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October 22, 2019

Mr. Hamed Adib
Eagle Canyon Capital, LLC
3223 Crow Canyon Road, Suite 300
San Ramon, CA 94583

Third Quarter 2019
Remediation System Status Report
Site No. 3520
4200 Wheaton Way
Bremerton, Washington

Dear Mr. Adib:

Montrose Environmental (Montrose), has prepared this *Third Quarter 2019 Remediation System Status Report* (Report) for the above-referenced site.

A soil vapor extraction (SVE) system is operated at the site to remediate fuel hydrocarbon-impacted soil. This Report summarizes remediation system operations and performance since restarting the system on September 16, 2019 and includes the field data and analytical results collected during the period of September 16, 2019 through September 30, 2019. Laboratory data packages and field notes are attached as Appendix A and Appendix B, respectively.

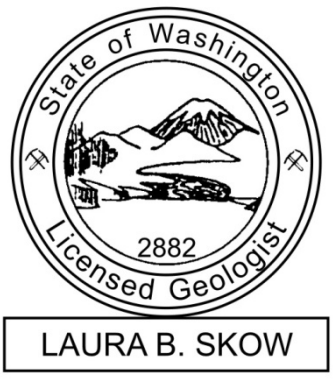
Montrose appreciates the opportunity to be of service. If you have any questions or require additional information regarding this report, please do not hesitate to contact us at (714) 919-6500.

Sincerely,

Montrose Environmental

Dane Nygaard
Senior Manager

Laura Skow, L.G. 2882
Project Manager



SITE INFORMATION AND CONTRACTOR OVERVIEW

Site Location:	Site No. 3520 4200 Wheaton Way Bremerton, Washington
Eagle Canyon Capital, LLC Contact:	Mr. Hamed Adib
Montrose Contact:	Ms. Laura Skow
Regulatory Agency:	Ms. Glynis Carrosino Toxics Cleanup Program Washington Department of Ecology NWRO 3190 160th Avenue SE Bellevue, WA 98008-5452
File No:	VCP No. NW2340
Laboratory Contractors:	Environmental Services Network (ESN) Northwest, Inc. 1210 Eastside Street SE, Suite 200 Olympia, Washington 98501 WADOE Accreditation No. C574-11 Libby Environmental, Inc. 4139 Libby Road NE Olympia, Washington 98506 WADOE Accreditation No. C855

SITE BACKGROUND

The subject site is located at 4200 Wheaton Way in Bremerton, Washington and is approximately a 0.5-acre rectangular-shaped, outparcel of commercial land located on the northeast corner of Wheaton Way and Hollis Street. The site is a fuel retail station with four underground storage tanks (USTs) and three pump islands that are located near (west of) a single-story convenience store. The USTs include one 6,000-gallon tank (diesel), two 12,000-gallon tanks (regular gasoline) and one 12,000-gallon tank (premium gasoline). The site is relatively flat, covered with asphalt and concrete, and is part of a larger retail shopping center. Surrounding land use includes commercial properties including retail shops and restaurants.

The site lies at an elevation of approximately 300 feet above mean sea level (ft amsl) on a small peninsula within Puget Sound. It is located approximately 2 miles from Port Orchard

Waterway, Dyes Inlet and Sinclair Inlet, which surround the peninsula to the east, west and south, respectively. A site location map is provided as Figure 1. Pertinent site features are shown on Figure 2.

In September and October 1996, the fuel distribution system at the subject site was upgraded. During system upgrades, hydrocarbon-affected soil was encountered in the tank cavity and 450 tons of impacted soil was excavated and transported to a disposal facility in Tacoma, Washington. The release was reported to the Washington Department of Ecology (Ecology) and five verification soil samples were collected from the tank cavity for laboratory analysis. In addition, five soil samples were collected from the beneath the product lines and pump islands. The samples were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) compounds and total petroleum hydrocarbons quantified as gasoline (TPH-Gx). Hydrocarbon impacts in excess of Model Toxics Cleanup Act (MTCA) Method A Cleanup Levels were identified in all ten soil samples. Specifically, the highest levels of fuel hydrocarbons were reported in a composite sample (identified as N&E Wall-8'), which was collected from the north and east sidewall of the diesel tank cavity at a depth of 8 feet. Sample N&E Wall-8' contained TPH-Gx at 7,220 milligrams per kilogram (mg/kg), benzene at 27.6 mg/kg, toluene at 191 mg/kg, ethylbenzene at 111 mg/kg and total xylenes at 626 mg/kg.

In June 1997, Clearwater conducted subsurface site assessment activities. During Clearwater's investigation, 17 soil borings (GP-1 through GP-17) were installed at various locations around the site to delineate the extent of hydrocarbon-affected soil. Borings were terminated at a depth of 17 feet bgs due to refusal. Twenty-six (26) soil samples collected from the borings were analyzed for TPH-Gx and BTEX compounds. Hydrocarbon-affected soil was detected in a majority of the soil borings. The highest concentration of TPH-Gx (1,410 mg/kg) was in a 10-foot sample from boring GP-7 located near the southwest corner of the tank cavity. Similarly, benzene was detected at a maximum level of 11.9 mg/kg in a 10-foot sample collected from GP-5 located east of the existing tank cavity.

In May 2010, Environ Strategy conducted an additional site assessment to evaluate subsurface conditions in the vicinity of the fuel distribution system (USTs and pump islands). Six soil borings (identified as SB-1 through SB-6) were advanced, of which, Borings SB-1, SB-2 and SB-3 were located near the existing tank cavity and advanced to a depth of 30 feet. Borings SB-4, SB-5 and SB-6 were drilled at the west end of the southern, central and northern pump islands, respectively, and extended to a depth of 25 feet at SB-4 and to 20 feet bgs at SB-5 and SB-6. Assessment findings are detailed in the *Focused Phase II Site Assessment Report,* dated May 30, 2010.

Based on the results of site assessment, an SVE system was designed and vapor extraction wells VE-1 through VE-4 were installed from March 29 to 31, 2011. Remediation by SVE was pilot

tested at the site from April 4 to 7, 2011, and proved effective at removing hydrocarbons from subsurface soil, as detailed in the *Soil Vapor Extraction Well Installation and Pilot Test Report*, dated June 21, 2011. An application for an air discharge permit for the operation of SVE equipment at the site for the remediation of hydrocarbons in soil was submitted on June 6, 2011.

The air discharge permit for the operation of SVE equipment at the site was received from the Puget Sound Clean Air Agency on November 7, 2011, and following system installation, baseline samples were collected on February 15, 2012, to demonstrate compliance with the air discharge permit requirements.

On February 28, 2012, the SVE system began continuous operation for the remediation of hydrocarbons in subsurface soil. Environ Strategy began bi-monthly site visits for operation and maintenance (O&M) of the system.

As reported in the *Remediation System Status Report,* dated October 15, 2012, field observations and laboratory test results demonstrate that soil vapor extraction is effective at removing petroleum constituents from subsurface soil beneath the site. During the first six months of system operation an estimated total of 7,461 pounds of petroleum hydrocarbons were extracted from the site subsurface. Based on the results of the first six months of system operation, Environ Strategy recommended continued operation of the SVE system until hydrocarbon removal rates reached asymptotic levels.

In March of 2013, the thermal oxidizer system was replaced with a carbon adsorption abatement system. As of September 30, 2013, an estimated 12,179 pounds of hydrocarbons were removed from the site subsurface through SVE. Monitoring data through September 2013 showed fluctuating hydrocarbon concentrations in system influent vapor since system start-up but showed a decreasing trend as select extraction wells were opened/closed to optimize system performance. Data collected from October 2013 through January 2014 showed similar trends in concentrations; therefore, confirmation sampling was proposed to confirm remediation and/or attenuation of hydrocarbons in soil characterized during previous assessments.

In December 2016, ES Engineering conducted confirmation soil sampling to evaluate remedial progress. Four confirmation borings (CB-1 through CB-4) were installed at the site to assess soil conditions following SVE remediation activities. Analytical results of the confirmation sampling indicated that COC concentrations in soil still exceeded MTCA Method A CULs in some areas of the site. Based on the findings, installation of additional extraction wells and re-instatement of SVE remediation were recommended. Additional details regarding the confirmation soil sampling are provided in the *Confirmation Soil Sampling Report*, dated March 30, 2017.

In January 2018, three additional remediation wells (RW-1 through RW-3) were installed at the site and connected to the remediation system. Well installation activities are detailed in the *Well Installation Report*, dated March 9, 2018.

RECENT REMEDIATION ACTIVITIES

- In December 2018, Montrose collected a sample of the granular activated carbon (GAC, Carbon-1) for waste profiling purposes. The sample was submitted to ESN for analysis of TPH-Gx by Method NWTPH-Gx and volatile organic compounds by EPA Method 8260. A copy of the laboratory analytical report is included as Appendix A.
- In June 2019, a *Notice of Construction and Application For Approval* for modification of the remediation equipment and restart of the SVE system was submitted to the Puget Sound Clean Air Agency (PSCAA).
- In July 2019, the PSCAA issued an *Order of Approval* for the proposed modifications and operation of the remediation system.
- In August and September 2019, Montrose was onsite to install the replacement blower and a water holding tank for the remediation system. On September 3, 2019, the system was briefly restarted to test the system, collect baseline vapor samples, and monitor the influent and effluent vapor stream to evaluate the GAC for potential breakthrough. Baseline vapor samples were collected from the individual extraction wells for laboratory analysis (Table 3).
- On September 6, 2019, Pacific Coast Carbon was retained to change out the GAC and provide waste transportation and disposal services. Certification of the removal and reactivation of the spent GAC is included as Appendix C.
- On September 11, 2019, Montrose submitted the *Notice of Completion* for the remediation system modifications and notification of planned system start-up to the PSCAA.
- On September 16 and 17, 2019, Montrose was onsite to restart the SVE system and conduct O&M activities.

Following system restart, twice weekly O&M visits were conducted to monitor the system in accordance with the PSCAA permit. Vapor flow rates, vacuum, system temperatures, and concentrations of unspeciated hydrocarbons in vapor in system influent, midpoint, effluent, and individual wells were recorded. Vapor samples were collected from the system influent, midpoint and effluent sample ports and submitted for laboratory analysis. Laboratory Analytical Reports are provided as Appendix A.

Remediation system operational data is tabulated in Table 1. SVE individual well data is summarized in Table 2. Soil vapor sample analytical data is summarized in Table 3. Calculated recovery and emission rates are tabulated in Table 4. System destruction efficiencies are summarized in Table 5. O&M field forms are provided in Appendix B. Historical O&M data tables and charts are presented as Appendix D.

REMEDIATION SYSTEM SUMMARY DATA

Facility:	Bremerton Food Mart (Site No. 3520)
Facility Address:	4200 Wheaton Way, Bremerton, WA
Remediation Technology:	SVE
Equipment Type:	Roots 200 cfm blower
Operation Mode:	Carbon Adsorption
Permit to Operate:	PSCAA Order of Approval No. 11837
Discharge Limits:	<10 ppmv (as measured by hexane or its equivalent)
Expiration Date:	Not Specified

SVE SYSTEM DATA (Table 1)

SVE System Re-start Date: September 16, 2019

Third Quarter 2019 (September 16, 2019 – September 30, 2019)

Period Hours of Operation:	283*
Percent Time Operational:	84%*
TPH Recovered:	84 pounds**
Wells online:	5 (VE-1, VE-3, RW-1, RW-2 and RW-3)(1)
Wells offline:	2 (VE-2 and VE-4)(1)

*Calculated from September 16, 2019 (system restart date) to September 30, 2019 (Table 1)
**Calculated based on field PID readings (Table 1)
(1) Based on September 30, 2019 data; extraction wells are opened/closed to optimize system performance

Cumulative

Since Initial Startup:	February 28, 2012 – September 30, 2019
Total Hours of Operation:	14,180
Total Hydrocarbons Recovered:	12,825 pounds

COMPLIANCE SAMPLING

On September 3, 2019, individual well vapor samples were collected to evaluate baseline conditions (Table 3). The vapor samples were collected in tedlar bags and submitted to ESN, in Olympia, Washington under chain-of-custody procedure. The vapor samples were analyzed for TPH-Gx and BTEX by EPA Method 8260. Analytical results indicate that TPH-Gx and BTEX were present in the vapor samples.

On September 16, September 20 and September 30, 2019, Montrose collected influent, midpoint, and effluent vapor samples from the SVE system to demonstrate compliance with air discharge conditions (Table 4). The vapor samples were collected in tedlar bags and submitted to Libby Environmental, Inc. in Olympia, Washington under chain-of-custody procedure. The vapor samples were analyzed for TPH-Gx and BTEX by EPA Method 8260. Laboratory analytical results indicate that TPH-Gx and BTEX were not present in the midpoint or effluent vapor samples.

The laboratory analytical results for the samples collected on September 16, September 20, September 30, 2019 were used to calculate mass recovery and discharge emissions for the current reporting period (Tables 4 and 5). The estimated discharge emissions do not exceed annual emission limits for TPH-Gx and BTEX.

The laboratory analytical reports for the vapor samples are provided as Appendix A.

DISCUSSION AND CONCLUSIONS

The SVE system was restarted on September 16, 2019. During the reporting period, approximately 84 pounds of petroleum hydrocarbons in vapor phase were extracted for treatment based on field PID readings. Since remediation was initiated in February 2012, an estimated total of 12,825 pounds of petroleum hydrocarbons have been extracted from the site subsurface, treated and discharged. Period trends in hydrocarbon concentrations in vapor, cumulative mass removed and individual well concentrations are graphically illustrated in Graphs 1 and 2. As shown in Graph 1, hydrocarbon concentrations in system influent vapor were elevated upon re-starting the system and decreased slightly after several days of operation. Field PID readings and baseline laboratory analytical results from the individual extraction wells show elevated hydrocarbon concentrations in most of the site extraction wells upon restarting the remediation system (Graph 2).

Montrose will continue to conduct twice weekly O&M visits to monitor the system as required by the PSCAA permit and to ensure the system is operating properly. Field PID monitoring and laboratory analytical results show effluent vapor is non-detect for TPH-Gx and BTEX constituents, therefore, a reduction in the O&M monitoring frequency from twice weekly to weekly is recommended. Montrose will request PSCAA approval of reduced O&M monitoring

prior to implementation. Based on field PID readings, select extraction wells may be opened/closed to optimize system performance. System vapor samples will be collected and analyzed on a monthly basis to demonstrate compliance with permit discharge requirements.

Montrose is pleased to be of service to Eagle Canyon Capital. If there are questions regarding this report or if additional site information is required, please do not hesitate to contact Montrose at (714) 919-6500.

ATTACHMENTS:

FIGURES

Figure 1:	Site Location Map
Figure 2:	Site Plan Showing Well Locations

TABLES

Table 1:	Summary of Vapor Extraction System Operational Data
Table 2:	SVE Individual Well Data
Table 3:	Soil Vapor Sample Analytical Data
Table 4:	Subsurface Hydrocarbon Mass Calculations
Table 5:	System Destruction Efficiencies

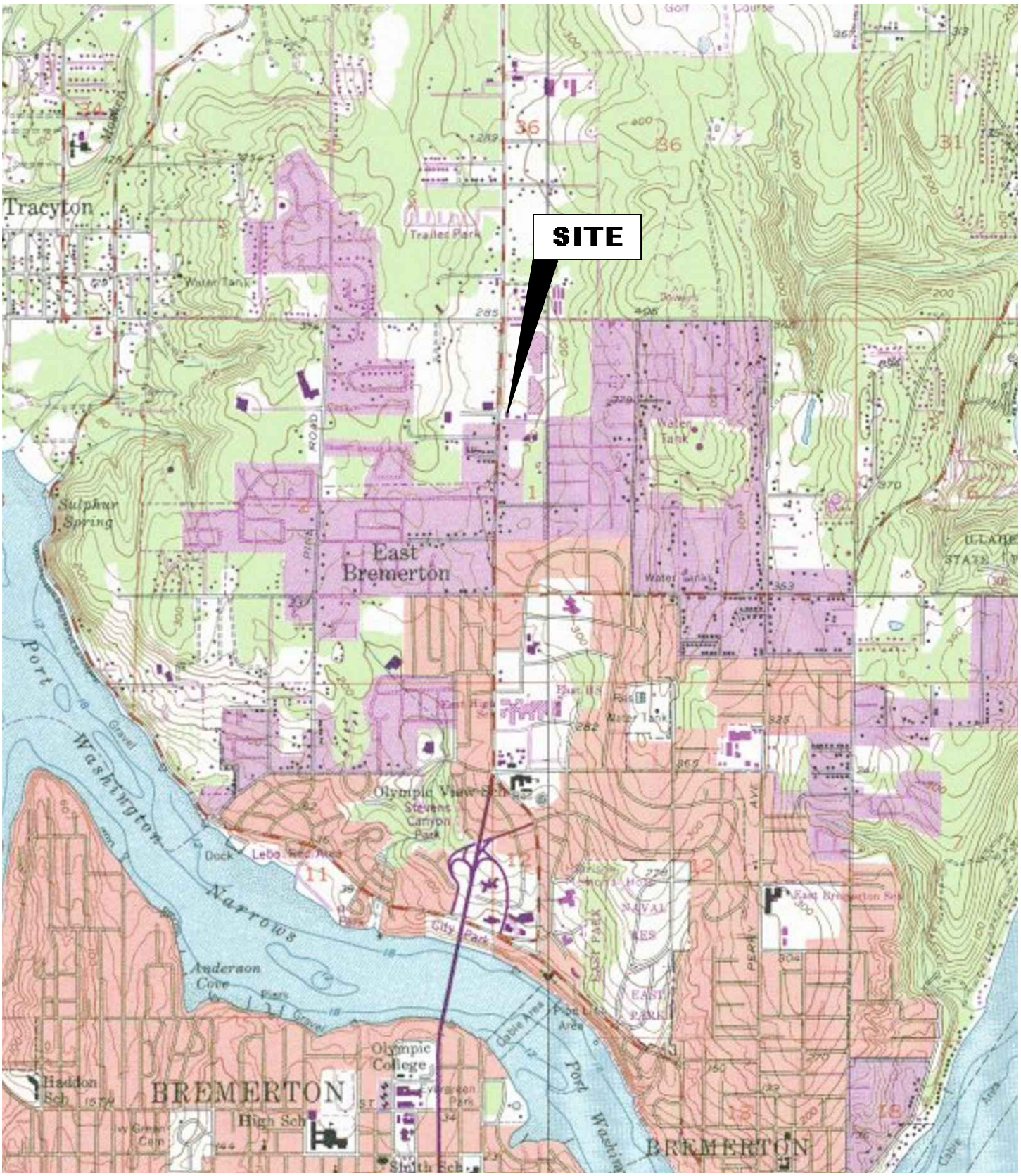
GRAPHS

Graph 1:	Vapor Extraction Remediation System – Mass Removal Trend
Graph 2:	Vapor Extraction Remediation System – Hydrocarbon Concentrations by Well

APPENDICES

Appendix A:	Laboratory Analytical Reports
Appendix B:	Field Data Sheets
Appendix C:	Certification of Waste Disposal
Appendix D:	Historical O&M Data Tables and Graphs

FIGURES



Map Information: Maptech
Terrain Navigator–2nd Ed.–San Juan Island
Olympic Peninsula/Sea–Tac (WA)
42°36'10"N 122°37'42"W

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N

0 2000

APPROX. SCALE: 1" = 2000'

FIGURE 1

SITE LOCATION MAP

Site No. 3520
4200 Wheaton Way
Bremerton, Washington

DATE DRAWN
10/15/2019

PROJECT NO.
123155

FILE NO.
123155F1–SLM

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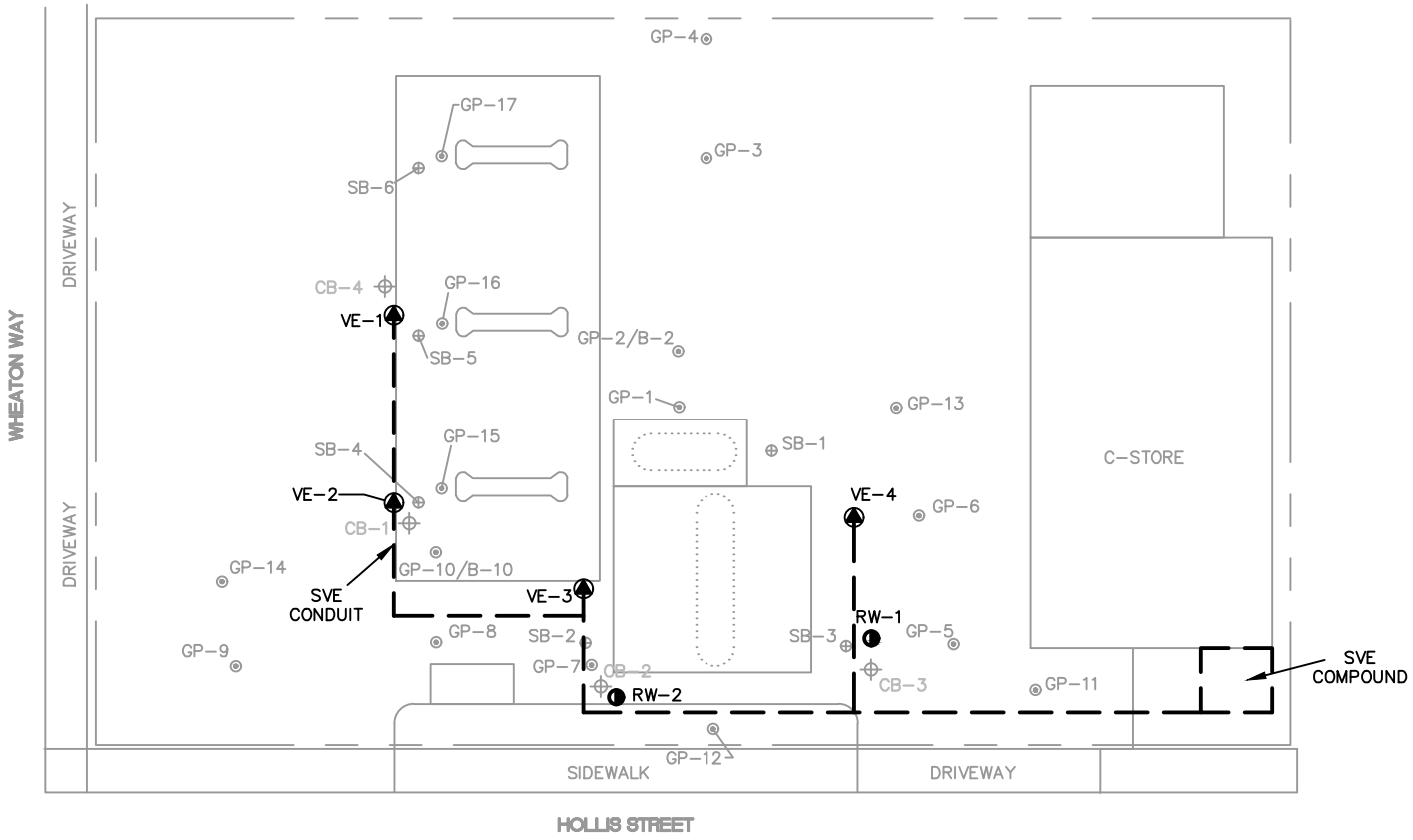

LEGEND

SB-1 ⊕	Soil Boring (Environ Strategy, 2010)
GP-1 ⊙	Soil Boring (Clearwater, 1997)
▲	Soil Vapor Extraction Well
◑	Remediation Well
▭	Underground Storage Tank
▭	Pump Island
⊕	Confirmation Soil Boring (ES Engineering, 2016)
SVE	Soil Vapor Extraction

N

30 0 30

APPROXIMATE SCALE: 1" = 30'

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FIGURE 2

SITE PLAN PLAN SHOWING SOIL BORING AND WELL LOCATIONS

Site No. 3520
4200 Wheaton Way
Bremerton, Washington

DATE DRAWN
10/16/2019

PROJECT NO.
123155

FILE NO.
123155F2-SP

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TABLES

TABLE 1
Summary of Soil Vapor Extraction System Operational Data
Site No. 3520
Bremerton, Washington
1 of 1

Date	Hour Meter Reading	Operational Hours	# of Wells Online	Influent Vacuum (in H_2O or Hg)[1]	System Combustion Temp / GAC Inlet (°F)	Temp below cat. Bed (°F)	Temp above cat. Bed (°F)	Flow (scfm)	Influent PID Reading (ppmV)	Midpoint PID Reading (ppmV)	First carbon Destruction Efficiency (%)	Effluent PID Reading (ppmV)	Total Destruction Efficiency (%)	Cumulative Hydrocarbon Mass Removed (lbs)	Hydrocarbon Removal Rate (lbs/day)	Remarks
09/03/19	70,095	13,892	7	6.0	109	-	-	135	49.4	-	-	43.5	12%	12,740	0.1	System offline, Start up for Baseline testing then shut off system
09/03/19	70,096	13,893	7	6.5	112	-	-	135	66.0	-	-	78.1	-18%	12,740	2.55	System offline, Start up for Baseline testing then shut off system
09/03/19	70,097	13,894	7	7.0	112	-	-	135	71.0	-	-	57.0	20%	12,741	3.02	System offline, Start up for Baseline testing then shut off system
09/06/19	70,097	13,895	-	-	-	-	-	-	-	-	-	-	-	12,741	-	System offline - Carbon Change Out
09/16/19	70,100	13,897	7	6.5	109	-	-	138	53.5	-	-	0.0	100%	12,741	2.41	**System Startup**
09/16/19	70,101	13,899	7	6.5	110	-	-	137	495	-	-	0.3	100%	12,742	12.28	
09/17/19	70,118	13,916	7	6.5	100	-	-	138	455	-	-	1.2	100%	12,756	20.18	
09/19/19	70,123	13,921	7	-	-	-	-	-	-	-	-	-	-	12,756	-	System off upon arrival; troubleshot and re-started
09/20/19	70,141	13,939	7	6.5	110	-	-	123	349	0.2	100%	0.0	100%	12,769	14.03	
09/23/19	70,216	14,014	7	7.0	105	-	-	127	43	0.0	100%	0.0	100%	12,795	8.13	
09/26/19	70,284	14,081	5	8.0	112	-	-	108	51	0.0	100%	0.0	100%	12,800	1.65	Vapor wells VE-2 and VE-4 off upon departure
09/26/19	70,285	14,082	5	10	130	-	-	77	131	0.0	100%	0.0	100%	12,800	2.28	
09/30/19	70,383	14,180	5	10	135	-	-	195	68	0.0	100%	0.0	100%	12,825	6.33	

Notes and abbreviations:

Hydrocarbon removal rate and cumulative hydrocarbon removal were calculated using the following formula:

$$lbs = \frac{ppmv\ (60\ min/hr)\ (24\ hr/day)\ (acfm)\ (86\ lb/lb\text{-}mole)}{(1{,}000{,}000)\ (379\ ft^3/lb\text{-}mole)}$$

Where: ppmv = average hydrocarbon concentration in parts per million by volume
ft3/min = velocity or flow rate in standard cubic feet per minute
acfm = vapor flow rate in actual cubic feet per minute
86 lb/lb-mole = average molecular weight of gasoline
379 ft^3/lb-mole = standard volume that 1 mole of gas occupies

(1): measurement in in. of H2O through 3/13/14 and in inches Hg begininning 9/3/19
- : not measured
lbs: pounds
lbs/day: pounds per day
PID: photo-ionization detector calibrated to hexane
ppmV: parts per million by volume
acfm: actual cubic feet per minute
scfm: standard cubic feet per minute
in H_2O: inches of water
in Hg: inches of mercury
Temp: temperature
^oF: degrees Farenheit

TABLE 2
SVE Individual Well Data
Site No. 3520
Bremerton, Washington
1 of 1

	VE-1	Vac	Status	VE-2	Vac	Status	VE-3	Vac	Status	VE-4	Vac	Status
Date	(ppmv)	(in Hg)	(%)	(ppmv)	(in Hg)	(%)	(ppmv)	(in Hg)	(%)	(ppmv)	(in Hg)	(%)
09/03/19	11.7	-	100%	12.9	-	100%	231	-	100%	17.9	-	100%
09/03/19	21.3	-	100%	18.2	-	100%	340	-	100%	30.3	-	100%
09/03/19	24.5	-	100%	22.4	-	100%	215	-	100%	35.0	-	100%
09/16/19	54.7	-	100%	50.2	-	100%	4,400	-	100%	34.8	-	100%
09/16/19	576	-	100%	166	-	100%	8,530	-	100%	340	-	100%
09/17/19	-	-	-	-	-	-	-	-	-	-	-	-
09/19/19	-	-	-	-	-	-	-	-	-	-	-	-
09/26/19	13.3	-	100%	-	-	0%	-	-	100%	-	-	0%
09/30/19	-	7	100%	-	-	0%	-	-	100%	-	-	0%

	RW-1	Vac	Status	RW-2	Vac	Status	RW-3	Vac	Status	VE-3/RW-2	Vac	Status
Date	(ppmv)	(in Hg)	(%)	(ppmv)	(in Hg)	(%)	(ppmv)	(in Hg)	(%)	(ppmv)	(in Hg)	(%)
09/03/19	108	-	100%	160	-	100%	55.8	-	100%	-	-	-
09/03/19	125	-	100%	123	-	100%	54.8	-	100%	-	-	-
09/03/19	62.8	-	100%	92.8	-	100%	28.8	-	100%	-	-	-
09/16/19	296	-	100%	142	-	100%	73	-	100%	-	-	-
09/16/19	669	-	100%	1,062	-	100%	450	-	100%	-	-	-
09/17/19	-	-	-	-	-	-	-	-	-	-	-	-
09/19/19	-	-	-	-	-	-	-	-	-	-	-	-
09/26/19	18	-	100%	-	-	100%	8	-	100%	203	-	100%
09/30/19	-	7	100%	-	-	100%	-	8	100%	-	8	100%

Notes:

Baseline Well Sampling on 9/03/19
System re-start up on 9/16/19
in Hg = inches of mercury
ppmv = parts per million by volume, based on field photo-ionization detector readings
acfm = actual cubic feet per minute
1% LEL = 138 ppmv (approximately)
"-" = not measured
%: percent
Status: well status, percent open
Vac: vacuum
Vapor wells VE-3 and RW-2 share the common line

TABLE 3
Soil Vapor Sample Analytical Data
Site No. 3520
Bremerton, Washington
1 of 1

SAMPLE ID	Date	EPA METHOD 8260				
		TPH-Gx	Benzene	Toluene	Ethylbenzene	Xylenes
		ppmv	ppmv	ppmv	ppmv	ppmv
INFLUENT	09/16/19	290	0.19	2.3	0.63	1.9
	09/20/19	-	-	-	-	-
	09/30/19	110	0.056	1.6	0.74	3.1
MIDPOINT	09/16/19	<1.0	<0.007	<0.04	<0.05	<0.03
	09/20/19	-	-	-	-	-
	09/30/19	<1.0	<0.007	<0.04	<0.05	<0.03
EFFLUENT	09/16/19	-	-	-	-	-
	09/20/19	<1.0	<0.007	<0.04	<0.05	<0.03
	09/30/19	<1.0	<0.007	<0.04	<0.05	<0.03
VE-1	09/03/19	78.24	0.018	0.080	0.078	0.322
VE-2	09/03/19	73.35	0.023	0.101	0.041	0.198
VE-3	09/03/19	1,589	0.153	0.478	0.299	0.598
VE-4	09/03/19	154	0.157	0.902	0.074	0.391
RW-1	09/03/19	538	0.500	3.18	0.668	1.91
RW-2	09/03/19	269	<0.003	0.080	0.115	0.322
RW-3	09/03/19	64	<0.003	0.066	0.576	0.193

Notes:

< = not detected at listed detection limit

Baseline well sampling on 9/03/19

Sytem restarted on 09/16/19

ppmv = parts per million by volume

TPH-Gx = total petroleum hydrocarbons quantified as gasoline

- = not applicable/sampled

TABLE 4
Subsurface Hydrocarbon Mass Removal and Emission Calculations
Site No. 3520
Bremerton, Washington
1 of 1

Sample ID	Sampling Date	Cumulative Operating Hours	System Flowrate (scfm)	TPH			Benzene			Ethylbenzene			Toluene			Xylenes		
				Conc. (ppmv)	Total Removal (lbs)	Removal Rate (lbs/day)	Conc. (ppmv)	Total Removal (lbs)	Removal Rate (lbs/day)	Conc. (ppmv)	Periodic Removal (lbs)	Removal Rate (lbs/day)	Conc. (ppmv)	Total Removal (lbs)	Removal Rate (lbs/day)	Conc. (ppmv)	Total Removal (lbs)	Removal Rate (lbs/day)
Influent	09/16/19	13,899	137	290	0	13	0.19	0.00	0.008	0.63	0.00	0.00	2.3	0.0	0.0	1.9	0.0	0.09
	09/20/19	13,939	123	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	09/30/19	14,180	195	110	82	7	0.06	0.04	0.003	0.74	0.68	0.03	1.6	1.2	0.0	3.1	2.3	0.20

Sample ID	Sampling Date	Cumulative Operating Hours	System Flowrate (scfm)	TPH			Benzene			Ethylbenzene			Toluene			Xylenes		
				Conc. (ppmv)	Periodic Emissions (lbs)	Emissions Rate (lbs/day)	Conc. (ppmv)	Periodic Emissions (lbs)	Emissions Rate (lbs/day)	Conc. (ppmv)	Periodic Emissions (lbs)	Emissions Rate (lbs/day)	Conc. (ppmv)	Periodic Emissions (lbs)	Emissions Rate (lbs/day)	Conc. (ppmv)	Periodic Emissions (lbs)	Emissions Rate (lbs/day)
Effluent	09/16/19	13,899	137	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	09/20/19	13,939	123	<1	0.07	0.04	<0.007	0.00	0.0003	<0.05	0.00	0.000	<0.04	0.0	0.0000	<0.03	0.0	0.001
	09/30/19	14,180	195	<1	0.64	0.06	<0.007	0.00	0.0004	<0.05	0.04	0.000	<0.04	0.0	0.0000	<0.03	0.0	0.002

Note: calculated cumulative using reporting limit if no detection

- : Not Sampled
Conc.: Concentration
lbs: pounds
lbs/day: pounds per day
ppmV: parts per million by volume
TPH: Total Petroleum Hydrocarbons

TPH emissions calculation = $\frac{\text{TPH-Gx parts per million x cubic feet per minute x 60 minutes/hour x hours x 86 pounds per lb mol x 24 hours/day}}{\text{1,000,000 x 379 cubic feet per lb mol}}$

Benezene emissions calculation = $\frac{\text{Benzene parts per million x cubic feet per minute x 60 minutes/hour x hours x 78 pounds per lb mol x 24 hours/day}}{\text{1,000,000 x 379 cubic feet per lb mol}}$

Ethybenzene emissions calculation = $\frac{\text{Ethylbenzene parts per million x cubic feet per minute x 60 minutes/hour x hours x 106 pounds per lb mol x 24 hours/day}}{\text{1,000,000 x 379 cubic feet per lb mol}}$

Toluene emissions calculation = $\frac{\text{Toluene parts per million x cubic feet per minute x 60 minutes/hour x hours x 92 pounds per lb mol x 24 hours/day}}{\text{1,000,000 x 379 cubic feet per lb mol}}$

Xylenes emissions calculation = $\frac{\text{Xylenes parts per million x cubic feet per minute x 60 minutes/hour x hours x 106 pounds per lb mol x 24 hours/day}}{\text{1,000,000 x 379 cubic feet per lb mol}}$

Carbon change out of first vessel required at: 10% of inlet stream concentration to the carbon vessel or 10 ppmv (measured as hexane or its equivalent)

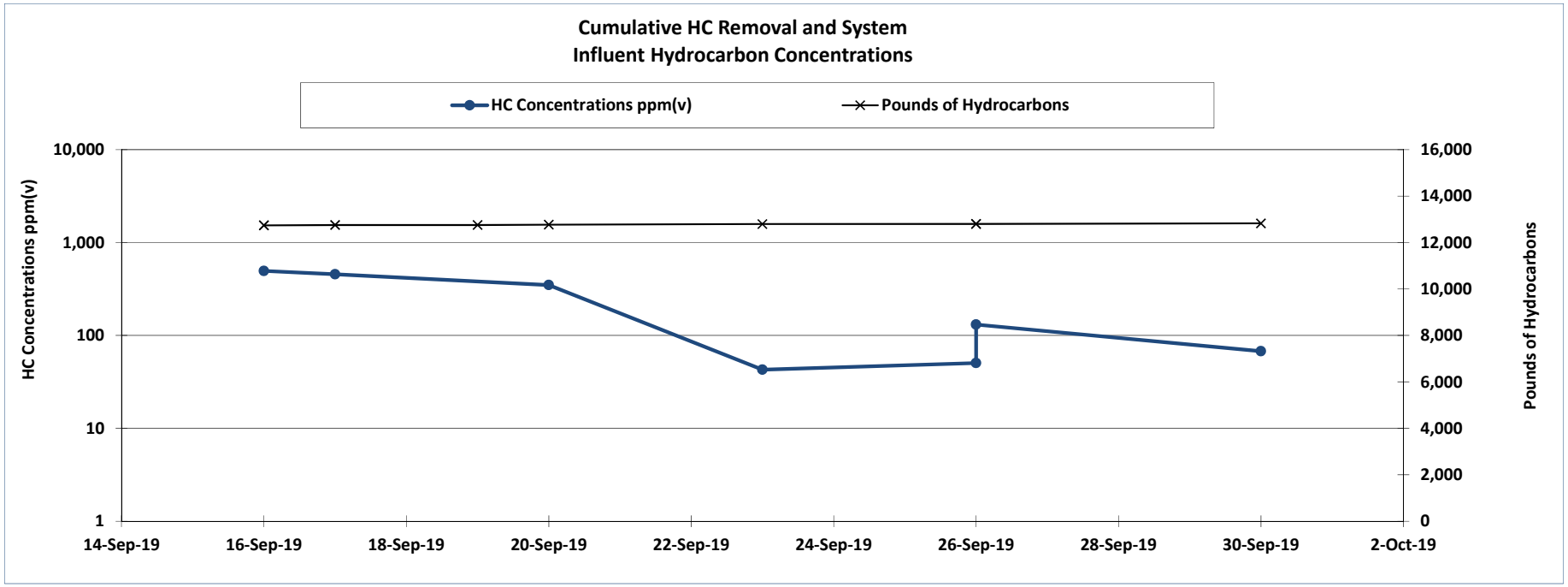
TABLE 5
System Destruction Efficiencies
Site No. 3520
Bremerton, Washington
1 of 1

Sample Date	Destruction Efficiencies				
	TPH-Gx	Benzene	Toluene	Ethylbenzene	Xylenes
09/16/19*	99.66%	96.32%	98.26%	92.06%	98.42%
09/30/19	99.09%	87.50%	97.50%	93.24%	99.03%

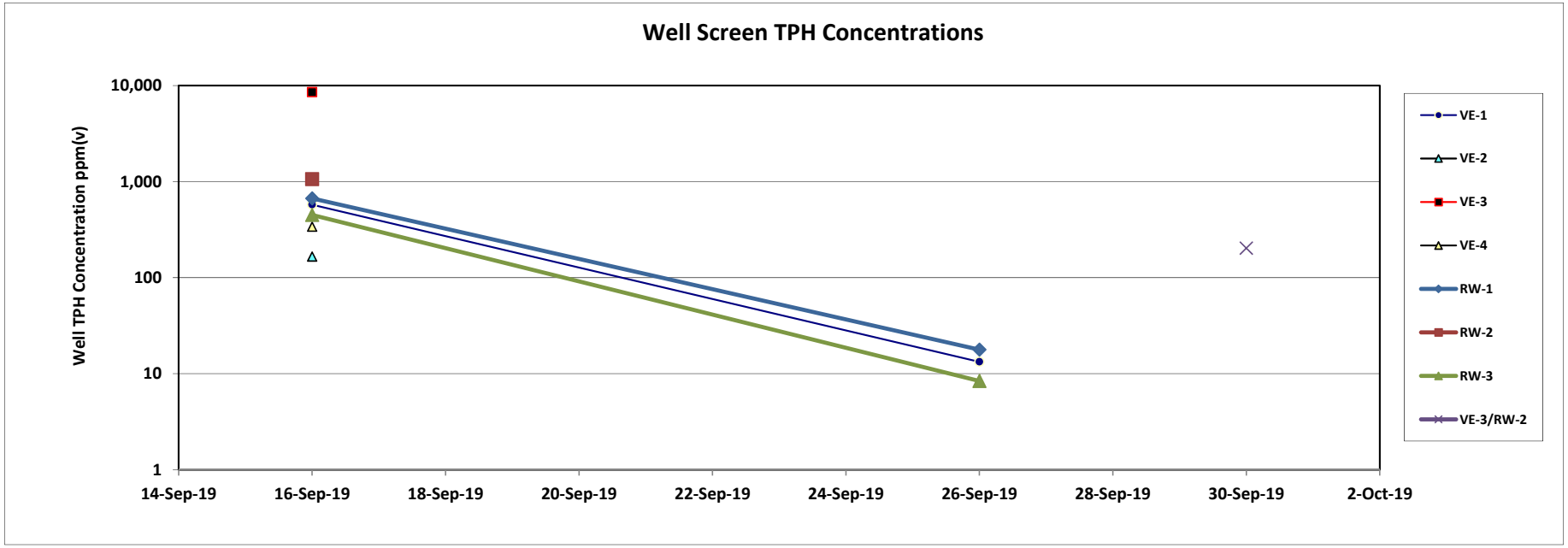
Notes:
* = destruction efficiency was calculated with influent sample collected on 9/16/19 and effluent sample collected on 9/20/19

GRAPHS

GRAPH 1
Vapor Extraction System - Mass Removal Trend
Site No. 3520
Bremerton, Washington



GRAPH 2
Vapor Extraction System - Hydrocarbon Concentrations by Well
SiteNo. 3520
Bremerton, Washington



APPENDIX A

Laboratory Analytical Reports

ESN NORTHWEST
Environmental Services Network

January 7, 2019

Laura Skow
ES Engineering
1 Park Plaza, Suite 1000
Irvine, CA 92614

Dear Ms. Skow:

Please find enclosed the analytical data report for the Site #3520 Project in Bremerton, Washington. One soil sample was analyzed for Gasoline by NWTPH-Gx and VOC's by Method 8260 on December 21, 2018.

The results of the analyses are summarized in the attached tables. All soil values are reported on a dry weight basis. Applicable detection limits and QA/QC data are included. An invoice for this analytical work is also enclosed.

ESN Northwest appreciates the opportunity to have provided analytical services to ES Engineering for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Michael A Korosec

Michael A. Korosec
President

1210 Eastside Street SE, Suite 200 ■ Olympia, Washington 98501 ■ 360.459.4670 ■ FAX 360.459.3432
Web Site: *www.esnnw.com* E-Mail: *info@esnnw.com*

ESN NORTHWEST CHEMISTRY LABORATORY

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

ES Engineering Services
PROJECT SITE NO. 3520
Bremerton, Washington

Analysis of Gasoline Range Organics in Soil
by Method NWTPH-Gx

Sample Number	Date Prepared	Date Analyzed	Surrogate Recovery (%)	Gasoline Range Organics (mg/kg)
Method Blank	12/21/2018	12/21/2018	111	nd
LCS	12/21/2018	12/21/2018	101	113%
Carbon-1	12/21/2018	12/21/2018	104	**1100**
Reporting Limits				10

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 50% TO 150%

ESN NORTHWEST CHEMISTRY LABORATORY

ES Engineering Services
PROJECT SITE NO. 3520
Bremerton, 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	Carbon
Date extracted		12/21/18	12/21/18	12/21/18	12/20/18
Date analyzed	(mg/Kg)	12/21/18	12/21/18	12/21/18	12/21/18
Dichlorodifluoromethane	0.05	nd			nd
Chloromethane	0.05	nd			nd
Vinyl chloride	0.02	nd	156%*	134%	nd
Bromomethane	0.05	nd			nd
Chloroethane	0.05	nd			nd
Trichlorofluoromethane	0.05	nd			nd
Acetone	0.25	nd			nd
1,1-Dichloroethene	0.05	nd	98%	87%	nd
Methylene chloride	0.05	nd			**0.07**
Methyl-t-butyl ether (MTBE)	0.05	nd			**0.80**
trans-1,2-Dichloroethene	0.05	nd			nd
1,1-Dichloroethane	0.05	nd			nd
2-Butanone (MEK)	0.25	nd			**4,200**
cis-1,2-Dichloroethene	0.05	nd			nd
2,2-Dichloropropane	0.05	nd			nd
Chloroform	0.05	nd	82%	75%	nd
Bromochloromethane	0.05	nd			nd
1,1,1-Trichloroethane	0.05	nd			nd
1,2-Dichloroethane (EDC)	0.05	nd			nd
1,1-Dichloropropene	0.05	nd			nd
Carbon tetrachloride	0.05	nd			nd
Benzene	0.02	nd	87%	78%	nd
Trichloroethene (TCE)	0.02	nd	97%	86%	nd
1,2-Dichloropropane	0.05	nd	90%	80%	nd
Dibromomethane	0.05	nd			nd
Bromodichloromethane	0.05	nd			nd
4-Methyl-2-pentanone (MIBK)	0.25	nd			nd
cis-1,3-Dichloropropene	0.05	nd			nd
Toluene	0.05	nd	93%	81%	nd
trans-1,3-Dichloropropene	0.05	nd			nd
1,1,2-Trichloroethane	0.05	nd			nd
2-Hexanone	0.25	nd			nd
1,3-Dichloropropane	0.05	nd			nd
Dibromochloromethane	0.05	nd			nd
Tetrachloroethene (PCE)	0.02	nd	86%	77%	nd
1,2-Dibromoethane (EDB)	0.05	nd			nd
Chlorobenzene	0.05	nd	95%	85%	nd
1,1,1,2-Tetrachloroethane	0.05	nd			nd
Ethylbenzene	0.05	nd	108%	92%	nd
Xylenes	0.15	nd	111%	98%	nd
Styrene	0.05	nd			nd
Bromoform	0.05	nd			nd
1,1,2,2-Tetrachloroethane	0.05	nd			nd
Isopropylbenzene	0.05	nd			nd
1,2,3-Trichloropropane	0.05	nd			nd
Bromobenzene	0.05	nd			nd

ESN NORTHWEST CHEMISTRY LABORATORY

ES Engineering Services
PROJECT SITE NO. 3520
Bremerton, 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	Carbon
Date extracted		12/21/18	12/21/18	12/21/18	12/20/18
Date analyzed	(mg/Kg)	12/21/18	12/21/18	12/21/18	12/21/18
n-Propylbenzene	0.05	nd			nd
2-Chlorotoluene	0.05	nd			nd
4-Chlorotoluene	0.05	nd			nd
1,3,5-Trimethylbenzene	0.05	nd			nd
tert-Butylbenzene	0.05	nd			nd
1,2,4-Trimethylbenzene	0.05	nd			nd
sec-Butylbenzene	0.05	nd			nd
1,3-Dichlorobenzene	0.05	nd			nd
1,4-Dichlorobenzene	0.05	nd			nd
Isopropyltoluene	0.05	nd			nd
1,2-Dichlorobenzene	0.05	nd			nd
n-Butylbenzene	0.05	nd			nd
1,2-Dibromo-3-Chloropropane	0.05	nd			nd
1,2,4-Trichlorobenzene	0.05	nd			nd
Naphthalene	0.05	nd			nd
Hexachloro-1,3-butadiene	0.05	nd			nd
1,2,3-Trichlorobenzene	0.05	nd			nd
Surrogate recoveries					
Dibromofluoromethane		86%	75%	75%	93%
Toluene-d8		91%	83%	84%	92%
4-Bromofluorobenzene		111%	117%	115%	104%

Data Qualifiers and Analytical Comments

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

ESN NORTHWEST, INC. | Environmental Services Network

PO1028837

CHAIN-OF-CUSTODY RECORD

CLIENT: ES Eng. SVCS

ADDRESS: 4150 B Pl. NW Ste 106 Auburn

PHONE: _____ FAX: _____

CLIENT PROJECT #: _____ PROJECT MANAGER: _____

DATE: 1 PAGE 1 OF 1

PROJECT NAME: Site No. 3520

LOCATION: 4200 Wharton Navy, Bremerton

COLLECTOR: Nick Olivier DATE OF COLLECTION: 12/5/18

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. CARBON - 1	n/a	15:30	GAC	bag			X			X															1	
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
[signature]	12/13/18 11:20	[signature]	12/13/18 11:20
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
Environmental
Services Network

September 19, 2019

Laura Skow
Montrose Environmental
1 Park Plaza, Suite 1000
Irvine, CA 92614

Dear Mr. Skow:

Please find enclosed the analytical data report for the Site #3520 Project in Bremerton, Washington. Soil vapor samples were analyzed for Gasoline by NWTPH-Gx and BTEX by Method 8260 on September 4, 2019.

The results of the analyses are summarized in the attached tables. All soil values are reported on a dry weight basis. Applicable detection limits and QA/QC data are included. An invoice for this analytical work is also enclosed.

ESN Northwest appreciates the opportunity to have provided analytical services to Montrose Environmental for this project. If you have any further questions about the data report, please give us a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Michael A. Korosec

Michael A. Korosec
President

1210 Eastside Street SE, Suite 200 ■ Olympia, Washington 98501 ■ 360.459.4670 ■ FAX 360.459.3432
Web Site: *www.esnnw.com* E-Mail: *info@esnnw.com*

ESN NORTHWEST CHEMISTRY LABORATORY

Montrose Environmental
PROJECT SITE No. 3520
Client Project #123155
Bremerton, Washington

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

Analyses of Volatile Organic Componds in Soil Vapor by Method 8260

Sample ID	Molecular	Reporting	MB	LCS	VE-1	VE-2	VE-3	VE-4	RW-1	RW-2	RW-3
Date Sampled	Weight	Limits	09/04/19	09/04/19	09/03/19	09/03/19	09/03/19	09/03/19	09/03/19	09/03/19	09/03/19
Date Analyzed	g	ug/m3	09/04/19	09/04/19	09/04/19	09/04/19	09/04/19	09/04/19	09/04/19	09/04/19	09/04/19
Benzene	78.11	10	nd	78%	**57**	**72**	**490**	**500**	**1,600**	nd	nd
Toluene	92.13	10	nd	73%	**300**	**380**	**1,800**	**3,400**	**12,000**	**300**	**250**
Ethylbenzene	106.2	10	nd	71%	**340**	**180**	**1,300**	**320**	**2,900**	**500.0**	**250**
Xylenes	106.2	10	nd	82%	**1,400**	**860**	**2,600**	**1,700**	**8,300**	**1,400**	**840**
Total Volatile Hydrocarbons	---	1000	nd	82%	**320,000**	**300,000**	**6,500,000**	**630,000**	**2,200,000**	**1,100,000**	**260,000**
Surrogate recoveries											
Dibromofluoromethane			70%	100%	63%	80%	89%	65%	101%	65%	120%
Toluene-d8			100%	94%	98%	92%	100%	101%	94%	96%	98%
4-Bromofluorobenzene			106%	105%	106%	105%	129%	115%	114%	108%	104%

Data Qualifiers and Analytical Comments

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

NORTHWEST, INC. | Services Network

PO 1039076

CHAIN-OF-CUSTODY RECORD

CLIENT: Maxim Sc Environmental

ADDRESS: 4150 B Pl NW Auburn WA ~~98466~~ 98001

PHONE: _____ FAX: _____

CLIENT PROJECT #: 123155 PROJECT MANAGER: Laura Skow

DATE: 9/3/19 PAGE 1 OF 1

PROJECT NAME: Site No. 3520

LOCATION: 4200 Wheaton Way Bremerton

COLLECTOR: Nick Oliver DATE OF COLLECTION: 9/3/19

Sample Number	Depth	Time	Sample Type	Container Type	TPH - HCID	TPH - Diesel & Oil	TPH - Gasoline	BTEX + TPH-GX *	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. VE-1	n/a		AIR	Tedlar				X														* by 8260	1	
2. VE-2								X																
3. VE-3								X																
4. VE-4								X																
5. RW-1								X																
6. RW-2								X																
7. RW-3								X																
8.																								
9.																								
10.																								
11.																								
12.																								
13.																								
14.																								
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16.																								
17.																								
18.																								

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
[signature]	9/4/19 10:45	[signature]	9-4-19 10:5
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
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Website: www.esnnw.com
E-Mail: info@esnnw.com

Libby Environmental, Inc.
3322 South Bay Road NE • Olympia, WA 98506-2957

September 25, 2019

Laura Skow
Montrose Environmental
4150 B Place NW, Suite 106
Auburn, WA 98001

Dear Ms. Skow:

Please find enclosed the analytical data report for the Site No. 3520 Project located in Bremerton, Washington.

The results of the analyses are summarized in the attached tables. Applicable detection limits and QA/QC data are included. The sample(s) will be disposed of within 30 days unless we are contacted to arrange long term storage.

Libby Environmental, Inc. appreciates the opportunity to have provided analytical services for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Sherry L. Chilcutt
Senior Chemist
Libby Environmental, Inc.

Phone (360) 352-2110 • Fax (360) 352-4154 • libbyenv@gmail.com

Libby Environmental, Inc.

Chain of Custody Record

www.LibbyEnvironmental.com

3322 South Bay Road NE
Olympia, WA 98506
Ph: 360-352-2110
Fax: 360-352-4154

Date: 9/16/19 Page: 1 of 1

Client: Montrose Environmental
Project Manager: Laura Skow
Address: 4150 B Pl NW Ste 106
Project Name: Site No. 3520
City: Auburn State: WA Zip: 98001
Location: 4200 Wheaton Way City, State: Bremerton, WA
Phone: 253 656 4856 Fax:
Collector: Nick Olivier Date of Collection: 9/16/19
Client Project # PO 1039708
Email: LSkow@montrose-env.com

Sample Number	Depth	Time	Sample Type	Container Type	VOC 8260	NWTPH-Gx	BTEX ~~8021~~ 8260	NWTPH-HCID	NWTPH-Dx	NWTPH-Dx/Dx	c PAH 8270	PAH 8270	Semi Vol 8270	PCB 8082	MTCA 5 Metals	RCRA 8 Metals			Field Notes
1 INFLUENT	n/a	17:10	AIR	Tedlar		X	X												
2 MID-POINT	↓	17:20	↓	↓		X	X												
3 EFFLUENT	↓	17:30	↓	↓		X	X												Hold Not analyzed
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			

Relinquished by:	Date / Time	Received by:	Date / Time
[signature]	9/17/19 14:50	[signature]	9/17/19 1450
Relinquished by:	Date / Time	Received by:	Date / Time
Relinquished by:	Date / Time	Received by:	Date / Time

Sample Receipt

Good Condition?	Y	N
Cooler Temp.		°C
Sample Temp.		°C
Total Number of Containers		

Remarks: Results in ppmV

TAT: 24HR 48HR 5-DAY

Distribution: White - Lab, Yellow - File, Pink - Originator

Libby Environmental, Inc.

3322 South Bay Road NE
Olympia, WA 98506
Phone: (360) 352-2110
FAX: (360) 352-4154
Email: libbyenv@gmail.com

SITE NO. 3520 PROJECT
Montrose Environmental, Inc.
Bremerton, Washington
Libby Project # L190917-9
Client Project # PO 1039708

Analyses of Gasoline (NWTPH-Gx) & BTEX (EPA Method 8260D) in Vapor

Sample Description		Method Blank	INFLUENT	INFLUENT Dup	MID-POINT
Date Sampled		N/A	9/16/19	9/16/19	9/16/19
Date Analyzed	PQL	9/18/19	9/17/19	9/18/19	9/18/19
	ppmv	ppmv	ppmv	ppmv	ppmv
Benzene	0.007	nd	0.19	0.14	nd
Toluene	0.04	nd	2.3	1.3	nd
Ethylbenzene	0.05	nd	0.63	0.35	nd
Total Xylenes	0.03	nd	1.9	1.1	nd
Gasoline	1.0	nd	290	290	nd
Surrogate Recovery					
Dibromofluoromethane		99	68	96	88
1,2-Dichloroethane-d4		84	100	85	71
Toluene-d8		85	15	90	87
4-Bromofluorobenzene		89	116	99	96

"nd" Indicates not detected at listed detection limit.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 65% TO 135%

ANALYSES PERFORMED BY: Sherry Chilcutt

Libby Environmental, Inc.

3322 South Bay Road NE
Olympia, WA 98506
Phone: (360) 352-2110
FAX: (360) 352-4154
Email: libbyenv@gmail.com

SITE NO. 3520 PROJECT
Montrose Environmental, Inc.
Bremerton, Washington
Libby Project # L190917-9
Client Project # PO 1039708

QA/QC for Gasoline (NWTPH-Gx) & BTEX (EPA Method 8260D) in Vapor

Laboratory Control Sample

	Spiked Conc. ug/l	LCS Response ug/l	LCS Recovery (%)	LCS Recovery Limits (%)	Data Flag
Benzene	0.50	0.48	95	80-120	
Toluene	0.50	0.42	84	80-120	
Ethylbenzene	0.50	0.49	97	80-120	
Total Xylenes	1.50	1.38	92	80-120	
Surrogate Recovery					
Dibromofluoromethane			105	65-135	
1,2-Dichloroethane-d4			90	65-135	
Toluene-d8			87	65-135	
4-Bromofluorobenzene			95	65-135	

ANALYSES PERFORMED BY: Sherry Chilcutt

Libby Environmental, Inc.

3322 South Bay Road NE
Olympia, WA 98506
Phone: (360) 352-2110
FAX: (360) 352-4154
Email: libbyenv@gmail.com

SITE NO. 3520 PROJECT
Montrose Environmental, Inc.
Libby Project # L190917-9
Date Received 9/17/2019
Time Received 2:50 PM

Received By KD

Sample Receipt Checklist

Chain of Custody

1. Is the Chain of Custody complete?	☑	Yes	☐	No		
2. How was the sample delivered?	☑	Hand Delivered	☐	Picked Up	☐	Shipped

Log In

3. Cooler or Shipping Container is present.	☐	Yes	☐	No	☑	N/A
4. Cooler or Shipping Container is in good condition.	☐	Yes	☐	No	☑	N/A
5. Cooler or Shipping Container has Custody Seals present.	☐	Yes	☐	No	☑	N/A
6. Was an attempt made to cool the samples?	☐	Yes	☐	No	☑	N/A
7. Temperature of cooler (0°C to 8°C recommended)	N/A °C					
8. Temperature of sample(s) (0°C to 8°C recommended)	N/A °C					
9. Did all containers arrive in good condition (unbroken)?	☑	Yes	☐	No		
10. Is it clear what analyses were requested?	☑	Yes	☐	No		
11. Did container labels match Chain of Custody?	☑	Yes	☐	No		
12. Are matrices correctly identified on Chain of Custody?	☑	Yes	☐	No		
13. Are correct containers used for the analysis indicated?	☑	Yes	☐	No		
14. Is there sufficient sample volume for indicated analysis?	☑	Yes	☐	No		
15. Were all containers properly preserved per each analysis?	☑	Yes	☐	No		
16. Were VOA vials collected correctly (no headspace)?	☐	Yes	☐	No	☑	N/A
17. Were all holding times able to be met?	☑	Yes	☐	No		

Discrepancies/ Notes

18. Was client notified of all discrepancies?	☑	Yes	☐	No	☐	N/A

Person Notified: Nicolas Olivier — Date: 18-Sep
By Whom: Sherry Chilcutt — Via: phone
Regarding:

19. Comments. Effluent Sample had open valve. Client is bringing a new sample

Libby Environmental, Inc.

3322 South Bay Road NE • Olympia, WA 98506-2957

September 25, 2019

Laura Skow
Montrose Environmental
4150 B Place NW, Suite 106
Auburn, WA 98001

Dear Ms. Skow:

Please find enclosed the analytical data report for the Site No. 3520 Project located in Bremerton, Washington.

The results of the analyses are summarized in the attached tables. Applicable detection limits and QA/QC data are included. The sample(s) will be disposed of within 30 days unless we are contacted to arrange long term storage.

Libby Environmental, Inc. appreciates the opportunity to have provided analytical services for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Sherry L. Chilcutt
Senior Chemist
Libby Environmental, Inc.

Phone (360) 352-2110 • Fax (360) 352-4154 • libbyenv@gmail.com

Libby Environmental, Inc.

Chain of Custody Record

www.LibbyEnvironmental.com

3322 South Bay Road NE
Olympia, WA 98506
Ph: 360-352-2110
Fax: 360-352-4154

Date: 9/20/19 Page: 1 of 1

Client: Montrose Env. Project Manager: Laura Skow

Address: 4150 B Pl NW Ste 106 Project Name: Site #3520

City: Auburn State: WA Zip: 98001 Location: 4200 Wheaton Way City, State: Bremerton

Phone: 253-656-4856 Fax: Collector: Nick Oliva Date of Collection: 9/20/19

Client Project # PO 1039708 Email:

	Sample Number	Depth	Time	Sample Type	Container Type	~~VOC 8260~~ BTEX	NWTPH-Gx	BTEX 8021	NWTPH-HCID	NWTPH-Dx	NWTPH-Dx/Dx	cPAH 8270	PAH 8270	Semi Vol 8270	PCB 8082	MTCA 5 Metals	RCRA 8 Metals			Field Notes
1	EFFLUENT	n/a	9:00	AIR	BAG	+	+													
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				
16																				
17																				

Relinquished by:	Date / Time	Received by:	Date / Time
[signature]	9/20/19 14:10	[signature]	9/20/19 1410
Relinquished by:	Date / Time	Received by:	Date / Time
Relinquished by:	Date / Time	Received by:	Date / Time

Sample Receipt

Good Condition?	Y	N
Cooler Temp.		°C
Sample Temp.		°C
Total Number of Containers		

Remarks:

TAT: 24HR 48HR 5-DAY

Distribution: White - Lab, Yellow - File, Pink - Originator

Libby Environmental, Inc.

3322 South Bay Road NE
Olympia, WA 98506
Phone: (360) 352-2110
FAX: (360) 352-4154
Email: libbyenv@gmail.com

SITE NO. 3520 PROJECT
Montrose Environmental, Inc.
Bremerton, Washington
Libby Project # L190920-6
Client Project # PO 1039708

Analyses of Gasoline (NWTPH-Gx) & BTEX (EPA Method 8260D) in Vapor

Sample Description		Method Blank	EFFLUENT	EFFLUENT Dup
Date Sampled		N/A	9/20/19	9/20/19
Date Analyzed	PQL	9/20/19	9/20/19	9/20/19
	ppmv	ppmv	ppmv	ppmv
Benzene	0.007	nd	nd	nd
Toluene	0.04	nd	nd	nd
Ethylbenzene	0.05	nd	nd	nd
Total Xylenes	0.03	nd	nd	nd
Gasoline	1.0	nd	nd	nd
Surrogate Recovery				
Dibromofluoromethane		102	92	94
1,2-Dichloroethane-d4		94	74	78
Toluene-d8		90	87	77
4-Bromofluorobenzene		96	117	97

"nd" Indicates not detected at listed detection limit.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 65% TO 135%

ANALYSES PERFORMED BY: Paul Burke

Libby Environmental, Inc.

3322 South Bay Road NE
Olympia, WA 98506
Phone: (360) 352-2110
FAX: (360) 352-4154
Email: libbyenv@gmail.com

SITE NO. 3520 PROJECT
Montrose Environmental, Inc.
Bremerton, Washington
Libby Project # L190920-6
Client Project # PO 1039708

QA/QC for Gasoline (NWTPH-Gx) & BTEX (EPA Method 8260D) in Vapor

Laboratory Control Sample

	Spiked Conc. ug/l	LCS Response ug/l	LCS Recovery (%)	LCS Recovery Limits (%)	Data Flag
Benzene	0.50	0.47	94	80-120	
Toluene	0.50	0.47	94	80-120	
Ethylbenzene	0.50	0.45	90	80-120	
Total Xylenes	1.50	1.30	87	80-120	
Surrogate Recovery					
Dibromofluoromethane			122	65-135	
1,2-Dichloroethane-d4			111	65-135	
Toluene-d8			110	65-135	
4-Bromofluorobenzene			96	65-135	

ANALYSES PERFORMED BY: Paul Burke

Libby Environmental, Inc.

3322 South Bay Road NE
Olympia, WA 98506
Phone: (360) 352-2110
FAX: (360) 352-4154
Email: libbyenv@gmail.com

SITE NO. 3520 PROJECT
Montrose Environmental, Inc.
Libby Project # L190920-6
Date Received 9/20/2019
Time Received 2:10 PM

Received By KD

Sample Receipt Checklist

Chain of Custody

1. Is the Chain of Custody complete?	☑	Yes	☐	No		
2. How was the sample delivered?	☑	Hand Delivered	☐	Picked Up	☐	Shipped

Log In

3. Cooler or Shipping Container is present.	☐	Yes	☐	No	☑	N/A
4. Cooler or Shipping Container is in good condition.	☐	Yes	☐	No	☑	N/A
5. Cooler or Shipping Container has Custody Seals present.	☐	Yes	☐	No	☑	N/A
6. Was an attempt made to cool the samples?	☐	Yes	☐	No	☑	N/A
7. Temperature of cooler (0°C to 8°C recommended)	N/A °C					
8. Temperature of sample(s) (0°C to 8°C recommended)	N/A °C					
9. Did all containers arrive in good condition (unbroken)?	☑	Yes	☐	No		
10. Is it clear what analyses were requested?	☑	Yes	☐	No		
11. Did container labels match Chain of Custody?	☑	Yes	☐	No		
12. Are matrices correctly identified on Chain of Custody?	☑	Yes	☐	No		
13. Are correct containers used for the analysis indicated?	☑	Yes	☐	No		
14. Is there sufficient sample volume for indicated analysis?	☑	Yes	☐	No		
15. Were all containers properly preserved per each analysis?	☑	Yes	☐	No		
16. Were VOA vials collected correctly (no headspace)?	☐	Yes	☐	No	☑	N/A
17. Were all holding times able to be met?	☑	Yes	☐	No		

Discrepancies/ Notes

18. Was client notified of all discrepancies?	☑	Yes	☐	No	☐	N/A

Person Notified: Nicolas Olivier — Date: 18-Sep
By Whom: Sherry Chilcutt — Via: phone
Regarding:

19. Comments. Effluent Sample had open valve. Client is bringing a new sample

Libby Environmental, Inc.

3322 South Bay Road NE • Olympia, WA 98506-2957

October 7, 2019

Laura Skow
Montrose Environmental
4150 B Place NW, Suite 106
Auburn, WA 98001

Dear Ms. Skow:

Please find enclosed the analytical data report for the Site No. 3520 Project located in Bremerton, Washington.

The results of the analyses are summarized in the attached tables. Applicable detection limits and QA/QC data are included. The sample(s) will be disposed of within 30 days unless we are contacted to arrange long term storage.

Libby Environmental, Inc. appreciates the opportunity to have provided analytical services for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Sherry L. Chilcutt
Senior Chemist
Libby Environmental, Inc.

Phone (360) 352-2110 • Fax (360) 352-4154 • libbyenv@gmail.com

Libby Environmental, Inc.

Chain of Custody Record

www.LibbyEnvironmental.com

3322 South Bay Road NE
Olympia, WA 98506
Ph: 360-352-2110
Fax: 360-352-4154

Date: 10/1/19 Page: 1 of 1

Client: Montrose Environmental
Project Manager: Laura Skow
Address: 4150 B Pl NW
Project Name: Site No. 3520
City: Auburn State: WA Zip: 98001
Location: 4200 Wheaton Way City, State: Bremerton, WA
Phone: 3603059942 Fax:
Collector: Nick Oliver Date of Collection: 9/30/19
Client Project # PO 1039735
Email: LSkow@montrose-env.com

Sample Number	Depth	Time	Sample Type	Container Type	VOC 8260 (BTEX)	NWTPH-Gx	BTEX 8021	NWTPH-HCID	NWTPH-Dx	NWTPH-Dx/Dx	c PAH 8270	PAH 8270	Semi Vol 8270	PCB 8082	MTCA 5 Metals	RCRA 8 Metals			Field Notes
1 Influent	n/a	13:00	air	tedlar	X	X													
2 mid-point		13:05			X	X													
3 effluent	↓	13:10	↓	↓	X	X													
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			

Relinquished by:	Date / Time	Received by:	Date / Time
[signature]	10/1/19 8:30	[signature]	10/1/19 0830
Relinquished by:	Date / Time	Received by	Date / Time
Relinquished by:	Date / Time	Received by:	Date / Time

Sample Receipt

Good Condition?	(Y) N
Cooler Temp.	— °C
Sample Temp.	— °C
Total Number of Containers	3

Remarks:

TAT: 24HR 48HR (5-DAY)

Distribution: White - Lab, Yellow - File, Pink - Originator

Libby Environmental, Inc.

3322 South Bay Road NE
Olympia, WA 98506
Phone: (360) 352-2110
FAX: (360) 352-4154
Email: libbyenv@gmail.com

SITE NO. 3520 PROJECT
Montrose Environmental, Inc.
Bremerton, Washington
Libby Project # L191001-2
Client Project # PO 1039735

Analyses of Gasoline (NWTPH-Gx) & BTEX (EPA Method 8260D) in Vapor

Sample Description		Method Blank	Influent	Mid-point	Mid-point Dup	Effluent
Date Sampled		N/A	9/30/19	9/30/19	9/30/19	9/30/19
Date Analyzed	PQL	10/2/19	9/17/19	10/2/19	10/2/19	10/2/19
	ppmv	ppmv	ppmv	ppmv	ppmv	ppmv
Benzene	0.007	nd	0.056	nd	nd	nd
Toluene	0.04	nd	1.6	nd	nd	nd
Ethylbenzene	0.05	nd	0.74	nd	nd	nd
Total Xylenes	0.03	nd	3.1	nd	nd	nd
Gasoline	1.0	nd	110	nd	nd	nd
Surrogate Recovery						
Dibromofluoromethane		98	88	103	100	98
1,2-Dichloroethane-d4		103	101	100	97	103
Toluene-d8		116	115	101	114	108
4-Bromofluorobenzene		108	112	86	87	92

"nd" Indicates not detected at listed detection limit.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 65% TO 135%

ANALYSES PERFORMED BY: Sherry Chilcutt

Libby Environmental, Inc.

3322 South Bay Road NE
Olympia, WA 98506
Phone: (360) 352-2110
FAX: (360) 352-4154
Email: libbyenv@gmail.com

SITE NO. 3520 PROJECT
Montrose Environmental, Inc.
Bremerton, Washington
Libby Project # L191001-2
Client Project # PO 1039735

QA/QC for Gasoline (NWTPH-Gx) & BTEX (EPA Method 8260D) in Vapor

Laboratory Control Sample

	Spiked Conc. ug/l	LCS Response ug/l	LCS Recovery (%)	LCS Recovery Limits (%)	Data Flag
Benzene	0.25	0.26	104	80-120	
Toluene	0.25	0.22	88	80-120	
Ethylbenzene	0.25	0.28	112	80-120	
Total Xylenes	0.75	0.83	111	80-120	
Surrogate Recovery					
Dibromofluoromethane			110	65-135	
1,2-Dichloroethane-d4			108	65-135	
Toluene-d8			90	65-135	
4-Bromofluorobenzene			112	65-135	

ANALYSES PERFORMED BY: Sherry Chilcutt

Libby Environmental, Inc.

3322 South Bay Road NE
Olympia, WA 98506
Phone: (360) 352-2110
FAX: (360) 352-4154
Email: libbyenv@gmail.com

SITE NO. 3520 PROJECT
Montrose Environmental, Inc.
Libby Project # L191001-2
Date Received 10/1/2019
Time Received 8:30 AM

Received By KD

Sample Receipt Checklist

Chain of Custody

1. Is the Chain of Custody complete?	☑	Yes	☐	No		
2. How was the sample delivered?	☑	Hand Delivered	☐	Picked Up	☐	Shipped

Log In

3. Cooler or Shipping Container is present.	☐	Yes	☑	No	☐	N/A
4. Cooler or Shipping Container is in good condition.	☐	Yes	☐	No	☑	N/A
5. Cooler or Shipping Container has Custody Seals present.	☐	Yes	☐	No	☑	N/A
6. Was an attempt made to cool the samples?	☐	Yes	☐	No	☑	N/A
7. Temperature of cooler (0°C to 8°C recommended)	N/A °C					
8. Temperature of sample(s) (0°C to 8°C recommended)	N/A °C					
9. Did all containers arrive in good condition (unbroken)?	☑	Yes	☐	No		
10. Is it clear what analyses were requested?	☑	Yes	☐	No		
11. Did container labels match Chain of Custody?	☑	Yes	☐	No		
12. Are matrices correctly identified on Chain of Custody?	☑	Yes	☐	No		
13. Are correct containers used for the analysis indicated?	☑	Yes	☐	No		
14. Is there sufficient sample volume for indicated analysis?	☑	Yes	☐	No		
15. Were all containers properly preserved per each analysis?	☑	Yes	☐	No		
16. Were VOA vials collected correctly (no headspace)?	☐	Yes	☐	No	☑	N/A
17. Were all holding times able to be met?	☑	Yes	☐	No		

Discrepancies/ Notes

18. Was client notified of all discrepancies?	☐	Yes	☐	No	☑	N/A

Person Notified: _____ Date: _____

By Whom: _____ Via: _____

Regarding: _____

19. Comments. _____

APPENDIX B

Field Data Sheets

APPENDIX C

Certification of Waste Disposal

APPENDIX D

Historical O&M Data Tables and Graphs