	
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								
11.								
12.								
13.								
14.								
15.								
16.								
17.								
18.								

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
Hunter	11/4/15 1:40		11/4/15 1:21
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	
NOTES:	

LABORATORY NOTES:

Turn Around Time: 24 HR 48 HR (5 DAY)

1210 Eastside Street SE, Suite 200
Olympia, Washington 98501
Phone: 360-459-4670
Fax: 360-459-3432
Website: www.esnnw.com
E-Mail: info@esnnw.com

ESN NORTHWEST CHEMISTRY LABORATORY

Partner Engineering & Science, Inc.
PROJECT CASCADE VILLAGE
PROJECT #15-139176.4
Renton, Washington

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

Analysis of Volatile Organic Compounds in Soil by Method 8260C/5035

	RL	MB	LCS	MW1-15	MW1-45	MW2-15	MW2-25
Date extracted		11/10/15	11/10/15	11/02/15	11/03/15	11/03/15	11/03/15
Date analyzed	(mg/Kg)	11/10/15	11/10/15	11/10/15	11/10/15	11/10/15	11/10/15
Dichlorodifluoromethane	0.05	nd		nd	nd	nd	nd
Chloromethane	0.05	nd		nd	nd	nd	nd
Vinyl chloride	0.02	nd	101%	nd	nd	nd	nd
Bromomethane	0.05	nd		nd	nd	nd	nd
Chloroethane	0.05	nd		nd	nd	nd	nd
Trichlorofluoromethane	0.05	nd		nd	nd	nd	nd
Acetone	0.25	nd		nd	nd	nd	nd
1,1-Dichloroethene	0.05	nd	105%	nd	nd	nd	nd
Methylene chloride	0.05	nd		nd	nd	nd	nd
Methyl-t-butyl ether (MTBE)	0.05	nd		nd	nd	nd	nd
trans-1,2-Dichloroethene	0.05	nd		nd	nd	nd	nd
1,1-Dichloroethane	0.05	nd		nd	nd	nd	nd
2-Butanone (MEK)	0.25	nd		nd	nd	nd	nd
cis-1,2-Dichloroethene	0.05	nd		nd	nd	**0.12**	nd
2,2-Dichloropropane	0.05	nd		nd	nd	nd	nd
Chloroform	0.05	nd	*139	nd	nd	nd	nd
Bromochloromethane	0.05	nd		nd	nd	nd	nd
1,1,1-Trichloroethane	0.05	nd		nd	nd	nd	nd
1,2-Dichloroethane (EDC)	0.05	nd		nd	nd	nd	nd
1,1-Dichloropropene	0.05	nd		nd	nd	nd	nd
Carbon tetrachloride	0.05	nd		nd	nd	nd	nd
Benzene	0.02	nd	117%	nd	nd	nd	nd
Trichloroethene (TCE)	0.02	nd	95%	nd	nd	**0.13**	nd
1,2-Dichloropropane	0.05	nd	132%	nd	nd	nd	nd
Dibromomethane	0.05	nd		nd	nd	nd	nd
Bromodichloromethane	0.05	nd		nd	nd	nd	nd
4-Methyl-2-pentanone (MIBK)	0.25	nd		nd	nd	nd	nd
cis-1,3-Dichloropropene	0.05	nd		nd	nd	nd	nd
Toluene	0.05	nd	121%	nd	nd	nd	nd
trans-1,3-Dichloropropene	0.05	nd		nd	nd	nd	nd
1,1,2-Trichloroethane	0.05	nd		nd	nd	nd	nd
2-Hexanone	0.25	nd		nd	nd	nd	nd
1,3-Dichloropropane	0.05	nd		nd	nd	nd	nd
Dibromochloromethane	0.05	nd		nd	nd	nd	nd
Tetrachloroethene (PCE)	0.02	nd	89%	nd	nd	**9.8**	**4.8**
1,2-Dibromoethane (EDB)	0.05	nd		nd	nd	nd	nd
Chlorobenzene	0.05	nd	122%	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	0.05	nd		nd	nd	nd	nd
Ethylbenzene	0.05	nd	123%	nd	nd	nd	nd
Xylenes	0.15	nd	126%	nd	nd	nd	nd
Styrene	0.05	nd		nd	nd	nd	nd
Bromoform	0.05	nd		nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	0.05	nd		nd	nd	nd	nd
Isopropylbenzene	0.05	nd		nd	nd	nd	nd
1,2,3-Trichloropropane	0.05	nd		nd	nd	nd	nd
Bromobenzene	0.05	nd		nd	nd	nd	nd

ESN NORTHWEST CHEMISTRY LABORATORY

Partner Engineering & Science, Inc.
PROJECT CASCADE VILLAGE
PROJECT #15-139176.4
Renton, Washington

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

Analysis of Volatile Organic Compounds in Soil by Method 8260C/5035

	RL	MB	LCS	MW1-15	MW1-45	MW2-15	MW2-25
Date extracted		11/10/15	11/10/15	11/02/15	11/03/15	11/03/15	11/03/15
Date analyzed	(mg/Kg)	11/10/15	11/10/15	11/10/15	11/10/15	11/10/15	11/10/15
n-Propylbenzene	0.05	nd		nd	nd	nd	nd
2-Chlorotoluene	0.05	nd		nd	nd	nd	nd
4-Chlorotoluene	0.05	nd		nd	nd	nd	nd
1,3,5-Trimethylbenzene	0.05	nd		nd	nd	nd	nd
tert-Butylbenzene	0.05	nd		nd	nd	nd	nd
1,2,4-Trimethylbenzene	0.05	nd		nd	nd	nd	nd
sec-Butylbenzene	0.05	nd		nd	nd	nd	nd
1,3-Dichlorobenzene	0.05	nd		nd	nd	nd	nd
1,4-Dichlorobenzene	0.05	nd		nd	nd	nd	nd
Isopropyltoluene	0.05	nd		nd	nd	nd	nd
1,2-Dichlorobenzene	0.05	nd		nd	nd	nd	nd
n-Butylbenzene	0.05	nd		nd	nd	nd	nd
1,2-Dibromo-3-Chloropropane	0.05	nd		nd	nd	nd	nd
1,2,4-Trichlorobenzene	0.05	nd		nd	nd	nd	nd
Naphthalene	0.05	nd		nd	nd	nd	nd
Hexachloro-1,3-butadiene	0.05	nd		nd	nd	nd	nd
1,2,3-Trichlorobenzene	0.05	nd		nd	nd	nd	nd
Surrogate recoveries							
Dibromofluoromethane		109%	109%	97%	101%	99%	92%
Toluene-d8		102%	107%	110%	104%	1074%	105%
4-Bromofluorobenzene		97%	89%	102%	102%	97%	91%

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits
Acceptable Recovery limits: 65% TO 135%
Acceptable RPD limit: 35%
The LCS failed high for Chloroform. Since all samples were nd for that compound, no further action was taken.

ESN Northwest, Inc. | Environmental Services Network

5151110.1

CHAIN-OF-CUSTODY RECORD

CLIENT: Partner Engineering & Science
ADDRESS: 3607 1st Ave N.W. Seattle, WA
PHONE: _____ FAX: _____
CLIENT PROJECT #: 15-139176.4 PROJECT MANAGER: E. Englehart

DATE: 11/10/15 PAGE 1 OF 1
PROJECT NAME: Cascade Village
LOCATION: Renton
COLLECTOR: Hunter White DATE OF COLLECTION 11/9/15

Sample Number	Depth	Time	Sample Type	Container Type	TPH-HCID	TPH - DIESEL & OIL	TPH - GASOLINE	BTEX	VOC 8260CL	VOC 8260	SemiVol 8270	PAH's 8270	PCB's 8082	CL Pesticides 8081	RCRA 8 Metals	MTCA 5 Metals	Pb	Asbestos-PLM	GRO Suite	DRO Suite	WO Suite	NOTES	Total Number of Containers	Laboratory Note Number
1. MW3-5	5	0850	Soil	VOA					X													hold	2	
2. MW3-10	10	0855																				~~hold~~ RUN		
3. MW3-15	15	0905																				~~RUN~~ hold		
4. MW3-20	20	0910																				hold		
5. MW3-25	25	0920																				RUN		
6. MW3-30	30	0935																				hold		
7. MW3-35	35	1030																				hold		
8.																								
9.																								
10.																								
11.																								
12.																								
13.																								
14.																								
15.																								
16.																								
17.																								
18.																								

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
[signature]	11/10/15 0955	[signature]	11/10/15 0955
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
		[signature]	

SAMPLE DISPOSAL INSTRUCTIONS

☐ ESN DISPOSAL @ $2.00 each ☐ Return ☐ Pickup

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	
NOTES:	

LABORATORY NOTES:

Turn Around Time: 24 HR 48 HR (5 DAY)

ESN NORTHWEST CHEMISTRY LABORATORY

Partner Engineering & Science, Inc.
PROJECT CASCADE VILLAGE
PROJECT #15-139176.4
Renton, Washington

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

Analysis of Volatile Organic Compounds in Soil by Method 8260C/5035

	RL	MB	LCS	LCSD	MW3-10	MW3-25
Date extracted		11/12/15	11/12/15	11/12/15	11/12/15	11/12/15
Date analyzed	(mg/Kg)	11/12/15	11/12/15	11/12/15	11/12/15	11/12/15
Dichlorodifluoromethane	0.05	nd			nd	nd
Chloromethane	0.05	nd			nd	nd
Vinyl chloride	0.02	nd	72%	68%	nd	nd
Bromomethane	0.05	nd			nd	nd
Chloroethane	0.05	nd			nd	nd
Trichlorofluoromethane	0.05	nd			nd	nd
Acetone	0.25	nd			nd	nd
1,1-Dichloroethene	0.05	nd	81%	76%	nd	nd
Methylene chloride	0.05	nd			nd	nd
Methyl-t-butyl ether (MTBE)	0.05	nd			nd	nd
trans-1,2-Dichloroethene	0.05	nd			nd	nd
1,1-Dichloroethane	0.05	nd			nd	nd
2-Butanone (MEK)	0.25	nd			nd	nd
cis-1,2-Dichloroethene	0.05	nd			nd	nd
2,2-Dichloropropane	0.05	nd			nd	nd
Chloroform	0.05	nd	107%	96%	nd	nd
Bromochloromethane	0.05	nd			nd	nd
1,1,1-Trichloroethane	0.05	nd			nd	nd
1,2-Dichloroethane (EDC)	0.05	nd			nd	nd
1,1-Dichloropropene	0.05	nd			nd	nd
Carbon tetrachloride	0.05	nd			nd	nd
Benzene	0.02	nd	94%	80%	nd	nd
Trichloroethene (TCE)	0.02	nd	76%	69%	nd	nd
1,2-Dichloropropane	0.05	nd	95%	91%	nd	nd
Dibromomethane	0.05	nd			nd	nd
Bromodichloromethane	0.05	nd			nd	nd
4-Methyl-2-pentanone (MIBK)	0.25	nd			nd	nd
cis-1,3-Dichloropropene	0.05	nd			nd	nd
Toluene	0.05	nd	99%	85%	nd	nd
trans-1,3-Dichloropropene	0.05	nd			nd	nd
1,1,2-Trichloroethane	0.05	nd			nd	nd
2-Hexanone	0.25	nd			nd	nd
1,3-Dichloropropane	0.05	nd			nd	nd
Dibromochloromethane	0.05	nd			nd	nd
Tetrachloroethene (PCE)	0.02	nd	73%	67%	nd	nd
1,2-Dibromoethane (EDB)	0.05	nd			nd	nd
Chlorobenzene	0.05	nd	93%	85%	nd	nd
1,1,1,2-Tetrachloroethane	0.05	nd			nd	nd
Ethylbenzene	0.05	nd	95%	85%	nd	nd
Xylenes	0.15	nd	99%	88%	nd	nd
Styrene	0.05	nd			nd	nd
Bromoform	0.05	nd			nd	nd
1,1,2,2-Tetrachloroethane	0.05	nd			nd	nd
Isopropylbenzene	0.05	nd			nd	nd
1,2,3-Trichloropropane	0.05	nd			nd	nd
Bromobenzene	0.05	nd			nd	nd

ESN NORTHWEST CHEMISTRY LABORATORY

Partner Engineering & Science, Inc.
PROJECT CASCADE VILLAGE
PROJECT #15-139176.4
Renton, Washington

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

Analysis of Volatile Organic Compounds in Soil by Method 8260C/5035

	RL	MB	LCS	LCSD	MW3-10	MW3-25
Date extracted		11/12/15	11/12/15	11/12/15	11/12/15	11/12/15
Date analyzed	(mg/Kg)	11/12/15	11/12/15	11/12/15	11/12/15	11/12/15
n-Propylbenzene	0.05	nd			nd	nd
2-Chlorotoluene	0.05	nd			nd	nd
4-Chlorotoluene	0.05	nd			nd	nd
1,3,5-Trimethylbenzene	0.05	nd			nd	nd
tert-Butylbenzene	0.05	nd			nd	nd
1,2,4-Trimethylbenzene	0.05	nd			nd	nd
sec-Butylbenzene	0.05	nd			nd	nd
1,3-Dichlorobenzene	0.05	nd			nd	nd
1,4-Dichlorobenzene	0.05	nd			nd	nd
Isopropyltoluene	0.05	nd			nd	nd
1,2-Dichlorobenzene	0.05	nd			nd	nd
n-Butylbenzene	0.05	nd			nd	nd
1,2-Dibromo-3-Chloropropane	0.05	nd			nd	nd
1,2,4-Trichlorobenzene	0.05	nd			nd	nd
Naphthalene	0.05	nd			nd	nd
Hexachloro-1,3-butadiene	0.05	nd			nd	nd
1,2,3-Trichlorobenzene	0.05	nd			nd	nd
Surrogate recoveries						
Dibromofluoromethane		115%	113%	115%	91%	101%
Toluene-d8		102%	104%	102%	100%	99%
4-Bromofluorobenzene		97%	99%	92%	95%	103%

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits
Acceptable Recovery limits: 65% TO 135%
Acceptable RPD limit: 35%

BLAINE
TECH SERVICES, INC.

1680 ROGERS AVENUE
SAN JOSE, CALIFORNIA 95112-1105
FAX (408) 573-7771
PHONE (408) 573-0555

CHAIN OF CUSTODY BTS # 151112-LB1

CLIENT: Partner Engineering and Science, Inc.

SITE: Cascade Village Shopping Center
17028 116th Ave., SE
Renton, WA

CONDUCT ANALYSIS TO DETECT

LAB: ESN Northwest Bellevue | DHS #

ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND
- ☐ EPA
- ☐ LIA
- ☐ OTHER
- ☐ RWQCB REGION _____

SPECIAL INSTRUCTIONS

Invoice and report to Partner Engineering
Attn: Hunter White - HWhite@partneresi.com
206.947.8875

SAMPLE I.D.	DATE	TIME	MATRIX S= SOIL W=H_2O	CONTAINERS TOTAL		C = COMPOSITE ALL CONTAINERS	VOC's (8260)							ADD'L INFORMATION		CONDITION	LAB SAMPLE #
MW-1	11/12/15	0857	W	3	VOA		X										
MW-2	↓	0915	W	3	↓		X										
MW-3	↓	0831	W	3	↓		X										

SAMPLING COMPLETED: DATE 11/12/15 TIME 0920

SAMPLING PERFORMED BY: LEE BURES

RESULTS NEEDED NO LATER THAN: **Standard TAT**

RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
	11/12/15	1127		11-12-15	1130
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME

SHIPPED VIA	DATE SENT	TIME SENT	COOLER #

ESN NORTHWEST CHEMISTRY LABORATORY

Partner Engineering & Science, Inc.
PROJECT CASCADE VILLAGE
PROJECT #15-139176.3
Renton, Washington

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

Analysis of Volatile Organic Compounds in Water by Method 8260C/5030C

Analytical Results

	RL	MB	LCS	MW-1	MW-2	MW-3	Trip Blank
Date analyzed	(ug/L)	11/16/15	11/16/15	11/16/15	11/16/15	11/16/15	11/16/15
Dichlorodifluoromethane	1.0	nd		nd	nd	nd	nd
Chloromethane	1.0	nd		nd	nd	nd	nd
Vinyl chloride	0.2	nd	117%	nd	**12**	nd	nd
Bromomethane	1.0	nd		nd	nd	nd	nd
Chloroethane	1.0	nd		nd	nd	nd	nd
Trichlorofluoromethane	1.0	nd		nd	nd	nd	nd
Acetone	10.0	nd		nd	nd	nd	nd
1,1-Dichloroethene	1.0	nd	84%	nd	**6.3**	nd	nd
Methylene chloride	1.0	nd		nd	nd	nd	nd
Methyl-t-butyl ether (MTBE)	1.0	nd		nd	nd	nd	nd
trans-1,2-Dichloroethene	1.0	nd		nd	nd	nd	nd
1,1-Dichloroethane	1.0	nd		nd	nd	nd	nd
2-Butanone (MEK)	10.0	nd		nd	nd	nd	nd
cis-1,2-Dichloroethene	1.0	nd		nd	**22**	nd	nd
2,2-Dichloropropane	1.0	nd		nd	nd	nd	nd
Chloroform	1.0	nd	122%	nd	nd	nd	nd
Bromochloromethane	1.0	nd		nd	nd	nd	nd
1,1,1-Trichloroethane	1.0	nd		nd	nd	nd	nd
1,2-Dichloroethane (EDC)	1.0	nd		nd	nd	nd	nd
1,1-Dichloropropene	1.0	nd		nd	nd	nd	nd
Carbon tetrachloride	1.0	nd		nd	nd	nd	nd
Benzene	1.0	nd	106%	nd	nd	nd	nd
Trichloroethene (TCE)	1.0	nd	87%	nd	**77**	nd	nd
1,2-Dichloropropane	1.0	nd	121%	nd	nd	nd	nd
Dibromomethane	1.0	nd		nd	nd	nd	nd
Bromodichloromethane	1.0	nd		nd	nd	nd	nd
4-Methyl-2-pentanone (MIBK)	1.0	nd		nd	nd	nd	nd
cis-1,3-Dichloropropene	1.0	nd		nd	nd	nd	nd
Toluene	1.0	nd	106%	nd	nd	nd	nd
trans-1,3-Dichloropropene	1.0	nd		nd	nd	nd	nd
1,1,2-Trichloroethane	1.0	nd		nd	nd	nd	nd
2-Hexanone	1.0	nd		nd	nd	nd	nd
1,3-Dichloropropane	1.0	nd		nd	nd	nd	nd
Dibromochloromethane	1.0	nd		nd	nd	nd	nd
Tetrachloroethene (PCE)	1.0	nd	83%	**2.5**	**6,700**	**1.7**	**1.7**
1,2-Dibromoethane (EDB)	1.0	nd		nd	nd	nd	nd
Chlorobenzene	1.0	nd	108%	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	1.0	nd		nd	nd	nd	nd
Ethylbenzene	1.0	nd	107%	nd	nd	nd	nd
Xylenes	3.0	nd	113%	nd	nd	nd	nd
Styrene	1.0	nd		nd	nd	nd	nd
Bromoform	1.0	nd		nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	1.0	nd		nd	nd	nd	nd
Isopropylbenzene	1.0	nd		nd	nd	nd	nd
1,2,3-Trichloropropane	1.0	nd		nd	nd	nd	nd
Bromobenzene	1.0	nd		nd	nd	nd	nd

ESN NORTHWEST CHEMISTRY LABORATORY

Partner Engineering & Science, Inc.
PROJECT CASCADE VILLAGE
PROJECT #15-139176.3
Renton, Washington

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(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

Analysis of Volatile Organic Compounds in Water by Method 8260C/5030C

Analytical Results

	RL	MB	LCS	MW-1	MW-2	MW-3	Trip Blank
Date analyzed	(ug/L)	11/16/15	11/16/15	11/16/15	11/16/15	11/16/15	11/16/15
n-Propylbenzene	1.0	nd		nd	nd	nd	nd
2-Chlorotoluene	1.0	nd		nd	nd	nd	nd
4-Chlorotoluene	1.0	nd		nd	nd	nd	nd
1,3,5-Trimethylbenzene	1.0	nd		nd	nd	nd	nd
tert-Butylbenzene	1.0	nd		nd	nd	nd	nd
1,2,4-Trimethylbenzene	1.0	nd		nd	nd	nd	nd
sec-Butylbenzene	1.0	nd		nd	nd	nd	nd
1,3-Dichlorobenzene	1.0	nd		nd	nd	nd	nd
1,4-Dichlorobenzene	1.0	nd		nd	nd	nd	nd
Isopropyltoluene	1.0	nd		nd	nd	nd	nd
1,2-Dichlorobenzene	1.0	nd		nd	nd	nd	nd
n-Butylbenzene	1.0	nd		nd	nd	nd	nd
1,2-Dibromo-3-Chloropropane	1.0	nd		nd	nd	nd	nd
1,2,4-Trichlorobenzene	1.0	nd		nd	nd	nd	nd
Naphthalene	1.0	nd		nd	nd	nd	nd
Hexachloro-1,3-butadiene	1.0	nd		nd	nd	nd	nd
1,2,3-Trichlorobenzene	1.0	nd		nd	nd	nd	nd
Surrogate recoveries							
Dibromofluoromethane		113%	112%	115%	111%	112%	109%
Toluene-d8		96%	100%	99%	107%	97%	97%
4-Bromofluorobenzene		92%	97%	97%	94%	97%	91%

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits
Acceptable Recovery limits: 65% TO 135%
Acceptable RPD limit: 35%

APPENDIX C: GROUNDWATER SAMPLING FIELD PROCEDURES

PARTNER

General Field Procedures
For Well Purging and Groundwater Sampling

These general guidelines will be followed unless additional directives are provided by the Client and/or regulatory agency and/or are warranted based on previous on-site experience. Deviations will be noted in the associated groundwater monitoring report.

The sequence of the monitoring activities will be followed as specified by the project manager. In general, gauging, purging, and sampling activities will be conducted in order from the least to the most impacted wells, whenever feasible, as based on previous on-site experience and/or historical information.

Decontamination

Nitrile gloves will be worn during gauging, purging, and sampling activities. Gloves will be changed at least after each well or more often as required.

Equipment that could come into contact with fluids and/or residue from wells will be dedicated to specific wells, decontaminated between uses, and/or discarded following a single use. Equipment decontamination will consist of a wash in a solution of Liquinox detergent and water followed by a double water rinse, each of which will be performed in a separate container. Care will be taken to decontaminate equipment prior to use on the first well, before use in a subsequent well, and prior to demobilizing from the site.

Groundwater Elevation Measurements

Each well to be monitored will be located based on the provided site map. Well boxes will be opened and debris and/or fluids present in the well box will be removed prior to removal of the well cap. If identified, damages to the well box and/or top of casing (TOC) will be recorded in the field sheets.

Measurements will be recorded to within 0.01 foot using a water level indicator or an interface meter if the presence of light or dense non-aqueous phase liquid (LNAPL or DNAPL, respectively) is known or suspected. A permanent survey mark on the TOC will be used as a constant reference point or the north side of the TOC if a survey mark is not available. NAPL thickness (if encountered), depth to groundwater, and total well length will be recorded for each well in the field sheets.

If LNAPL is not present (<0.02 foot), the well will be purged and sampled as discussed in the proceeding sections. If LNAPL is encountered (>0.02 foot), the total well length will not be measured and the well will not be purged or sampled, though LNAPL will be removed as practical and time permitting with a bailer and placed in a separate, grounded container for disposal.

Conventional Groundwater Purging

The purge volume of each well will be calculated based on the depth to groundwater, well diameter, and total well length. A purge volume equivalent to three well column volumes of groundwater will be removed from the well by vacuum truck, submersible pump, or bailer. The groundwater parameters temperature, pH, conductivity, turbidity, dissolved oxygen, and/or oxidation-reduction potential (ORP) will be periodically recorded at a rate of no less than one reading per well column volume while purging.

Purging may be discontinued prior to removing the calculated purge volume if the well is pumped dry (i.e., dewatered). Sampling may proceed after the water column height has recovered to at least 80% of the pre-purge groundwater level or after 2 hours, whichever is sooner.

Low-Flow Purging

The purpose of low flow sampling is to minimize disturbances to groundwater chemistry during the purging process sample collection and to reduce the amount of investigation-derived waste (IDW) that is generated.

The pump will be set at the desired extraction point within the well prior to purging. This depth will be recorded and the pump will be set at the same depth during future sampling events. Unless otherwise specified, the default depth of the pump in wells will be near the midpoint of the well screened interval.

At least one system volume (i.e., pump tubing volume) will be removed prior to recording groundwater parameters. The groundwater parameters temperature, pH, conductivity, turbidity, dissolved oxygen, and/or ORP will be periodically recorded at a rate of one reading every 3 to 5 minutes. Purging may cease once groundwater parameters stabilize. Groundwater parameter stabilization is considered to be fluctuations of less than 3% in temperature; 10% in conductivity, turbidity, and dissolved oxygen; 0.1 units in pH; and 10 millivolts in ORP over three consecutive readings.

The depth to water (DTW) will be recorded with a water level meter during purging to monitor the water column drawdown. The pump will purge groundwater from the well at a flow rate of no more than 500 milliliters per minute (typically between 200 and 500 milliliters per minute) that results in a stabilized water column drawdown of no greater than 0.33 feet after purging the initial system volume.

Sampling may begin once groundwater parameters and well column drawdown stabilize.

For wells where the water column drawdown is unable to stabilize, the pump will be shut off for 15 minutes after removing one system volume to allow groundwater to recharge before restarting the well purging. This will be performed for up to two iterations. In the event that the well drawdown cannot stabilize after two iterations, the well may be sampled during the third attempt at well purging.

Sample Collection

For wells that have been conventionally purged, a sample will be collected once the water column height has recovered to at least 80% of the pre-purge groundwater level by lowering a new, disposable bailer beneath the groundwater surface to allow water to enter the bailer (bailers used to sample wells for volatile organics analysis will not be fully submerged). The water-filled bailer will be retrieved from the well and groundwater will be conveyed into laboratory-supplied sample containers

For low-flow purged wells, groundwater will be conveyed directly from the pump discharge tubing into laboratory-supplied containers. The pump flow rate will be maintained or reduced slightly during sampling. The pump will be shut off and downhole sampling equipment will be retrieved from the well after sampling.

The type and number of sample containers to be collected will be based on the analyses to be conducted. Care will be taken while conveying the sample into the containers to avoid excessive turbulence and/or aeration. Containers for analysis of volatile compounds will be filled with no observable headspace or air bubbles to minimize the potential for volatilization. Sample containers will be sealed, labeled for identification, placed into a plastic bag, and stored in an iced cooler. The samples will be transported in

an iced cooler (if necessary based on the target analyte[s]) under chain-of-custody protocol to the laboratory for analysis.

Each well cap and well box lid will be securely replaced prior to demobilizing from the site.

Trip Blanks and Duplicate Samples

Trip blanks can be used to identify systematic sources of cross-contamination and will be prepared prior to sample collection, if required for the project. The trip blank containers, which will be filled with deionized water, will be stored in the iced cooler for the duration of the monitoring episode and submitted to the laboratory for analysis along with the collected samples.

Duplicate samples can be used to assess the precision of the laboratory analyses and can be collected, if required for the project. The duplicate samples will be collected consecutively to minimize variations between the samples. Sample collection will be performed as described in the previous sections and the sample will be labeled with a unique identification to disassociate the two samples.

Investigation-Derived Wastes

Generated decontamination and purge water will be containerized in labeled and sealed 55-gallon steel drums. The drums of IDW will remain on-site in a secure location until transportation to an appropriate off-site receiving facility for treatment, recycling, and/or disposal can be arranged.

APPENDIX D: GROUNDWATER SAMPLING DATA SHEETS

PARTNER

WELL GAUGING DATA

Project # 151112-LB1 Date 11/12/15 Client PARTNER ENG.

Site 17028 116th Ave. SE, RENTON, WA

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or (TOC)	Notes
MW-1	0750	2					64.67	80.28		
MW-2	0754	2					13.91	39.67		
MW-3	0744	2					12.01	34.65		

LOW FLOW WELL MONITORING DATA SHEET

Project #: 151112-LB1	Client: PARTNER ENGINEERING
Sampler: LB	Gauging Date: 11/12/15
Well I.D.: MW-1	Well Diameter (in.): (2) 3 4 6 8 ____
Total Well Depth (ft.): 80.28	Depth to Water (ft.): 64.67
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI 556

Purge Method: (2" Grundfos) Pump | Peristaltic Pump | Bladder Pump
Sampling Method: Dedicated Tubing | New (Tubing) | Other ____

Start Purge Time: 0843 | Flow Rate: 600 mL/MIN | Pump Depth: 74'

Time	Temp. ((°C) or °F)	pH	Cond. (mS/cm or (µS)/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or (mL))	Depth to Water (ft.)
0846	14.16	7.32	265	>1000	0.96	34.3	1500	64.70
0849	15.81	7.27	260	988	0.93	30.1	3000	64.70
0852	15.90	7.23	262	32	0.92	28.9	4500	64.70
0855	15.89	7.23	263	30	0.91	27.5	6000	64.70
0858	15.88	7.22	264	30	0.90	26.2	7500	64.70

Did well dewater? Yes (No)	Amount actually evacuated: 7.5L
Sampling Time: 0859	Sampling Date: 11/12/15
Sample I.D.: MW-1	Laboratory: ESN
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: (VOC's)
Equipment Blank I.D.: @ Time	Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 151112-LB1	Client: PARTNER ENGINEERING
Sampler: LB	Gauging Date: 11/12/15
Well I.D.: MW-2	Well Diameter (in.): (2) 3 4 6 8 ___
Total Well Depth (ft.): 39.67	Depth to Water (ft.): 13.91
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI 556

Purge Method: 2" Grundfos Pump | (Peristaltic Pump) | Bladder Pump
Sampling Method: Dedicated Tubing | (New Tubing) | Other ___

Start Purge Time: 0915 Flow Rate: 200 mL/MIN Pump Depth: ± 33'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
0918	14.48	7.61	256	49	1.16	28.8	600	14.11
0921	14.67	7.62	258	33	0.99	25.2	1200	14.11
0924	14.69	7.63	258	30	0.98	21.7	1800	14.11
0927	14.68	7.64	259	30	0.97	20.4	2400	14.11
0930	14.67	7.65	259	29	0.98	19.2	3000	14.11

Did well dewater? Yes (NO)	Amount actually evacuated: 3L
Sampling Time: 0931	Sampling Date: 11/12/15
Sample I.D.: MW-2	Laboratory: ESN
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: (VOC's)
Equipment Blank I.D.: @ Time	Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 151112-LB1	Client: PARTNER ENGINEERING
Sampler: LB	Gauging Date: 11/12/15
Well I.D.: MW-3	Well Diameter (in.): (2) 3 4 6 8 ___
Total Well Depth (ft.): 34.65	Depth to Water (ft.): 12.01
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI 556

Purge Method: 2" Grundfos Pump | Peristaltic Pump | Bladder Pump
Sampling Method: Dedicated Tubing | New Tubing | Other ___

Start Purge Time: 0815 Flow Rate: 200 ML/MIN Pump Depth: 30' 28'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
0818	14.93	6.56	944	34	2.25	84.1	600	12.23
0821	14.71	6.73	961	25	2.05	62.7	1200	12.23
0824	14.79	6.81	962	21	2.03	61.5	1800	12.23
0827	14.80	6.83	962	20	2.02	60.7	2400	12.23
0830	14.81	6.84	963	19	2.01	59.6	3000	12.23

Did well dewater? Yes (No) Amount actually evacuated: 3 L

Sampling Time: 0831 Sampling Date: 11/12/15

Sample I.D.: MW-3 Laboratory: ESN

Analyzed for: TPH-G BTEX MTBE TPH-D Other (VOC's)

Equipment Blank I.D.: @ Time Duplicate I.D.:

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME Partner @ Renton				PROJECT NUMBER 151112-LB1			
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP.	INITIALS
YSI 556	SEA #2	11/12/15 0615	PH 4.0 7.0 10.0	4.01 7.05 9.98	—	15.2	LB
			COND 3900	3898	—	15.1	LB
			ORP 244	238.4	244.1 ✓	15.2	LB
			DO 100%	98.6%	100.1% ✓	—	LB

PURGE DRUM INVENTORY LOG

CLIENT Partner Engineering

SITE ADDRESS 17028 116th Ave. SE, Renton, WA

STATUS OF DRUM(S) UPON ARRIVAL							
DATE	11/12/15						
Number of drum(s) empty:							
Number of drum(s) 1/4 full:							
Number of drum(s) 1/2 full:							
Number of drum(s) 3/4 full:							
Number of drum(s) full:	22						
Total drum(s) on site:	22						
Are the drum(s) properly labeled?	Y						
Drum ID & Contents:							
STATUS OF DRUM(S) UPON DEPARTURE							
DATE	11/22/15						
Number of drum(s) empty:							
Number of drum(s) 1/4 full:	1						
Number of drum(s) 1/2 full:							
Number of drum(s) 3/4 full:							
Number of drum(s) full:	22						
Total drum(s) on site:	23						
Are the drum(s) properly labeled?	Y						
Drum ID & Contents:							
LOCATION OF DRUM(S)							
Describe location of drum(s):	Near MW-2						
FINAL STATUS							
Number of new drum(s) left on site this event:	1						
Date of inspection:	11/12/15						
Logged by BTS Field Technician:	Yes						
Office reviewed by:	LB						

WELLHEAD INSPECTION CHECKLIST

Client PARTNER Date 11/12/15

Site Address 17028 116th AVE. SE, RENTON, WA

Job Number 151112-LB1 Technician L. BURES

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)	Repair Order Submitted
MW-1	X							
MW-2	X							
MW-3	X							

NOTES: No locks

BLAINE
TECH SERVICES, INC.

1680 ROGERS AVENUE
SAN JOSE, CALIFORNIA 95112-1105
FAX (408) 573-7771
PHONE (408) 573-0555

CHAIN OF CUSTODY BTS # 151112-LB1

CLIENT: Partner Engineering and Science, Inc.

SITE: Cascade Village Shopping Center
17028 116th Ave., SE
Renton, WA

CONDUCT ANALYSIS TO DETECT

LAB: ESN Northwest Bellevue | DHS #

ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND
- ☐ EPA
- ☐ LIA
- ☐ OTHER
- ☐ RWQCB REGION

SPECIAL INSTRUCTIONS

Invoice and report to Partner Engineering
Attn: Hunter White - HWhite@partneresi.com
206.947.8875

SAMPLE I.D.	DATE	TIME	MATRIX (S= SOIL W=H_2O)	CONTAINERS TOTAL		C = COMPOSITE ALL CONTAINERS	VOC's (8260)	ADD'L INFORMATION		CONDITION	LAB SAMPLE #
MW-1	11/12/15	0851	W	3	VOA		X				
MW-2	↓	0915	W	3	↓		X				
MW-3	↓	0831	W	3	↓		X				

SAMPLING COMPLETED: DATE 11/12/15 TIME 0920

SAMPLING PERFORMED BY: Lee Bures

RESULTS NEEDED NO LATER THAN: **Standard TAT**

RELEASED BY	DATE 11/12/15	TIME 1127	RECEIVED BY	DATE 11-12-15	TIME 1134
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME

SHIPPED VIA	DATE SENT	TIME SENT	COOLER #	Page 1 of 1