



TGERESOURCES, INC.
*Environmental Consulting,
Engineering and Industrial Hygiene*



**Supplemental Confirmation Testing
Former Payless Auto Mart**

29805 Pacific Highway South
Federal Way, King County, Washington
WA Ecology Cleanup Site/Facility ID Nos. – 5427 / 7222592
WA Ecology VCP Project ID No. – NW3270
Lat. 47.33537° / Long. - 122.3126°
King County Parcel No. 042104-9157
TGE Project No.: R13411.13

Prepared for:

MultiCare Health System, a Washington Nonprofit Corporation
315 Martin Luther King Jr. Way
Tacoma, Washington 98415-0299

October 10, 2022

Corporate Headquarters
8048 Northcourt Road
Houston, Texas 77040
Phone: 713.744.5800 Fax: 713.744.5888
www.tgeresources.com



Environmental Consulting & Engineering, Building Sciences, Industrial Hygiene & Remediation Services

October 10, 2022

MultiCare Health System, a Washington Nonprofit Corporation
315 Martin Luther King Jr. Way
Tacoma, Washington 98415-0299

Subject: **Supplemental Confirmation Testing
Federal Way Emergency Center**
29805 Pacific Highway South
Federal Way, King County, Washington
WA Ecology Cleanup Site/Facility ID Nos. – 5427 / 7222592
WA Ecology VCP Project ID No. – NW3270
Lat. 47.33537° / Long. - 122.3126°
King County Parcel No. 042104-9157
TGE Project No.: R13411.13

Dear Sir or Madam:

TGE Resources, Inc. ("TGE") has completed Supplemental Confirmation Testing at the Former Payless Auto Mart (redeveloped as the MultiCare Health System – Federal Way Emergency Center), located at 29805 Pacific Highway South in Federal Way, King County, Washington, hereinafter referred to as the "Property" (**Figure 1 – Property Location Map**). The objective of supplemental confirmation testing at the Property was to further demonstrate that, following the completion of self-implemented source removal in 2020/2021 (Remedial Investigation and Independent Remedial Action Report, dated April 19, 2021), that the vapor intrusion pathway at the site is not complete and does not pose a threat to human health and the environment.

Sub-Pavement Soil Vapor Assessment

Additional sub-pavement soil vapor assessments and Tier II evaluations of indoor and ambient air (summarized below) were conducted on June 3, 2022 and September 14, 2022. These assessments included the collection of shallow soil vapor samples at ten locations from beneath paved areas of the Property in close proximity east and south of the newly-constructed Property building (**Figure 2**). Stainless-steel sub-pavement vapor pins were installed along the southern and eastern limits of the Property building via hammer drill through an approximately three-inch thick layer of asphalt and a four-inch layer of sand/gravel base material in November 2021. The shallow soil vapor test locations (designated TVMP-3 through TVMP-12) were improved with silicone sleeves to form a surface seal and vapor intake points set within the top of the underlying soil strata (at a depth of approximately 12 inches below grade).

Following performance of a shut-in ("leak") test, a shallow soil vapor sample was collected from each vapor pin using 1.0-liter stainless-steel Summa® canisters equipped with airflow restricting assemblies set for an approximately five-minute sample collection period. During each sampling event, samples were recorded with respect to sample designation, collection date, initial/final pressure, and collection

time. Following sample collection within the Summa canisters, the flow train valves were closed and the canisters were collected and shipped for overnight delivery to the contract laboratory for VOCs analysis via EPA Method TO-15.

Reported shallow soil vapor concentrations were compared to respective Model Toxic Control Act (MTCA) Method B soil vapor screening levels (**Table 1**). While concentrations of multiple VOCs were found in shallow soil vapor during the 2021 and 2022 sampling events, the VOC analytes acrolein, benzene, 1,2-butadiene, chloroform, ethylene dibromide, naphthalene, tetrachloroethylene and trichloroethylene (previously reported in 2017 with elevated soil vapor levels prior to site redevelopment) were not reported above respective MTCA screening levels.

Sub-pavement soil vapor sample results for the Property are summarized in **Table 1**, and laboratory reports and sample chain-of-custody documentation are provided for reference as **Attachment 1**. Soil vapor concentration maps for test locations at the Property prior to the Independent Remedial Action (IRA) and site redevelopment as well as post site redevelopment are provided herein (**Figure 3** through **Figure 5**).

Indoor and Ambient Air Evaluation

Indoor (Tier II evaluation) and ambient (exterior) air testing events were conducted concurrently with sub-pavement soil vapor sampling to provide an additional line of evidence that Property conditions are protective of human health (per MTCA requirements), vapor intrusion is not resulting in unacceptably high levels of indoor contaminants, and the vapor intrusion exposure pathway at the Property is incomplete.

Specifically, certified clean and leak-free Summa canisters and airflow restricting assemblies were provided to TGE by the contract laboratory for each sampling event. Initially at negative pressure, the canister airflow restricting assemblies were opened and the canisters were left to equilibrate over an approximately 24-hour sample collection period. All Summa canisters and airflow restrictive assemblies were recorded with respect to initial/final pressure, sample location, collection date, and collection time. Following sample collection within the Summa canisters, the flow train valves were closed and the canisters were collected and shipped for overnight delivery to the contract laboratory for VOCs analysis via EPA Method TO-15.

Per Ecology guidance, and based on the current use of the Property building as an emergency care clinic with use/storage/disposal of various alcohols, solvents, and cleaners (both liquid and aerosol); the interior layout of the building; and positive-pressure operation of the HVAC system; samples were placed at a height of 1.5 meters above ground within an interior hallway adjacent to staff offices, breakroom, and nurse station (i.e., where building occupants spend a significant period of time, yet somewhat distant from background source areas) and upwind and downwind of the building; near the building, yet distant enough to preclude sample influence by the building (**Figure 2**).

Laboratory analysis of the indoor and exterior ambient air samples collected on November 16, 2021, June 3, 2022 and September 14, 2022 demonstrated an absence of VOC concentrations above respective MTCA Method B screening levels, with the exception of benzene, carbon tetrachloride and TCE. However, as reported, “upwind” ambient air concentrations of these contaminants were more elevated than interior “indoor” air levels. As such, per Ecology draft guidance, it is concluded that the presence of carbon tetrachloride and TCE within the Property’s building is related to background sources and not representative of a soil vapor intrusion condition.

Interior/Exterior Ambient Air Analytical Results (November 2021 – September 2022)				
Analysis		VOCs - (TO-15)		
Analyte		Carbon Tetrachloride	Benzene	TCE
WA Indoor Air Method B Carcinogenic Screening Level		0.417	0.321	0.3339
WA Indoor Air Method B Non-Carcinogenic Screening Level		45.71	13.71	0.914
Sample Location				
Interior	November 16, 2021	0.465 J	0.0309 J	0.534 J
	June 3, 2022	0.474 J	0.364 J	<0.364
	September 14, 2022	2.18	0.524 J	0.927 J
Exterior (Upwind)	November 16, 2021	0.474 J	0.495 J	34
	June 3, 2022	0.490 J	0.402 J	<0.364
	September 14, 2022	2.48	0.460 J	<0.364
Exterior (Downwind)	November 16, 2021	NT	NT	NT
	June 3, 2022	<0.461	0.390 J	4.09
	September 14, 2022	<0.461	1.34	<0.364
Note: • Bold/highlighted type represents a concentration in excess of the applicable WA Ecology MTCA Method B screening level. • Concentration in blue indicates a level above the method detection limit (MDL) and below the Ecology screen level (if established) for Indoor Air Concentraions.				

Indoor and ambient air sample results for the Property are summarized in **Table 2**, and laboratory reports and sample chain-of-custody documentation are provided for reference as **Attachment 1**.

Findings

Multiple lines of evidence compiled from post-construction, supplemental soil gas testing, and indoor and ambient (exterior) air sampling has demonstrated effective mitigation of soil vapors attributable to sub-slab VOC constituents identified prior to Property redevelopment.

- Elevated concentrations of the VOC analytes acrolein, benzene, 1,2-butadiene, chloroform, ethylene dibromide, naphthalene, PCE and TCE, previously found in soil vapor above MTCA Method B screening levels prior to completion of the IRA/property redevelopment, were not reported in shallow, sub-pavement soil vapor samples (collected between November 2021 and September 2022) in excess of Ecology MTCA Method B screening levels.
- Indoor and ambient exterior air sampling (Tier II evaluation) as collected between November 16, 2021 and September 14, 2022 demonstrated an absence of VOC constituent concentrations above respective MTCA Method B screening levels, with the exception of benzene, carbon tetrachloride and TCE. However, it was concluded that benzene, carbon tetrachloride and TCE concentrations within the Property building were related to background (exterior) sources as exterior concentrations of these constituents exceeded interior concentrations and as such were not representative of a soil vapor intrusion condition. Therefore, potential vapor intrusion at the Property is not resulting in unacceptably high levels of indoor contaminants, the vapor intrusion exposure pathway at the Property is incomplete, and Property conditions are protective of human health (per MTCA requirements).

Recommendations

Based on the results of this study, and within stated project limitations and qualifications made part of this effort, TGE provides the following suggested course of action:

- Due to a preponderance of data supporting the conclusion that indoor air is not impacted by soil vapor intrusion resulting from historical Property use and/or trespass of hazardous substances to the Property from adjacent properties, it has been demonstrated that the vapor intrusion pathway at the Property is incomplete and further testing is not necessary; and
- TGE requests agency determination that “no further action” is necessary at the Property and that Ecology has “no interest” in further corrective action.

Qualifications

Our professional services have been performed, our findings obtained and our recommendations prepared in accordance with customary principles and practices in the fields of environmental science and engineering. This company is not responsible for independent conclusions, opinions, or recommendations made by others based on the field exploration and laboratory test data presented in this report.

Conclusions presented in this report are professional opinions based solely upon visual observations and testing of soil vapor and ambient air at the subject property, as described in this report. They are intended exclusively for the purpose outlined herein and at the Property and project indicated. This report is intended for the sole use of the Client, and its representatives. The scope of services performed in the execution of this investigation may not be appropriate to satisfy the needs of other users, and any use or re-use of this document or the findings, conclusions, or recommendations presented herein is at the sole risk of said user.

It should be recognized that this study was not intended to be a definitive investigation of contamination across the subject property. Although the scope of services for this investigation included analytical testing of soil vapor and indoor/outdoor ambient air, it is possible that currently, unrecognized contamination may exist at the Property and that the levels of this potential contamination may vary across the Property. Opinions and recommendations presented herein apply to Property conditions existing at the time of our investigation and those reasonably foreseeable. They cannot necessarily apply to Property changes of which this company is not aware and has not had the opportunity to evaluate.

We appreciate the opportunity to provide MHS with these services. If you have any questions or comments about this report please contact us at your convenience.

Very truly yours,
TGE Resources, Inc.


Timothy E. Crump, P.G. CPG
Sr. Project Manager
WA P.G. #3210




Robin D. Franks, CHMM, RSO
President

TIMOTHY E. CRUMP

Attachments: Figure 1 – Property Location Map
Figure 2 – Sample Location Map
Figure 3A – Soil Vapor Concentration Map – Benzene (August 2017 – August 2018)
Figure 3B – Soil Vapor Concentration Map – Benzene (November 16, 2021)
Figure 3C – Soil Vapor Concentration Map – Benzene (June 3, 2022)
Figure 3D – Soil Vapor Concentration Map – Benzene (September 14, 2022)
Figure 4A – Soil Vapor Concentration Map – TCE (August 2017 – August 2018)
Figure 4B – Soil Vapor Concentration Map – TCE (November 16, 2021)
Figure 4C – Soil Vapor Concentration Map – TCE (June 3, 2022)
Figure 4D – Soil Vapor Concentration Map – TCE (September 14, 2022)
Figure 5A – Soil Vapor Concentration Map – PCE (August 2017 – August 2018)
Figure 5B – Soil Vapor Concentration Map – PCE (November 16, 2021)
Figure 5C – Soil Vapor Concentration Map – PCE (June 3, 2022)
Figure 5D – Soil Vapor Concentration Map – PCE (September 14, 2022)

Table 1 - Sub-Pavement Soil Vapor Analytical Data

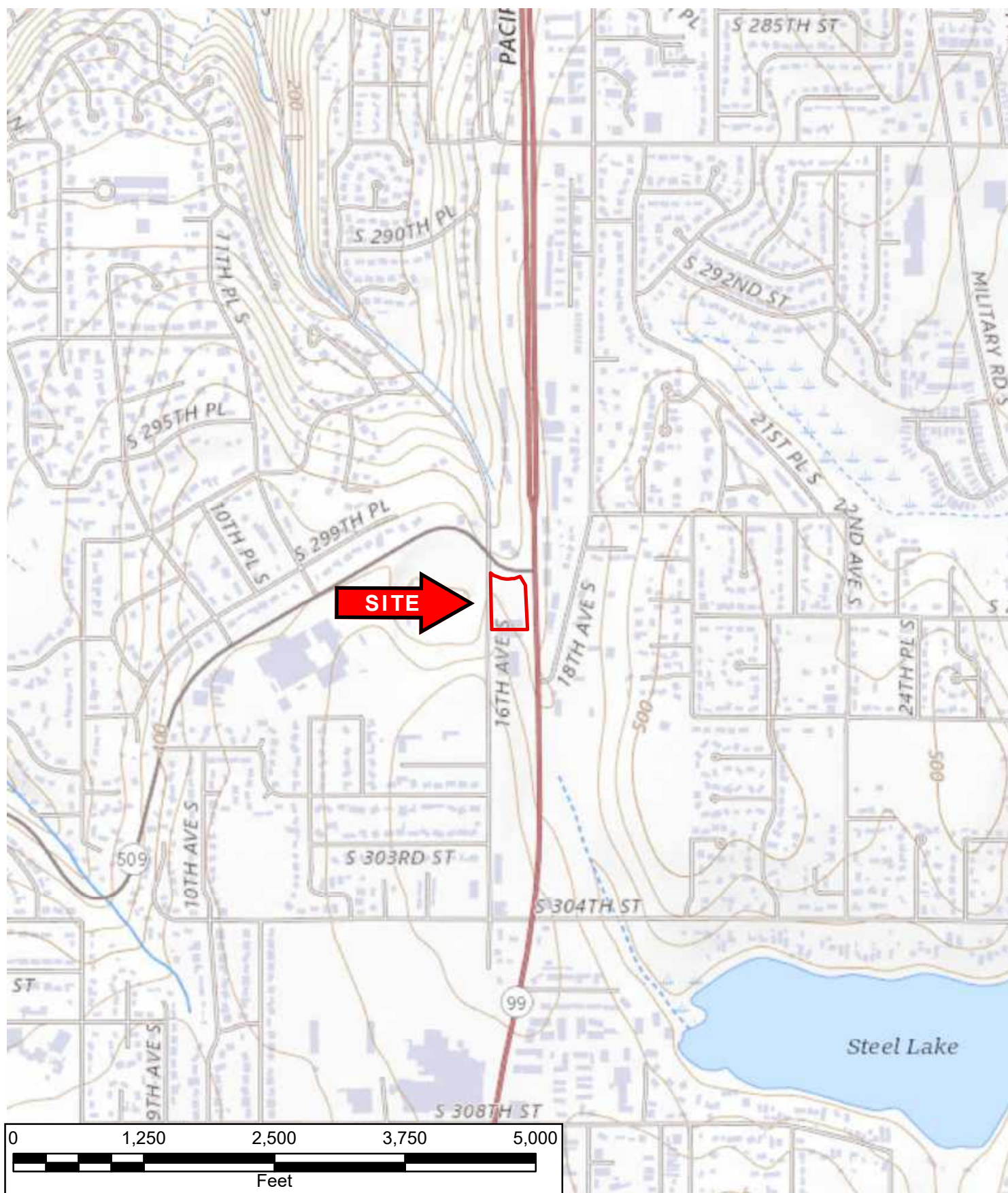
Table 2 - Interior/Exterior Air Analytical Results

Attachment 1 - Laboratory Data Reports

Attachment 2 –Qualifications of Environmental Professionals

cc: Mr. Andy Rigel – Hillis Clark Martin & Peterson P.S.
Mr. Dudley Carpenter – Emerus Hospital Partners
Mr. Ben M. Mingle – The Centurion Foundation, Inc.
Ms. Tammy Buyok – MultiCare Health System

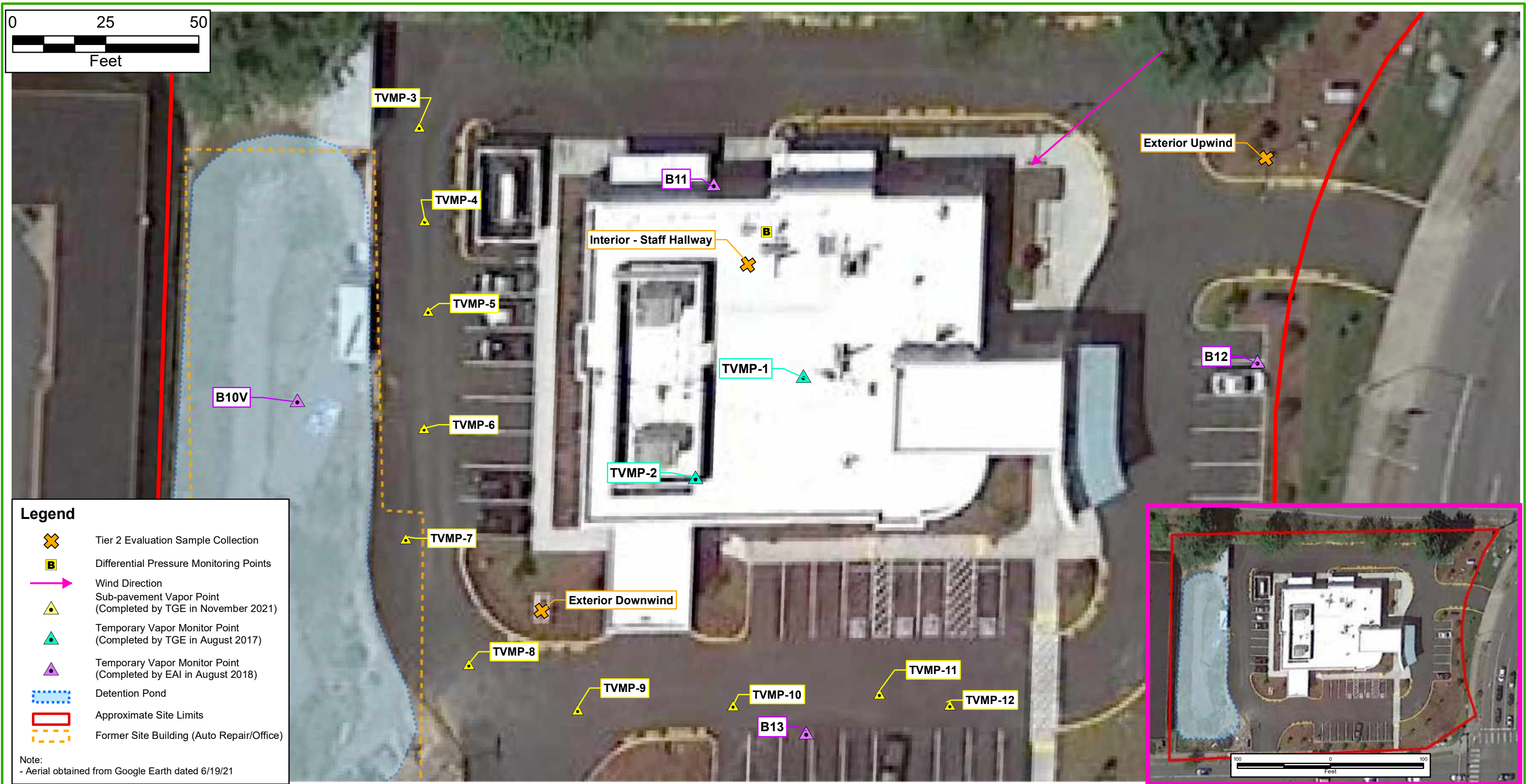
FIGURES



Former Payless Auto Mart
 29805 Pacific Highway South
 Federal Way, King County, WA
 TGE Project No.: R13411.13



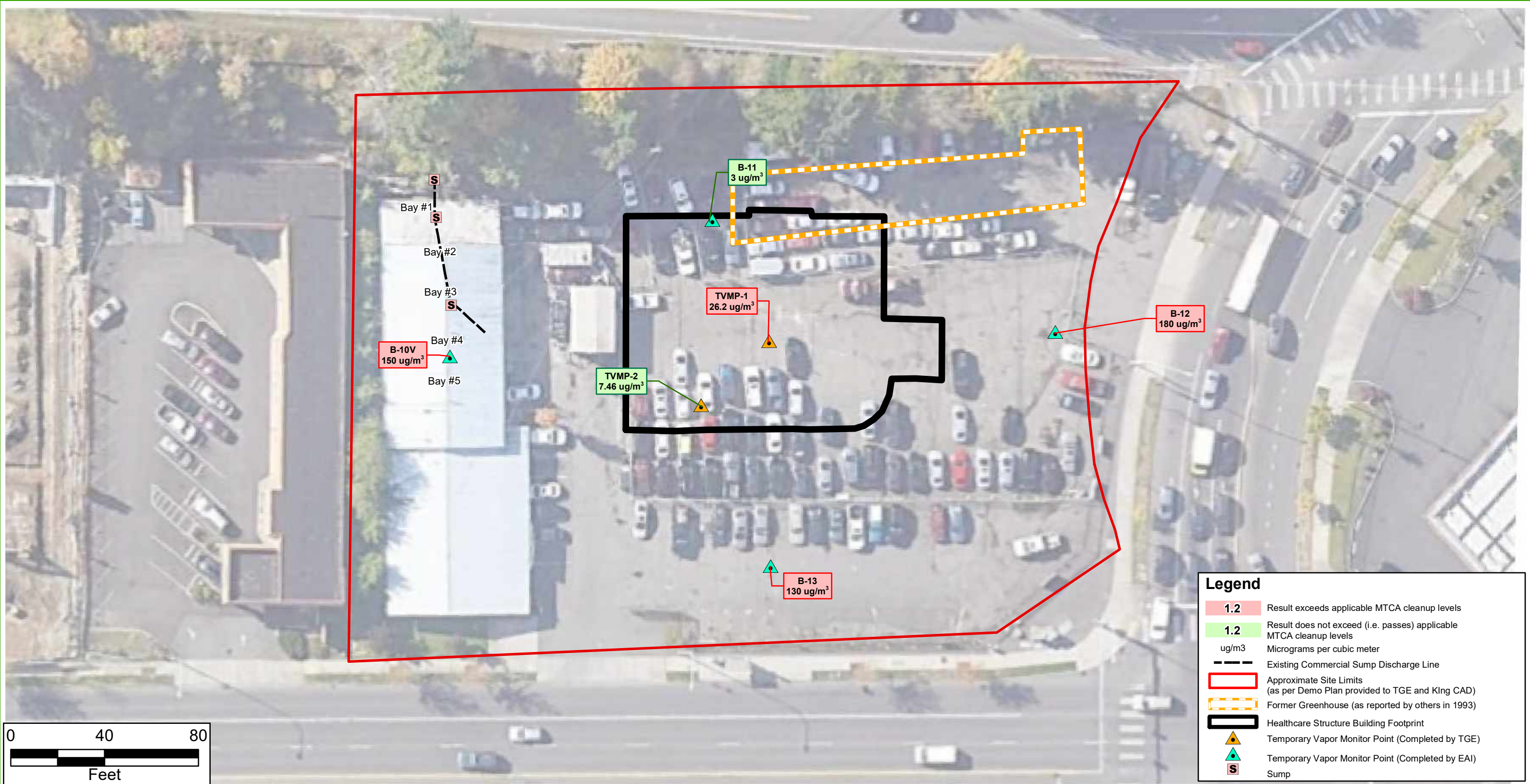
Figure 1
 Site Location Map
 USGS 7.5 Minute Series Topographic Map
 Poverty Bay, Washington Quadrangle
 2014



Former Payless Auto Mart
29805 Pacific Highway South
Federal Way, King County, Washington
TGE Project No.: R13411.13



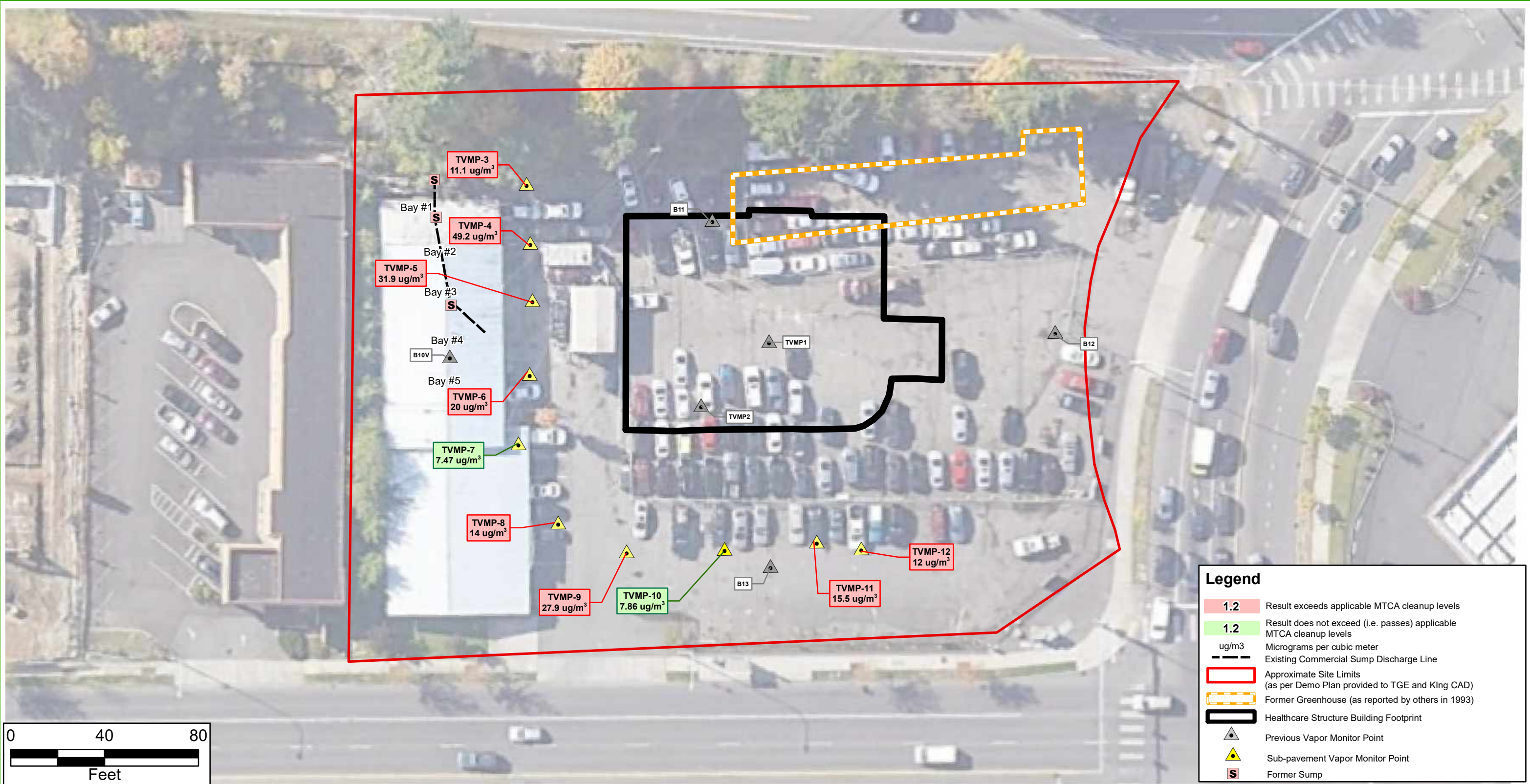
Figure 2
Sample Location Map - September 2022
(Includes Former Subslab Test Locations)



Former Payless Auto Mart
29805 Pacific Highway South
Federal Way, King County, Washington
TGE Project No.: R13411.13



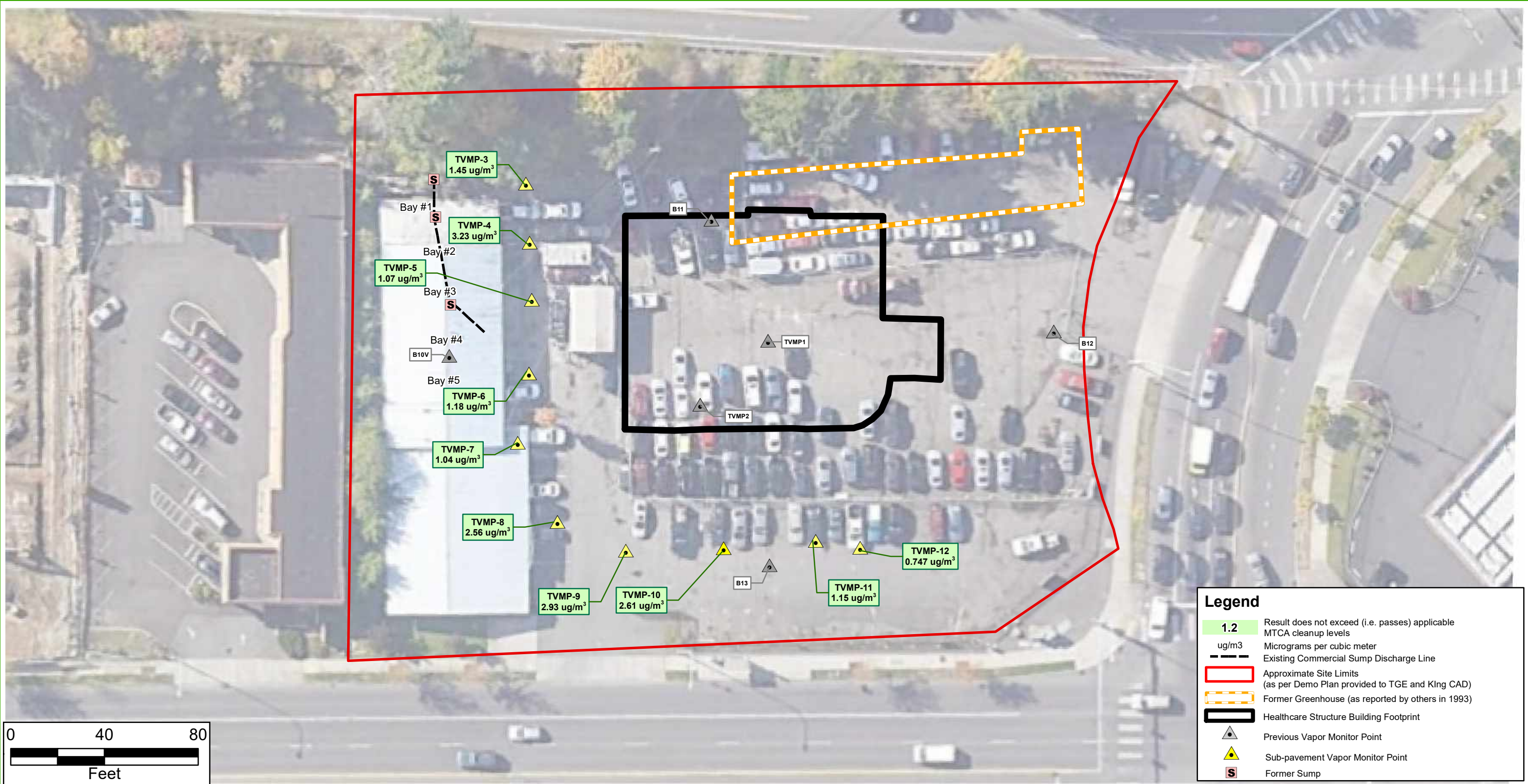
Figure 3A
Soil Vapor Concentration Map
Benzene
(August 2017 - August 2018)



Former Payless Auto Mart
29805 Pacific Highway South
Federal Way, King County, Washington
TGE Project No.: R13411.13



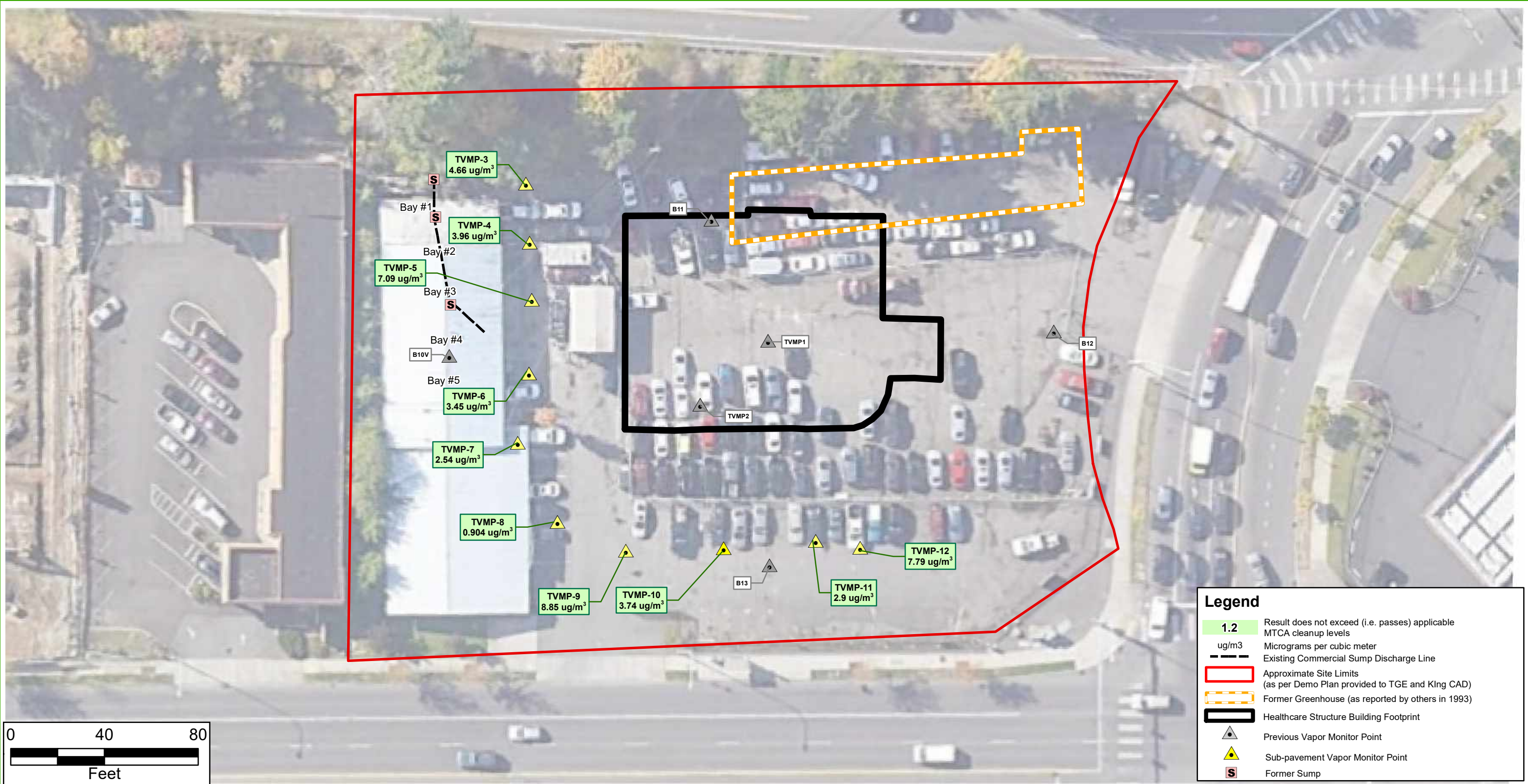
Figure 3B
Soil Vapor Concentration Map
Benzene
(November 16, 2021)



Former Payless Auto Mart
29805 Pacific Highway South
Federal Way, King County, Washington
TGE Project No.: R13411.13



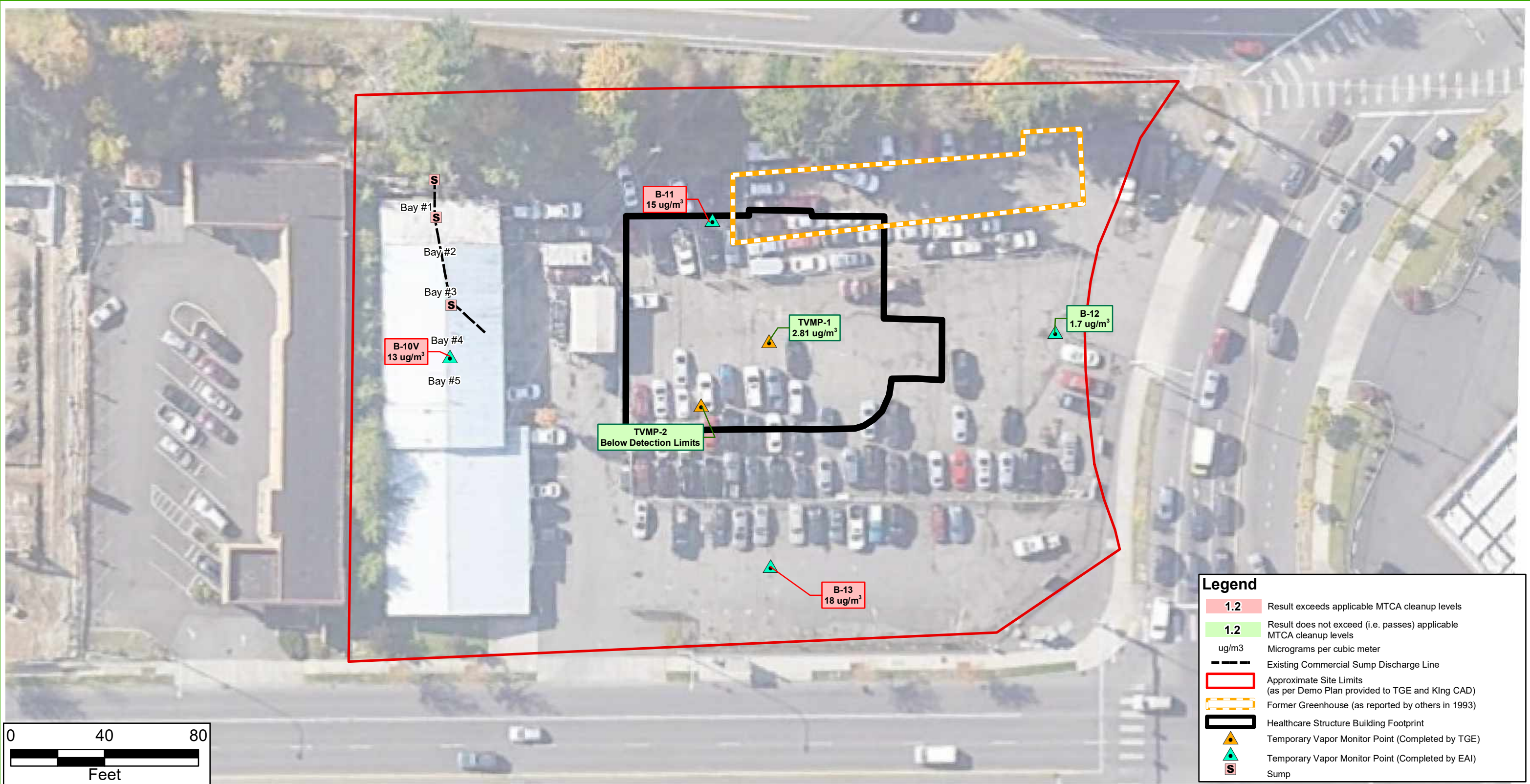
Figure 3C
Soil Vapor Concentration Map
Benzene
(June 3, 2022)



Former Payless Auto Mart
29805 Pacific Highway South
Federal Way, King County, Washington
TGE Project No.: R13411.13



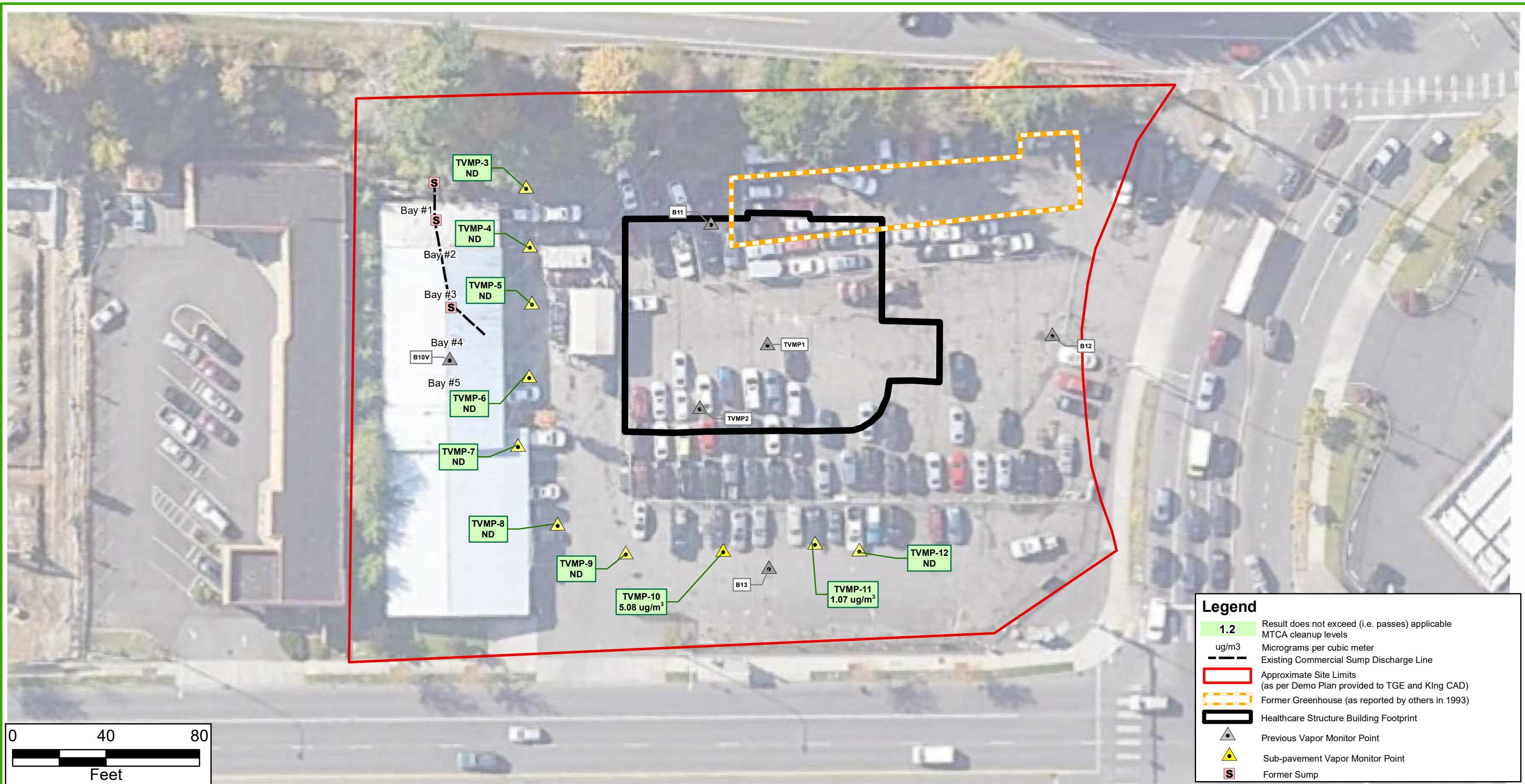
Figure 3D
Soil Vapor Concentration Map
Benzene
(September 14, 2022)



Former Payless Auto Mart
29805 Pacific Highway South
Federal Way, King County, Washington
TGE Project No.: R13411.13



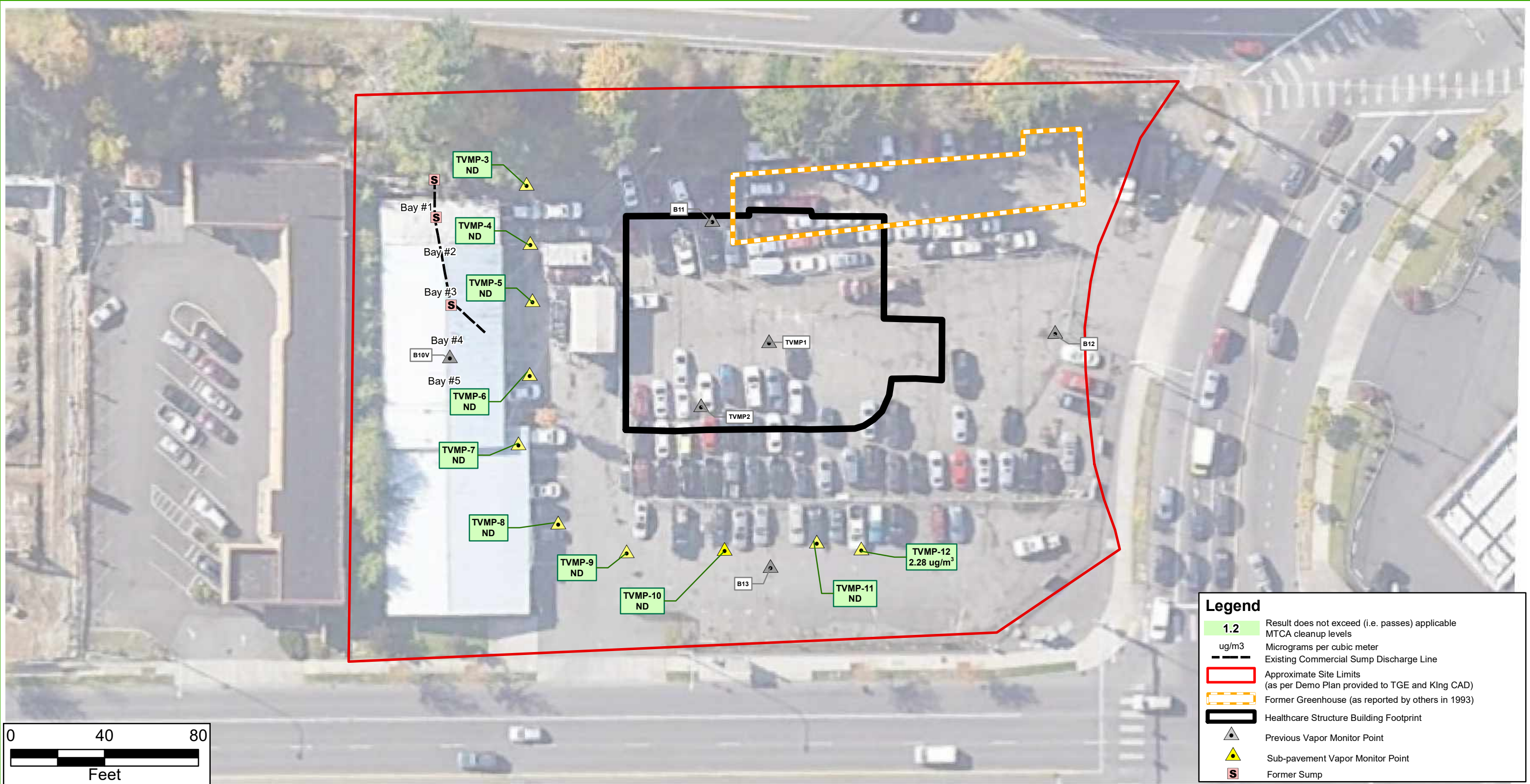
Figure 4A
Soil Vapor Concentration Map
Trichloroethylene
(August 2017 - August 2018)



Former Payless Auto Mart
29805 Pacific Highway South
Federal Way, King County, Washington
TGE Project No.: R13411.13



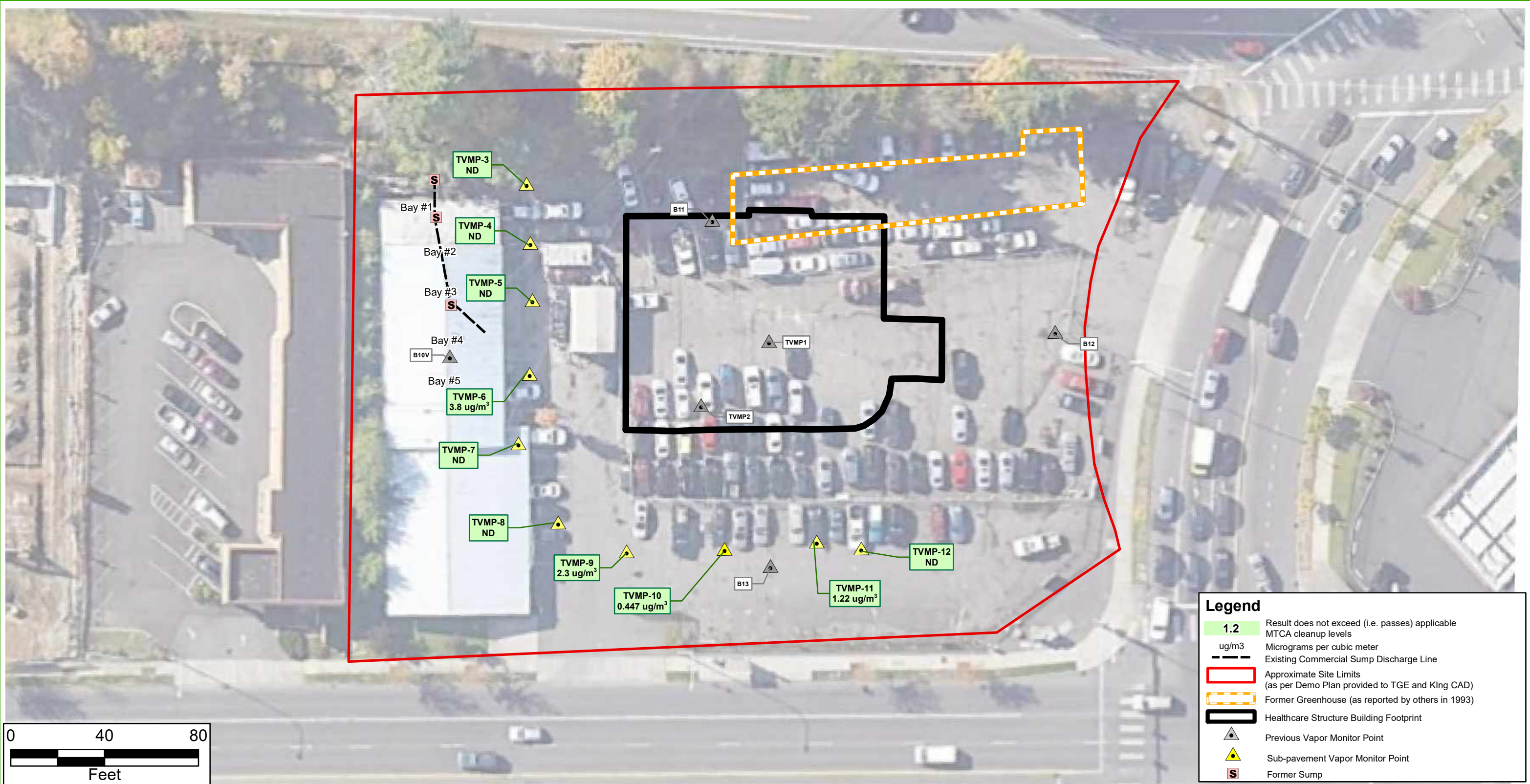
Figure 4B
Soil Vapor Concentration Map
Trichloroethylene
(November 16, 2021)



Former Payless Auto Mart
29805 Pacific Highway South
Federal Way, King County, Washington
TGE Project No.: R13411.13



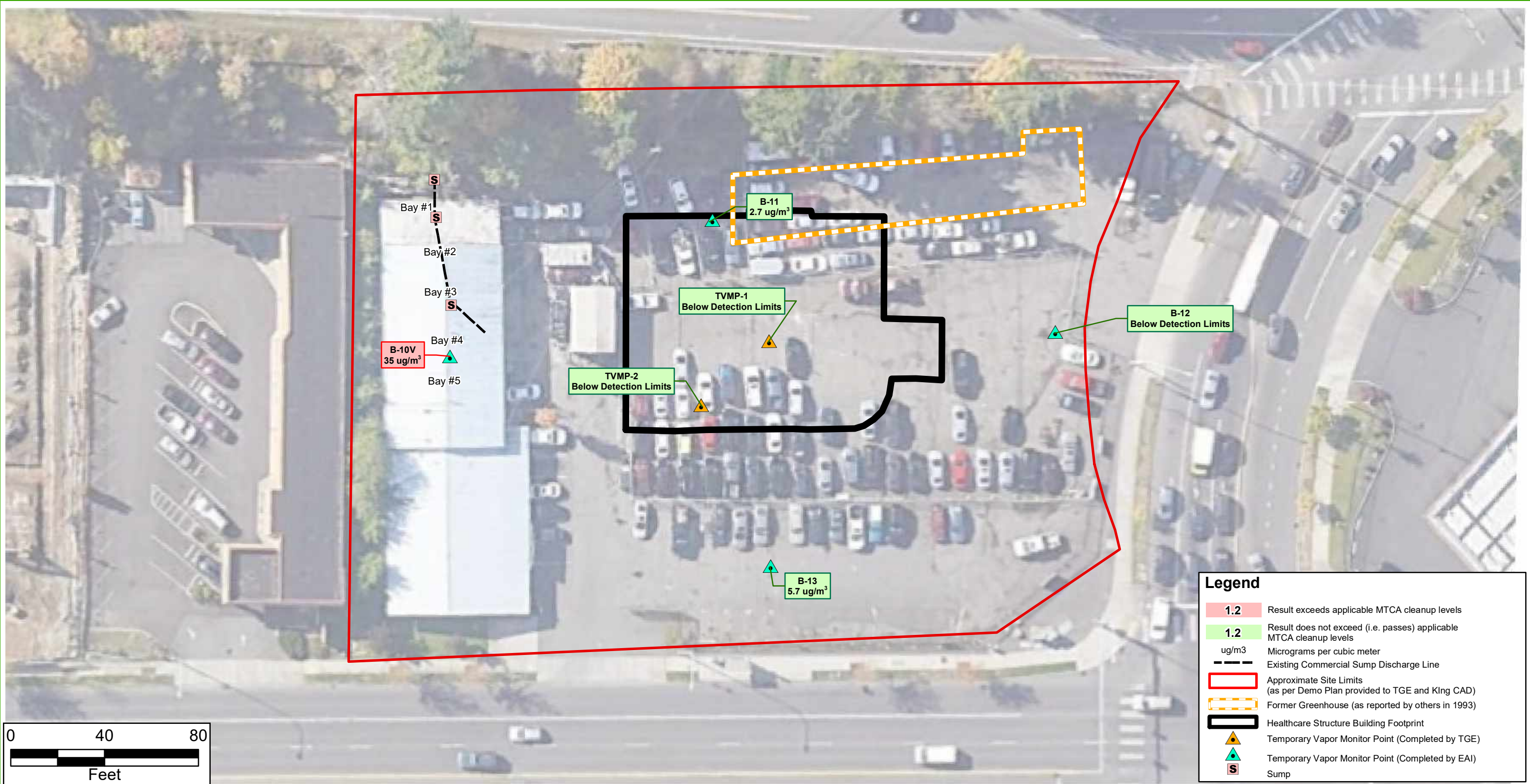
Figure 4C
Soil Vapor Concentration Map
Trichloroethylene
(June 3, 2022)



Former Payless Auto Mart
29805 Pacific Highway South
Federal Way, King County, Washington
TGE Project No.: R13411.13



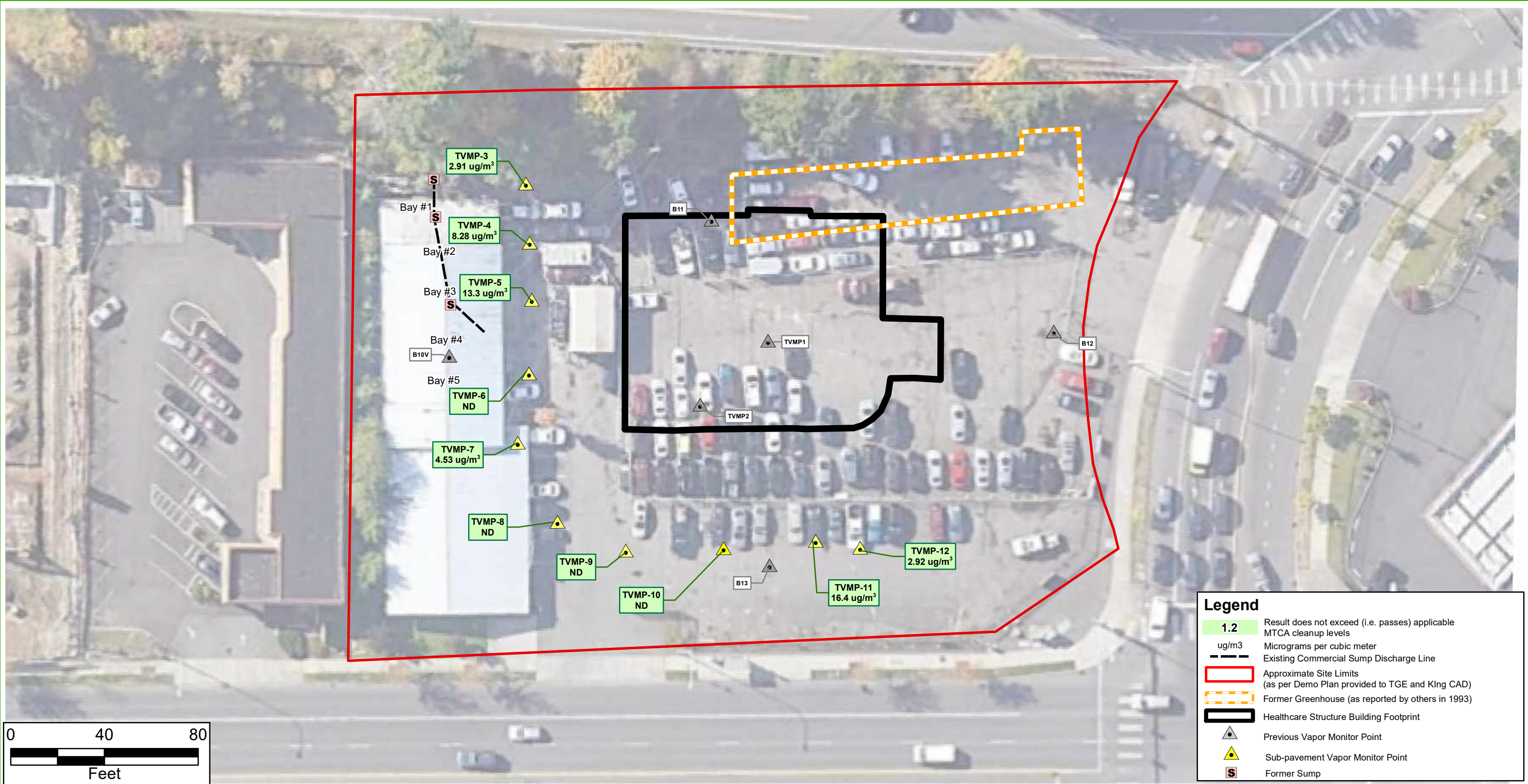
Figure 4D
Soil Vapor Concentration Map
Trichloroethylene
(September 14, 2022)



Former Payless Auto Mart
29805 Pacific Highway South
Federal Way, King County, Washington
TGE Project No.: R13411.13



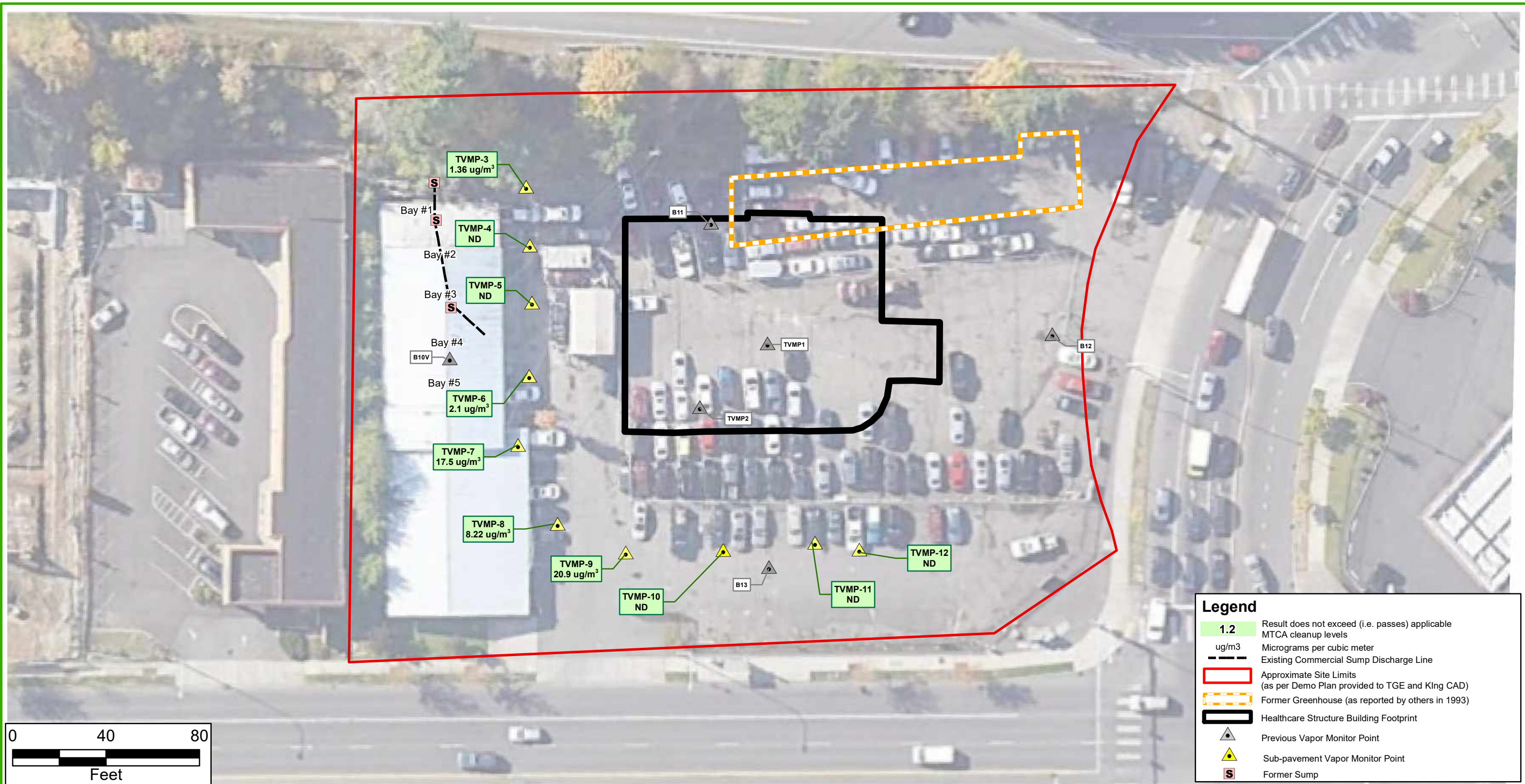
Figure 5A
Soil Vapor Concentration Map
Tetrachloroethylene
(August 2017 - August 2018)



Former Payless Auto Mart
29805 Pacific Highway South
Federal Way, King County, Washington
TGE Project No.: R13411.13



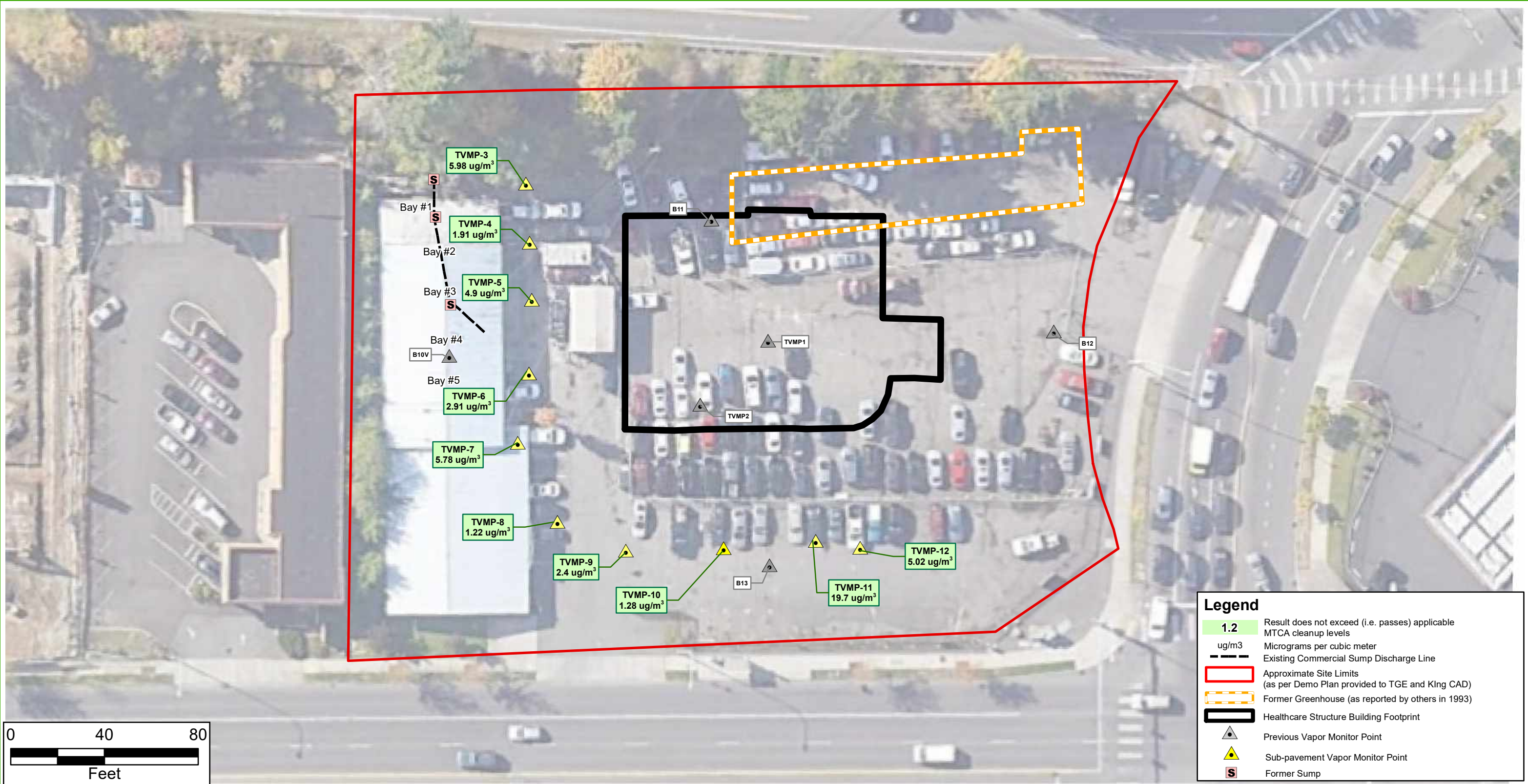
Figure 5B
Soil Vapor Concentration Map
Tetrachloroethylene
(November 21, 2021)



Former Payless Auto Mart
29805 Pacific Highway South
Federal Way, King County, Washington
TGE Project No.: R13411.13



Figure 5C
Soil Vapor Concentration Map
Tetrachloroethylene
(June 3, 2022)



Former Payless Auto Mart
29805 Pacific Highway South
Federal Way, King County, Washington
TGE Project No.: R13411.13



Figure 5D
Soil Vapor Concentration Map
Tetrachloroethylene
September 14, 2022)

TABLES

Table 1
SUB-SURFACE SOIL VAPOR ANALYTICAL RESULTS
Federal Way OCED
Federal Way, Washington
TGE Project No. R13411.13

Station Name	SubSlab Soil Gas Screening Level Method B Cancer (TR=1E ⁻⁶) (July 2021)	SubSlab Soil Gas Screening Level Method B Noncancer (THQ=1) (July 2021)	Reporting Units	TVMP3		
Laboratory Identification				L1433098-01	L1504104-01	L1536552-01
Sample Date				11/16/2021	6/3/2022	9/14/2022
Depth Range				1 ft		
VOAs						
1,1,1-Trichloroethane	NL	76000	ug/m3	<0.4	5.77	<0.4
1,1,2,2-Tetrachloroethane	1.4	NL	ug/m3	<0.511	<0.511	<0.511
1,1,2-Trichloro-1,2,2-trifluoroethane	NL	76000	ug/m3	0.716 J	<0.608	<0.608
1,1,2-Trichloroethane	5.2	3	ug/m3	<0.422	<0.422	<0.422
1,1-Dichloroethane	52	NL	ug/m3	<0.29	<0.29	<0.29
1,1-Dichloroethene	NL	3000	ug/m3	<0.302	<0.302	<0.302
1,2,4-Trichlorobenzene	NL	30	ug/m3	<1.1	<1.1	<1.1
1,2-Dichlorobenzene	NL	3000	ug/m3	<0.77	<0.77	<0.77
1,2-Dichloroethane	3.2	110	ug/m3	<0.283	<0.283	<0.283
1,2-Dichloropropane	23	61	ug/m3	<0.351	<0.351	<0.351
1,2-Dichlorotetrafluoroethane	NL	NL	ug/m3	<0.622	<0.622	<0.622
1,3,5-Trimethylbenzene	NL	910	ug/m3	1.03	<0.382	1.02
1,3-Butadiene	2.8	30	ug/m3	<0.23	<0.23	<0.23
1,3-Dichlorobenzene	NL	NL	ug/m3	<1.09	<1.09	<1.09
1,4-Dichlorobenzene	7.6	12000	ug/m3	0.449 J	<0.335	<0.335
1,4-Dioxane	17	460	ug/m3	<0.3	<0.3	<0.3
2,2,4-Trimethylpentane	NL	NL	ug/m3	<0.621	<0.621	<0.621
2-Chlorotoluene	NL	NL	ug/m3	<0.427	<0.427	<0.427
2-Hexanone	NL	460	ug/m3	<0.544	<0.544	<0.544
2-Propanol	NL	NL	ug/m3	12.2	<0.649	<0.649
4-Ethyltoluene	NL	NL	ug/m3	2.17	<0.384	<0.384
4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	NL	46000	ug/m3	<0.313	<0.313	<0.313
Acetone	NL	470000	ug/m3	65.1	55.1	6.11
Allyl chloride	14	15	ug/m3	<0.357	<0.357	<0.357
Benzene	11	460	ug/m3	11.1	1.45	4.66
Benzyl chloride	1.7	15	ug/m3	<0.311	<0.311	<0.311
Bromodichloromethane	2.3	NL	ug/m3	<0.471	<0.471	<0.471
Bromoform	76	NL	ug/m3	<0.757	<0.757	<0.757
Bromomethane	NL	76	ug/m3	<0.381	<0.381	<0.381
Carbon disulfide	NL	11000	ug/m3	6.41	2.55	2.56
Carbon tetrachloride	14	1500	ug/m3	0.506 J	<0.461	<0.461
Chlorobenzene	NL	760	ug/m3	<0.385	<0.385	<0.385
Chloroethane (Ethyl Chloride)	NL	150000	ug/m3	5.28	<0.263	0.000
Chloroform	3.6	1500	ug/m3	<0.349	<0.349	<0.349
Chloromethane	NL	1400	ug/m3	2.21	1.77	1.2
cis-1,2-Dichloroethene	NL	NL	ug/m3	<0.311	<0.311	<0.311
cis-1,3-Dichloropropene	NL	NL	ug/m3	<0.313	<0.313	<0.313
Cyclohexane	NL	91000	ug/m3	10.6	<0.259	5.99
Dibromochloromethane	NL	NL	ug/m3	<0.618	<0.618	<0.618
Dichlorodifluoromethane	NL	1500	ug/m3	2.51	2.28	2.35
Ethanol	NL	NL	ug/m3	183	15.6	14.6
Ethylbenzene	NL	15000	ug/m3	2.14	0.906	1.07
Ethylene dibromide	0.14	140	ug/m3	<0.554	<0.554	<0.554
Heptane	NL	NL	ug/m3	15	1.6	4.05
Hexachlorobutadiene	3.8	NL	ug/m3	<1.12	<1.12	<1.12
Hexane-n	NL	11000	ug/m3	25.9	3.74	7.23
Isopropylbenzene	NL	NL	ug/m3	<0.382	<0.382	<0.382
Methyl ethyl ketone	NL	76000	ug/m3	12.4	9.97	1.73 J
Methyl methacrylate	NL	11000	ug/m3	<0.359	<0.359	<0.359
Methyl tert butyl ether	320	46000	ug/m3	<0.233	<0.233	<0.233
Methylene chloride	2200	9100	ug/m3	<0.34	0.865 B	1.48 B
Naphthalene	2.5	46	ug/m3	<1.83	<1.83	<1.83
o-Xylene	NL	NL	ug/m3	2.78	1.4	1.62
Propene	NL	NL	ug/m3	341	38.4	<0.16
Styrene	NL	15000	ug/m3	0.774 J	<0.335	<0.335
Tetrachloroethene	320	610	ug/m3	2.91	1.36	5.98
Tetrahydrofuran	NL	30000	ug/m3	<0.216	<0.216	<0.216
Toluene	NL	76000	ug/m3	9.15	5.16	<0.328
trans-1,2-Dichloroethene(dichloroethylene)	NL	610	ug/m3	<0.267	<0.267	<0.267
trans-1,3-Dichloropropene	NL	NL	ug/m3	<0.331	<0.331	<0.331
Trichloroethene	11	30	ug/m3	<0.364	<0.364	<0.364
Trichlorofluoromethane	NL	11000	ug/m3	<0.46	1.57	2.01
Trimethylbenzene, 1,2,4-	NL	910	ug/m3	2.31	<0.375	1.99
Vinyl Bromide	NL	NL	ug/m3	<0.373	<0.373	0.000
Vinylacetate	NL	3000	ug/m3	<0.408	<0.408	<0.408
Vinylchloride	9.5	1500	ug/m3	<0.243	<0.243	<0.243
Xylene (Total)	NL	1500	ug/m3	8.06	3.38	2.98

Table 1
SUB-SURFACE SOIL VAPOR ANALYTICAL RESULTS
Federal Way OCED
Federal Way, Washington
TGE Project No. R13411.13

Station Name	SubSlab Soil Gas Screening Level Method B Cancer (TR=1E ⁻⁶) (July 2021)	SubSlab Soil Gas Screening Level Method B Noncancer (THQ=1) (July 2021)	Reporting Units	TVMP4		
Laboratory Identification				L1433098-02	L1504104-08	L1536552-02
Sample Date				11/16/2021	6/3/2022	9/14/2022
Depth Range				1 ft		
VOAs						
1,1,1-Trichloroethane	NL	76000	ug/m3	<0.4	<0.4	<0.4
1,1,2,2-Tetrachloroethane	1.4	NL	ug/m3	<0.511	<0.511	<0.511
1,1,2-Trichloro-1,2,2-trifluoroethane	NL	76000	ug/m3	<0.608	<0.608	0.623 J
1,1,2-Trichloroethane	5.2	3	ug/m3	<0.422	<0.422	<0.422
1,1-Dichloroethane	52	NL	ug/m3	<0.29	<0.29	<0.29
1,1-Dichloroethene	NL	3000	ug/m3	<0.302	<0.302	<0.302
1,2,4-Trichlorobenzene	NL	30	ug/m3	<1.1	<1.1	<1.1
1,2-Dichlorobenzene	NL	3000	ug/m3	<0.77	<0.77	<0.77
1,2-Dichloroethane	3.2	110	ug/m3	<0.283	<0.283	<0.283
1,2-Dichloropropane	23	61	ug/m3	<0.351	<0.351	<0.351
1,2-Dichlorotetrafluoroethane	NL	NL	ug/m3	<0.622	<0.622	<0.622
1,3,5-Trimethylbenzene	NL	910	ug/m3	2.79	<0.382	<0.382
1,3-Butadiene	2.8	30	ug/m3	<0.23	<0.23	<0.23
1,3-Dichlorobenzene	NL	NL	ug/m3	<1.09	<1.09	<1.09
1,4-Dichlorobenzene	7.6	12000	ug/m3	<0.335	<0.335	<0.335
1,4-Dioxane	17	460	ug/m3	<0.3	<0.3	<0.3
2,2,4-Trimethylpentane	NL	NL	ug/m3	<0.621	<0.621	<0.621
2-Chlorotoluene	NL	NL	ug/m3	<0.427	<0.427	<0.427
2-Hexanone	NL	460	ug/m3	<0.544	<0.544	<0.544
2-Propanol	NL	NL	ug/m3	11.7	4.1	<0.649
4-Ethyltoluene	NL	NL	ug/m3	5.55	3.31	<0.384
4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	NL	46000	ug/m3	<0.313	<0.313	<0.313
Acetone	NL	470000	ug/m3	234	36.6	13.5
Allyl chloride	14	15	ug/m3	<0.357	<0.357	<0.357
Benzene	11	460	ug/m3	49.2	3.23	3.96
Benzyl chloride	1.7	15	ug/m3	<0.311	<0.311	<0.311
Bromodichloromethane	2.3	NL	ug/m3	<0.471	<0.471	<0.471
Bromoform	76	NL	ug/m3	<0.757	<0.757	<0.757
Bromomethane	NL	76	ug/m3	<0.381	<0.381	<0.381
Carbon disulfide	NL	11000	ug/m3	22.8	6.82	5.63
Carbon tetrachloride	14	1500	ug/m3	<0.461	<0.461	0.489 J
Chlorobenzene	NL	760	ug/m3	<0.385	<0.385	<0.385
Chloroethane (Ethyl Chloride)	NL	150000	ug/m3	<0.263	1.9	0.000
Chloroform	3.6	1500	ug/m3	<0.349	<0.349	<0.349
Chloromethane	NL	1400	ug/m3	10.3	2	1.45
cis-1,2-Dichloroethene	NL	NL	ug/m3	<0.311	<0.311	<0.311
cis-1,3-Dichloropropene	NL	NL	ug/m3	<0.313	<0.313	<0.313
Cyclohexane	NL	91000	ug/m3	41.7	1.96	2
Dibromochloromethane	NL	NL	ug/m3	<0.618	<0.618	<0.618
Dichlorodifluoromethane	NL	1500	ug/m3	2.16	1.94	2.43
Ethanol	NL	NL	ug/m3	159	<0.5	13.4
Ethylbenzene	NL	15000	ug/m3	3.82	4.94	0.551 J
Ethylene dibromide	0.14	140	ug/m3	<0.554	<0.554	<0.554
Heptane	NL	NL	ug/m3	75.3	1.49	3.23
Hexachlorobutadiene	3.8	NL	ug/m3	<1.12	<1.12	<1.12
Hexane-n	NL	11000	ug/m3	192	3.91	4.12
Isopropylbenzene	NL	NL	ug/m3	<0.382	<0.382	<0.382
Methyl ethyl ketone	NL	76000	ug/m3	53.7	5.72	7.05
Methyl methacrylate	NL	11000	ug/m3	<0.359	<0.359	<0.359
Methyl tert butyl ether	320	46000	ug/m3	<0.233	<0.233	<0.233
Methylene chloride	2200	9100	ug/m3	<0.34	1.55	1.38 B
Naphthalene	2.5	46	ug/m3	<1.83	<1.83	<1.83
o-Xylene	NL	NL	ug/m3	5.33	5.38	0.564 J
Propene	NL	NL	ug/m3	1100	82.3	<0.16
Styrene	NL	15000	ug/m3	1.82	<0.335	<0.335
Tetrachloroethene	320	610	ug/m3	8.28	<0.553	1.91
Tetrahydrofuran	NL	30000	ug/m3	<0.216	<0.216	<0.216
Toluene	NL	76000	ug/m3	21	30.8	<0.328
trans-1,2-Dichloroethene(dichloroethylene)	NL	610	ug/m3	<0.267	<0.267	<0.267
trans-1,3-Dichloropropene	NL	NL	ug/m3	<0.331	<0.331	<0.331
Trichloroethene	11	30	ug/m3	<0.364	<0.364	<0.364
Trichlorofluoromethane	NL	11000	ug/m3	6.13	1.64	1.74
Trimethylbenzene, 1,2,4-	NL	910	ug/m3	5.94	3.15	0.382 J
Vinyl Bromide	NL	NL	ug/m3	<0.373	<0.373	0.000
Vinylacetate	NL	3000	ug/m3	<0.408	<0.408	<0.408
Vinylchloride	9.5	1500	ug/m3	<0.243	0.792	<0.243
Xylene (Total)	NL	1500	ug/m3	10.2	18	1.490 J

Table 1
SUB-SURFACE SOIL VAPOR ANALYTICAL RESULTS
Federal Way OCED
Federal Way, Washington
TGE Project No. R13411.13

Station Name	SubSlab Soil Gas Screening Level Method B Cancer (TR=1E ⁻⁶) (July 2021)	SubSlab Soil Gas Screening Level Method B Noncancer (THQ=1) (July 2021)	Reporting Units	TVMP5		
Laboratory Identification				L1433098-03	L1504104-02	L1536552-03
Sample Date				11/16/2021	6/3/2022	9/14/2022
Depth Range				1 ft		
VOAs						
1,1,1-Trichloroethane	NL	76000	ug/m3	<0.4	<0.4	<0.4
1,1,2,2-Tetrachloroethane	1.4	NL	ug/m3	<0.511	<0.511	<0.511
1,1,2-Trichloro-1,2,2-trifluoroethane	NL	76000	ug/m3	<0.608	<0.608	<0.608
1,1,2-Trichloroethane	5.2	3	ug/m3	<0.422	<0.422	<0.422
1,1-Dichloroethane	52	NL	ug/m3	<0.29	<0.29	<0.29
1,1-Dichloroethene	NL	3000	ug/m3	<0.302	<0.302	<0.302
1,2,4-Trichlorobenzene	NL	30	ug/m3	<1.1	<1.1	<1.1
1,2-Dichlorobenzene	NL	3000	ug/m3	<0.77	<0.77	<0.77
1,2-Dichloroethane	3.2	110	ug/m3	<0.283	<0.283	<0.283
1,2-Dichloropropane	23	61	ug/m3	<0.351	<0.351	<0.351
1,2-Dichlorotetrafluoroethane	NL	NL	ug/m3	<0.622	<0.622	<0.622
1,3,5-Trimethylbenzene	NL	910	ug/m3	1.63	<0.382	<0.382
1,3-Butadiene	2.8	30	ug/m3	<0.23	<0.23	7.39
1,3-Dichlorobenzene	NL	NL	ug/m3	<1.09	<1.09	<1.09
1,4-Dichlorobenzene	7.6	12000	ug/m3	<0.335	<0.335	<0.335
1,4-Dioxane	17	460	ug/m3	<0.3	<0.3	<0.3
2,2,4-Trimethylpentane	NL	NL	ug/m3	<0.621	<0.621	<0.621
2-Chlorotoluene	NL	NL	ug/m3	<0.427	<0.427	<0.427
2-Hexanone	NL	460	ug/m3	7.98	<0.544	<0.544
2-Propanol	NL	NL	ug/m3	14	7.13	<0.649
4-Ethyltoluene	NL	NL	ug/m3	2.95	<0.384	<0.384
4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	NL	46000	ug/m3	<0.313	<0.313	<0.313
Acetone	NL	470000	ug/m3	425 E	24	25
Allyl chloride	14	15	ug/m3	<0.357	<0.357	<0.357
Benzene	11	460	ug/m3	31.9	1.07	7.09
Benzyl chloride	1.7	15	ug/m3	<0.311	<0.311	<0.311
Bromodichloromethane	2.3	NL	ug/m3	<0.471	<0.471	<0.471
Bromoform	76	NL	ug/m3	<0.757	<0.757	<0.757
Bromomethane	NL	76	ug/m3	<0.381	<0.381	<0.381
Carbon disulfide	NL	11000	ug/m3	5.54	2.02	2.8
Carbon tetrachloride	14	1500	ug/m3	<0.461	<0.461	0.519 J
Chlorobenzene	NL	760	ug/m3	<0.385	<0.385	<0.385
Chloroethane (Ethyl Chloride)	NL	150000	ug/m3	62.5	<0.263	11.6
Chloroform	3.6	1500	ug/m3	<0.349	<0.349	<0.349
Chloromethane	NL	1400	ug/m3	10.2	1.45	2.17
cis-1,2-Dichloroethene	NL	NL	ug/m3	<0.311	<0.311	<0.311
cis-1,3-Dichloropropene	NL	NL	ug/m3	<0.313	<0.313	<0.313
Cyclohexane	NL	91000	ug/m3	25.4	2.14	6.27
Dibromochloromethane	NL	NL	ug/m3	<0.618	<0.618	<0.618
Dichlorodifluoromethane	NL	1500	ug/m3	2.48	2.43	2.46
Ethanol	NL	NL	ug/m3	108	67.5	23.8
Ethylbenzene	NL	15000	ug/m3	2.86	2.21	0.655 J
Ethylene dibromide	0.14	140	ug/m3	<0.554	<0.554	<0.554
Heptane	NL	NL	ug/m3	52.4	1.06	11.4
Hexachlorobutadiene	3.8	NL	ug/m3	<1.12	<1.12	<1.12
Hexane-n	NL	11000	ug/m3	105	<0.726	23.3
Isopropylbenzene	NL	NL	ug/m3	<0.382	<0.382	<0.382
Methyl ethyl ketone	NL	76000	ug/m3	84.3	<0.24	8.46
Methyl methacrylate	NL	11000	ug/m3	<0.359	<0.359	<0.359
Methyl tert butyl ether	320	46000	ug/m3	<0.233	<0.233	<0.233
Methylene chloride	2200	9100	ug/m3	<0.34	1.22 B	1.82 B
Naphthalene	2.5	46	ug/m3	<1.83	<1.83	<1.83
o-Xylene	NL	NL	ug/m3	4.55	3.33	0.884
Propene	NL	NL	ug/m3	370	<0.16	100
Styrene	NL	15000	ug/m3	1.58	0.927	<0.335
Tetrachloroethene	320	610	ug/m3	13.3	<0.553	4.9
Tetrahydrofuran	NL	30000	ug/m3	<0.216	<0.216	<0.216
Toluene	NL	76000	ug/m3	20.7	8.51	<0.328
trans-1,2-Dichloroethene(dichloroethylene)	NL	610	ug/m3	<0.267	<0.267	<0.267
trans-1,3-Dichloropropene	NL	NL	ug/m3	<0.331	<0.331	<0.331
Trichloroethene	11	30	ug/m3	<0.364	<0.364	<0.364
Trichlorofluoromethane	NL	11000	ug/m3	<0.46	1.39	<0.46
Trimethylbenzene, 1,2,4-	NL	910	ug/m3	4.04	1.9	0.736 J
Vinyl Bromide	NL	NL	ug/m3	<0.373	<0.373	0.000
Vinylacetate	NL	3000	ug/m3	<0.408	<0.408	<0.408
Vinylchloride	9.5	1500	ug/m3	<0.243	<0.243	<0.243
Xylene (Total)	NL	1500	ug/m3	9.19	8.63	1.89

Table 1
SUB-SURFACE SOIL VAPOR ANALYTICAL RESULTS
Federal Way OCED
Federal Way, Washington
TGE Project No. R13411.13

Station Name	SubSlab Soil Gas Screening Level Method B Cancer (TR=1E ⁻⁶) (July 2021)	SubSlab Soil Gas Screening Level Method B Noncancer (THQ=1) (July 2021)	Reporting Units	TVMP6		
Laboratory Identification				L1433098-04	L1504104-03	L1536552-04
Sample Date				11/16/2021	6/3/2022	9/14/2022
Depth Range				1 ft		
VOAs						
1,1,1-Trichloroethane	NL	76000	ug/m3	<0.4	<0.4	<0.4
1,1,2,2-Tetrachloroethane	1.4	NL	ug/m3	<0.511	<0.511	<0.511
1,1,2-Trichloro-1,2,2-trifluoroethane	NL	76000	ug/m3	<0.608	<0.608	<0.608
1,1,2-Trichloroethane	5.2	3	ug/m3	<0.422	<0.422	<0.422
1,1-Dichloroethane	52	NL	ug/m3	<0.29	<0.29	<0.29
1,1-Dichloroethene	NL	3000	ug/m3	<0.302	<0.302	<0.302
1,2,4-Trichlorobenzene	NL	30	ug/m3	<1.1	<1.1	<1.1
1,2-Dichlorobenzene	NL	3000	ug/m3	<0.77	<0.77	<0.77
1,2-Dichloroethane	3.2	110	ug/m3	<0.283	<0.283	<0.283
1,2-Dichloropropane	23	61	ug/m3	<0.351	<0.351	<0.351
1,2-Dichlorotetrafluoroethane	NL	NL	ug/m3	<0.622	<0.622	<0.622
1,3,5-Trimethylbenzene	NL	910	ug/m3	2.11	<0.382	<0.382
1,3-Butadiene	2.8	30	ug/m3	<0.23	<0.23	<0.23
1,3-Dichlorobenzene	NL	NL	ug/m3	<1.09	<1.09	<1.09
1,4-Dichlorobenzene	7.6	12000	ug/m3	<0.335	<0.335	<0.335
1,4-Dioxane	17	460	ug/m3	<0.3	<0.3	<0.3
2,2,4-Trimethylpentane	NL	NL	ug/m3	<0.621	<0.621	<0.621
2-Chlorotoluene	NL	NL	ug/m3	<0.427	<0.427	<0.427
2-Hexanone	NL	460	ug/m3	11.8	<0.544	<0.544
2-Propanol	NL	NL	ug/m3	28.8	<0.649	<0.649
4-Ethyltoluene	NL	NL	ug/m3	6.48	<0.384	0.530 J
4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	NL	46000	ug/m3	11.1	<0.313	<0.313
Acetone	NL	470000	ug/m3	447 E	41.8	31.8
Allyl chloride	14	15	ug/m3	<0.357	<0.357	<0.357
Benzene	11	460	ug/m3	20	1.18	3.45
Benzyl chloride	1.7	15	ug/m3	<0.311	<0.311	<0.311
Bromodichloromethane	2.3	NL	ug/m3	<0.471	<0.471	<0.471
Bromoform	76	NL	ug/m3	<0.757	<0.757	<0.757
Bromomethane	NL	76	ug/m3	<0.381	<0.381	<0.381
Carbon disulfide	NL	11000	ug/m3	28.9	2.71	0.89
Carbon tetrachloride	14	1500	ug/m3	0.629 J	<0.461	0.471 J
Chlorobenzene	NL	760	ug/m3	<0.385	<0.385	<0.385
Chloroethane (Ethyl Chloride)	NL	150000	ug/m3	<0.263	1.61	2.66
Chloroform	3.6	1500	ug/m3	<0.349	<0.349	<0.349
Chloromethane	NL	1400	ug/m3	5.89	1.9	1.83
cis-1,2-Dichloroethene	NL	NL	ug/m3	<0.311	<0.311	<0.311
cis-1,3-Dichloropropene	NL	NL	ug/m3	<0.313	<0.313	<0.313
Cyclohexane	NL	91000	ug/m3	14.1	1.2	12.7
Dibromochloromethane	NL	NL	ug/m3	<0.618	<0.618	<0.618
Dichlorodifluoromethane	NL	1500	ug/m3	<0.678	2.33	2.47
Ethanol	NL	NL	ug/m3	57.3	2.45	71.6
Ethylbenzene	NL	15000	ug/m3	4.51	<0.362	0.624 J
Ethylene dibromide	0.14	140	ug/m3	<0.554	<0.554	<0.554
Heptane	NL	NL	ug/m3	21.7	<0.425	1.92
Hexachlorobutadiene	3.8	NL	ug/m3	<1.12	<1.12	<1.12
Hexane-n	NL	11000	ug/m3	57.5	<0.726	6.35
Isopropylbenzene	NL	NL	ug/m3	<0.382	<0.382	<0.382
Methyl ethyl ketone	NL	76000	ug/m3	107	<0.24	6.78
Methyl methacrylate	NL	11000	ug/m3	<0.359	<0.359	<0.359
Methyl tert butyl ether	320	46000	ug/m3	<0.233	<0.233	<0.233
Methylene chloride	2200	9100	ug/m3	<0.34	0.771 B	6.53
Naphthalene	2.5	46	ug/m3	3.57	<1.83	<1.83
o-Xylene	NL	NL	ug/m3	6.16	<0.359	0.616 J
Propene	NL	NL	ug/m3	1410	<0.16	<0.16
Styrene	NL	15000	ug/m3	1.35	<0.335	<0.335
Tetrachloroethene	320	610	ug/m3	<0.553	2.1	2.91
Tetrahydrofuran	NL	30000	ug/m3	<0.216	<0.216	<0.216
Toluene	NL	76000	ug/m3	24.3	3.39	<0.328
trans-1,2-Dichloroethene(dichloroethylene)	NL	610	ug/m3	<0.267	<0.267	<0.267
trans-1,3-Dichloropropene	NL	NL	ug/m3	<0.331	<0.331	<0.331
Trichloroethene	11	30	ug/m3	<0.364	<0.364	3.8
Trichlorofluoromethane	NL	11000	ug/m3	<0.46	1.34	<0.46
Trimethylbenzene, 1,2,4-	NL	910	ug/m3	8.64	<0.375	0.496 J
Vinyl Bromide	NL	NL	ug/m3	<0.373	<0.373	0.000
Vinylacetate	NL	3000	ug/m3	<0.408	<0.408	<0.408
Vinylchloride	9.5	1500	ug/m3	<0.243	0.907	<0.243
Xylene (Total)	NL	1500	ug/m3	17.6	2.03	1.81

Table 1
SUB-SURFACE SOIL VAPOR ANALYTICAL RESULTS
Federal Way OCED
Federal Way, Washington
TGE Project No. R13411.13

Station Name	SubSlab Soil Gas Screening Level Method B Cancer (TR=1E ⁻⁶) (July 2021)	SubSlab Soil Gas Screening Level Method B Noncancer (THQ=1) (July 2021)	Reporting Units	TVMP7		
Laboratory Identification				L1433098-05	L1504104-09	L1536552-05
Sample Date				11/16/2021	6/3/2022	9/14/2022
Depth Range				1 ft		
VOAs						
1,1,1-Trichloroethane	NL	76000	ug/m3	<0.4	<0.4	<0.4
1,1,2,2-Tetrachloroethane	1.4	NL	ug/m3	<0.511	<0.511	<0.511
1,1,2-Trichloro-1,2,2-trifluoroethane	NL	76000	ug/m3	0.615 J	<0.608	<0.608
1,1,2-Trichloroethane	5.2	3	ug/m3	<0.422	<0.422	<0.422
1,1-Dichloroethane	52	NL	ug/m3	<0.29	<0.29	<0.29
1,1-Dichloroethene	NL	3000	ug/m3	<0.302	<0.302	<0.302
1,2,4-Trichlorobenzene	NL	30	ug/m3	<1.1	<1.1	<1.1
1,2-Dichlorobenzene	NL	3000	ug/m3	<0.77	<0.77	<0.77
1,2-Dichloroethane	3.2	110	ug/m3	<0.283	<0.283	<0.283
1,2-Dichloropropane	23	61	ug/m3	<0.351	<0.351	<0.351
1,2-Dichlorotetrafluoroethane	NL	NL	ug/m3	<0.622	<0.622	<0.622
1,3,5-Trimethylbenzene	NL	910	ug/m3	0.482 J	<0.382	<0.382
1,3-Butadiene	2.8	30	ug/m3	30.5	<0.23	<0.23
1,3-Dichlorobenzene	NL	NL	ug/m3	<1.09	<1.09	1.47
1,4-Dichlorobenzene	7.6	12000	ug/m3	<0.335	<0.335	<0.335
1,4-Dioxane	17	460	ug/m3	<0.3	<0.3	<0.3
2,2,4-Trimethylpentane	NL	NL	ug/m3	<0.621	<0.621	<0.621
2-Chlorotoluene	NL	NL	ug/m3	<0.427	<0.427	<0.427
2-Hexanone	NL	460	ug/m3	<0.544	<0.544	<0.544
2-Propanol	NL	NL	ug/m3	4.97	10.3	<0.649
4-Ethyltoluene	NL	NL	ug/m3	0.677 J	<0.384	<0.384
4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	NL	46000	ug/m3	0.884 J	<0.313	<0.313
Acetone	NL	470000	ug/m3	55.1	35.2	6.44
Allyl chloride	14	15	ug/m3	<0.357	<0.357	<0.357
Benzene	11	460	ug/m3	7.47	1.04	2.54
Benzyl chloride	1.7	15	ug/m3	<0.311	<0.311	<0.311
Bromodichloromethane	2.3	NL	ug/m3	<0.471	<0.471	<0.471
Bromoform	76	NL	ug/m3	<0.757	<0.757	<0.757
Bromomethane	NL	76	ug/m3	<0.381	<0.381	<0.381
Carbon disulfide	NL	11000	ug/m3	7.87	2.72	3.36
Carbon tetrachloride	14	1500	ug/m3	<0.461	<0.461	0.474 J
Chlorobenzene	NL	760	ug/m3	<0.385	<0.385	<0.385
Chloroethane (Ethyl Chloride)	NL	150000	ug/m3	<0.263	<0.263	0.000
Chloroform	3.6	1500	ug/m3	<0.349	<0.349	<0.349
Chloromethane	NL	1400	ug/m3	2.5	1.88	1.51
cis-1,2-Dichloroethene	NL	NL	ug/m3	<0.311	<0.311	<0.311
cis-1,3-Dichloropropene	NL	NL	ug/m3	<0.313	<0.313	<0.313
Cyclohexane	NL	91000	ug/m3	3.89	2.4	2.47
Dibromochloromethane	NL	NL	ug/m3	<0.618	<0.618	<0.618
Dichlorodifluoromethane	NL	1500	ug/m3	2.42	2.09	2.46
Ethanol	NL	NL	ug/m3	48.1	81.5	16.8
Ethylbenzene	NL	15000	ug/m3	0.91	1.14	<0.362
Ethylene dibromide	0.14	140	ug/m3	<0.554	<0.554	<0.554
Heptane	NL	NL	ug/m3	5.89	3.16	<0.425
Hexachlorobutadiene	3.8	NL	ug/m3	<1.12	<1.12	<1.12
Hexane-n	NL	11000	ug/m3	12.9	13.3	4.37
Isopropylbenzene	NL	NL	ug/m3	<0.382	<0.382	<0.382
Methyl ethyl ketone	NL	76000	ug/m3	11.1	8.67	2.88 J
Methyl methacrylate	NL	11000	ug/m3	<0.359	<0.359	<0.359
Methyl tert butyl ether	320	46000	ug/m3	<0.233	<0.233	<0.233
Methylene chloride	2200	9100	ug/m3	<0.34	2.75	<0.34
Naphthalene	2.5	46	ug/m3	<1.83	<1.83	<1.83
o-Xylene	NL	NL	ug/m3	1.21	1.37	0.368 J
Propene	NL	NL	ug/m3	387	<0.16	<0.16
Styrene	NL	15000	ug/m3	0.557 J	<0.335	<0.335
Tetrachloroethene	320	610	ug/m3	4.53	17.5	5.78
Tetrahydrofuran	NL	30000	ug/m3	<0.216	<0.216	<0.216
Toluene	NL	76000	ug/m3	<0.328	8.29	<0.328
trans-1,2-Dichloroethene(dichloroethylene)	NL	610	ug/m3	<0.267	<0.267	<0.267
trans-1,3-Dichloropropene	NL	NL	ug/m3	<0.331	<0.331	<0.331
Trichloroethene	11	30	ug/m3	<0.364	<0.364	<0.364
Trichlorofluoromethane	NL	11000	ug/m3	2.23	1.48	2.08
Trimethylbenzene, 1,2,4-	NL	910	ug/m3	1.22	<0.375	<0.375
Vinyl Bromide	NL	NL	ug/m3	<0.373	<0.373	0.000
Vinylacetate	NL	3000	ug/m3	<0.408	<0.408	<0.408
Vinylchloride	9.5	1500	ug/m3	<0.243	<0.243	<0.243
Xylene (Total)	NL	1500	ug/m3	2.96	4.17	0.949 J

Table 1
SUB-SURFACE SOIL VAPOR ANALYTICAL RESULTS
Federal Way OCED
Federal Way, Washington
TGE Project No. R13411.13

Station Name	SubSlab Soil Gas Screening Level Method B Cancer (TR=1E ⁻⁶) (July 2021)	SubSlab Soil Gas Screening Level Method B Noncancer (THQ=1) (July 2021)	Reporting Units	TVMP8		
Laboratory Identification				L1433098-06	L1504104-04	L1536552-06
Sample Date				11/16/2021	6/3/2022	9/14/2022
Depth Range				1 ft		
VOAs						
1,1,1-Trichloroethane	NL	76000	ug/m3	<0.4	<0.4	<0.4
1,1,2,2-Tetrachloroethane	1.4	NL	ug/m3	<0.511	<0.511	<0.511
1,1,2-Trichloro-1,2,2-trifluoroethane	NL	76000	ug/m3	0.667 J	<0.608	<0.608
1,1,2-Trichloroethane	5.2	3	ug/m3	<0.422	<0.422	<0.422
1,1-Dichloroethane	52	NL	ug/m3	<0.29	<0.29	<0.29
1,1-Dichloroethene	NL	3000	ug/m3	<0.302	<0.302	<0.302
1,2,4-Trichlorobenzene	NL	30	ug/m3	<1.1	<1.1	<1.1
1,2-Dichlorobenzene	NL	3000	ug/m3	<0.77	<0.77	<0.77
1,2-Dichloroethane	3.2	110	ug/m3	<0.283	<0.283	<0.283
1,2-Dichloropropane	23	61	ug/m3	<0.351	<0.351	<0.351
1,2-Dichlorotetrafluoroethane	NL	NL	ug/m3	<0.622	<0.622	<0.622
1,3,5-Trimethylbenzene	NL	910	ug/m3	<0.382	<0.382	0.638 J
1,3-Butadiene	2.8	30	ug/m3	5.66	<0.23	<0.23
1,3-Dichlorobenzene	NL	NL	ug/m3	<1.09	<1.09	<1.09
1,4-Dichlorobenzene	7.6	12000	ug/m3	<0.335	<0.335	<0.335
1,4-Dioxane	17	460	ug/m3	<0.3	<0.3	<0.3
2,2,4-Trimethylpentane	NL	NL	ug/m3	<0.621	<0.621	<0.621
2-Chlorotoluene	NL	NL	ug/m3	<0.427	<0.427	<0.427
2-Hexanone	NL	460	ug/m3	<0.544	<0.544	<0.544
2-Propanol	NL	NL	ug/m3	8.8	<0.649	10.1
4-Ethyltoluene	NL	NL	ug/m3	<0.384	<0.384	1.31
4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	NL	46000	ug/m3	<0.313	<0.313	<0.313
Acetone	NL	470000	ug/m3	29.7	32.3	11.5
Allyl chloride	14	15	ug/m3	<0.357	<0.357	<0.357
Benzene	11	460	ug/m3	14	2.56	0.904
Benzyl chloride	1.7	15	ug/m3	<0.311	<0.311	<0.311
Bromodichloromethane	2.3	NL	ug/m3	<0.471	<0.471	<0.471
Bromoform	76	NL	ug/m3	<0.757	<0.757	<0.757
Bromomethane	NL	76	ug/m3	<0.381	<0.381	<0.381
Carbon disulfide	NL	11000	ug/m3	5.73	6.47	3.7
Carbon tetrachloride	14	1500	ug/m3	0.468 J	<0.461	<0.461
Chlorobenzene	NL	760	ug/m3	<0.385	<0.385	<0.385
Chloroethane (Ethyl Chloride)	NL	150000	ug/m3	<0.263	2.69	4.27
Chloroform	3.6	1500	ug/m3	<0.349	<0.349	<0.349
Chloromethane	NL	1400	ug/m3	<0.213	0.785	1.09
cis-1,2-Dichloroethene	NL	NL	ug/m3	<0.311	<0.311	<0.311
cis-1,3-Dichloropropene	NL	NL	ug/m3	<0.313	<0.313	<0.313
Cyclohexane	NL	91000	ug/m3	1.76	3.99	<0.259
Dibromochloromethane	NL	NL	ug/m3	<0.618	<0.618	<0.618
Dichlorodifluoromethane	NL	1500	ug/m3	2.4	<0.678	2.08
Ethanol	NL	NL	ug/m3	68.6	3.54	17.3
Ethylbenzene	NL	15000	ug/m3	1.08	3.3	<0.362
Ethylene dibromide	0.14	140	ug/m3	<0.554	<0.554	<0.554
Heptane	NL	NL	ug/m3	<0.425	<0.425	<0.425
Hexachlorobutadiene	3.8	NL	ug/m3	<1.12	<1.12	<1.12
Hexane-n	NL	11000	ug/m3	8.99	4.9	1.540 J
Isopropylbenzene	NL	NL	ug/m3	<0.382	<0.382	<0.382
Methyl ethyl ketone	NL	76000	ug/m3	7.52	11.6	2.53 J
Methyl methacrylate	NL	11000	ug/m3	<0.359	<0.359	<0.359
Methyl tert butyl ether	320	46000	ug/m3	<0.233	<0.233	<0.233
Methylene chloride	2200	9100	ug/m3	1.97	0.75 B	1.80 B
Naphthalene	2.5	46	ug/m3	<1.83	<1.83	<1.83
o-Xylene	NL	NL	ug/m3	1.12	3.59	0.512 J
Propene	NL	NL	ug/m3	15.5	13.9	<0.16
Styrene	NL	15000	ug/m3	0.681 J	<0.335	<0.335
Tetrachloroethene	320	610	ug/m3	<0.553	8.22	1.220 J
Tetrahydrofuran	NL	30000	ug/m3	<0.216	<0.216	<0.216
Toluene	NL	76000	ug/m3	11.5	11.7	<0.328
trans-1,2-Dichloroethene(dichloroethylene)	NL	610	ug/m3	<0.267	<0.267	<0.267
trans-1,3-Dichloropropene	NL	NL	ug/m3	<0.331	<0.331	<0.331
Trichloroethene	11	30	ug/m3	<0.364	<0.364	<0.364
Trichlorofluoromethane	NL	11000	ug/m3	1.31	1.7	1.66
Trimethylbenzene, 1,2,4-	NL	910	ug/m3	0.908 J	2.72	2.19
Vinyl Bromide	NL	NL	ug/m3	<0.373	<0.373	0.000
Vinylacetate	NL	3000	ug/m3	<0.408	<0.408	<0.408
Vinylchloride	9.5	1500	ug/m3	<0.243	<0.243	<0.243
Xylene (Total)	NL	1500	ug/m3	2.59	10.4	1.720 J

Table 1
SUB-SURFACE SOIL VAPOR ANALYTICAL RESULTS
Federal Way OCED
Federal Way, Washington
TGE Project No. R13411.13

Station Name	SubSlab Soil Gas Screening Level Method B Cancer (TR=1E ⁻⁶) (July 2021)	SubSlab Soil Gas Screening Level Method B Noncancer (THQ=1) (July 2021)	Reporting Units	TVMP9		
Laboratory Identification				L1433098-07	L1504104-05	L1536552-07
Sample Date				11/16/2021	6/3/2022	9/14/2022
Depth Range				1 ft		
VOAs						
1,1,1-Trichloroethane	NL	76000	ug/m3	<0.4	<0.4	<0.4
1,1,2,2-Tetrachloroethane	1.4	NL	ug/m3	<0.511	<0.511	<0.511
1,1,2-Trichloro-1,2,2-trifluoroethane	NL	76000	ug/m3	0.612 J	<0.608	<0.608
1,1,2-Trichloroethane	5.2	3	ug/m3	<0.422	<0.422	<0.422
1,1-Dichloroethane	52	NL	ug/m3	<0.29	<0.29	<0.29
1,1-Dichloroethene	NL	3000	ug/m3	<0.302	<0.302	<0.302
1,2,4-Trichlorobenzene	NL	30	ug/m3	<1.1	<1.1	<1.1
1,2-Dichlorobenzene	NL	3000	ug/m3	<0.77	<0.77	<0.77
1,2-Dichloroethane	3.2	110	ug/m3	<0.283	<0.283	<0.283
1,2-Dichloropropane	23	61	ug/m3	<0.351	<0.351	<0.351
1,2-Dichlorotetrafluoroethane	NL	NL	ug/m3	<0.622	<0.622	<0.622
1,3,5-Trimethylbenzene	NL	910	ug/m3	0.53 J	<0.382	<0.382
1,3-Butadiene	2.8	30	ug/m3	<0.23	<0.23	<0.23
1,3-Dichlorobenzene	NL	NL	ug/m3	<1.09	<1.09	<1.09
1,4-Dichlorobenzene	7.6	12000	ug/m3	<0.335	1.35	0.439 B J
1,4-Dioxane	17	460	ug/m3	<0.3	<0.3	<0.3
2,2,4-Trimethylpentane	NL	NL	ug/m3	<0.621	<0.621	<0.621
2-Chlorotoluene	NL	NL	ug/m3	<0.427	<0.427	<0.427
2-Hexanone	NL	460	ug/m3	6.99	<0.544	1.200 J
2-Propanol	NL	NL	ug/m3	21.2	<0.649	<0.649
4-Ethyltoluene	NL	NL	ug/m3	<0.384	<0.384	<0.384
4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	NL	46000	ug/m3	8.97	<0.313	1.730 J
Acetone	NL	470000	ug/m3	428 E	87.4	31.8
Allyl chloride	14	15	ug/m3	<0.357	<0.357	<0.357
Benzene	11	460	ug/m3	27.9	2.93	8.85
Benzyl chloride	1.7	15	ug/m3	<0.311	<0.311	<0.311
Bromodichloromethane	2.3	NL	ug/m3	<0.471	<0.471	<0.471
Bromoform	76	NL	ug/m3	<0.757	<0.757	<0.757
Bromomethane	NL	76	ug/m3	<0.381	<0.381	<0.381
Carbon disulfide	NL	11000	ug/m3	60.1	5.51	3.14
Carbon tetrachloride	14	1500	ug/m3	0.576 J	<0.461	<0.461
Chlorobenzene	NL	760	ug/m3	<0.385	<0.385	<0.385
Chloroethane (Ethyl Chloride)	NL	150000	ug/m3	<0.263	1.88	0.000
Chloroform	3.6	1500	ug/m3	<0.349	<0.349	<0.349
Chloromethane	NL	1400	ug/m3	4.32	1.61	1.17
cis-1,2-Dichloroethene	NL	NL	ug/m3	<0.311	<0.311	<0.311
cis-1,3-Dichloropropene	NL	NL	ug/m3	<0.313	<0.313	<0.313
Cyclohexane	NL	91000	ug/m3	9.4	2.68	6.13
Dibromochloromethane	NL	NL	ug/m3	<0.618	<0.618	<0.618
Dichlorodifluoromethane	NL	1500	ug/m3	2.29	2.37	2.33
Ethanol	NL	NL	ug/m3	142	34.5	17.5
Ethylbenzene	NL	15000	ug/m3	2.16	2.1	0.681 J
Ethylene dibromide	0.14	140	ug/m3	<0.554	<0.554	<0.554
Heptane	NL	NL	ug/m3	20.1	1.21	10.8
Hexachlorobutadiene	3.8	NL	ug/m3	<1.12	<1.12	<1.12
Hexane-n	NL	11000	ug/m3	39.5	2.76	26.4
Isopropylbenzene	NL	NL	ug/m3	<0.382	<0.382	<0.382
Methyl ethyl ketone	NL	76000	ug/m3	97.3	20.3	8.29
Methyl methacrylate	NL	11000	ug/m3	<0.359	<0.359	<0.359
Methyl tert butyl ether	320	46000	ug/m3	<0.233	<0.233	<0.233
Methylene chloride	2200	9100	ug/m3	<0.34	1.25 B	2.01 B
Naphthalene	2.5	46	ug/m3	<1.83	<1.83	<1.83
o-Xylene	NL	NL	ug/m3	2.13	3.27	1.1
Propene	NL	NL	ug/m3	532	26	716
Styrene	NL	15000	ug/m3	0.944	<0.335	<0.335
Tetrachloroethene	320	610	ug/m3	<0.553	20.9	2.4
Tetrahydrofuran	NL	30000	ug/m3	<0.216	<0.216	<0.216
Toluene	NL	76000	ug/m3	20.5	7.42	<0.328
trans-1,2-Dichloroethene(dichloroethylene)	NL	610	ug/m3	<0.267	<0.267	<0.267
trans-1,3-Dichloropropene	NL	NL	ug/m3	<0.331	<0.331	<0.331
Trichloroethene	11	30	ug/m3	<0.364	<0.364	2.3
Trichlorofluoromethane	NL	11000	ug/m3	<0.46	1.36	<0.46
Trimethylbenzene, 1,2,4-	NL	910	ug/m3	1.33	2.05	0.560 J
Vinyl Bromide	NL	NL	ug/m3	<0.373	<0.373	0.000
Vinylacetate	NL	3000	ug/m3	<0.408	<0.408	<0.408
Vinylchloride	9.5	1500	ug/m3	<0.243	1.01	<0.243
Xylene (Total)	NL	1500	ug/m3	6.33	8.41	2.29

Table 1
SUB-SURFACE SOIL VAPOR ANALYTICAL RESULTS
Federal Way OCED
Federal Way, Washington
TGE Project No. R13411.13

Station Name	SubSlab Soil Gas Screening Level Method B Cancer (TR=1E ⁻⁶) (July 2021)	SubSlab Soil Gas Screening Level Method B Noncancer (THQ=1) (July 2021)	Reporting Units	TVMP10		
Laboratory Identification				L1433098-08	L1504104-10	L1536552-08
Sample Date				11/16/2021	6/3/2022	9/14/2022
Depth Range				1 ft		
VOAs						
1,1,1-Trichloroethane	NL	76000	ug/m3	<0.4	<0.4	<0.4
1,1,2,2-Tetrachloroethane	1.4	NL	ug/m3	<0.511	<0.511	<0.511
1,1,2-Trichloro-1,2,2-trifluoroethane	NL	76000	ug/m3	0.675 J	<0.608	<0.608
1,1,2-Trichloroethane	5.2	3	ug/m3	<0.422	<0.422	<0.422
1,1-Dichloroethane	52	NL	ug/m3	<0.29	<0.29	<0.29
1,1-Dichloroethene	NL	3000	ug/m3	<0.302	<0.302	<0.302
1,2,4-Trichlorobenzene	NL	30	ug/m3	<1.1	<1.1	<1.1
1,2-Dichlorobenzene	NL	3000	ug/m3	<0.77	<0.77	<0.77
1,2-Dichloroethane	3.2	110	ug/m3	<0.283	<0.283	<0.283
1,2-Dichloropropane	23	61	ug/m3	<0.351	<0.351	<0.351
1,2-Dichlorotetrafluoroethane	NL	NL	ug/m3	<0.622	<0.622	<0.622
1,3,5-Trimethylbenzene	NL	910	ug/m3	0.741 J	<0.382	<0.382
1,3-Butadiene	2.8	30	ug/m3	9.43	<0.23	<0.23
1,3-Dichlorobenzene	NL	NL	ug/m3	<1.09	<1.09	<1.09
1,4-Dichlorobenzene	7.6	12000	ug/m3	<0.335	<0.335	<0.335
1,4-Dioxane	17	460	ug/m3	<0.3	<0.3	<0.3
2,2,4-Trimethylpentane	NL	NL	ug/m3	3.71	0.967	1.08
2-Chlorotoluene	NL	NL	ug/m3	<0.427	<0.427	<0.427
2-Hexanone	NL	460	ug/m3	<0.544	<0.544	1.460 J
2-Propanol	NL	NL	ug/m3	10.9	<0.649	<0.649
4-Ethyltoluene	NL	NL	ug/m3	1.77	<0.384	<0.384
4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	NL	46000	ug/m3	<0.313	<0.313	<0.313
Acetone	NL	470000	ug/m3	35.9	71.3	11.1
Allyl chloride	14	15	ug/m3	<0.357	<0.357	<0.357
Benzene	11	460	ug/m3	7.86	2.61	3.74
Benzyl chloride	1.7	15	ug/m3	<0.311	<0.311	<0.311
Bromodichloromethane	2.3	NL	ug/m3	<0.471	<0.471	<0.471
Bromoform	76	NL	ug/m3	<0.757	<0.757	<0.757
Bromomethane	NL	76	ug/m3	<0.381	<0.381	<0.381
Carbon disulfide	NL	11000	ug/m3	13.5	10.5	5.85
Carbon tetrachloride	14	1500	ug/m3	0.496 J	<0.461	0.491 J
Chlorobenzene	NL	760	ug/m3	<0.385	<0.385	<0.385
Chloroethane (Ethyl Chloride)	NL	150000	ug/m3	<0.263	<0.263	0.000
Chloroform	3.6	1500	ug/m3	<0.349	<0.349	<0.349
Chloromethane	NL	1400	ug/m3	1.57	1.71	1.57
cis-1,2-Dichloroethene	NL	NL	ug/m3	<0.311	<0.311	<0.311
cis-1,3-Dichloropropene	NL	NL	ug/m3	<0.313	<0.313	<0.313
Cyclohexane	NL	91000	ug/m3	4.37	2.88	3.51
Dibromochloromethane	NL	NL	ug/m3	<0.618	<0.618	<0.618
Dichlorodifluoromethane	NL	1500	ug/m3	2.38	2.58	2.48
Ethanol	NL	NL	ug/m3	126	<0.5	29
Ethylbenzene	NL	15000	ug/m3	1.48	0.975	0.620 J
Ethylene dibromide	0.14	140	ug/m3	<0.554	<0.554	<0.554
Heptane	NL	NL	ug/m3	10.1	1.59	4.02
Hexachlorobutadiene	3.8	NL	ug/m3	<1.12	<1.12	<1.12
Hexane-n	NL	11000	ug/m3	8.5	4.44	7.72
Isopropylbenzene	NL	NL	ug/m3	<0.382	<0.382	<0.382
Methyl ethyl ketone	NL	76000	ug/m3	24.7	12.9	4.75
Methyl methacrylate	NL	11000	ug/m3	<0.359	<0.359	<0.359
Methyl tert butyl ether	320	46000	ug/m3	<0.233	<0.233	<0.233
Methylene chloride	2200	9100	ug/m3	4.9	0.969	2.08 B
Naphthalene	2.5	46	ug/m3	<1.83	<1.83	<1.83
o-Xylene	NL	NL	ug/m3	1.95	1.41	0.689 J
Propene	NL	NL	ug/m3	<0.16	49.8	52
Styrene	NL	15000	ug/m3	0.536 J	<0.335	<0.335
Tetrachloroethene	320	610	ug/m3	<0.553	<0.553	1.280 J
Tetrahydrofuran	NL	30000	ug/m3	<0.216	<0.216	<0.216
Toluene	NL	76000	ug/m3	13	<0.328	<0.328
trans-1,2-Dichloroethene(dichloroethylene)	NL	610	ug/m3	<0.267	<0.267	<0.267
trans-1,3-Dichloropropene	NL	NL	ug/m3	<0.331	<0.331	<0.331
Trichloroethene	11	30	ug/m3	5.08	<0.364	0.447 J
Trichlorofluoromethane	NL	11000	ug/m3	1.45	1.43	<0.46
Trimethylbenzene, 1,2,4-	NL	910	ug/m3	2.02	<0.375	0.406 J
Vinyl Bromide	NL	NL	ug/m3	<0.373	<0.373	0.000
Vinylacetate	NL	3000	ug/m3	<0.408	<0.408	<0.408
Vinylchloride	9.5	1500	ug/m3	<0.243	1.25	<0.243
Xylene (Total)	NL	1500	ug/m3	5.33	3.08	1.510 J

Table 1
SUB-SURFACE SOIL VAPOR ANALYTICAL RESULTS
Federal Way OCED
Federal Way, Washington
TGE Project No. R13411.13

Station Name	SubSlab Soil Gas Screening Level Method B Cancer (TR=1E ⁻⁶) (July 2021)	SubSlab Soil Gas Screening Level Method B Noncancer (THQ=1) (July 2021)	Reporting Units	TVMP11		
Laboratory Identification				L1433098-09	L1504104-06	L1536552-09
Sample Date				11/16/2021	6/3/2022	9/14/2022
Depth Range				1 ft		
VOAs						
1,1,1-Trichloroethane	NL	76000	ug/m3	0.408 J	<0.4	<0.4
1,1,2,2-Tetrachloroethane	1.4	NL	ug/m3	<0.511	<0.511	<0.511
1,1,2-Trichloro-1,2,2-trifluoroethane	NL	76000	ug/m3	0.866 J	1.56	<0.608
1,1,2-Trichloroethane	5.2	3	ug/m3	<0.422	<0.422	<0.422
1,1-Dichloroethane	52	NL	ug/m3	<0.29	<0.29	<0.29
1,1-Dichloroethene	NL	3000	ug/m3	<0.302	<0.302	<0.302
1,2,4-Trichlorobenzene	NL	30	ug/m3	<1.1	<1.1	<1.1
1,2-Dichlorobenzene	NL	3000	ug/m3	<0.77	<0.77	<0.77
1,2-Dichloroethane	3.2	110	ug/m3	<0.283	<0.283	<0.283
1,2-Dichloropropane	23	61	ug/m3	<0.351	<0.351	<0.351
1,2-Dichlorotetrafluoroethane	NL	NL	ug/m3	<0.622	<0.622	<0.622
1,3,5-Trimethylbenzene	NL	910	ug/m3	0.972 J	<0.382	<0.382
1,3-Butadiene	2.8	30	ug/m3	46	<0.23	<0.23
1,3-Dichlorobenzene	NL	NL	ug/m3	<1.09	<1.09	<1.09
1,4-Dichlorobenzene	7.6	12000	ug/m3	<0.335	<0.335	<0.335
1,4-Dioxane	17	460	ug/m3	<0.3	<0.3	0.5 J
2,2,4-Trimethylpentane	NL	NL	ug/m3	<0.621	<0.621	0.874 J
2-Chlorotoluene	NL	NL	ug/m3	<0.427	<0.427	<0.427
2-Hexanone	NL	460	ug/m3	7.4	<0.544	<0.544
2-Propanol	NL	NL	ug/m3	9	<0.649	15.3
4-Ethyltoluene	NL	NL	ug/m3	1.05	<0.384	<0.384
4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	NL	46000	ug/m3	4.14 J	<0.313	<0.313
Acetone	NL	470000	ug/m3	176	10.5	26.6
Allyl chloride	14	15	ug/m3	<0.357	<0.357	<0.357
Benzene	11	460	ug/m3	15.5	1.15	2.9
Benzyl chloride	1.7	15	ug/m3	<0.311	<0.311	<0.311
Bromodichloromethane	2.3	NL	ug/m3	<0.471	<0.471	<0.471
Bromoform	76	NL	ug/m3	<0.757	<0.757	<0.757
Bromomethane	NL	76	ug/m3	<0.381	<0.381	<0.381
Carbon disulfide	NL	11000	ug/m3	12.5	1.41	2.93
Carbon tetrachloride	14	1500	ug/m3	0.649 J	<0.461	0.491 J
Chlorobenzene	NL	760	ug/m3	<0.385	<0.385	<0.385
Chloroethane (Ethyl Chloride)	NL	150000	ug/m3	<0.263	<0.263	0.000
Chloroform	3.6	1500	ug/m3	<0.349	<0.349	<0.349
Chloromethane	NL	1400	ug/m3	1.89	3.8	2.07
cis-1,2-Dichloroethene	NL	NL	ug/m3	<0.311	3.58	<0.311
cis-1,3-Dichloropropene	NL	NL	ug/m3	<0.313	<0.313	<0.313
Cyclohexane	NL	91000	ug/m3	3.48	1.06	35.5
Dibromochloromethane	NL	NL	ug/m3	<0.618	<0.618	<0.618
Dichlorodifluoromethane	NL	1500	ug/m3	2.66	<0.678	<0.678
Ethanol	NL	NL	ug/m3	134	<0.5	75.4
Ethylbenzene	NL	15000	ug/m3	1.58	<0.362	0.98
Ethylene dibromide	0.14	140	ug/m3	<0.554	<0.554	<0.554
Heptane	NL	NL	ug/m3	6.3	<0.425	1.61
Hexachlorobutadiene	3.8	NL	ug/m3	<1.12	<1.12	<1.12
Hexane-n	NL	11000	ug/m3	10.1	<0.726	12
Isopropylbenzene	NL	NL	ug/m3	<0.382	<0.382	<0.382
Methyl ethyl ketone	NL	76000	ug/m3	43.1	<0.24	3.04 J
Methyl methacrylate	NL	11000	ug/m3	<0.359	<0.359	<0.359
Methyl tert butyl ether	320	46000	ug/m3	<0.233	<0.233	<0.233
Methylene chloride	2200	9100	ug/m3	<0.34	<0.34	3.68 B
Naphthalene	2.5	46	ug/m3	<1.83	<1.83	<1.83
o-Xylene	NL	NL	ug/m3	2.09	1.22	1.13
Propene	NL	NL	ug/m3	468	5.25 B	<0.16
Styrene	NL	15000	ug/m3	1.31	<0.335	0.422 J
Tetrachloroethene	320	610	ug/m3	16.4	<0.553	19.7
Tetrahydrofuran	NL	30000	ug/m3	<0.216	<0.216	<0.216
Toluene	NL	76000	ug/m3	9.79	2.01	<0.328
trans-1,2-Dichloroethene(dichloroethylene)	NL	610	ug/m3	<0.267	<0.267	<0.267
trans-1,3-Dichloropropene	NL	NL	ug/m3	<0.331	<0.331	<0.331
Trichloroethene	11	30	ug/m3	1.07 J	<0.364	1.22
Trichlorofluoromethane	NL	11000	ug/m3	<0.46	1.33	<0.46
Trimethylbenzene, 1,2,4-	NL	910	ug/m3	2.27	<0.375	0.810 J
Vinyl Bromide	NL	NL	ug/m3	<0.373	<0.373	0.000
Vinylacetate	NL	3000	ug/m3	<0.408	<0.408	<0.408
Vinylchloride	9.5	1500	ug/m3	2.41	<0.243	<0.243
Xylene (Total)	NL	1500	ug/m3	4.51	2.9	2.8

Table 1
SUB-SURFACE SOIL VAPOR ANALYTICAL RESULTS
Federal Way OCED
Federal Way, Washington
TGE Project No. R13411.13

Station Name	SubSlab Soil Gas Screening Level Method B Cancer (TR=1E ⁻⁶) (July 2021)	SubSlab Soil Gas Screening Level Method B Noncancer (THQ=1) (July 2021)	Reporting Units	TVMP12		
Laboratory Identification				L1433098-10	L1504104-07	L1536552-10
Sample Date				11/16/2021	6/3/2022	9/14/2022
Depth Range				1 ft		
VOAs						
1,1,1-Trichloroethane	NL	76000	ug/m3	<0.4	<0.4	<0.4
1,1,2,2-Tetrachloroethane	1.4	NL	ug/m3	<0.511	<0.511	<0.511
1,1,2-Trichloro-1,2,2-trifluoroethane	NL	76000	ug/m3	0.669 J	<0.608	<0.608
1,1,2-Trichloroethane	5.2	3	ug/m3	<0.422	<0.422	<0.422
1,1-Dichloroethane	52	NL	ug/m3	<0.29	<0.29	<0.29
1,1-Dichloroethene	NL	3000	ug/m3	<0.302	<0.302	<0.302
1,2,4-Trichlorobenzene	NL	30	ug/m3	<1.1	<1.1	<1.1
1,2-Dichlorobenzene	NL	3000	ug/m3	<0.77	<0.77	<0.77
1,2-Dichloroethane	3.2	110	ug/m3	<0.283	<0.283	<0.283
1,2-Dichloropropane	23	61	ug/m3	<0.351	<0.351	<0.351
1,2-Dichlorotetrafluoroethane	NL	NL	ug/m3	<0.622	<0.622	<0.622
1,3,5-Trimethylbenzene	NL	910	ug/m3	0.569 J	<0.382	5.15
1,3-Butadiene	2.8	30	ug/m3	<0.23	<0.23	<0.23
1,3-Dichlorobenzene	NL	NL	ug/m3	<1.09	<1.09	<1.09
1,4-Dichlorobenzene	7.6	12000	ug/m3	<0.335	1.29	<0.335
1,4-Dioxane	17	460	ug/m3	<0.3	<0.3	<0.3
2,2,4-Trimethylpentane	NL	NL	ug/m3	<0.621	<0.621	<0.621
2-Chlorotoluene	NL	NL	ug/m3	<0.427	<0.427	<0.427
2-Hexanone	NL	460	ug/m3	<0.544	<0.544	<0.544
2-Propanol	NL	NL	ug/m3	3.79	<0.649	<0.649
4-Ethyltoluene	NL	NL	ug/m3	1.2	<0.384	12.1
4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	NL	46000	ug/m3	<0.313	<0.313	<0.313
Acetone	NL	470000	ug/m3	47.8	30.4	14.3
Allyl chloride	14	15	ug/m3	<0.357	<0.357	<0.357
Benzene	11	460	ug/m3	12	0.747	7.79
Benzyl chloride	1.7	15	ug/m3	<0.311	<0.311	<0.311
Bromodichloromethane	2.3	NL	ug/m3	<0.471	<0.471	<0.471
Bromoform	76	NL	ug/m3	<0.757	<0.757	<0.757
Bromomethane	NL	76	ug/m3	<0.381	<0.381	<0.381
Carbon disulfide	NL	11000	ug/m3	11.3	0.725	3.11
Carbon tetrachloride	14	1500	ug/m3	<0.461	<0.461	<0.461
Chlorobenzene	NL	760	ug/m3	<0.385	<0.385	<0.385
Chloroethane (Ethyl Chloride)	NL	150000	ug/m3	<0.263	<0.263	0.000
Chloroform	3.6	1500	ug/m3	<0.349	<0.349	<0.349
Chloromethane	NL	1400	ug/m3	2.13	1.55	2.4
cis-1,2-Dichloroethene	NL	NL	ug/m3	<0.311	<0.311	<0.311
cis-1,3-Dichloropropene	NL	NL	ug/m3	<0.313	<0.313	<0.313
Cyclohexane	NL	91000	ug/m3	9.81	1.64	15.6
Dibromochloromethane	NL	NL	ug/m3	<0.618	<0.618	<0.618
Dichlorodifluoromethane	NL	1500	ug/m3	2.35	2.38	<0.678
Ethanol	NL	NL	ug/m3	80.9	5.11	26.4
Ethylbenzene	NL	15000	ug/m3	1.06	2.29	2.87
Ethylene dibromide	0.14	140	ug/m3	<0.554	<0.554	<0.554
Heptane	NL	NL	ug/m3	19.9	<0.425	9.16
Hexachlorobutadiene	3.8	NL	ug/m3	<1.12	<1.12	<1.12
Hexane-n	NL	11000	ug/m3	42.7	<0.726	33.7
Isopropylbenzene	NL	NL	ug/m3	<0.382	<0.382	<0.382
Methyl ethyl ketone	NL	76000	ug/m3	7.61	11.4	5.63
Methyl methacrylate	NL	11000	ug/m3	<0.359	<0.359	<0.359
Methyl tert butyl ether	320	46000	ug/m3	<0.233	<0.233	<0.233
Methylene chloride	2200	9100	ug/m3	<0.34	<0.34	<0.34
Naphthalene	2.5	46	ug/m3	<1.83	<1.83	1.89 J
o-Xylene	NL	NL	ug/m3	1.33	3.73	7.67
Propene	NL	NL	ug/m3	517	4.8 B	1170
Styrene	NL	15000	ug/m3	0.587 J	<0.335	<0.335
Tetrachloroethene	320	610	ug/m3	2.92	<0.553	5.02
Tetrahydrofuran	NL	30000	ug/m3	<0.216	<0.216	<0.216
Toluene	NL	76000	ug/m3	<0.328	6.03	<0.328
trans-1,2-Dichloroethene(dichloroethylene)	NL	610	ug/m3	<0.267	<0.267	<0.267
trans-1,3-Dichloropropene	NL	NL	ug/m3	<0.331	<0.331	<0.331
Trichloroethene	11	30	ug/m3	<0.364	2.28	<0.364
Trichlorofluoromethane	NL	11000	ug/m3	<0.46	1.34	<0.46
Trimethylbenzene, 1,2,4-	NL	910	ug/m3	1.37	2.14	12.7
Vinyl Bromide	NL	NL	ug/m3	<0.373	<0.373	0.000
Vinylacetate	NL	3000	ug/m3	<0.408	<0.408	<0.408
Vinylchloride	9.5	1500	ug/m3	<0.243	<0.243	<0.243
Xylene (Total)	NL	1500	ug/m3	3.13	9.45	31.2

Legend

TR = 1E^{-6} Incremental Lifetime Cancer Risk target value of 1 : 1,000,000

THQ = 1 Target hazard quotient for potential non-cancer effects

1.8 Concentration in blue indicates a level above the method detection limit (MDL) (for Reported Concentrations) and below Ecology Subslab Soil Gas Screening Levels using the "Method B" Cancer health risk model.

NL Not Listed with a Target Screening Level per US EPA

ug/m³ Micrograms per cubic meter

--- Soil Vapor attenuation not calculated for constituent concentrations below the laboratory sample quantitation limit.

0.1242 Concentration exceeds the Washington State Department of Ecology Subslab Soil Gas Screening Levels using the "Method B" Cancer health risk model.

Table 2
Interior/Exterior Air Analytical Results
Former Payless Auto
Federal Way, Washington
TGE Project No. R13411.13

Station Name	Indoor Air Method B Cancer (July 2021)	Indoor Air Method B Noncancer (July 2021)	Reporting Units	EXTERIOR (Upwind)		
Laboratory Identification				L1433114-02	L1501970-02	L1537776-02
Sample Date				11/16/2021	6/4/2022	9/15/2022
				Exterior Air Concentration		
VOAs						
1,1,1-Trichloroethane	NL	2285.714	ug/m3	<0.4	<0.4	<0.4
1,1,2,2-Tetrachloroethane	0.043	NL	ug/m3	<0.511	<0.511	<0.511
1,1,2-Trichloro-1,2,2-trifluoroethane	NL	2285.714	ug/m3	<0.608	<0.608	<0.608
1,1,2-Trichloroethane	0.156	0.091	ug/m3	<0.422	<0.422	<0.422
1,1-Dichloroethane	1.563	NL	ug/m3	<0.29	<0.29	<0.29
1,1-Dichloroethene	NL	91.429	ug/m3	<0.302	<0.302	<0.302
1,2,4-Trichlorobenzene	NL	0.914	ug/m3	<1.1	<1.1	<1.1
1,2-Dichlorobenzene	NL	91.429	ug/m3	<0.77	<0.77	<0.77
1,2-Dichloroethane	0.096	3.2	ug/m3	<0.283	<0.283	<0.283
1,2-Dichloropropane	0.676	1.829	ug/m3	<0.351	<0.351	<0.351
1,2-Dichlorotetrafluoroethane	NL	NL	ug/m3	<0.622	<0.622	<0.622
1,3,5-Trimethylbenzene	NL	27.42857143	ug/m3	<0.382	<0.382	<0.382
1,3-Butadiene	0.083	0.91428571	ug/m3	<0.23	<0.23	<0.23
1,3-Dichlorobenzene	NL	NL	ug/m3	<1.09	<1.09	<1.09
1,4-Dichlorobenzene	0.227	365.714	ug/m3	<0.335	<0.335	<0.335
1,4-Dioxane	0.5	13.714	ug/m3	<0.3	<0.3	<0.3
2,2,4-Trimethylpentane	NL	NL	ug/m3	<0.621	<0.621	<0.621
2-Chlorotoluene	NL	NL	ug/m3	<0.427	<0.427	<0.427
2-Hexanone	NL	13.714	ug/m3	<0.544	<0.544	<0.544
2-Propanol	NL	NL	ug/m3	2.14 J	1.570 J	4.35
4-Ethyltoluene	NL	NL	ug/m3	<0.384	<0.384	<0.384
4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	NL	1371.429	ug/m3	<0.313	<0.313	<0.313
Acetone	NL	14171.429	ug/m3	4.06	3.04	6.44
Allyl chloride	0.417	0.457	ug/m3	<0.357	<0.357	<0.357
Benzene	0.321	13.714	ug/m3	0.495 J	0.402 J	0.460 J
Benzyl chloride	0.051	0.457	ug/m3	<0.311	<0.311	<0.311
Bromodichloromethane	0.068	NL	ug/m3	<0.471	<0.471	<0.471
Bromoform	2.273	NL	ug/m3	<0.757	<0.757	<0.757
Bromomethane	NL	2.286	ug/m3	<0.381	<0.381	<0.381
Carbon disulfide	NL	320	ug/m3	<0.317	<0.317	<0.317
Carbon tetrachloride	0.417	45.714	ug/m3	0.474 J	0.490 J	2.48
Chlorobenzene	NL	22.857	ug/m3	<0.385	<0.385	<0.385
Chloroethane	NL	4571.429	ug/m3	<0.263	<0.263	<0.263
Chloroform	0.109	44.800	ug/m3	<0.349	<0.349	<0.349
Chloromethane	NL	41.143	ug/m3	0.989	1.32	1.18
cis-1,2-Dichloroethene	NL	NL	ug/m3	<0.311	<0.311	<0.311
cis-1,3-Dichloropropene	NL	NL	ug/m3	<0.313	<0.313	<0.313
Cyclohexane	NL	2742.857	ug/m3	<0.259	<0.259	<0.259
Dibromochloromethane	NL	NL	ug/m3	<0.618	<0.618	<0.618
Dichlorodifluoromethane	NL	45.714	ug/m3	1.78	2.59	2.61
Ethanol	NL	NL	ug/m3	17.1	1.0 J	14.7
Ethylbenzene	NL	457.14285714	ug/m3	<0.362	<0.362	<0.362
Ethylene dibromide	0.004	4.114	ug/m3	<0.554	<0.554	<0.554
Heptane	NL	NL	ug/m3	<0.425	<0.425	<0.425
Hexachlorobutadiene	0.114	NL	ug/m3	<1.12	<1.12	<1.12
Hexane-n	NL	320.00000000	ug/m3	<0.726	<0.726	<0.726
Isopropylbenzene	NL	NL	ug/m3	<0.382	<0.382	<0.382
Methyl ethyl ketone	NL	2285.714	ug/m3	<0.24	0.42 J	1.21 J
Methyl methacrylate	NL	320	ug/m3	<0.359	<0.359	<0.359
Methyl tert butyl ether	9.615	NL	ug/m3	<0.233	<0.233	<0.233
Methylene chloride	65.789	274.286	ug/m3	1.16	0.68 B J	0.69 J
Naphthalene	0.074	1.371	ug/m3	<1.83	<1.83	0.00
o-Xylene	NL	NL	ug/m3	<0.359	<0.359	<0.359
Propene	NL	NL	ug/m3	<0.16	<0.16	<0.16
Styrene	NL	457.14285714	ug/m3	<0.335	<0.335	<0.335
Tetrachloroethene	9.615	18.28571429	ug/m3	7.47	<0.553	2.07
Tetrahydrofuran	NL	914.28571429	ug/m3	<0.216	<0.216	<0.216
Toluene	NL	2285.71428571	ug/m3	1.24 J	1.650 J	1.830 J
trans-1,2-Dichloroethene(dichloroethylene)	NL	18.28571429	ug/m3	<0.267	<0.267	<0.267
trans-1,3-Dichloropropene	NL	NL	ug/m3	<0.331	<0.331	<0.331
Trichloroethene	0.33393821	0.914	ug/m3	34	<0.364	<0.364
Trichlorofluoromethane	NL	320	ug/m3	1.2	1.32	1.37
Trimethylbenzene, 1,2,4-	NL	27.429	ug/m3	<0.375	<0.375	<0.375
Vinyl Bromide	NL	NL	ug/m3	<0.373	<0.373	<0.373
Vinylacetate	NL	91.429	ug/m3	<0.408	<0.408	<0.408
Vinylchloride	0.284	45.714	ug/m3	<0.243	<0.243	<0.243
Xylene (Total)	NL	45.714	ug/m3	0.65 J	0.798 J	0.724 J

Notes:

1.8	Concentration in blue indicates a level above the method detection limit (MDL) (for R Ecology (Ecology) screening level (if established) for Calculated Indoor Air Concentr
NL	Not Listed with a Target Screening Level per Ecology
ug/m ³	Micrograms per cubic meter
20	Result exceeds Ecology's Method B carcinogenic indoor air screening level
J	Analyte is an estimated value between the Reporting Limit (RL) and Method Detectic

Table 2
Interior/Exterior Air Analytical Results
Former Payless Auto
Federal Way, Washington
TGE Project No. R13411.13

Station Name	Indoor Air Method B Cancer (July 2021)	Indoor Air Method B Noncancer (July 2021)	Reporting Units	EXTERIOR (Downwind)	
Laboratory Identification				L1501970-03	L1537776-03
Sample Date				6/4/2022	9/15/2022
				Exterior Air Concentration	
VOAs					
1,1,1-Trichloroethane	NL	2285.714	ug/m3	<0.4	<0.4
1,1,2,2-Tetrachloroethane	0.043	NL	ug/m3	<0.511	<0.511
1,1,2-Trichloro-1,2,2-trifluoroethane	NL	2285.714	ug/m3	<0.608	<0.608
1,1,2-Trichloroethane	0.156	0.091	ug/m3	<0.422	<0.422
1,1-Dichloroethane	1.563	NL	ug/m3	<0.29	<0.29
1,1-Dichloroethene	NL	91.429	ug/m3	<0.302	<0.302
1,2,4-Trichlorobenzene	NL	0.914	ug/m3	<1.1	<1.1
1,2-Dichlorobenzene	NL	91.429	ug/m3	<0.77	<0.77
1,2-Dichloroethane	0.096	3.2	ug/m3	<0.283	<0.283
1,2-Dichloropropane	0.676	1.829	ug/m3	<0.351	<0.351
1,2-Dichlorotetrafluoroethane	NL	NL	ug/m3	<0.622	<0.622
1,3,5-Trimethylbenzene	NL	27.42857143	ug/m3	<0.382	0.653 J
1,3-Butadiene	0.083	0.91428571	ug/m3	<0.23	<0.23
1,3-Dichlorobenzene	NL	NL	ug/m3	<1.09	<1.09
1,4-Dichlorobenzene	0.227	365.714	ug/m3	<0.335	<0.335
1,4-Dioxane	0.5	13.714	ug/m3	<0.3	<0.3
2,2,4-Trimethylpentane	NL	NL	ug/m3	<0.621	<0.621
2-Chlorotoluene	NL	NL	ug/m3	<0.427	<0.427
2-Hexanone	NL	13.714	ug/m3	<0.544	<0.544
2-Propanol	NL	NL	ug/m3	5.92	179
4-Ethyltoluene	NL	NL	ug/m3	<0.384	1.58
4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	NL	1371.429	ug/m3	<0.313	<0.313
Acetone	NL	14171.429	ug/m3	6.7	14.8
Allyl chloride	0.417	0.457	ug/m3	<0.357	<0.357
Benzene	0.321	13.714	ug/m3	0.390 J	1.34
Benzyl chloride	0.051	0.457	ug/m3	<0.311	<0.311
Bromodichloromethane	0.068	NL	ug/m3	<0.471	<0.471
Bromoform	2.273	NL	ug/m3	<0.757	<0.757
Bromomethane	NL	2.286	ug/m3	<0.381	<0.381
Carbon disulfide	NL	320	ug/m3	0.859	<0.317
Carbon tetrachloride	0.417	45.714	ug/m3	<0.461	<0.461
Chlorobenzene	NL	22.857	ug/m3	<0.385	<0.385
Chloroethane	NL	4571.429	ug/m3	<0.263	<0.263
Chloroform	0.109	44.800	ug/m3	<0.349	<0.349
Chloromethane	NL	41.143	ug/m3	1.3	1.17
cis-1,2-Dichloroethene	NL	NL	ug/m3	<0.311	<0.311
cis-1,3-Dichloropropene	NL	NL	ug/m3	<0.313	<0.313
Cyclohexane	NL	2742.857	ug/m3	0.672 J	21.5
Dibromochloromethane	NL	NL	ug/m3	<0.618	<0.618
Dichlorodifluoromethane	NL	45.714	ug/m3	2.5	1.76
Ethanol	NL	NL	ug/m3	13.6	339.0 E
Ethylbenzene	NL	457.14285714	ug/m3	<0.362	1.79
Ethylene dibromide	0.004	4.114	ug/m3	<0.554	<0.554
Heptane	NL	NL	ug/m3	0.438 J	8.92
Hexachlorobutadiene	0.114	NL	ug/m3	<1.12	<1.12
Hexane-n	NL	320.00000000	ug/m3	<0.726	5.99
Isopropylbenzene	NL	NL	ug/m3	<0.382	<0.382
Methyl ethyl ketone	NL	2285.714	ug/m3	0.87 J	70.8
Methyl methacrylate	NL	320	ug/m3	<0.359	4.91
Methyl tert butyl ether	9.615	NL	ug/m3	<0.233	<0.233
Methylene chloride	65.789	274.286	ug/m3	1.06 B	4.83
Naphthalene	0.074	1.371	ug/m3	<1.83	<1.83
o-Xylene	NL	NL	ug/m3	0.418 J	2.64
Propene	NL	NL	ug/m3	<0.16	<0.16
Styrene	NL	457.14285714	ug/m3	<0.335	2
Tetrachloroethene	9.615	18.28571429	ug/m3	0.591 J	0.634 J
Tetrahydrofuran	NL	914.28571429	ug/m3	0.245 J	<0.216
Toluene	NL	2285.71428571	ug/m3	2.44	116
trans-1,2-Dichloroethene(dichloroethylene)	NL	18.28571429	ug/m3	<0.267	<0.267
trans-1,3-Dichloropropene	NL	NL	ug/m3	<0.331	<0.331
Trichloroethene	0.33393821	0.914	ug/m3	4.09	<0.364
Trichlorofluoromethane	NL	320	ug/m3	1.3	1.18
Trimethylbenzene, 1,2,4-	NL	27.429	ug/m3	<0.375	1.6
Vinyl Bromide	NL	NL	ug/m3	<0.373	<0.373
Vinylacetate	NL	91.429	ug/m3	<0.408	1.98
Vinylchloride	0.284	45.714	ug/m3	<0.243	<0.243
Xylene (Total)	NL	45.714	ug/m3	1.060 J	6.59

Notes:

- 1.8

Concentration in blue indicates a level reported Concentrations) and below Washir Ecology (Ecology) screening level (if esations.
- NL

Not Listed with a Target Screening Leve
- ug/m³

Micrograms per cubic meter
- 20

Result exceeds Ecology's Method B car
- J

Analyte is an estimated value between bn Limit (MDL) (for organics only)

Table 2
Interior/Exterior Air Analytical Results
Former Payless Auto
Federal Way, Washington
TGE Project No. R13411.13

Station Name	Indoor Air Method B Cancer (July 2021)	Indoor Air Method B Noncancer (July 2021)	Reporting Units	INTERIOR (Staff Hallway)		
Laboratory Identification				L1433114-01	L1501970-01	L1537776-01
Sample Date				11/16/2021	6/4/2022	9/15/2022
				Interior Air Concentration		
VOAs						
1,1,1-Trichloroethane	NL	2285.714	ug/m3	<0.4	<0.4	<0.4
1,1,2,2-Tetrachloroethane	0.043	NL	ug/m3	<0.511	<0.511	<0.511
1,1,2-Trichloro-1,2,2-trifluoroethane	NL	2285.714	ug/m3	<0.608	<0.608	<0.608
1,1,2-Trichloroethane	0.156	0.091	ug/m3	<0.422	<0.422	<0.422
1,1-Dichloroethane	1.563	NL	ug/m3	<0.29	<0.29	<0.29
1,1-Dichloroethene	NL	91.429	ug/m3	<0.302	<0.302	<0.302
1,2,4-Trichlorobenzene	NL	0.914	ug/m3	<1.1	<1.1	<1.1
1,2-Dichlorobenzene	NL	91.429	ug/m3	<0.77	<0.77	<0.77
1,2-Dichloroethane	0.096	3.2	ug/m3	<0.283	<0.283	<0.283
1,2-Dichloropropane	0.676	1.829	ug/m3	<0.351	<0.351	<0.351
1,2-Dichlorotetrafluoroethane	NL	NL	ug/m3	<0.622	<0.622	<0.622
1,3,5-Trimethylbenzene	NL	27.42857143	ug/m3	<0.382	<0.382	<0.382
1,3-Butadiene	0.083	0.91428571	ug/m3	<0.23	<0.23	<0.23
1,3-Dichlorobenzene	NL	NL	ug/m3	<1.09	<1.09	<1.09
1,4-Dichlorobenzene	0.227	365.714	ug/m3	<0.335	<0.335	<0.335
1,4-Dioxane	0.5	13.714	ug/m3	<0.3	<0.3	<0.3
2,2,4-Trimethylpentane	NL	NL	ug/m3	<0.621	<0.621	<0.621
2-Chlorotoluene	NL	NL	ug/m3	<0.427	<0.427	<0.427
2-Hexanone	NL	13.714	ug/m3	<0.544	<0.544	<0.544
2-Propanol	NL	NL	ug/m3	5680 E	7130 E	4520.000 E
4-Ethyltoluene	NL	NL	ug/m3	<0.384	<0.384	<0.384
4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	NL	1371.429	ug/m3	<0.313	<0.313	<0.313
Acetone	NL	14171.429	ug/m3	<1.39	22.1	45.6
Allyl chloride	0.417	0.457	ug/m3	<0.357	<0.357	<0.357
Benzene	0.321	13.714	ug/m3	0.309 J	0.364 J	0.524 J
Benzyl chloride	0.051	0.457	ug/m3	<0.311	<0.311	<0.311
Bromodichloromethane	0.068	NL	ug/m3	<0.471	<0.471	<0.471
Bromoform	2.273	NL	ug/m3	<0.757	<0.757	<0.757
Bromomethane	NL	2.286	ug/m3	<0.381	<0.381	<0.381
Carbon disulfide	NL	320	ug/m3	<0.317	<0.317	<0.317
Carbon tetrachloride	0.417	45.714	ug/m3	0.465 J	0.474 J	2.18
Chlorobenzene	NL	22.857	ug/m3	<0.385	<0.385	<0.385
Chloroethane	NL	4571.429	ug/m3	<0.263	<0.263	<0.263
Chloroform	0.109	44.800	ug/m3	<0.349	<0.349	<0.349
Chloromethane	NL	41.143	ug/m3	1.06	1.4	1.07
cis-1,2-Dichloroethene	NL	NL	ug/m3	<0.311	<0.311	<0.311
cis-1,3-Dichloropropene	NL	NL	ug/m3	<0.313	<0.313	<0.313
Cyclohexane	NL	2742.857	ug/m3	<0.259	<0.259	<0.259
Dibromochloromethane	NL	NL	ug/m3	<0.618	<0.618	<0.618
Dichlorodifluoromethane	NL	45.714	ug/m3	1.67	2.63	1.81
Ethanol	NL	NL	ug/m3	1470	1380.0 E	1870.0 E
Ethylbenzene	NL	457.14285714	ug/m3	0.65 J	<0.362	0.819 J
Ethylene dibromide	0.004	4.114	ug/m3	<0.554	<0.554	<0.554
Heptane	NL	NL	ug/m3	<0.425	0.556 J	<0.425
Hexachlorobutadiene	0.114	NL	ug/m3	<1.12	<1.12	<1.12
Hexane-n	NL	320.00000000	ug/m3	<0.726	<0.726	<0.726
Isopropylbenzene	NL	NL	ug/m3	<0.382	<0.382	<0.382
Methyl ethyl ketone	NL	2285.714	ug/m3	5.07	1.56 J	1.19 J
Methyl methacrylate	NL	320	ug/m3	<0.359	<0.359	<0.359
Methyl tert butyl ether	9.615	NL	ug/m3	<0.233	<0.233	<0.233
Methylene chloride	65.789	274.286	ug/m3	0.514 J	1.00 B	0.51 J
Naphthalene	0.074	1.371	ug/m3	<1.83	<1.83	<1.83
o-Xylene	NL	NL	ug/m3	0.893	0.423 J	<0.359
Propene	NL	NL	ug/m3	<0.16	<0.16	<0.16
Styrene	NL	457.14285714	ug/m3	0.596 J	0.348 J	<0.335
Tetrachloroethene	9.615	18.28571429	ug/m3	<0.553	<0.553	0.937 J
Tetrahydrofuran	NL	914.28571429	ug/m3	<0.216	0.339 J	<0.216
Toluene	NL	2285.71428571	ug/m3	4.33	2.72	3.1
trans-1,2-Dichloroethene(dichloroethylene)	NL	18.28571429	ug/m3	<0.267	<0.267	<0.267
trans-1,3-Dichloropropene	NL	NL	ug/m3	<0.331	<0.331	<0.331
Trichloroethene	0.33393821	0.914	ug/m3	0.534 J	<0.364	0.927 J
Trichlorofluoromethane	NL	320	ug/m3	1.12 J	<0.46	1.25
Trimethylbenzene, 1,2,4-	NL	27.429	ug/m3	<0.375	<0.375	<0.375
Vinyl Bromide	NL	NL	ug/m3	<0.373	<0.373	<0.373
Vinylacetate	NL	91.429	ug/m3	<0.408	<0.408	<0.408
Vinylchloride	0.284	45.714	ug/m3	<0.243	<0.243	<0.243
Xylene (Total)	NL	45.714	ug/m3	3	1.070 J	0.698 J

Notes:

1.8

Concentration in blue indicates a level agton Department of Ecology (Ecology) screening level (if es

NL

Not Listed with a Target Screening Leve

ug/m³

Micrograms per cubic meter

20

Result exceeds Ecology's Method B car

J

Analyte is an estimated value between 1

ATTACHMENT 1

TGE Resources

Sample Delivery Group: L1501970
Samples Received: 06/06/2022
Project Number: R13411.13
Description: Federal Way OCED

Report To: Kristi Barnette
8048 Northcourt Road
Houston, TX 77040

Entire Report Reviewed By:



Mark W. Beasley
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

TABLE OF CONTENTS

Cp: Cover Page	1	¹ Cp
Tc: Table of Contents	2	
Ss: Sample Summary	3	² Tc
Cn: Case Narrative	4	
Tr: TRRP Summary	5	³ Ss
TRRP form R	6	
TRRP form S	7	⁴ Cn
TRRP Exception Reports	8	⁵ Tr
Sr: Sample Results	9	⁶ Sr
INTERIOR - STAFF HALLWAY L1501970-01	9	
EXTERIOR - UPWIND L1501970-02	11	
EXTERIOR - DOWNWIND L1501970-03	13	⁷ Qc
Qc: Quality Control Summary	15	⁸ Gl
Volatile Organic Compounds (MS) by Method TO-15	15	
Gl: Glossary of Terms	20	⁹ Al
Al: Accreditations & Locations	21	
Sc: Sample Chain of Custody	22	¹⁰ Sc

SAMPLE SUMMARY

INTERIOR - STAFF HALLWAY L1501970-01 Air

Collected by
K. Barnette

Collected date/time
06/04/22 10:24

Received date/time
06/06/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1876857	1	06/09/22 15:24	06/09/22 15:24	DAH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1877490	20	06/10/22 16:47	06/10/22 16:47	DAH	Mt. Juliet, TN

EXTERIOR - UPWIND L1501970-02 Air

Collected by
K. Barnette

Collected date/time
06/04/22 10:17

Received date/time
06/06/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1876857	1	06/09/22 15:55	06/09/22 15:55	DAH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1877490	1	06/10/22 17:16	06/10/22 17:16	DAH	Mt. Juliet, TN

EXTERIOR - DOWNWIND L1501970-03 Air

Collected by
K. Barnette

Collected date/time
06/04/22 16:47

Received date/time
06/06/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1876857	1	06/09/22 16:25	06/09/22 16:25	DAH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1877490	1	06/10/22 11:32	06/10/22 11:32	MBF	Mt. Juliet, TN

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Mark W. Beasley
Project Manager

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Tr

⁶ Sr

⁷ Qc

⁸ Gl

⁹ Al

¹⁰ Sc

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

- R1 - Field chain-of-custody documentation;
- R2 - Sample identification cross-reference;
- R3 - Test reports (analytical data sheets) for each environmental sample that includes:
 - a. Items consistent with NELAC Chapter 5,
 - b. dilution factors,
 - c. preparation methods,
 - d. cleanup methods, and
 - e. if required for the project, tentatively identified compounds (TICs).
- R4 - Surrogate recovery data including:
 - a. Calculated recovery (%R), and
 - b. The laboratory's surrogate QC limits.
- R5 - Test reports/summary forms for blank samples;
- R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
 - a. LCS spiking amounts,
 - b. Calculated %R for each analyte, and
 - c. The laboratory's LCS QC limits.
- R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
 - a. Samples associated with the MS/MSD clearly identified,
 - b. MS/MSD spiking amounts,
 - c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
 - d. Calculated %Rs and relative percent differences (RPDs), and
 - e. The laboratory's MS/MSD QC limits
- R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
 - a. The amount of analyte measured in the duplicate,
 - b. The calculated RPD, and
 - c. The laboratory's QC limits for analytical duplicates.
- R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.



Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National			LRC Date: 06/11/2022 15:34				
Project Name: Federal Way OCED			Laboratory Job Number: L1501970-01, 02 and 03				
Reviewer Name: Mark W. Beasley			Prep Batch Number(s): WG1876857 and WG1877490				
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?		X			1
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?			X		
		Were MS/MSD analyzed at the appropriate frequency?			X		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			X		
		Were MS/MSD RPDs within laboratory QC limits?			X		
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National			LRC Date: 06/11/2022 15:34				
Project Name: Federal Way OCED			Laboratory Job Number: L1501970-01, 02 and 03				
Reviewer Name: Mark W. Beasley			Prep Batch Number(s): WG1876857 and WG1877490				
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER ⁵
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X		
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?			X		
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				
1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period. 2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable); 3. NA = Not applicable; 4. NR = Not reviewed; 5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).							

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National		LRC Date: 06/11/2022 15:34	
Project Name: Federal Way OCED		Laboratory Job Number: L1501970-01, 02 and 03	
Reviewer Name: Mark W. Beasley		Prep Batch Number(s): WG1876857 and WG1877490	
ER #¹	Description		
1	TO-15 WG1876857 L1501970-01: The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL). TO-15 WG1877490 L1501970-01: The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).		
1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period. 2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable); 3. NA = Not applicable; 4. NR = Not reviewed; 5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).			

INTERIOR - STAFF HALLWAY

SAMPLE RESULTS - 01

Collected date/time: 06/04/22 10:24

L1501970

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	SDL ug/m3	Unadj. MQL ug/m3	MQL ug/m3	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.39	2.97	2.97	22.1		1	WG1876857
Allyl chloride	107-05-1	76.53	0.357	0.626	0.626	U		1	WG1876857
Benzene	71-43-2	78.10	0.228	0.639	0.639	0.364	J	1	WG1876857
Benzyl Chloride	100-44-7	127	0.311	1.04	1.04	U		1	WG1876857
Bromodichloromethane	75-27-4	164	0.471	1.34	1.34	U		1	WG1876857
Bromoform	75-25-2	253	0.757	6.21	6.21	U		1	WG1876857
Bromomethane	74-83-9	94.90	0.381	0.776	0.776	U		1	WG1876857
1,3-Butadiene	106-99-0	54.10	0.230	4.43	4.43	U		1	WG1876857
Carbon disulfide	75-15-0	76.10	0.317	0.622	0.622	U		1	WG1876857
Carbon tetrachloride	56-23-5	154	0.461	1.26	1.26	0.474	J	1	WG1876857
Chlorobenzene	108-90-7	113	0.385	0.924	0.924	U		1	WG1876857
Chloroethane	75-00-3	64.50	0.263	0.528	0.528	U		1	WG1876857
Chloroform	67-66-3	119	0.349	0.973	0.973	U		1	WG1876857
Chloromethane	74-87-3	50.50	0.213	0.413	0.413	1.40		1	WG1876857
2-Chlorotoluene	95-49-8	126	0.427	1.03	1.03	U		1	WG1876857
Cyclohexane	110-82-7	84.20	0.259	0.689	0.689	U		1	WG1876857
Dibromochloromethane	124-48-1	208	0.618	1.70	1.70	U		1	WG1876857
1,2-Dibromoethane	106-93-4	188	0.554	1.54	1.54	U		1	WG1876857
1,2-Dichlorobenzene	95-50-1	147	0.770	1.20	1.20	U		1	WG1876857
1,3-Dichlorobenzene	541-73-1	147	1.09	1.20	1.20	U		1	WG1876857
1,4-Dichlorobenzene	106-46-7	147	0.335	1.20	1.20	U		1	WG1876857
1,2-Dichloroethane	107-06-2	99	0.283	0.810	0.810	U		1	WG1876857
1,1-Dichloroethane	75-34-3	98	0.290	0.802	0.802	U		1	WG1876857
1,1-Dichloroethene	75-35-4	96.90	0.302	0.793	0.793	U		1	WG1876857
cis-1,2-Dichloroethene	156-59-2	96.90	0.311	0.793	0.793	U		1	WG1876857
trans-1,2-Dichloroethene	156-60-5	96.90	0.267	0.793	0.793	U		1	WG1876857
1,2-Dichloropropane	78-87-5	113	0.351	0.924	0.924	U		1	WG1876857
cis-1,3-Dichloropropene	10061-01-5	111	0.313	0.908	0.908	U		1	WG1876857
trans-1,3-Dichloropropene	10061-02-6	111	0.331	0.908	0.908	U		1	WG1876857
1,4-Dioxane	123-91-1	88.10	0.300	0.721	0.721	U		1	WG1876857
Ethanol	64-17-5	46.10	0.500	2.36	2.36	1380	E	1	WG1876857
Ethylbenzene	100-41-4	106	0.362	0.867	0.867	U		1	WG1876857
4-Ethyltoluene	622-96-8	120	0.384	0.982	0.982	U		1	WG1876857
Trichlorofluoromethane	75-69-4	137.40	0.460	1.12	1.12	U		1	WG1876857
Dichlorodifluoromethane	75-71-8	120.92	0.678	0.989	0.989	2.63		1	WG1876857
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.608	1.53	1.53	U		1	WG1876857
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.622	1.40	1.40	U		1	WG1876857
Heptane	142-82-5	100	0.425	0.818	0.818	0.556	J	1	WG1876857
Hexachloro-1,3-butadiene	87-68-3	261	1.12	6.73	6.73	U		1	WG1876857
n-Hexane	110-54-3	86.20	0.726	2.22	2.22	U		1	WG1876857
Isopropylbenzene	98-82-8	120.20	0.382	0.983	0.983	U		1	WG1876857
Methylene Chloride	75-09-2	84.90	0.340	0.694	0.694	1.00	B	1	WG1876857
Methyl Butyl Ketone	591-78-6	100	0.544	5.11	5.11	U		1	WG1876857
2-Butanone (MEK)	78-93-3	72.10	0.240	3.69	3.69	1.56	J	1	WG1876857
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	0.313	5.12	5.12	U		1	WG1876857
Methyl methacrylate	80-62-6	100.12	0.359	0.819	0.819	U		1	WG1876857
MTBE	1634-04-4	88.10	0.233	0.721	0.721	U		1	WG1876857
Naphthalene	91-20-3	128	1.83	3.30	3.30	U		1	WG1876857
2-Propanol	67-63-0	60.10	13.0	3.07	61.5	7130	E	20	WG1877490
Propene	115-07-1	42.10	0.160	2.15	2.15	U		1	WG1876857
Styrene	100-42-5	104	0.335	0.851	0.851	0.348	J	1	WG1876857
1,1,2,2-Tetrachloroethane	79-34-5	168	0.511	1.37	1.37	U		1	WG1876857
Tetrachloroethylene	127-18-4	166	0.553	1.36	1.36	U		1	WG1876857
Tetrahydrofuran	109-99-9	72.10	0.216	0.590	0.590	0.339	J	1	WG1876857
Toluene	108-88-3	92.10	0.328	1.88	1.88	2.72		1	WG1876857
1,2,4-Trichlorobenzene	120-82-1	181	1.10	4.66	4.66	U		1	WG1876857



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	SDL ug/m3	Unadj. MQL ug/m3	MQL ug/m3	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	1.09	1.09	U		1	WG1876857
1,1,2-Trichloroethane	79-00-5	133	0.422	1.09	1.09	U		1	WG1876857
Trichloroethylene	79-01-6	131	0.364	1.07	1.07	U		1	WG1876857
1,2,4-Trimethylbenzene	95-63-6	120	0.375	0.982	0.982	U		1	WG1876857
1,3,5-Trimethylbenzene	108-67-8	120	0.382	0.982	0.982	U		1	WG1876857
2,2,4-Trimethylpentane	540-84-1	114.22	0.621	0.934	0.934	U		1	WG1876857
Vinyl chloride	75-01-4	62.50	0.243	0.511	0.511	U		1	WG1876857
Vinyl Bromide	593-60-2	106.95	0.373	0.875	0.875	U		1	WG1876857
Vinyl acetate	108-05-4	86.10	0.408	0.704	0.704	U		1	WG1876857
m&p-Xylene	1330-20-7	106	0.585	1.73	1.73	1.07	J	1	WG1876857
o-Xylene	95-47-6	106	0.359	0.867	0.867	0.423	J	1	WG1876857
(S) 1,4-Bromofluorobenzene	460-00-4	175				98.4		60.0-140	WG1876857
(S) 1,4-Bromofluorobenzene	460-00-4	175				91.0		60.0-140	WG1877490

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

EXTERIOR - UPWIND

Collected date/time: 06/04/22 10:17

SAMPLE RESULTS - 02

L1501970

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	SDL ug/m3	Unadj. MQL ug/m3	MQL ug/m3	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.39	2.97	2.97	3.04		1	WG1876857
Allyl chloride	107-05-1	76.53	0.357	0.626	0.626	U		1	WG1876857
Benzene	71-43-2	78.10	0.228	0.639	0.639	0.402	J	1	WG1876857
Benzyl Chloride	100-44-7	127	0.311	1.04	1.04	U		1	WG1876857
Bromodichloromethane	75-27-4	164	0.471	1.34	1.34	U		1	WG1876857
Bromoform	75-25-2	253	0.757	6.21	6.21	U		1	WG1876857
Bromomethane	74-83-9	94.90	0.381	0.776	0.776	U		1	WG1876857
1,3-Butadiene	106-99-0	54.10	0.230	4.43	4.43	U		1	WG1876857
Carbon disulfide	75-15-0	76.10	0.317	0.622	0.622	U		1	WG1876857
Carbon tetrachloride	56-23-5	154	0.461	1.26	1.26	0.490	J	1	WG1876857
Chlorobenzene	108-90-7	113	0.385	0.924	0.924	U		1	WG1876857
Chloroethane	75-00-3	64.50	0.263	0.528	0.528	U		1	WG1876857
Chloroform	67-66-3	119	0.349	0.973	0.973	U		1	WG1876857
Chloromethane	74-87-3	50.50	0.213	0.413	0.413	1.32		1	WG1876857
2-Chlorotoluene	95-49-8	126	0.427	1.03	1.03	U		1	WG1876857
Cyclohexane	110-82-7	84.20	0.259	0.689	0.689	U		1	WG1876857
Dibromochloromethane	124-48-1	208	0.618	1.70	1.70	U		1	WG1876857
1,2-Dibromoethane	106-93-4	188	0.554	1.54	1.54	U		1	WG1876857
1,2-Dichlorobenzene	95-50-1	147	0.770	1.20	1.20	U		1	WG1876857
1,3-Dichlorobenzene	541-73-1	147	1.09	1.20	1.20	U		1	WG1876857
1,4-Dichlorobenzene	106-46-7	147	0.335	1.20	1.20	U		1	WG1876857
1,2-Dichloroethane	107-06-2	99	0.283	0.810	0.810	U		1	WG1876857
1,1-Dichloroethane	75-34-3	98	0.290	0.802	0.802	U		1	WG1876857
1,1-Dichloroethene	75-35-4	96.90	0.302	0.793	0.793	U		1	WG1876857
cis-1,2-Dichloroethene	156-59-2	96.90	0.311	0.793	0.793	U		1	WG1876857
trans-1,2-Dichloroethene	156-60-5	96.90	0.267	0.793	0.793	U		1	WG1876857
1,2-Dichloropropane	78-87-5	113	0.351	0.924	0.924	U		1	WG1876857
cis-1,3-Dichloropropene	10061-01-5	111	0.313	0.908	0.908	U		1	WG1876857
trans-1,3-Dichloropropene	10061-02-6	111	0.331	0.908	0.908	U		1	WG1876857
1,4-Dioxane	123-91-1	88.10	0.300	0.721	0.721	U		1	WG1876857
Ethanol	64-17-5	46.10	0.500	2.36	2.36	0.979	J	1	WG1877490
Ethylbenzene	100-41-4	106	0.362	0.867	0.867	U		1	WG1876857
4-Ethyltoluene	622-96-8	120	0.384	0.982	0.982	U		1	WG1876857
Trichlorofluoromethane	75-69-4	137.40	0.460	1.12	1.12	1.32		1	WG1876857
Dichlorodifluoromethane	75-71-8	120.92	0.678	0.989	0.989	2.59		1	WG1876857
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.608	1.53	1.53	U		1	WG1876857
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.622	1.40	1.40	U		1	WG1876857
Heptane	142-82-5	100	0.425	0.818	0.818	U		1	WG1876857
Hexachloro-1,3-butadiene	87-68-3	261	1.12	6.73	6.73	U		1	WG1876857
n-Hexane	110-54-3	86.20	0.726	2.22	2.22	U		1	WG1876857
Isopropylbenzene	98-82-8	120.20	0.382	0.983	0.983	U		1	WG1876857
Methylene Chloride	75-09-2	84.90	0.340	0.694	0.694	0.677	B J	1	WG1876857
Methyl Butyl Ketone	591-78-6	100	0.544	5.11	5.11	U		1	WG1876857
2-Butanone (MEK)	78-93-3	72.10	0.240	3.69	3.69	0.419	J	1	WG1876857
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	0.313	5.12	5.12	U		1	WG1876857
Methyl methacrylate	80-62-6	100.12	0.359	0.819	0.819	U		1	WG1876857
MTBE	1634-04-4	88.10	0.233	0.721	0.721	U		1	WG1876857
Naphthalene	91-20-3	128	1.83	3.30	3.30	U		1	WG1876857
2-Propanol	67-63-0	60.10	0.649	3.07	3.07	1.57	J	1	WG1877490
Propene	115-07-1	42.10	0.160	2.15	2.15	U		1	WG1876857
Styrene	100-42-5	104	0.335	0.851	0.851	U		1	WG1876857
1,1,2,2-Tetrachloroethane	79-34-5	168	0.511	1.37	1.37	U		1	WG1876857
Tetrachloroethylene	127-18-4	166	0.553	1.36	1.36	U		1	WG1876857
Tetrahydrofuran	109-99-9	72.10	0.216	0.590	0.590	U		1	WG1876857
Toluene	108-88-3	92.10	0.328	1.88	1.88	1.65	J	1	WG1876857
1,2,4-Trichlorobenzene	120-82-1	181	1.10	4.66	4.66	U		1	WG1876857

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

EXTERIOR - UPWIND

Collected date/time: 06/04/22 10:17

SAMPLE RESULTS - 02

L1501970

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	SDL ug/m3	Unadj. MQL ug/m3	MQL ug/m3	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	1.09	1.09	U		1	WG1876857
1,1,2-Trichloroethane	79-00-5	133	0.422	1.09	1.09	U		1	WG1876857
Trichloroethylene	79-01-6	131	0.364	1.07	1.07	U		1	WG1876857
1,2,4-Trimethylbenzene	95-63-6	120	0.375	0.982	0.982	U		1	WG1876857
1,3,5-Trimethylbenzene	108-67-8	120	0.382	0.982	0.982	U		1	WG1876857
2,2,4-Trimethylpentane	540-84-1	114.22	0.621	0.934	0.934	U		1	WG1876857
Vinyl chloride	75-01-4	62.50	0.243	0.511	0.511	U		1	WG1876857
Vinyl Bromide	593-60-2	106.95	0.373	0.875	0.875	U		1	WG1876857
Vinyl acetate	108-05-4	86.10	0.408	0.704	0.704	U		1	WG1876857
m&p-Xylene	1330-20-7	106	0.585	1.73	1.73	0.798	J	1	WG1876857
o-Xylene	95-47-6	106	0.359	0.867	0.867	U		1	WG1876857
(S) 1,4-Bromofluorobenzene	460-00-4	175				98.5		60.0-140	WG1876857
(S) 1,4-Bromofluorobenzene	460-00-4	175				90.8		60.0-140	WG1877490

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

EXTERIOR - DOWNWIND

Collected date/time: 06/04/22 16:47

SAMPLE RESULTS - 03

L1501970

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	SDL ug/m3	Unadj. MQL ug/m3	MQL ug/m3	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.39	2.97	2.97	6.70		1	WG1876857
Allyl chloride	107-05-1	76.53	0.357	0.626	0.626	U		1	WG1876857
Benzene	71-43-2	78.10	0.228	0.639	0.639	0.390	J	1	WG1876857
Benzyl Chloride	100-44-7	127	0.311	1.04	1.04	U		1	WG1876857
Bromodichloromethane	75-27-4	164	0.471	1.34	1.34	U		1	WG1876857
Bromoform	75-25-2	253	0.757	6.21	6.21	U		1	WG1876857
Bromomethane	74-83-9	94.90	0.381	0.776	0.776	U		1	WG1876857
1,3-Butadiene	106-99-0	54.10	0.230	4.43	4.43	U		1	WG1876857
Carbon disulfide	75-15-0	76.10	0.317	0.622	0.622	0.859		1	WG1876857
Carbon tetrachloride	56-23-5	154	0.461	1.26	1.26	U		1	WG1876857
Chlorobenzene	108-90-7	113	0.385	0.924	0.924	U		1	WG1876857
Chloroethane	75-00-3	64.50	0.263	0.528	0.528	U		1	WG1876857
Chloroform	67-66-3	119	0.349	0.973	0.973	U		1	WG1876857
Chloromethane	74-87-3	50.50	0.213	0.413	0.413	1.30		1	WG1876857
2-Chlorotoluene	95-49-8	126	0.427	1.03	1.03	U		1	WG1876857
Cyclohexane	110-82-7	84.20	0.259	0.689	0.689	0.672	J	1	WG1876857
Dibromochloromethane	124-48-1	208	0.618	1.70	1.70	U		1	WG1876857
1,2-Dibromoethane	106-93-4	188	0.554	1.54	1.54	U		1	WG1876857
1,2-Dichlorobenzene	95-50-1	147	0.770	1.20	1.20	U		1	WG1876857
1,3-Dichlorobenzene	541-73-1	147	1.09	1.20	1.20	U		1	WG1876857
1,4-Dichlorobenzene	106-46-7	147	0.335	1.20	1.20	U		1	WG1876857
1,2-Dichloroethane	107-06-2	99	0.283	0.810	0.810	U		1	WG1876857
1,1-Dichloroethane	75-34-3	98	0.290	0.802	0.802	U		1	WG1876857
1,1-Dichloroethene	75-35-4	96.90	0.302	0.793	0.793	U		1	WG1876857
cis-1,2-Dichloroethene	156-59-2	96.90	0.311	0.793	0.793	U		1	WG1876857
trans-1,2-Dichloroethene	156-60-5	96.90	0.267	0.793	0.793	U		1	WG1876857
1,2-Dichloropropane	78-87-5	113	0.351	0.924	0.924	U		1	WG1876857
cis-1,3-Dichloropropene	10061-01-5	111	0.313	0.908	0.908	U		1	WG1876857
trans-1,3-Dichloropropene	10061-02-6	111	0.331	0.908	0.908	U		1	WG1876857
1,4-Dioxane	123-91-1	88.10	0.300	0.721	0.721	U		1	WG1876857
Ethanol	64-17-5	46.10	0.500	2.36	2.36	13.6		1	WG1877490
Ethylbenzene	100-41-4	106	0.362	0.867	0.867	U		1	WG1876857
4-Ethyltoluene	622-96-8	120	0.384	0.982	0.982	U		1	WG1876857
Trichlorofluoromethane	75-69-4	137.40	0.460	1.12	1.12	1.30		1	WG1876857
Dichlorodifluoromethane	75-71-8	120.92	0.678	0.989	0.989	2.50		1	WG1876857
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.608	1.53	1.53	U		1	WG1876857
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.622	1.40	1.40	U		1	WG1876857
Heptane	142-82-5	100	0.425	0.818	0.818	0.438	J	1	WG1876857
Hexachloro-1,3-butadiene	87-68-3	261	1.12	6.73	6.73	U		1	WG1876857
n-Hexane	110-54-3	86.20	0.726	2.22	2.22	U		1	WG1876857
Isopropylbenzene	98-82-8	120.20	0.382	0.983	0.983	U		1	WG1876857
Methylene Chloride	75-09-2	84.90	0.340	0.694	0.694	1.06	B	1	WG1876857
Methyl Butyl Ketone	591-78-6	100	0.544	5.11	5.11	U		1	WG1876857
2-Butanone (MEK)	78-93-3	72.10	0.240	3.69	3.69	0.873	J	1	WG1876857
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	0.313	5.12	5.12	U		1	WG1876857
Methyl methacrylate	80-62-6	100.12	0.359	0.819	0.819	U		1	WG1876857
MTBE	1634-04-4	88.10	0.233	0.721	0.721	U		1	WG1876857
Naphthalene	91-20-3	128	1.83	3.30	3.30	U		1	WG1876857
2-Propanol	67-63-0	60.10	0.649	3.07	3.07	5.92		1	WG1877490
Propene	115-07-1	42.10	0.160	2.15	2.15	U		1	WG1876857
Styrene	100-42-5	104	0.335	0.851	0.851	U		1	WG1876857
1,1,2,2-Tetrachloroethane	79-34-5	168	0.511	1.37	1.37	U		1	WG1876857
Tetrachloroethylene	127-18-4	166	0.553	1.36	1.36	0.591	J	1	WG1876857
Tetrahydrofuran	109-99-9	72.10	0.216	0.590	0.590	0.245	J	1	WG1876857
Toluene	108-88-3	92.10	0.328	1.88	1.88	2.44		1	WG1876857
1,2,4-Trichlorobenzene	120-82-1	181	1.10	4.66	4.66	U		1	WG1876857

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

EXTERIOR - DOWNWIND

Collected date/time: 06/04/22 16:47

SAMPLE RESULTS - 03

L1501970

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	SDL ug/m3	Unadj. MQL ug/m3	MQL ug/m3	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	1.09	1.09	U		1	WG1876857
1,1,2-Trichloroethane	79-00-5	133	0.422	1.09	1.09	U		1	WG1876857
Trichloroethylene	79-01-6	131	0.364	1.07	1.07	4.09		1	WG1876857
1,2,4-Trimethylbenzene	95-63-6	120	0.375	0.982	0.982	U		1	WG1876857
1,3,5-Trimethylbenzene	108-67-8	120	0.382	0.982	0.982	U		1	WG1876857
2,2,4-Trimethylpentane	540-84-1	114.22	0.621	0.934	0.934	U		1	WG1876857
Vinyl chloride	75-01-4	62.50	0.243	0.511	0.511	U		1	WG1876857
Vinyl Bromide	593-60-2	106.95	0.373	0.875	0.875	U		1	WG1876857
Vinyl acetate	108-05-4	86.10	0.408	0.704	0.704	U		1	WG1876857
m&p-Xylene	1330-20-7	106	0.585	1.73	1.73	1.06	J	1	WG1876857
o-Xylene	95-47-6	106	0.359	0.867	0.867	0.418	J	1	WG1876857
(S) 1,4-Bromofluorobenzene	460-00-4	175				98.2		60.0-140	WG1876857
(S) 1,4-Bromofluorobenzene	460-00-4	175				97.1		60.0-140	WG1877490

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Method Blank (MB)

(MB) R3801444-3 06/09/22 09:36

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Cyclohexane	U		0.0753	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.200
Ethanol	U		0.265	1.25
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Heptane	U		0.104	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
n-Hexane	U		0.206	0.630

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Method Blank (MB)

(MB) R3801444-3 06/09/22 09:36

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Isopropylbenzene	U		0.0777	0.200
Methylene Chloride	0.133	U	0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
Propene	0.146	U	0.0932	1.25
Styrene	U		0.0788	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
Tetrachloroethylene	U		0.0814	0.200
Tetrahydrofuran	U		0.0734	0.200
Toluene	U		0.0870	0.500
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0736	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
Trichloroethylene	0.0737	U	0.0680	0.200
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
2,2,4-Trimethylpentane	U		0.133	0.200
Vinyl chloride	U		0.0949	0.200
Vinyl Bromide	U		0.0852	0.200
Vinyl acetate	U		0.116	0.200
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
(S) 1,4-Bromofluorobenzene	97.3			60.0-140

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3801444-1 06/09/22 08:33 • (LCSD) R3801444-2 06/09/22 09:06

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	3.75	3.78	4.33	101	115	70.0-130			13.6	25
Allyl Chloride	3.75	3.78	4.36	101	116	70.0-130			14.3	25
Benzene	3.75	3.84	3.78	102	101	70.0-130			1.57	25
Benzyl Chloride	3.75	4.42	4.34	118	116	70.0-152			1.83	25
Bromodichloromethane	3.75	3.95	3.87	105	103	70.0-130			2.05	25
Bromoform	3.75	4.11	4.08	110	109	70.0-130			0.733	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3801444-1 06/09/22 08:33 • (LCSD) R3801444-2 06/09/22 09:06

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromomethane	3.75	3.84	4.17	102	111	70.0-130			8.24	25
1,3-Butadiene	3.75	3.83	4.20	102	112	70.0-130			9.22	25
Carbon disulfide	3.75	3.82	4.36	102	116	70.0-130			13.2	25
Carbon tetrachloride	3.75	3.96	3.92	106	105	70.0-130			1.02	25
Chlorobenzene	3.75	4.04	3.98	108	106	70.0-130			1.50	25
Chloroethane	3.75	3.82	4.21	102	112	70.0-130			9.71	25
Chloroform	3.75	3.92	3.88	105	103	70.0-130			1.03	25
Chloromethane	3.75	3.87	4.19	103	112	70.0-130			7.94	25
2-Chlorotoluene	3.75	4.20	4.17	112	111	70.0-130			0.717	25
Cyclohexane	3.75	3.80	3.80	101	101	70.0-130			0.000	25
Dibromochloromethane	3.75	3.99	3.94	106	105	70.0-130			1.26	25
1,2-Dibromoethane	3.75	4.07	3.98	109	106	70.0-130			2.24	25
1,2-Dichlorobenzene	3.75	4.18	4.18	111	111	70.0-130			0.000	25
1,3-Dichlorobenzene	3.75	4.28	4.28	114	114	70.0-130			0.000	25
1,4-Dichlorobenzene	3.75	4.28	4.29	114	114	70.0-130			0.233	25
1,2-Dichloroethane	3.75	3.92	3.86	105	103	70.0-130			1.54	25
1,1-Dichloroethane	3.75	3.89	3.85	104	103	70.0-130			1.03	25
1,1-Dichloroethene	3.75	3.85	4.35	103	116	70.0-130			12.2	25
cis-1,2-Dichloroethene	3.75	3.85	3.82	103	102	70.0-130			0.782	25
trans-1,2-Dichloroethene	3.75	3.91	4.39	104	117	70.0-130			11.6	25
1,2-Dichloropropane	3.75	3.83	3.80	102	101	70.0-130			0.786	25
cis-1,3-Dichloropropene	3.75	3.95	3.89	105	104	70.0-130			1.53	25
trans-1,3-Dichloropropene	3.75	4.02	3.95	107	105	70.0-130			1.76	25
1,4-Dioxane	3.75	3.83	3.80	102	101	70.0-140			0.786	25
Ethanol	3.75	3.83	4.20	102	112	55.0-148			9.22	25
Ethylbenzene	3.75	4.06	4.05	108	108	70.0-130			0.247	25
4-Ethyltoluene	3.75	4.25	4.21	113	112	70.0-130			0.946	25
Trichlorofluoromethane	3.75	3.95	4.38	105	117	70.0-130			10.3	25
Dichlorodifluoromethane	3.75	3.97	4.45	106	119	64.0-139			11.4	25
1,1,2-Trichlorotrifluoroethane	3.75	3.85	4.36	103	116	70.0-130			12.4	25
1,2-Dichlorotetrafluoroethane	3.75	4.02	4.30	107	115	70.0-130			6.73	25
Heptane	3.75	3.97	4.00	106	107	70.0-130			0.753	25
Hexachloro-1,3-butadiene	3.75	4.27	4.14	114	110	70.0-151			3.09	25
n-Hexane	3.75	3.97	3.92	106	105	70.0-130			1.27	25
Isopropylbenzene	3.75	4.16	4.16	111	111	70.0-130			0.000	25
Methylene Chloride	3.75	3.62	4.04	96.5	108	70.0-130			11.0	25
Methyl Butyl Ketone	3.75	3.90	3.87	104	103	70.0-149			0.772	25
Methyl Ethyl Ketone	3.75	3.89	3.82	104	102	70.0-130			1.82	25
4-Methyl-2-pentanone (MIBK)	3.75	4.08	4.08	109	109	70.0-139			0.000	25
Methyl Methacrylate	3.75	3.88	3.81	103	102	70.0-130			1.82	25

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3801444-1 06/09/22 08:33 • (LCSD) R3801444-2 06/09/22 09:06

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
MTBE	3.75	3.85	3.86	103	103	70.0-130			0.259	25
Naphthalene	3.75	3.40	3.34	90.7	89.1	70.0-159			1.78	25
Propene	3.75	3.73	3.74	99.5	99.7	64.0-144			0.268	25
Styrene	3.75	4.14	4.08	110	109	70.0-130			1.46	25
1,1,2,2-Tetrachloroethane	3.75	4.14	4.10	110	109	70.0-130			0.971	25
Tetrachloroethylene	3.75	4.01	3.97	107	106	70.0-130			1.00	25
Tetrahydrofuran	3.75	3.67	3.64	97.9	97.1	70.0-137			0.821	25
Toluene	3.75	3.92	3.88	105	103	70.0-130			1.03	25
1,2,4-Trichlorobenzene	3.75	3.06	3.04	81.6	81.1	70.0-160			0.656	25
1,1,1-Trichloroethane	3.75	3.93	3.88	105	103	70.0-130			1.28	25
1,1,2-Trichloroethane	3.75	3.94	3.86	105	103	70.0-130			2.05	25
Trichloroethylene	3.75	3.92	3.85	105	103	70.0-130			1.80	25
1,2,4-Trimethylbenzene	3.75	4.40	4.36	117	116	70.0-130			0.913	25
1,3,5-Trimethylbenzene	3.75	4.24	4.26	113	114	70.0-130			0.471	25
2,2,4-Trimethylpentane	3.75	3.96	3.95	106	105	70.0-130			0.253	25
Vinyl chloride	3.75	3.91	4.25	104	113	70.0-130			8.33	25
Vinyl Bromide	3.75	3.91	4.30	104	115	70.0-130			9.50	25
Vinyl acetate	3.75	3.94	3.90	105	104	70.0-130			1.02	25
m&p-Xylene	7.50	8.59	8.55	115	114	70.0-130			0.467	25
o-Xylene	3.75	4.21	4.16	112	111	70.0-130			1.19	25
(S) 1,4-Bromofluorobenzene				103	103	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Method Blank (MB)

(MB) R3801865-3 06/10/22 09:49

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Ethanol	U		0.265	1.25
2-Propanol	U		0.264	1.25
(S) 1,4-Bromofluorobenzene	95.5			60.0-140

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3801865-1 06/10/22 08:45 • (LCSD) R3801865-2 06/10/22 09:19

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
Ethanol	3.75	4.12	4.27	110	114	55.0-148			3.58	25
2-Propanol	3.75	4.48	4.53	119	121	70.0-139			1.11	25
(S) 1,4-Bromofluorobenzene				98.6	98.1	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.



ACCREDITATIONS & LOCATIONS

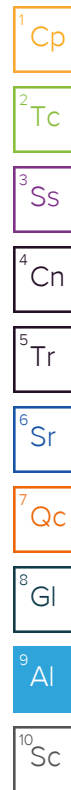
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey--NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio--VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA -- ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA -- ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA--Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

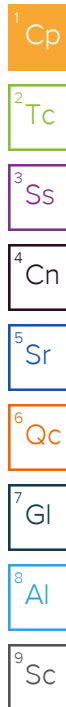


[illegible]



ANALYTICAL REPORT

June 21, 2022



TGE Resources

Sample Delivery Group: L1504104
Samples Received: 06/07/2022
Project Number: R13411.13
Description: Off-Campus Emergency Department - Federal Way

Report To: Kristi Barnette
8048 Northcourt Road
Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
Project Manager

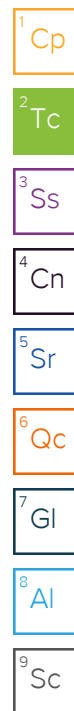
Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

TABLE OF CONTENTS

Cp: Cover Page	1
Tc: Table of Contents	2
Ss: Sample Summary	3
Cn: Case Narrative	5
Sr: Sample Results	6
TVMP-3 L1504104-01	6
TVMP-5 L1504104-02	8
TVMP-6 L1504104-03	10
TVMP-8 L1504104-04	12
TVMP-9 L1504104-05	14
TVMP-11 L1504104-06	16
TVMP-12 L1504104-07	18
TVMP-4 L1504104-08	20
TVMP-7 L1504104-09	22
TVMP-10 L1504104-10	24
Qc: Quality Control Summary	26
Volatile Organic Compounds (MS) by Method TO-15	26
Gl: Glossary of Terms	39
Al: Accreditations & Locations	40
Sc: Sample Chain of Custody	41



SAMPLE SUMMARY

TVMP-3 L1504104-01 Air

				Collected by K. Barnette	Collected date/time 06/03/22 18:05	Received date/time 06/07/22 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1878206	1	06/12/22 22:09	06/12/22 22:09	FKG	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1879678	1	06/15/22 11:03	06/15/22 11:03	CEP	Mt. Juliet, TN

TVMP-5 L1504104-02 Air

				Collected by K. Barnette	Collected date/time 06/03/22 17:15	Received date/time 06/07/22 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1878206	1	06/12/22 22:52	06/12/22 22:52	FKG	Mt. Juliet, TN

TVMP-6 L1504104-03 Air

				Collected by K. Barnette	Collected date/time 06/03/22 17:57	Received date/time 06/07/22 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1878206	1	06/12/22 23:35	06/12/22 23:35	FKG	Mt. Juliet, TN

TVMP-8 L1504104-04 Air

				Collected by K. Barnette	Collected date/time 06/03/22 17:54	Received date/time 06/07/22 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1878206	1	06/13/22 00:19	06/13/22 00:19	FKG	Mt. Juliet, TN

TVMP-9 L1504104-05 Air

				Collected by K. Barnette	Collected date/time 06/03/22 11:20	Received date/time 06/07/22 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1878206	1	06/13/22 01:02	06/13/22 01:02	FKG	Mt. Juliet, TN

TVMP-11 L1504104-06 Air

				Collected by K. Barnette	Collected date/time 06/03/22 10:40	Received date/time 06/07/22 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1878206	1	06/13/22 01:46	06/13/22 01:46	FKG	Mt. Juliet, TN

TVMP-12 L1504104-07 Air

				Collected by K. Barnette	Collected date/time 06/03/22 09:58	Received date/time 06/07/22 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1878206	1	06/13/22 02:29	06/13/22 02:29	FKG	Mt. Juliet, TN

TVMP-4 L1504104-08 Air

				Collected by K. Barnette	Collected date/time 06/06/22 17:56	Received date/time 06/16/22 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1881812	1	06/19/22 19:20	06/19/22 19:20	MBF	Mt. Juliet, TN

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

SAMPLE SUMMARY

TVMP-7 L1504104-09 Air

Collected by
K. Barnette

Collected date/time
06/06/22 18:17

Received date/time
06/16/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1881812	1	06/19/22 20:02	06/19/22 20:02	MBF	Mt. Juliet, TN

TVMP-10 L1504104-10 Air

Collected by
K. Barnette

Collected date/time
06/06/22 18:34

Received date/time
06/16/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1881814	1	06/19/22 16:19	06/19/22 16:19	DAH	Mt. Juliet, TN

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Mark W. Beasley
Project Manager



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	23.2	55.1		1	WG1878206
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1878206
Benzene	71-43-2	78.10	0.200	0.639	0.453	1.45		1	WG1878206
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1878206
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1878206
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1878206
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1878206
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1878206
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.818	2.55		1	WG1878206
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1878206
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1878206
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1878206
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1878206
Chloromethane	74-87-3	50.50	0.200	0.413	0.855	1.77		1	WG1878206
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1878206
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1878206
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1878206
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1878206
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1878206
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1878206
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1878206
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1878206
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1878206
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1878206
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1878206
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1878206
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1878206
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1878206
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1878206
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1878206
Ethanol	64-17-5	46.10	1.25	2.36	8.29	15.6		1	WG1878206
Ethylbenzene	100-41-4	106	0.200	0.867	0.209	0.906		1	WG1878206
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1878206
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.279	1.57		1	WG1878206
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.462	2.28		1	WG1878206
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1878206
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1878206
Heptane	142-82-5	100	0.200	0.818	0.392	1.60		1	WG1878206
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1878206
n-Hexane	110-54-3	86.20	0.630	2.22	1.06	3.74		1	WG1878206
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1878206
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.249	0.865	B	1	WG1878206
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1878206
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	3.38	9.97		1	WG1878206
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1878206
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1878206
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1878206
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1878206
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1878206
Propene	115-07-1	42.10	1.25	2.15	22.3	38.4		1	WG1878206
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1878206
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1878206
Tetrachloroethylene	127-18-4	166	0.200	1.36	0.200	1.36		1	WG1878206
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1878206
Toluene	108-88-3	92.10	0.500	1.88	1.37	5.16		1	WG1878206
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1878206

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	1.06	5.77		1	WG1879678
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1878206
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1878206
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1878206
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1878206
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1878206
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1878206
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1878206
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1878206
m&p-Xylene	1330-20-7	106	0.400	1.73	0.779	3.38		1	WG1878206
o-Xylene	95-47-6	106	0.200	0.867	0.324	1.40		1	WG1878206
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		87.6				WG1878206
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		96.0				WG1879678

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	10.1	24.0		1	WG1878206
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1878206
Benzene	71-43-2	78.10	0.200	0.639	0.335	1.07		1	WG1878206
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1878206
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1878206
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1878206
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1878206
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1878206
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.648	2.02		1	WG1878206
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1878206
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1878206
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1878206
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1878206
Chloromethane	74-87-3	50.50	0.200	0.413	0.701	1.45		1	WG1878206
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1878206
Cyclohexane	110-82-7	84.20	0.200	0.689	0.622	2.14		1	WG1878206
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1878206
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1878206
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1878206
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1878206
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1878206
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1878206
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1878206
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1878206
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1878206
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1878206
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1878206
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1878206
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1878206
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1878206
Ethanol	64-17-5	46.10	1.25	2.36	35.8	67.5		1	WG1878206
Ethylbenzene	100-41-4	106	0.200	0.867	0.509	2.21		1	WG1878206
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1878206
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.247	1.39		1	WG1878206
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.491	2.43		1	WG1878206
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1878206
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1878206
Heptane	142-82-5	100	0.200	0.818	0.260	1.06		1	WG1878206
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1878206
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1878206
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1878206
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.351	1.22	B	1	WG1878206
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1878206
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1878206
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1878206
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1878206
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1878206
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1878206
2-Propanol	67-63-0	60.10	1.25	3.07	2.90	7.13		1	WG1878206
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1878206
Styrene	100-42-5	104	0.200	0.851	0.218	0.927		1	WG1878206
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1878206
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1878206
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1878206
Toluene	108-88-3	92.10	0.500	1.88	2.26	8.51		1	WG1878206
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1878206

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1878206
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1878206
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1878206
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.388	1.90		1	WG1878206
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1878206
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1878206
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1878206
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1878206
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1878206
m&p-Xylene	1330-20-7	106	0.400	1.73	1.99	8.63		1	WG1878206
o-Xylene	95-47-6	106	0.200	0.867	0.768	3.33		1	WG1878206
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		90.1				WG1878206

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	17.6	41.8		1	WG1878206
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1878206
Benzene	71-43-2	78.10	0.200	0.639	0.368	1.18		1	WG1878206
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1878206
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1878206
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1878206
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1878206
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1878206
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.872	2.71		1	WG1878206
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1878206
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1878206
Chloroethane	75-00-3	64.50	0.200	0.528	0.609	1.61		1	WG1878206
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1878206
Chloromethane	74-87-3	50.50	0.200	0.413	0.919	1.90		1	WG1878206
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1878206
Cyclohexane	110-82-7	84.20	0.200	0.689	0.348	1.20		1	WG1878206
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1878206
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1878206
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1878206
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1878206
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1878206
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1878206
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1878206
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1878206
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1878206
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1878206
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1878206
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1878206
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1878206
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1878206
Ethanol	64-17-5	46.10	1.25	2.36	1.30	2.45		1	WG1878206
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1878206
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1878206
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.238	1.34		1	WG1878206
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.472	2.33		1	WG1878206
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1878206
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1878206
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1878206
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1878206
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1878206
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1878206
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.222	0.771	B	1	WG1878206
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1878206
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1878206
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1878206
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1878206
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1878206
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1878206
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1878206
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1878206
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1878206
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1878206
Tetrachloroethylene	127-18-4	166	0.200	1.36	0.309	2.10		1	WG1878206
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1878206
Toluene	108-88-3	92.10	0.500	1.88	0.900	3.39		1	WG1878206
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1878206

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1878206
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1878206
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1878206
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1878206
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1878206
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1878206
Vinyl chloride	75-01-4	62.50	0.200	0.511	0.355	0.907		1	WG1878206
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1878206
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1878206
m&p-Xylene	1330-20-7	106	0.400	1.73	0.469	2.03		1	WG1878206
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1878206
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		86.6				WG1878206

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	13.6	32.3		1	WG1878206
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1878206
Benzene	71-43-2	78.10	0.200	0.639	0.802	2.56		1	WG1878206
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1878206
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1878206
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1878206
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1878206
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1878206
Carbon disulfide	75-15-0	76.10	0.200	0.622	2.08	6.47		1	WG1878206
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1878206
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1878206
Chloroethane	75-00-3	64.50	0.200	0.528	1.02	2.69		1	WG1878206
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1878206
Chloromethane	74-87-3	50.50	0.200	0.413	0.380	0.785		1	WG1878206
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1878206
Cyclohexane	110-82-7	84.20	0.200	0.689	1.16	3.99		1	WG1878206
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1878206
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1878206
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1878206
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1878206
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1878206
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1878206
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1878206
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1878206
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1878206
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1878206
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1878206
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1878206
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1878206
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1878206
Ethanol	64-17-5	46.10	1.25	2.36	1.88	3.54		1	WG1878206
Ethylbenzene	100-41-4	106	0.200	0.867	0.761	3.30		1	WG1878206
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1878206
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.302	1.70		1	WG1878206
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG1878206
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1878206
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1878206
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1878206
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1878206
n-Hexane	110-54-3	86.20	0.630	2.22	1.39	4.90		1	WG1878206
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1878206
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.216	0.750	B	1	WG1878206
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1878206
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	3.93	11.6		1	WG1878206
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1878206
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1878206
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1878206
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1878206
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1878206
Propene	115-07-1	42.10	1.25	2.15	8.05	13.9		1	WG1878206
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1878206
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1878206
Tetrachloroethylene	127-18-4	166	0.200	1.36	1.21	8.22		1	WG1878206
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1878206
Toluene	108-88-3	92.10	0.500	1.88	3.10	11.7		1	WG1878206
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1878206

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1878206
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1878206
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1878206
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.555	2.72		1	WG1878206
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1878206
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1878206
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1878206
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1878206
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1878206
m&p-Xylene	1330-20-7	106	0.400	1.73	2.40	10.4		1	WG1878206
o-Xylene	95-47-6	106	0.200	0.867	0.827	3.59		1	WG1878206
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		88.8				WG1878206

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	36.8	87.4		1	WG1878206
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1878206
Benzene	71-43-2	78.10	0.200	0.639	0.916	2.93		1	WG1878206
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1878206
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1878206
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1878206
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1878206
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1878206
Carbon disulfide	75-15-0	76.10	0.200	0.622	1.77	5.51		1	WG1878206
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1878206
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1878206
Chloroethane	75-00-3	64.50	0.200	0.528	0.713	1.88		1	WG1878206
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1878206
Chloromethane	74-87-3	50.50	0.200	0.413	0.780	1.61		1	WG1878206
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1878206
Cyclohexane	110-82-7	84.20	0.200	0.689	0.779	2.68		1	WG1878206
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1878206
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1878206
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1878206
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1878206
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	0.225	1.35		1	WG1878206
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1878206
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1878206
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1878206
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1878206
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1878206
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1878206
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1878206
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1878206
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1878206
Ethanol	64-17-5	46.10	1.25	2.36	18.3	34.5		1	WG1878206
Ethylbenzene	100-41-4	106	0.200	0.867	0.485	2.10		1	WG1878206
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1878206
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.242	1.36		1	WG1878206
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.479	2.37		1	WG1878206
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1878206
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1878206
Heptane	142-82-5	100	0.200	0.818	0.296	1.21		1	WG1878206
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1878206
n-Hexane	110-54-3	86.20	0.630	2.22	0.782	2.76		1	WG1878206
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1878206
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.361	1.25	B	1	WG1878206
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1878206
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	6.88	20.3		1	WG1878206
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1878206
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1878206
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1878206
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1878206
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1878206
Propene	115-07-1	42.10	1.25	2.15	15.1	26.0		1	WG1878206
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1878206
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1878206
Tetrachloroethylene	127-18-4	166	0.200	1.36	3.08	20.9		1	WG1878206
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1878206
Toluene	108-88-3	92.10	0.500	1.88	1.97	7.42		1	WG1878206
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1878206

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1878206
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1878206
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1878206
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.418	2.05		1	WG1878206
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1878206
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1878206
Vinyl chloride	75-01-4	62.50	0.200	0.511	0.395	1.01		1	WG1878206
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1878206
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1878206
m&p-Xylene	1330-20-7	106	0.400	1.73	1.94	8.41		1	WG1878206
o-Xylene	95-47-6	106	0.200	0.867	0.755	3.27		1	WG1878206
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		89.6				WG1878206

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

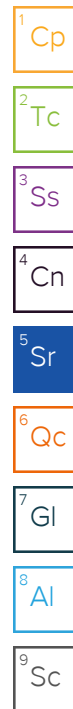
7Gl

8Al

9Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	4.42	10.5		1	WG1878206
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1878206
Benzene	71-43-2	78.10	0.200	0.639	0.361	1.15		1	WG1878206
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1878206
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1878206
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1878206
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1878206
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1878206
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.453	1.41		1	WG1878206
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1878206
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1878206
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1878206
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1878206
Chloromethane	74-87-3	50.50	0.200	0.413	1.84	3.80		1	WG1878206
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1878206
Cyclohexane	110-82-7	84.20	0.200	0.689	0.309	1.06		1	WG1878206
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1878206
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1878206
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1878206
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1878206
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1878206
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1878206
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1878206
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1878206
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	0.904	3.58		1	WG1878206
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1878206
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1878206
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1878206
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1878206
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1878206
Ethanol	64-17-5	46.10	1.25	2.36	ND	ND		1	WG1878206
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1878206
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1878206
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.237	1.33		1	WG1878206
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG1878206
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	0.203	1.56		1	WG1878206
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1878206
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1878206
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1878206
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1878206
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1878206
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1878206
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1878206
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1878206
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1878206
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1878206
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1878206
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1878206
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1878206
Propene	115-07-1	42.10	1.25	2.15	3.05	5.25	B	1	WG1878206
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1878206
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1878206
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1878206
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1878206
Toluene	108-88-3	92.10	0.500	1.88	0.534	2.01		1	WG1878206
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1878206



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1878206
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1878206
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1878206
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1878206
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1878206
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1878206
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1878206
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1878206
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1878206
m&p-Xylene	1330-20-7	106	0.400	1.73	0.670	2.90		1	WG1878206
o-Xylene	95-47-6	106	0.200	0.867	0.282	1.22		1	WG1878206
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		86.7				WG1878206

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	12.8	30.4		1	WG1878206
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1878206
Benzene	71-43-2	78.10	0.200	0.639	0.234	0.747		1	WG1878206
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1878206
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1878206
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1878206
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1878206
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1878206
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.233	0.725		1	WG1878206
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1878206
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1878206
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1878206
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1878206
Chloromethane	74-87-3	50.50	0.200	0.413	0.750	1.55		1	WG1878206
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1878206
Cyclohexane	110-82-7	84.20	0.200	0.689	0.476	1.64		1	WG1878206
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1878206
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1878206
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1878206
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1878206
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	0.215	1.29		1	WG1878206
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1878206
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1878206
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1878206
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1878206
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1878206
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1878206
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1878206
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1878206
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1878206
Ethanol	64-17-5	46.10	1.25	2.36	2.71	5.11		1	WG1878206
Ethylbenzene	100-41-4	106	0.200	0.867	0.529	2.29		1	WG1878206
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1878206
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.239	1.34		1	WG1878206
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.482	2.38		1	WG1878206
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1878206
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1878206
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1878206
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1878206
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1878206
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1878206
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1878206
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1878206
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	3.86	11.4		1	WG1878206
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1878206
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1878206
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1878206
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1878206
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1878206
Propene	115-07-1	42.10	1.25	2.15	2.79	4.80	B	1	WG1878206
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1878206
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1878206
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1878206
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1878206
Toluene	108-88-3	92.10	0.500	1.88	1.60	6.03		1	WG1878206
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1878206

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1878206
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1878206
Trichloroethylene	79-01-6	131	0.200	1.07	0.426	2.28		1	WG1878206
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.437	2.14		1	WG1878206
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1878206
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1878206
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1878206
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1878206
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1878206
m&p-Xylene	1330-20-7	106	0.400	1.73	2.18	9.45		1	WG1878206
o-Xylene	95-47-6	106	0.200	0.867	0.861	3.73		1	WG1878206
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		86.4				WG1878206

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	15.4	36.6		1	WG1881812
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1881812
Benzene	71-43-2	78.10	0.200	0.639	1.01	3.23		1	WG1881812
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1881812
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1881812
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1881812
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1881812
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1881812
Carbon disulfide	75-15-0	76.10	0.200	0.622	2.19	6.82		1	WG1881812
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1881812
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1881812
Chloroethane	75-00-3	64.50	0.200	0.528	0.722	1.90		1	WG1881812
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1881812
Chloromethane	74-87-3	50.50	0.200	0.413	0.967	2.00		1	WG1881812
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1881812
Cyclohexane	110-82-7	84.20	0.200	0.689	0.568	1.96		1	WG1881812
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1881812
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1881812
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1881812
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1881812
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1881812
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1881812
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1881812
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1881812
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1881812
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1881812
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1881812
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1881812
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1881812
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1881812
Ethanol	64-17-5	46.10	1.25	2.36	ND	ND		1	WG1881812
Ethylbenzene	100-41-4	106	0.200	0.867	1.14	4.94		1	WG1881812
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.674	3.31		1	WG1881812
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.291	1.64		1	WG1881812
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.393	1.94		1	WG1881812
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1881812
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1881812
Heptane	142-82-5	100	0.200	0.818	0.364	1.49		1	WG1881812
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1881812
n-Hexane	110-54-3	86.20	0.630	2.22	1.11	3.91		1	WG1881812
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1881812
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.447	1.55		1	WG1881812
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1881812
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	1.94	5.72		1	WG1881812
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1881812
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1881812
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1881812
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1881812
2-Propanol	67-63-0	60.10	1.25	3.07	1.67	4.10		1	WG1881812
Propene	115-07-1	42.10	1.25	2.15	47.8	82.3		1	WG1881812
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1881812
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1881812
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1881812
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1881812
Toluene	108-88-3	92.10	0.500	1.88	8.18	30.8		1	WG1881812
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1881812

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1881812
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1881812
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1881812
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.642	3.15		1	WG1881812
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1881812
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1881812
Vinyl chloride	75-01-4	62.50	0.200	0.511	0.310	0.792		1	WG1881812
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1881812
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1881812
m&p-Xylene	1330-20-7	106	0.400	1.73	4.16	18.0		1	WG1881812
o-Xylene	95-47-6	106	0.200	0.867	1.24	5.38		1	WG1881812
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		97.6				WG1881812

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	14.8	35.2		1	WG1881812
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1881812
Benzene	71-43-2	78.10	0.200	0.639	0.325	1.04		1	WG1881812
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1881812
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1881812
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1881812
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1881812
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1881812
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.873	2.72		1	WG1881812
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1881812
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1881812
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1881812
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1881812
Chloromethane	74-87-3	50.50	0.200	0.413	0.908	1.88		1	WG1881812
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1881812
Cyclohexane	110-82-7	84.20	0.200	0.689	0.696	2.40		1	WG1881812
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1881812
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1881812
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1881812
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1881812
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1881812
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1881812
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1881812
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1881812
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1881812
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1881812
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1881812
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1881812
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1881812
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1881812
Ethanol	64-17-5	46.10	1.25	2.36	43.2	81.5		1	WG1881812
Ethylbenzene	100-41-4	106	0.200	0.867	0.262	1.14		1	WG1881812
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1881812
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.263	1.48		1	WG1881812
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.423	2.09		1	WG1881812
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1881812
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1881812
Heptane	142-82-5	100	0.200	0.818	0.772	3.16		1	WG1881812
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1881812
n-Hexane	110-54-3	86.20	0.630	2.22	3.78	13.3		1	WG1881812
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1881812
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.792	2.75		1	WG1881812
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1881812
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	2.94	8.67		1	WG1881812
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1881812
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1881812
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1881812
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1881812
2-Propanol	67-63-0	60.10	1.25	3.07	4.20	10.3		1	WG1881812
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1881812
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1881812
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1881812
Tetrachloroethylene	127-18-4	166	0.200	1.36	2.58	17.5		1	WG1881812
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1881812
Toluene	108-88-3	92.10	0.500	1.88	2.20	8.29		1	WG1881812
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1881812

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1881812
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1881812
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1881812
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1881812
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1881812
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1881812
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1881812
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1881812
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1881812
m&p-Xylene	1330-20-7	106	0.400	1.73	0.961	4.17		1	WG1881812
o-Xylene	95-47-6	106	0.200	0.867	0.317	1.37		1	WG1881812
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		96.3				WG1881812

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	30.0	71.3		1	WG1881814
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1881814
Benzene	71-43-2	78.10	0.200	0.639	0.817	2.61		1	WG1881814
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1881814
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1881814
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1881814
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1881814
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1881814
Carbon disulfide	75-15-0	76.10	0.200	0.622	3.36	10.5		1	WG1881814
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1881814
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1881814
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1881814
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1881814
Chloromethane	74-87-3	50.50	0.200	0.413	0.827	1.71		1	WG1881814
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1881814
Cyclohexane	110-82-7	84.20	0.200	0.689	0.837	2.88		1	WG1881814
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1881814
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1881814
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1881814
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1881814
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1881814
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1881814
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1881814
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1881814
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1881814
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1881814
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1881814
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1881814
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1881814
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1881814
Ethanol	64-17-5	46.10	1.25	2.36	ND	ND		1	WG1881814
Ethylbenzene	100-41-4	106	0.200	0.867	0.225	0.975		1	WG1881814
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1881814
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.255	1.43		1	WG1881814
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.522	2.58		1	WG1881814
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1881814
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1881814
Heptane	142-82-5	100	0.200	0.818	0.389	1.59		1	WG1881814
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1881814
n-Hexane	110-54-3	86.20	0.630	2.22	1.26	4.44		1	WG1881814
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1881814
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.279	0.969		1	WG1881814
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1881814
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	4.36	12.9		1	WG1881814
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1881814
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1881814
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1881814
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1881814
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1881814
Propene	115-07-1	42.10	1.25	2.15	28.9	49.8		1	WG1881814
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1881814
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1881814
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1881814
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1881814
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1881814
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1881814

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1881814
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1881814
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1881814
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1881814
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1881814
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	0.207	0.967		1	WG1881814
Vinyl chloride	75-01-4	62.50	0.200	0.511	0.489	1.25		1	WG1881814
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1881814
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1881814
m&p-Xylene	1330-20-7	106	0.400	1.73	0.711	3.08		1	WG1881814
o-Xylene	95-47-6	106	0.200	0.867	0.325	1.41		1	WG1881814
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		102				WG1881814

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3802631-3 06/12/22 11:22

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Cyclohexane	U		0.0753	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.200
Ethanol	U		0.265	1.25
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Heptane	U		0.104	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
n-Hexane	U		0.206	0.630

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3802631-3 06/12/22 11:22

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Isopropylbenzene	U		0.0777	0.200
Methylene Chloride	0.112	U	0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	0.504	U	0.0932	1.25
Styrene	U		0.0788	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
Tetrachloroethylene	U		0.0814	0.200
Tetrahydrofuran	U		0.0734	0.200
Toluene	U		0.0870	0.500
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0736	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
Trichloroethylene	U		0.0680	0.200
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
2,2,4-Trimethylpentane	U		0.133	0.200
Vinyl chloride	U		0.0949	0.200
Vinyl Bromide	U		0.0852	0.200
Vinyl acetate	U		0.116	0.200
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
(S) 1,4-Bromofluorobenzene	90.4			60.0-140

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3802631-1 06/12/22 09:57 • (LCSD) R3802631-2 06/12/22 10:40

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	3.75	4.26	4.22	114	113	70.0-130			0.943	25
Allyl Chloride	3.75	3.26	3.45	86.9	92.0	70.0-130			5.66	25
Benzene	3.75	4.38	4.36	117	116	70.0-130			0.458	25
Benzyl Chloride	3.75	3.56	3.60	94.9	96.0	70.0-152			1.12	25
Bromodichloromethane	3.75	4.21	4.18	112	111	70.0-130			0.715	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3802631-1 06/12/22 09:57 • (LCSD) R3802631-2 06/12/22 10:40

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Bromoform	3.75	3.76	3.67	100	97.9	70.0-130			2.42	25
Bromomethane	3.75	3.97	3.82	106	102	70.0-130			3.85	25
1,3-Butadiene	3.75	4.17	4.01	111	107	70.0-130			3.91	25
Carbon disulfide	3.75	4.06	4.08	108	109	70.0-130			0.491	25
Carbon tetrachloride	3.75	4.07	4.10	109	109	70.0-130			0.734	25
Chlorobenzene	3.75	4.09	4.07	109	109	70.0-130			0.490	25
Chloroethane	3.75	4.19	4.18	112	111	70.0-130			0.239	25
Chloroform	3.75	4.25	4.19	113	112	70.0-130			1.42	25
Chloromethane	3.75	4.41	4.35	118	116	70.0-130			1.37	25
2-Chlorotoluene	3.75	4.24	4.13	113	110	70.0-130			2.63	25
Cyclohexane	3.75	4.29	4.27	114	114	70.0-130			0.467	25
Dibromochloromethane	3.75	4.04	4.01	108	107	70.0-130			0.745	25
1,2-Dibromoethane	3.75	3.97	3.97	106	106	70.0-130			0.000	25
1,2-Dichlorobenzene	3.75	4.65	4.55	124	121	70.0-130			2.17	25
1,3-Dichlorobenzene	3.75	4.34	4.29	116	114	70.0-130			1.16	25
1,4-Dichlorobenzene	3.75	4.34	4.31	116	115	70.0-130			0.694	25
1,2-Dichloroethane	3.75	4.40	4.42	117	118	70.0-130			0.454	25
1,1-Dichloroethane	3.75	4.26	4.26	114	114	70.0-130			0.000	25
1,1-Dichloroethene	3.75	4.35	4.38	116	117	70.0-130			0.687	25
cis-1,2-Dichloroethene	3.75	4.28	4.30	114	115	70.0-130			0.466	25
trans-1,2-Dichloroethene	3.75	4.19	4.25	112	113	70.0-130			1.42	25
1,2-Dichloropropane	3.75	4.34	4.38	116	117	70.0-130			0.917	25
cis-1,3-Dichloropropene	3.75	4.20	4.05	112	108	70.0-130			3.64	25
trans-1,3-Dichloropropene	3.75	4.05	4.05	108	108	70.0-130			0.000	25
1,4-Dioxane	3.75	4.23	4.29	113	114	70.0-140			1.41	25
Ethanol	3.75	4.43	4.32	118	115	55.0-148			2.51	25
Ethylbenzene	3.75	4.18	4.19	111	112	70.0-130			0.239	25
4-Ethyltoluene	3.75	4.60	4.53	123	121	70.0-130			1.53	25
Trichlorofluoromethane	3.75	4.34	4.31	116	115	70.0-130			0.694	25
Dichlorodifluoromethane	3.75	4.20	4.25	112	113	64.0-139			1.18	25
1,1,2-Trichlorotrifluoroethane	3.75	4.27	4.22	114	113	70.0-130			1.18	25
1,2-Dichlorotetrafluoroethane	3.75	4.24	4.22	113	113	70.0-130			0.473	25
Heptane	3.75	4.66	4.72	124	126	70.0-130			1.28	25
Hexachloro-1,3-butadiene	3.75	4.33	4.24	115	113	70.0-151			2.10	25
n-Hexane	3.75	4.34	4.43	116	118	70.0-130			2.05	25
Isopropylbenzene	3.75	4.49	4.54	120	121	70.0-130			1.11	25
Methylene Chloride	3.75	3.97	3.96	106	106	70.0-130			0.252	25
Methyl Butyl Ketone	3.75	4.85	4.86	129	130	70.0-149			0.206	25
Methyl Ethyl Ketone	3.75	4.25	4.28	113	114	70.0-130			0.703	25
4-Methyl-2-pentanone (MIBK)	3.75	4.73	4.75	126	127	70.0-139			0.422	25

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3802631-1 06/12/22 09:57 • (LCSD) R3802631-2 06/12/22 10:40

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Methyl Methacrylate	3.75	4.50	4.43	120	118	70.0-130			1.57	25
MTBE	3.75	4.21	4.27	112	114	70.0-130			1.42	25
Naphthalene	3.75	3.27	3.32	87.2	88.5	70.0-159			1.52	25
2-Propanol	3.75	4.40	4.39	117	117	70.0-139			0.228	25
Propene	3.75	4.08	4.09	109	109	64.0-144			0.245	25
Styrene	3.75	4.30	4.26	115	114	70.0-130			0.935	25
1,1,2,2-Tetrachloroethane	3.75	4.38	4.37	117	117	70.0-130			0.229	25
Tetrachloroethylene	3.75	3.92	3.94	105	105	70.0-130			0.509	25
Tetrahydrofuran	3.75	4.47	4.43	119	118	70.0-137			0.899	25
Toluene	3.75	4.21	4.27	112	114	70.0-130			1.42	25
1,2,4-Trichlorobenzene	3.75	3.35	3.42	89.3	91.2	70.0-160			2.07	25
1,1,1-Trichloroethane	3.75	4.16	4.17	111	111	70.0-130			0.240	25
1,1,2-Trichloroethane	3.75	4.09	4.05	109	108	70.0-130			0.983	25
Trichloroethylene	3.75	4.20	4.14	112	110	70.0-130			1.44	25
1,2,4-Trimethylbenzene	3.75	4.65	4.53	124	121	70.0-130			2.61	25
1,3,5-Trimethylbenzene	3.75	4.68	4.61	125	123	70.0-130			1.51	25
2,2,4-Trimethylpentane	3.75	4.36	4.41	116	118	70.0-130			1.14	25
Vinyl chloride	3.75	4.35	4.21	116	112	70.0-130			3.27	25
Vinyl Bromide	3.75	4.15	4.17	111	111	70.0-130			0.481	25
Vinyl acetate	3.75	3.70	3.63	98.7	96.8	70.0-130			1.91	25
m&p-Xylene	7.50	8.57	8.76	114	117	70.0-130			2.19	25
o-Xylene	3.75	4.22	4.23	113	113	70.0-130			0.237	25
(S) 1,4-Bromofluorobenzene				91.5	91.9	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3803433-3 06/15/22 10:27

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
1,1,1-Trichloroethane	U		0.0736	0.200
(S) 1,4-Bromofluorobenzene	93.0			60.0-140

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3803433-1 06/15/22 09:21 • (LCSD) R3803433-2 06/15/22 09:54

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
1,1,1-Trichloroethane	3.75	4.65	4.74	124	126	70.0-130			1.92	25
(S) 1,4-Bromofluorobenzene				95.6	96.4	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3804936-3 06/19/22 10:57

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Cyclohexane	U		0.0753	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.200
Ethanol	U		0.265	1.25
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Heptane	U		0.104	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
n-Hexane	U		0.206	0.630

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3804936-3 06/19/22 10:57

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Isopropylbenzene	U		0.0777	0.200
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	0.283	U	0.0932	1.25
Styrene	U		0.0788	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
Tetrachloroethylene	U		0.0814	0.200
Tetrahydrofuran	U		0.0734	0.200
Toluene	U		0.0870	0.500
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0736	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
Trichloroethylene	U		0.0680	0.200
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
2,2,4-Trimethylpentane	U		0.133	0.200
Vinyl chloride	U		0.0949	0.200
Vinyl Bromide	U		0.0852	0.200
Vinyl acetate	U		0.116	0.200
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
(S) 1,4-Bromofluorobenzene	93.7			60.0-140

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3804936-1 06/19/22 09:32 • (LCSD) R3804936-2 06/19/22 10:15

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	3.75	4.54	4.53	121	121	70.0-130			0.221	25
Allyl Chloride	3.75	3.41	3.87	90.9	103	70.0-130			12.6	25
Benzene	3.75	4.28	4.25	114	113	70.0-130			0.703	25
Benzyl Chloride	3.75	4.45	4.41	119	118	70.0-152			0.903	25
Bromodichloromethane	3.75	4.34	4.34	116	116	70.0-130			0.000	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3804936-1 06/19/22 09:32 • (LCSD) R3804936-2 06/19/22 10:15

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Bromoform	3.75	4.38	4.40	117	117	70.0-130			0.456	25
Bromomethane	3.75	4.41	4.37	118	117	70.0-130			0.911	25
1,3-Butadiene	3.75	4.25	4.25	113	113	70.0-130			0.000	25
Carbon disulfide	3.75	4.42	4.40	118	117	70.0-130			0.454	25
Carbon tetrachloride	3.75	4.74	4.69	126	125	70.0-130			1.06	25
Chlorobenzene	3.75	4.35	4.24	116	113	70.0-130			2.56	25
Chloroethane	3.75	4.57	4.62	122	123	70.0-130			1.09	25
Chloroform	3.75	4.38	4.33	117	115	70.0-130			1.15	25
Chloromethane	3.75	4.36	4.39	116	117	70.0-130			0.686	25
2-Chlorotoluene	3.75	4.26	4.29	114	114	70.0-130			0.702	25
Cyclohexane	3.75	4.31	4.34	115	116	70.0-130			0.694	25
Dibromochloromethane	3.75	4.36	4.40	116	117	70.0-130			0.913	25
1,2-Dibromoethane	3.75	4.30	4.30	115	115	70.0-130			0.000	25
1,2-Dichlorobenzene	3.75	4.21	4.29	112	114	70.0-130			1.88	25
1,3-Dichlorobenzene	3.75	4.22	4.30	113	115	70.0-130			1.88	25
1,4-Dichlorobenzene	3.75	4.23	4.25	113	113	70.0-130			0.472	25
1,2-Dichloroethane	3.75	4.27	4.32	114	115	70.0-130			1.16	25
1,1-Dichloroethane	3.75	4.43	4.42	118	118	70.0-130			0.226	25
1,1-Dichloroethene	3.75	4.34	4.42	116	118	70.0-130			1.83	25
cis-1,2-Dichloroethene	3.75	4.36	4.36	116	116	70.0-130			0.000	25
trans-1,2-Dichloroethene	3.75	4.48	4.46	119	119	70.0-130			0.447	25
1,2-Dichloropropane	3.75	4.33	4.36	115	116	70.0-130			0.690	25
cis-1,3-Dichloropropene	3.75	4.43	4.45	118	119	70.0-130			0.450	25
trans-1,3-Dichloropropene	3.75	4.40	4.34	117	116	70.0-130			1.37	25
1,4-Dioxane	3.75	4.28	4.31	114	115	70.0-140			0.698	25
Ethanol	3.75	4.24	4.27	113	114	55.0-148			0.705	25
Ethylbenzene	3.75	4.30	4.30	115	115	70.0-130			0.000	25
4-Ethyltoluene	3.75	4.28	4.38	114	117	70.0-130			2.31	25
Trichlorofluoromethane	3.75	4.40	4.38	117	117	70.0-130			0.456	25
Dichlorodifluoromethane	3.75	4.19	4.14	112	110	64.0-139			1.20	25
1,1,2-Trichlorotrifluoroethane	3.75	4.47	4.50	119	120	70.0-130			0.669	25
1,2-Dichlorotetrafluoroethane	3.75	4.50	4.49	120	120	70.0-130			0.222	25
Heptane	3.75	4.09	4.08	109	109	70.0-130			0.245	25
Hexachloro-1,3-butadiene	3.75	4.32	4.38	115	117	70.0-151			1.38	25
n-Hexane	3.75	4.38	4.39	117	117	70.0-130			0.228	25
Isopropylbenzene	3.75	4.25	4.35	113	116	70.0-130			2.33	25
Methylene Chloride	3.75	4.05	4.04	108	108	70.0-130			0.247	25
Methyl Butyl Ketone	3.75	4.58	4.41	122	118	70.0-149			3.78	25
Methyl Ethyl Ketone	3.75	4.42	4.34	118	116	70.0-130			1.83	25
4-Methyl-2-pentanone (MIBK)	3.75	4.51	4.39	120	117	70.0-139			2.70	25

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3804936-1 06/19/22 09:32 • (LCSD) R3804936-2 06/19/22 10:15

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Methyl Methacrylate	3.75	4.37	4.37	117	117	70.0-130			0.000	25
MTBE	3.75	4.41	4.45	118	119	70.0-130			0.903	25
Naphthalene	3.75	4.32	4.32	115	115	70.0-159			0.000	25
2-Propanol	3.75	4.41	4.36	118	116	70.0-139			1.14	25
Propene	3.75	4.50	4.60	120	123	64.0-144			2.20	25
Styrene	3.75	4.36	4.38	116	117	70.0-130			0.458	25
1,1,2,2-Tetrachloroethane	3.75	4.32	4.33	115	115	70.0-130			0.231	25
Tetrachloroethylene	3.75	4.33	4.31	115	115	70.0-130			0.463	25
Tetrahydrofuran	3.75	4.47	4.50	119	120	70.0-137			0.669	25
Toluene	3.75	4.32	4.39	115	117	70.0-130			1.61	25
1,2,4-Trichlorobenzene	3.75	4.39	4.33	117	115	70.0-160			1.38	25
1,1,1-Trichloroethane	3.75	4.29	4.30	114	115	70.0-130			0.233	25
1,1,2-Trichloroethane	3.75	4.35	4.45	116	119	70.0-130			2.27	25
Trichloroethylene	3.75	4.19	4.29	112	114	70.0-130			2.36	25
1,2,4-Trimethylbenzene	3.75	4.39	4.49	117	120	70.0-130			2.25	25
1,3,5-Trimethylbenzene	3.75	4.39	4.45	117	119	70.0-130			1.36	25
2,2,4-Trimethylpentane	3.75	4.43	4.42	118	118	70.0-130			0.226	25
Vinyl chloride	3.75	4.41	4.37	118	117	70.0-130			0.911	25
Vinyl Bromide	3.75	4.37	4.38	117	117	70.0-130			0.229	25
Vinyl acetate	3.75	4.14	4.07	110	109	70.0-130			1.71	25
m&p-Xylene	7.50	8.64	8.70	115	116	70.0-130			0.692	25
o-Xylene	3.75	4.32	4.32	115	115	70.0-130			0.000	25
(S) 1,4-Bromofluorobenzene				96.3	97.7	60.0-140				

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3805461-3 06/19/22 10:44

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Cyclohexane	U		0.0753	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.200
Ethanol	U		0.265	1.25
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Heptane	U		0.104	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
n-Hexane	U		0.206	0.630

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3805461-3 06/19/22 10:44

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Isopropylbenzene	U		0.0777	0.200
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	0.353	UL	0.264	1.25
Propene	0.115	UL	0.0932	1.25
Styrene	U		0.0788	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
Tetrachloroethylene	U		0.0814	0.200
Tetrahydrofuran	U		0.0734	0.200
Toluene	U		0.0870	0.500
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	0.168	UL	0.0736	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
Trichloroethylene	0.119	UL	0.0680	0.200
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
2,2,4-Trimethylpentane	U		0.133	0.200
Vinyl chloride	U		0.0949	0.200
Vinyl Bromide	U		0.0852	0.200
Vinyl acetate	U		0.116	0.200
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
(S) 1,4-Bromofluorobenzene	98.0			60.0-140

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3805461-1 06/19/22 09:26 • (LCSD) R3805461-2 06/19/22 10:06

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	3.75	4.12	4.10	110	109	70.0-130			0.487	25
Allyl Chloride	3.75	4.31	3.91	115	104	70.0-130			9.73	25
Benzene	3.75	4.22	4.18	113	111	70.0-130			0.952	25
Benzyl Chloride	3.75	4.37	4.25	117	113	70.0-152			2.78	25
Bromodichloromethane	3.75	4.21	4.21	112	112	70.0-130			0.000	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3805461-1 06/19/22 09:26 • (LCSD) R3805461-2 06/19/22 10:06

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Bromoform	3.75	4.42	4.34	118	116	70.0-130			1.83	25
Bromomethane	3.75	4.14	4.17	110	111	70.0-130			0.722	25
1,3-Butadiene	3.75	4.06	4.07	108	109	70.0-130			0.246	25
Carbon disulfide	3.75	4.29	4.26	114	114	70.0-130			0.702	25
Carbon tetrachloride	3.75	4.30	4.26	115	114	70.0-130			0.935	25
Chlorobenzene	3.75	4.22	4.26	113	114	70.0-130			0.943	25
Chloroethane	3.75	4.20	4.12	112	110	70.0-130			1.92	25
Chloroform	3.75	4.24	4.17	113	111	70.0-130			1.66	25
Chloromethane	3.75	4.18	4.18	111	111	70.0-130			0.000	25
2-Chlorotoluene	3.75	4.26	4.20	114	112	70.0-130			1.42	25
Cyclohexane	3.75	4.34	4.30	116	115	70.0-130			0.926	25
Dibromochloromethane	3.75	4.29	4.26	114	114	70.0-130			0.702	25
1,2-Dibromoethane	3.75	4.21	4.23	112	113	70.0-130			0.474	25
1,2-Dichlorobenzene	3.75	4.32	4.27	115	114	70.0-130			1.16	25
1,3-Dichlorobenzene	3.75	4.25	4.28	113	114	70.0-130			0.703	25
1,4-Dichlorobenzene	3.75	4.25	4.20	113	112	70.0-130			1.18	25
1,2-Dichloroethane	3.75	4.15	4.19	111	112	70.0-130			0.959	25
1,1-Dichloroethane	3.75	4.28	4.26	114	114	70.0-130			0.468	25
1,1-Dichloroethene	3.75	4.27	4.25	114	113	70.0-130			0.469	25
cis-1,2-Dichloroethene	3.75	4.24	4.24	113	113	70.0-130			0.000	25
trans-1,2-Dichloroethene	3.75	4.21	4.23	112	113	70.0-130			0.474	25
1,2-Dichloropropane	3.75	4.18	4.17	111	111	70.0-130			0.240	25
cis-1,3-Dichloropropene	3.75	4.28	4.31	114	115	70.0-130			0.698	25
trans-1,3-Dichloropropene	3.75	4.26	4.26	114	114	70.0-130			0.000	25
1,4-Dioxane	3.75	4.17	4.20	111	112	70.0-140			0.717	25
Ethanol	3.75	3.75	3.69	100	98.4	55.0-148			1.61	25
Ethylbenzene	3.75	4.31	4.24	115	113	70.0-130			1.64	25
4-Ethyltoluene	3.75	4.31	4.28	115	114	70.0-130			0.698	25
Trichlorofluoromethane	3.75	4.13	4.11	110	110	70.0-130			0.485	25
Dichlorodifluoromethane	3.75	4.26	4.24	114	113	64.0-139			0.471	25
1,1,2-Trichlorotrifluoroethane	3.75	4.28	4.27	114	114	70.0-130			0.234	25
1,2-Dichlorotetrafluoroethane	3.75	4.27	4.24	114	113	70.0-130			0.705	25
Heptane	3.75	4.15	4.28	111	114	70.0-130			3.08	25
Hexachloro-1,3-butadiene	3.75	4.20	4.16	112	111	70.0-151			0.957	25
n-Hexane	3.75	4.29	4.28	114	114	70.0-130			0.233	25
Isopropylbenzene	3.75	4.35	4.36	116	116	70.0-130			0.230	25
Methylene Chloride	3.75	3.86	3.79	103	101	70.0-130			1.83	25
Methyl Butyl Ketone	3.75	4.17	4.17	111	111	70.0-149			0.000	25
Methyl Ethyl Ketone	3.75	4.24	4.21	113	112	70.0-130			0.710	25
4-Methyl-2-pentanone (MIBK)	3.75	4.04	4.08	108	109	70.0-139			0.985	25

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3805461-1 06/19/22 09:26 • (LCSD) R3805461-2 06/19/22 10:06

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Methyl Methacrylate	3.75	4.13	4.23	110	113	70.0-130			2.39	25
MTBE	3.75	4.30	4.29	115	114	70.0-130			0.233	25
Naphthalene	3.75	4.13	4.08	110	109	70.0-159			1.22	25
2-Propanol	3.75	4.38	4.36	117	116	70.0-139			0.458	25
Propene	3.75	4.06	4.07	108	109	64.0-144			0.246	25
Styrene	3.75	4.34	4.31	116	115	70.0-130			0.694	25
1,1,2,2-Tetrachloroethane	3.75	4.22	4.17	113	111	70.0-130			1.19	25
Tetrachloroethylene	3.75	4.25	4.27	113	114	70.0-130			0.469	25
Tetrahydrofuran	3.75	4.18	4.19	111	112	70.0-137			0.239	25
Toluene	3.75	4.24	4.27	113	114	70.0-130			0.705	25
1,2,4-Trichlorobenzene	3.75	3.95	3.90	105	104	70.0-160			1.27	25
1,1,1-Trichloroethane	3.75	4.46	4.45	119	119	70.0-130			0.224	25
1,1,2-Trichloroethane	3.75	4.20	4.24	112	113	70.0-130			0.948	25
Trichloroethylene	3.75	4.35	4.35	116	116	70.0-130			0.000	25
1,2,4-Trimethylbenzene	3.75	4.37	4.34	117	116	70.0-130			0.689	25
1,3,5-Trimethylbenzene	3.75	4.37	4.35	117	116	70.0-130			0.459	25
2,2,4-Trimethylpentane	3.75	4.28	4.23	114	113	70.0-130			1.18	25
Vinyl chloride	3.75	4.29	4.24	114	113	70.0-130			1.17	25
Vinyl Bromide	3.75	4.19	4.21	112	112	70.0-130			0.476	25
Vinyl acetate	3.75	4.16	4.04	111	108	70.0-130			2.93	25
m&p-Xylene	7.50	8.60	8.52	115	114	70.0-130			0.935	25
o-Xylene	3.75	4.31	4.28	115	114	70.0-130			0.698	25
(S) 1,4-Bromofluorobenzene				100	99.4	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

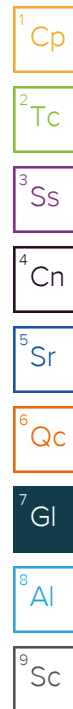
Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.



ACCREDITATIONS & LOCATIONS

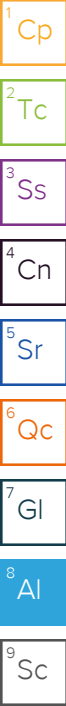
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey--NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio--VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1 6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA -- ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA -- ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA--Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.



Company Name/Address:

TGE Resources, Inc.
8048 Northcourt Road
Houston, TX 77040

Billing Information:

Kim Pham
8048 Northcourt Road
Houston, TX 77040

Report To:

Kristi Barnette

Email To:

kfbarnette@tgeresources.com

Project: Federal Way OCEC
Description:

City/State Collected:

Federal Way, WA

Please Order:
☐ RT ☐ MT ☐ CT ☐ ET

Phone: 713-744-5815

Client Project #

R13411.13

Lab Project #: TGERESHTX-R1341113

Collected by (print):
K. Barnette

Site/Facility ID #

P.O. #

9908

Data Results Needed

Collected by (signature):

K. Barnette

Rush? (Lab MUST Be Notified)

☐ Same Day ☐ Three Day
☐ Next Day ☐ Five Day
☐ Two Day

Collection

Container Pressure/Vacuum

Sample ID	Cell #	Flow Cont. #	Date	Time	Initial	Final	TC-10 Summary
TVMP-3	20472	5742	6/3/22	1805	28	5	X
TVMP-4	6585	9588	6/3/22	1756	28	5	X
TVMP-5	11847	9180	6/3/22	1715	28	3	X
TVMP-6	20025	11353	6/3/22	1457	27	3	X
TVMP-7	10552	10370	6/3/22	1817	27	4	X
TVMP-8	7371	11202	6/3/22	1454	28	4	X
TVMP-9	20253	11369	6/3/22	1120	28	6	X
TVMP-10	20189	7039	6/3/22	1834	27	3	X
TVMP-11	20168	7486	6/3/22	1040	30	4	X
TVMP-12	21228	10154	6/3/22	958	30	4	X

Remarks:

Samples returned via:

☐ UPS ☐ FedEx ☐ Courier

Tracking #

Pool #

Condition

Lab #

Relinquished by: (Signature)

K. Barnette

Date:

6/3/22

Time:

1900

Received by: (Signature)

Date:

Time:

Received by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date:

Time:

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date:

Time:

Lab #

Condition

Lab #

Condition

Lab #

Condition

Lab #

Condition

Lab #

Condition

Lab #

Condition

Lab #

Condition

Lab #

Condition

Lab #

Condition

Company Name/Address:

TGE Resources, Inc.
8048 Northcourt Rpad
Houston, TX 77040

Billing Information:

Kim Pham
8048 Northcourt Road
Houston, TX 77040

Analysis

Chain of Custody Page of


PEOPLE ADVANCING SCIENCE

(2065) Johnson Road Mt. Juliet, TN 37122
Phone: 615-718-5458 Fax: 615-718-1809
Submitting a sample via this chain of custody
constitutes acknowledgement and acceptance
of the Pace Terms and Conditions found at:
<https://info.pacelabs.com/hubs/standard-terms.pdf>

Report To:
Kristi Barnette

Email To: **krbarnette@tgeresources.com**

Project: **Federal Way OCED**
Description:

City/State
Collected:

Federal Way, WA

Please Circle:
☐ PT ☐ MT ☐ CT ☐ ET

Phone: **713-744-5815**

Client Project #

R13411.13Lab Project # **TGERESHTX-R1341113**

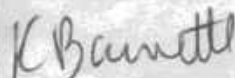
Collected by (print):
K. Barnette

Site/Facility ID #

P.O. #

9908

Collected by (signature):

**Rush?** (Lab MUST Be Notified)

☐ Same Day ☐ Three Day
☐ Next Day ☒ Five Day
☐ Two Day

Date Results Needed

Collection

Canister Pressure/Vacuum

Sample ID

Can #

Flow Cont. #

Date

Time

Initial

Final

TO-15 Summas

Sample ID	Can #	Flow Cont. #	Date	Time	Initial	Final												
TVMP-3	20472	5742	6/3/22	1805	28	5	X											
TVMP-4	6585	9588	6/3/22	1756	28	5	X											-01
TVMP-5	11847	9180	6/3/22	1715	28	3	X											-08
TVMP-6	20025	11353	6/3/22	1757	27	3	X											-02
TVMP-7	10552	10370	6/3/22	1817	27	4	X											-03
TVMP-8	7371	11202	6/3/22	1754	28	4	X											-09
TVMP-9	20253	11369	6/3/22	1120	28	6	X											-04
TVMP-10	20189	7039	6/3/22	1834	27	3	X											-05
TVMP-11	20168	7486	6/3/22	1040	30	4	X											-10
TVMP-12	21228	10154	6/3/22	958	30	4	X											-06
																		-07

Remarks:

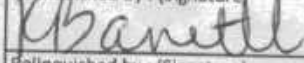
Samples returned via:

☐ UPS ☐ FedEx ☐ Courier

Tracking #

Hold #

Relinquished by: (Signature)



Date:

6/3/22

Time:

1900

Received by: (Signature)

Date:

Time:

Condition:

(lab use only)

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Date:

Time:

COC Seal Intact:

☒ Y ☐ N ☐ NA

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date:

Time:

NCF:

6/16/22**0900**

the 1990s, the number of people in the UK who are employed in the public sector has increased by 1.5 million, from 2.5 million in 1980 to 4 million in 1995 (Department of Health 1996).

There is a growing emphasis on the need to improve the efficiency of the public sector, and to ensure that the public sector is able to deliver the services that are required by the public. This has led to a number of initiatives, including the introduction of competition, the restructuring of public sector organisations, and the introduction of performance targets. The aim of these initiatives is to ensure that the public sector is able to deliver the services that are required by the public, in a cost-effective and efficient manner.

One of the key challenges facing the public sector is the need to improve the efficiency of the public sector. This is a complex task, and one that requires a number of different approaches. One of the key approaches is the introduction of competition. This involves the introduction of competition between public sector organisations, and the introduction of competition between public sector organisations and private sector organisations.

Another key approach is the restructuring of public sector organisations. This involves the restructuring of public sector organisations, and the introduction of new public sector organisations. This is a complex task, and one that requires a number of different approaches. One of the key approaches is the introduction of competition.

Another key approach is the introduction of performance targets. This involves the introduction of performance targets for public sector organisations, and the introduction of performance targets for public sector organisations and private sector organisations. This is a complex task, and one that requires a number of different approaches. One of the key approaches is the introduction of competition.

One of the key challenges facing the public sector is the need to improve the efficiency of the public sector. This is a complex task, and one that requires a number of different approaches. One of the key approaches is the introduction of competition. This involves the introduction of competition between public sector organisations, and the introduction of competition between public sector organisations and private sector organisations.

Another key approach is the restructuring of public sector organisations. This involves the restructuring of public sector organisations, and the introduction of new public sector organisations. This is a complex task, and one that requires a number of different approaches. One of the key approaches is the introduction of competition.

Another key approach is the introduction of performance targets. This involves the introduction of performance targets for public sector organisations, and the introduction of performance targets for public sector organisations and private sector organisations. This is a complex task, and one that requires a number of different approaches. One of the key approaches is the introduction of competition.

TGE Resources

Sample Delivery Group: L1536552
Samples Received: 09/16/2022
Project Number: R13411.13
Description: Off-Campus Emergency Department - Federal Way

Report To: Kristi Barnette
8048 Northcourt Road
Houston, TX 77040

Entire Report Reviewed By:



Jason Romer
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

TABLE OF CONTENTS

Cp: Cover Page	1
Tc: Table of Contents	2
Ss: Sample Summary	3
Cn: Case Narrative	5
Tr: TRRP Summary	6
TRRP form R	7
TRRP form S	8
TRRP Exception Reports	9
Sr: Sample Results	10
TVMP-3 L1536552-01	10
TVMP-4 L1536552-02	12
TVMP-5 L1536552-03	14
TVMP-6 L1536552-04	16
TVMP-7 L1536552-05	18
TVMP-8 L1536552-06	20
TVMP-9 L1536552-07	22
TVMP-10 L1536552-08	24
TVMP-11 L1536552-09	26
TVMP-12 L1536552-10	28
Qc: Quality Control Summary	30
Volatile Organic Compounds (MS) by Method TO-15	30
Gl: Glossary of Terms	35
Al: Accreditations & Locations	36
Sc: Sample Chain of Custody	37

¹ Cp
² Tc
³ Ss
⁴ Cn
⁵ Tr
⁶ Sr
⁷ Qc
⁸ Gl
⁹ Al
¹⁰ Sc

SAMPLE SUMMARY

TVMP-3 L1536552-01 Air

				Collected by K. Barnette	Collected date/time 09/14/22 14:39	Received date/time 09/16/22 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1929120	1	09/20/22 11:46	09/20/22 11:46	DAH	Mt. Juliet, TN

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Tr

⁶ Sr

⁷ Qc

⁸ Gl

⁹ Al

¹⁰ Sc

TVMP-4 L1536552-02 Air

				Collected by K. Barnette	Collected date/time 09/14/22 14:29	Received date/time 09/16/22 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1929120	1	09/20/22 12:30	09/20/22 12:30	DAH	Mt. Juliet, TN

TVMP-5 L1536552-03 Air

				Collected by K. Barnette	Collected date/time 09/14/22 14:18	Received date/time 09/16/22 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1929120	1	09/20/22 13:14	09/20/22 13:14	DAH	Mt. Juliet, TN

TVMP-6 L1536552-04 Air

				Collected by K. Barnette	Collected date/time 09/14/22 14:15	Received date/time 09/16/22 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1929120	1	09/20/22 13:57	09/20/22 13:57	DAH	Mt. Juliet, TN

TVMP-7 L1536552-05 Air

				Collected by K. Barnette	Collected date/time 09/14/22 13:51	Received date/time 09/16/22 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1929120	1	09/20/22 14:41	09/20/22 14:41	DAH	Mt. Juliet, TN

TVMP-8 L1536552-06 Air

				Collected by K. Barnette	Collected date/time 09/14/22 13:43	Received date/time 09/16/22 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1929120	1	09/20/22 15:24	09/20/22 15:24	DAH	Mt. Juliet, TN

TVMP-9 L1536552-07 Air

				Collected by K. Barnette	Collected date/time 09/14/22 13:35	Received date/time 09/16/22 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1929120	1	09/20/22 16:08	09/20/22 16:08	SDS	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1929772	10	09/21/22 16:26	09/21/22 16:26	SDS	Mt. Juliet, TN

TVMP-10 L1536552-08 Air

				Collected by K. Barnette	Collected date/time 09/14/22 13:28	Received date/time 09/16/22 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1929120	1	09/20/22 16:52	09/20/22 16:52	SDS	Mt. Juliet, TN

SAMPLE SUMMARY

TVMP-11 L1536552-09 Air

Collected by
K. Barnette

Collected date/time
09/14/22 13:20

Received date/time
09/16/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1929120	1	09/20/22 17:35	09/20/22 17:35	SDS	Mt. Juliet, TN

TVMP-12 L1536552-10 Air

Collected by
K. Barnette

Collected date/time
09/14/22 13:12

Received date/time
09/16/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1929120	1	09/20/22 18:18	09/20/22 18:18	SDS	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1929772	10	09/21/22 16:52	09/21/22 16:52	SDS	Mt. Juliet, TN

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

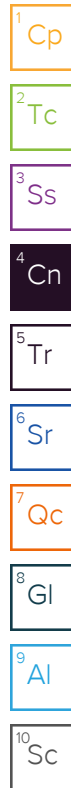
¹⁰Sc

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Jason Romer
Project Manager



Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

- R1 - Field chain-of-custody documentation;
- R2 - Sample identification cross-reference;
- R3 - Test reports (analytical data sheets) for each environmental sample that includes:
 - a. Items consistent with NELAC Chapter 5,
 - b. dilution factors,
 - c. preparation methods,
 - d. cleanup methods, and
 - e. if required for the project, tentatively identified compounds (TICs).
- R4 - Surrogate recovery data including:
 - a. Calculated recovery (%R), and
 - b. The laboratory's surrogate QC limits.
- R5 - Test reports/summary forms for blank samples;
- R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
 - a. LCS spiking amounts,
 - b. Calculated %R for each analyte, and
 - c. The laboratory's LCS QC limits.
- R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
 - a. Samples associated with the MS/MSD clearly identified,
 - b. MS/MSD spiking amounts,
 - c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
 - d. Calculated %Rs and relative percent differences (RPDs), and
 - e. The laboratory's MS/MSD QC limits
- R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
 - a. The amount of analyte measured in the duplicate,
 - b. The calculated RPD, and
 - c. The laboratory's QC limits for analytical duplicates.
- R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.



Jason Romer
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National		LRC Date: 09/22/2022 10:55					
Project Name: Off-Campus Emergency Department - Federal Way		Laboratory Job Number: L1536552-01, 02, 03, 04, 05, 06, 07, 08, 09 and 10					
Reviewer Name: Jason Romer		Prep Batch Number(s): WG1929120 and WG1929772					
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?		X			1
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?			X		
		Were MS/MSD analyzed at the appropriate frequency?			X		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			X		
		Were MS/MSD RPDs within laboratory QC limits?			X		
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National		LRC Date: 09/22/2022 10:55					
Project Name: Off-Campus Emergency Department - Federal Way		Laboratory Job Number: L1536552-01, 02, 03, 04, 05, 06, 07, 08, 09 and 10					
Reviewer Name: Jason Romer		Prep Batch Number(s): WG1929120 and WG1929772					
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X		
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?			X		
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				
1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period. 2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable); 3. NA = Not applicable; 4. NR = Not reviewed; 5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).							

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National		LRC Date: 09/22/2022 10:55	
Project Name: Off-Campus Emergency Department - Federal Way		Laboratory Job Number: L1536552-01, 02, 03, 04, 05, 06, 07, 08, 09 and 10	
Reviewer Name: Jason Romer		Prep Batch Number(s): WG1929120 and WG1929772	
ER #¹	Description		
1	TO-15 WG1929120 Chloroethane, Vinyl Bromide: Percent Recovery is outside of established control limits.		
1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period. 2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable); 3. NA = Not applicable; 4. NR = Not reviewed; 5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).			

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	SDL ug/m3	Unadj. MQL ug/m3	MQL ug/m3	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.39	2.97	2.97	6.11		1	WG1929120
Allyl chloride	107-05-1	76.53	0.357	0.626	0.626	U		1	WG1929120
Benzene	71-43-2	78.10	0.228	0.639	0.639	4.66		1	WG1929120
Benzyl Chloride	100-44-7	127	0.311	1.04	1.04	U		1	WG1929120
Bromodichloromethane	75-27-4	164	0.471	1.34	1.34	U		1	WG1929120
Bromoform	75-25-2	253	0.757	6.21	6.21	U		1	WG1929120
Bromomethane	74-83-9	94.90	0.381	0.776	0.776	U		1	WG1929120
1,3-Butadiene	106-99-0	54.10	0.230	4.43	4.43	U		1	WG1929120
Carbon disulfide	75-15-0	76.10	0.317	0.622	0.622	2.56		1	WG1929120
Carbon tetrachloride	56-23-5	154	0.461	1.26	1.26	U		1	WG1929120
Chlorobenzene	108-90-7	113	0.385	0.924	0.924	U		1	WG1929120
Chloroethane	75-00-3	64.50	0.263	0.528	0.528	U	J4	1	WG1929120
Chloroform	67-66-3	119	0.349	0.973	0.973	U		1	WG1929120
Chloromethane	74-87-3	50.50	0.213	0.413	0.413	1.20		1	WG1929120
2-Chlorotoluene	95-49-8	126	0.427	1.03	1.03	U		1	WG1929120
Cyclohexane	110-82-7	84.20	0.259	0.689	0.689	5.99		1	WG1929120
Dibromochloromethane	124-48-1	208	0.618	1.70	1.70	U		1	WG1929120
1,2-Dibromoethane	106-93-4	188	0.554	1.54	1.54	U		1	WG1929120
1,2-Dichlorobenzene	95-50-1	147	0.770	1.20	1.20	U		1	WG1929120
1,3-Dichlorobenzene	541-73-1	147	1.09	1.20	1.20	U		1	WG1929120
1,4-Dichlorobenzene	106-46-7	147	0.335	1.20	1.20	U		1	WG1929120
1,2-Dichloroethane	107-06-2	99	0.283	0.810	0.810	U		1	WG1929120
1,1-Dichloroethane	75-34-3	98	0.290	0.802	0.802	U		1	WG1929120
1,1-Dichloroethene	75-35-4	96.90	0.302	0.793	0.793	U		1	WG1929120
cis-1,2-Dichloroethene	156-59-2	96.90	0.311	0.793	0.793	U		1	WG1929120
trans-1,2-Dichloroethene	156-60-5	96.90	0.267	0.793	0.793	U		1	WG1929120
1,2-Dichloropropane	78-87-5	113	0.351	0.924	0.924	U		1	WG1929120
cis-1,3-Dichloropropene	10061-01-5	111	0.313	0.908	0.908	U		1	WG1929120
trans-1,3-Dichloropropene	10061-02-6	111	0.331	0.908	0.908	U		1	WG1929120
1,4-Dioxane	123-91-1	88.10	0.300	0.721	0.721	U		1	WG1929120
Ethanol	64-17-5	46.10	0.500	2.36	2.36	14.6		1	WG1929120
Ethylbenzene	100-41-4	106	0.362	0.867	0.867	1.07		1	WG1929120
4-Ethyltoluene	622-96-8	120	0.384	0.982	0.982	U		1	WG1929120
Trichlorofluoromethane	75-69-4	137.40	0.460	1.12	1.12	2.01		1	WG1929120
Dichlorodifluoromethane	75-71-8	120.92	0.678	0.989	0.989	2.35		1	WG1929120
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.608	1.53	1.53	U		1	WG1929120
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.622	1.40	1.40	U		1	WG1929120
Heptane	142-82-5	100	0.425	0.818	0.818	4.05		1	WG1929120
Hexachloro-1,3-butadiene	87-68-3	261	1.12	6.73	6.73	U		1	WG1929120
n-Hexane	110-54-3	86.20	0.726	2.22	2.22	7.23		1	WG1929120
Isopropylbenzene	98-82-8	120.20	0.382	0.983	0.983	U		1	WG1929120
Methylene Chloride	75-09-2	84.90	0.340	0.694	0.694	1.48	B	1	WG1929120
Methyl Butyl Ketone	591-78-6	100	0.544	5.11	5.11	U		1	WG1929120
2-Butanone (MEK)	78-93-3	72.10	0.240	3.69	3.69	1.73	J	1	WG1929120
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	0.313	5.12	5.12	U		1	WG1929120
Methyl methacrylate	80-62-6	100.12	0.359	0.819	0.819	U		1	WG1929120
MTBE	1634-04-4	88.10	0.233	0.721	0.721	U		1	WG1929120
Naphthalene	91-20-3	128	1.83	3.30	3.30	U		1	WG1929120
2-Propanol	67-63-0	60.10	0.649	3.07	3.07	U		1	WG1929120
Propene	115-07-1	42.10	0.160	2.15	2.15	U		1	WG1929120
Styrene	100-42-5	104	0.335	0.851	0.851	U		1	WG1929120
1,1,2,2-Tetrachloroethane	79-34-5	168	0.511	1.37	1.37	U		1	WG1929120
Tetrachloroethylene	127-18-4	166	0.553	1.36	1.36	5.98		1	WG1929120
Tetrahydrofuran	109-99-9	72.10	0.216	0.590	0.590	U		1	WG1929120
Toluene	108-88-3	92.10	0.328	1.88	1.88	U		1	WG1929120
1,2,4-Trichlorobenzene	120-82-1	181	1.10	4.66	4.66	U		1	WG1929120



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	SDL ug/m3	Unadj. MQL ug/m3	MQL ug/m3	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	1.09	1.09	U		1	WG1929120
1,1,2-Trichloroethane	79-00-5	133	0.422	1.09	1.09	U		1	WG1929120
Trichloroethylene	79-01-6	131	0.364	1.07	1.07	U		1	WG1929120
1,2,4-Trimethylbenzene	95-63-6	120	0.375	0.982	0.982	1.99		1	WG1929120
1,3,5-Trimethylbenzene	108-67-8	120	0.382	0.982	0.982	1.02		1	WG1929120
2,2,4-Trimethylpentane	540-84-1	114.22	0.621	0.934	0.934	U		1	WG1929120
Vinyl chloride	75-01-4	62.50	0.243	0.511	0.511	U		1	WG1929120
Vinyl Bromide	593-60-2	106.95	0.373	0.875	0.875	U	J4	1	WG1929120
Vinyl acetate	108-05-4	86.10	0.408	0.704	0.704	U		1	WG1929120
m&p-Xylene	1330-20-7	106	0.585	1.73	1.73	2.98		1	WG1929120
o-Xylene	95-47-6	106	0.359	0.867	0.867	1.62		1	WG1929120
(S) 1,4-Bromofluorobenzene	460-00-4	175				90.6		60.0-140	WG1929120

¹ Cp² Tc³ Ss⁴ Cn⁵ Tr⁶ Sr⁷ Qc⁸ Gl⁹ Al¹⁰ Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	SDL ug/m3	Unadj. MQL ug/m3	MQL ug/m3	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.39	2.97	2.97	13.5		1	WG1929120
Allyl chloride	107-05-1	76.53	0.357	0.626	0.626	U		1	WG1929120
Benzene	71-43-2	78.10	0.228	0.639	0.639	3.96		1	WG1929120
Benzyl Chloride	100-44-7	127	0.311	1.04	1.04	U		1	WG1929120
Bromodichloromethane	75-27-4	164	0.471	1.34	1.34	U		1	WG1929120
Bromoform	75-25-2	253	0.757	6.21	6.21	U		1	WG1929120
Bromomethane	74-83-9	94.90	0.381	0.776	0.776	U		1	WG1929120
1,3-Butadiene	106-99-0	54.10	0.230	4.43	4.43	U		1	WG1929120
Carbon disulfide	75-15-0	76.10	0.317	0.622	0.622	5.63		1	WG1929120
Carbon tetrachloride	56-23-5	154	0.461	1.26	1.26	0.489	J	1	WG1929120
Chlorobenzene	108-90-7	113	0.385	0.924	0.924	U		1	WG1929120
Chloroethane	75-00-3	64.50	0.263	0.528	0.528	U	J4	1	WG1929120
Chloroform	67-66-3	119	0.349	0.973	0.973	U		1	WG1929120
Chloromethane	74-87-3	50.50	0.213	0.413	0.413	1.45		1	WG1929120
2-Chlorotoluene	95-49-8	126	0.427	1.03	1.03	U		1	WG1929120
Cyclohexane	110-82-7	84.20	0.259	0.689	0.689	2.00		1	WG1929120
Dibromochloromethane	124-48-1	208	0.618	1.70	1.70	U		1	WG1929120
1,2-Dibromoethane	106-93-4	188	0.554	1.54	1.54	U		1	WG1929120
1,2-Dichlorobenzene	95-50-1	147	0.770	1.20	1.20	U		1	WG1929120
1,3-Dichlorobenzene	541-73-1	147	1.09	1.20	1.20	U		1	WG1929120
1,4-Dichlorobenzene	106-46-7	147	0.335	1.20	1.20	U		1	WG1929120
1,2-Dichloroethane	107-06-2	99	0.283	0.810	0.810	U		1	WG1929120
1,1-Dichloroethane	75-34-3	98	0.290	0.802	0.802	U		1	WG1929120
1,1-Dichloroethene	75-35-4	96.90	0.302	0.793	0.793	U		1	WG1929120
cis-1,2-Dichloroethene	156-59-2	96.90	0.311	0.793	0.793	U		1	WG1929120
trans-1,2-Dichloroethene	156-60-5	96.90	0.267	0.793	0.793	U		1	WG1929120
1,2-Dichloropropane	78-87-5	113	0.351	0.924	0.924	U		1	WG1929120
cis-1,3-Dichloropropene	10061-01-5	111	0.313	0.908	0.908	U		1	WG1929120
trans-1,3-Dichloropropene	10061-02-6	111	0.331	0.908	0.908	U		1	WG1929120
1,4-Dioxane	123-91-1	88.10	0.300	0.721	0.721	U		1	WG1929120
Ethanol	64-17-5	46.10	0.500	2.36	2.36	13.4		1	WG1929120
Ethylbenzene	100-41-4	106	0.362	0.867	0.867	0.551	J	1	WG1929120
4-Ethyltoluene	622-96-8	120	0.384	0.982	0.982	U		1	WG1929120
Trichlorofluoromethane	75-69-4	137.40	0.460	1.12	1.12	1.74		1	WG1929120
Dichlorodifluoromethane	75-71-8	120.92	0.678	0.989	0.989	2.43		1	WG1929120
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.608	1.53	1.53	0.623	J	1	WG1929120
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.622	1.40	1.40	U		1	WG1929120
Heptane	142-82-5	100	0.425	0.818	0.818	3.23		1	WG1929120
Hexachloro-1,3-butadiene	87-68-3	261	1.12	6.73	6.73	U		1	WG1929120
n-Hexane	110-54-3	86.20	0.726	2.22	2.22	4.12		1	WG1929120
Isopropylbenzene	98-82-8	120.20	0.382	0.983	0.983	U		1	WG1929120
Methylene Chloride	75-09-2	84.90	0.340	0.694	0.694	1.38	B	1	WG1929120
Methyl Butyl Ketone	591-78-6	100	0.544	5.11	5.11	U		1	WG1929120
2-Butanone (MEK)	78-93-3	72.10	0.240	3.69	3.69	7.05		1	WG1929120
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	0.313	5.12	5.12	U		1	WG1929120
Methyl methacrylate	80-62-6	100.12	0.359	0.819	0.819	U		1	WG1929120
MTBE	1634-04-4	88.10	0.233	0.721	0.721	U		1	WG1929120
Naphthalene	91-20-3	128	1.83	3.30	3.30	U		1	WG1929120
2-Propanol	67-63-0	60.10	0.649	3.07	3.07	U		1	WG1929120
Propene	115-07-1	42.10	0.160	2.15	2.15	U		1	WG1929120
Styrene	100-42-5	104	0.335	0.851	0.851	U		1	WG1929120
1,1,2,2-Tetrachloroethane	79-34-5	168	0.511	1.37	1.37	U		1	WG1929120
Tetrachloroethylene	127-18-4	166	0.553	1.36	1.36	1.91		1	WG1929120
Tetrahydrofuran	109-99-9	72.10	0.216	0.590	0.590	U		1	WG1929120
Toluene	108-88-3	92.10	0.328	1.88	1.88	U		1	WG1929120
1,2,4-Trichlorobenzene	120-82-1	181	1.10	4.66	4.66	U		1	WG1929120



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	SDL ug/m3	Unadj. MQL ug/m3	MQL ug/m3	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	1.09	1.09	U		1	WG1929120
1,1,2-Trichloroethane	79-00-5	133	0.422	1.09	1.09	U		1	WG1929120
Trichloroethylene	79-01-6	131	0.364	1.07	1.07	U		1	WG1929120
1,2,4-Trimethylbenzene	95-63-6	120	0.375	0.982	0.982	0.382	J	1	WG1929120
1,3,5-Trimethylbenzene	108-67-8	120	0.382	0.982	0.982	U		1	WG1929120
2,2,4-Trimethylpentane	540-84-1	114.22	0.621	0.934	0.934	U		1	WG1929120
Vinyl chloride	75-01-4	62.50	0.243	0.511	0.511	U		1	WG1929120
Vinyl Bromide	593-60-2	106.95	0.373	0.875	0.875	U	J4	1	WG1929120
Vinyl acetate	108-05-4	86.10	0.408	0.704	0.704	U		1	WG1929120
m&p-Xylene	1330-20-7	106	0.585	1.73	1.73	1.49	J	1	WG1929120
o-Xylene	95-47-6	106	0.359	0.867	0.867	0.564	J	1	WG1929120
(S) 1,4-Bromofluorobenzene	460-00-4	175				89.9		60.0-140	WG1929120

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	SDL ug/m3	Unadj. MQL ug/m3	MQL ug/m3	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.39	2.97	2.97	25.0		1	WG1929120
Allyl chloride	107-05-1	76.53	0.357	0.626	0.626	U		1	WG1929120
Benzene	71-43-2	78.10	0.228	0.639	0.639	7.09		1	WG1929120
Benzyl Chloride	100-44-7	127	0.311	1.04	1.04	U		1	WG1929120
Bromodichloromethane	75-27-4	164	0.471	1.34	1.34	U		1	WG1929120
Bromoform	75-25-2	253	0.757	6.21	6.21	U		1	WG1929120
Bromomethane	74-83-9	94.90	0.381	0.776	0.776	U		1	WG1929120
1,3-Butadiene	106-99-0	54.10	0.230	4.43	4.43	7.39		1	WG1929120
Carbon disulfide	75-15-0	76.10	0.317	0.622	0.622	2.80		1	WG1929120
Carbon tetrachloride	56-23-5	154	0.461	1.26	1.26	0.519	J	1	WG1929120
Chlorobenzene	108-90-7	113	0.385	0.924	0.924	U		1	WG1929120
Chloroethane	75-00-3	64.50	0.263	0.528	0.528	11.6	J4	1	WG1929120
Chloroform	67-66-3	119	0.349	0.973	0.973	U		1	WG1929120
Chloromethane	74-87-3	50.50	0.213	0.413	0.413	2.17		1	WG1929120
2-Chlorotoluene	95-49-8	126	0.427	1.03	1.03	U		1	WG1929120
Cyclohexane	110-82-7	84.20	0.259	0.689	0.689	6.27		1	WG1929120
Dibromochloromethane	124-48-1	208	0.618	1.70	1.70	U		1	WG1929120
1,2-Dibromoethane	106-93-4	188	0.554	1.54	1.54	U		1	WG1929120
1,2-Dichlorobenzene	95-50-1	147	0.770	1.20	1.20	U		1	WG1929120
1,3-Dichlorobenzene	541-73-1	147	1.09	1.20	1.20	U		1	WG1929120
1,4-Dichlorobenzene	106-46-7	147	0.335	1.20	1.20	U		1	WG1929120
1,2-Dichloroethane	107-06-2	99	0.283	0.810	0.810	U		1	WG1929120
1,1-Dichloroethane	75-34-3	98	0.290	0.802	0.802	U		1	WG1929120
1,1-Dichloroethene	75-35-4	96.90	0.302	0.793	0.793	U		1	WG1929120
cis-1,2-Dichloroethene	156-59-2	96.90	0.311	0.793	0.793	U		1	WG1929120
trans-1,2-Dichloroethene	156-60-5	96.90	0.267	0.793	0.793	U		1	WG1929120
1,2-Dichloropropane	78-87-5	113	0.351	0.924	0.924	U		1	WG1929120
cis-1,3-Dichloropropene	10061-01-5	111	0.313	0.908	0.908	U		1	WG1929120
trans-1,3-Dichloropropene	10061-02-6	111	0.331	0.908	0.908	U		1	WG1929120
1,4-Dioxane	123-91-1	88.10	0.300	0.721	0.721	U		1	WG1929120
Ethanol	64-17-5	46.10	0.500	2.36	2.36	23.8		1	WG1929120
Ethylbenzene	100-41-4	106	0.362	0.867	0.867	0.655	J	1	WG1929120
4-Ethyltoluene	622-96-8	120	0.384	0.982	0.982	U		1	WG1929120
Trichlorofluoromethane	75-69-4	137.40	0.460	1.12	1.12	U		1	WG1929120
Dichlorodifluoromethane	75-71-8	120.92	0.678	0.989	0.989	2.46		1	WG1929120
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.608	1.53	1.53	U		1	WG1929120
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.622	1.40	1.40	U		1	WG1929120
Heptane	142-82-5	100	0.425	0.818	0.818	11.4		1	WG1929120
Hexachloro-1,3-butadiene	87-68-3	261	1.12	6.73	6.73	U		1	WG1929120
n-Hexane	110-54-3	86.20	0.726	2.22	2.22	23.3		1	WG1929120
Isopropylbenzene	98-82-8	120.20	0.382	0.983	0.983	U		1	WG1929120
Methylene Chloride	75-09-2	84.90	0.340	0.694	0.694	1.82	B	1	WG1929120
Methyl Butyl Ketone	591-78-6	100	0.544	5.11	5.11	U		1	WG1929120
2-Butanone (MEK)	78-93-3	72.10	0.240	3.69	3.69	8.46		1	WG1929120
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	0.313	5.12	5.12	U		1	WG1929120
Methyl methacrylate	80-62-6	100.12	0.359	0.819	0.819	U		1	WG1929120
MTBE	1634-04-4	88.10	0.233	0.721	0.721	U		1	WG1929120
Naphthalene	91-20-3	128	1.83	3.30	3.30	U		1	WG1929120
2-Propanol	67-63-0	60.10	0.649	3.07	3.07	U		1	WG1929120
Propene	115-07-1	42.10	0.160	2.15	2.15	100		1	WG1929120
Styrene	100-42-5	104	0.335	0.851	0.851	U		1	WG1929120
1,1,2,2-Tetrachloroethane	79-34-5	168	0.511	1.37	1.37	U		1	WG1929120
Tetrachloroethylene	127-18-4	166	0.553	1.36	1.36	4.90		1	WG1929120
Tetrahydrofuran	109-99-9	72.10	0.216	0.590	0.590	U		1	WG1929120
Toluene	108-88-3	92.10	0.328	1.88	1.88	U		1	WG1929120
1,2,4-Trichlorobenzene	120-82-1	181	1.10	4.66	4.66	U		1	WG1929120

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	SDL ug/m3	Unadj. MQL ug/m3	MQL ug/m3	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	1.09	1.09	U		1	WG1929120
1,1,2-Trichloroethane	79-00-5	133	0.422	1.09	1.09	U		1	WG1929120
Trichloroethylene	79-01-6	131	0.364	1.07	1.07	U		1	WG1929120
1,2,4-Trimethylbenzene	95-63-6	120	0.375	0.982	0.982	0.736	J	1	WG1929120
1,3,5-Trimethylbenzene	108-67-8	120	0.382	0.982	0.982	U		1	WG1929120
2,2,4-Trimethylpentane	540-84-1	114.22	0.621	0.934	0.934	U		1	WG1929120
Vinyl chloride	75-01-4	62.50	0.243	0.511	0.511	U		1	WG1929120
Vinyl Bromide	593-60-2	106.95	0.373	0.875	0.875	U	J4	1	WG1929120
Vinyl acetate	108-05-4	86.10	0.408	0.704	0.704	U		1	WG1929120
m&p-Xylene	1330-20-7	106	0.585	1.73	1.73	1.89		1	WG1929120
o-Xylene	95-47-6	106	0.359	0.867	0.867	0.884		1	WG1929120
(S) 1,4-Bromofluorobenzene	460-00-4	175				89.7		60.0-140	WG1929120

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	SDL ug/m3	Unadj. MQL ug/m3	MQL ug/m3	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.39	2.97	2.97	31.8		1	WG1929120
Allyl chloride	107-05-1	76.53	0.357	0.626	0.626	U		1	WG1929120
Benzene	71-43-2	78.10	0.228	0.639	0.639	3.45		1	WG1929120
Benzyl Chloride	100-44-7	127	0.311	1.04	1.04	U		1	WG1929120
Bromodichloromethane	75-27-4	164	0.471	1.34	1.34	U		1	WG1929120
Bromoform	75-25-2	253	0.757	6.21	6.21	U		1	WG1929120
Bromomethane	74-83-9	94.90	0.381	0.776	0.776	U		1	WG1929120
1,3-Butadiene	106-99-0	54.10	0.230	4.43	4.43	U		1	WG1929120
Carbon disulfide	75-15-0	76.10	0.317	0.622	0.622	0.890		1	WG1929120
Carbon tetrachloride	56-23-5	154	0.461	1.26	1.26	0.471	J	1	WG1929120
Chlorobenzene	108-90-7	113	0.385	0.924	0.924	U		1	WG1929120
Chloroethane	75-00-3	64.50	0.263	0.528	0.528	2.66	J4	1	WG1929120
Chloroform	67-66-3	119	0.349	0.973	0.973	U		1	WG1929120
Chloromethane	74-87-3	50.50	0.213	0.413	0.413	1.83		1	WG1929120
2-Chlorotoluene	95-49-8	126	0.427	1.03	1.03	U		1	WG1929120
Cyclohexane	110-82-7	84.20	0.259	0.689	0.689	12.7		1	WG1929120
Dibromochloromethane	124-48-1	208	0.618	1.70	1.70	U		1	WG1929120
1,2-Dibromoethane	106-93-4	188	0.554	1.54	1.54	U		1	WG1929120
1,2-Dichlorobenzene	95-50-1	147	0.770	1.20	1.20	U		1	WG1929120
1,3-Dichlorobenzene	541-73-1	147	1.09	1.20	1.20	U		1	WG1929120
1,4-Dichlorobenzene	106-46-7	147	0.335	1.20	1.20	U		1	WG1929120
1,2-Dichloroethane	107-06-2	99	0.283	0.810	0.810	U		1	WG1929120
1,1-Dichloroethane	75-34-3	98	0.290	0.802	0.802	U		1	WG1929120
1,1-Dichloroethene	75-35-4	96.90	0.302	0.793	0.793	U		1	WG1929120
cis-1,2-Dichloroethene	156-59-2	96.90	0.311	0.793	0.793	U		1	WG1929120
trans-1,2-Dichloroethene	156-60-5	96.90	0.267	0.793	0.793	U		1	WG1929120
1,2-Dichloropropane	78-87-5	113	0.351	0.924	0.924	U		1	WG1929120
cis-1,3-Dichloropropene	10061-01-5	111	0.313	0.908	0.908	U		1	WG1929120
trans-1,3-Dichloropropene	10061-02-6	111	0.331	0.908	0.908	U		1	WG1929120
1,4-Dioxane	123-91-1	88.10	0.300	0.721	0.721	U		1	WG1929120
Ethanol	64-17-5	46.10	0.500	2.36	2.36	71.6		1	WG1929120
Ethylbenzene	100-41-4	106	0.362	0.867	0.867	0.624	J	1	WG1929120
4-Ethyltoluene	622-96-8	120	0.384	0.982	0.982	0.530	J	1	WG1929120
Trichlorofluoromethane	75-69-4	137.40	0.460	1.12	1.12	U		1	WG1929120
Dichlorodifluoromethane	75-71-8	120.92	0.678	0.989	0.989	2.47		1	WG1929120
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.608	1.53	1.53	U		1	WG1929120
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.622	1.40	1.40	U		1	WG1929120
Heptane	142-82-5	100	0.425	0.818	0.818	1.92		1	WG1929120
Hexachloro-1,3-butadiene	87-68-3	261	1.12	6.73	6.73	U		1	WG1929120
n-Hexane	110-54-3	86.20	0.726	2.22	2.22	6.35		1	WG1929120
Isopropylbenzene	98-82-8	120.20	0.382	0.983	0.983	U		1	WG1929120
Methylene Chloride	75-09-2	84.90	0.340	0.694	0.694	6.53		1	WG1929120
Methyl Butyl Ketone	591-78-6	100	0.544	5.11	5.11	U		1	WG1929120
2-Butanone (MEK)	78-93-3	72.10	0.240	3.69	3.69	6.78		1	WG1929120
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	0.313	5.12	5.12	U		1	WG1929120
Methyl methacrylate	80-62-6	100.12	0.359	0.819	0.819	U		1	WG1929120
MTBE	1634-04-4	88.10	0.233	0.721	0.721	U		1	WG1929120
Naphthalene	91-20-3	128	1.83	3.30	3.30	U		1	WG1929120
2-Propanol	67-63-0	60.10	0.649	3.07	3.07	U		1	WG1929120
Propene	115-07-1	42.10	0.160	2.15	2.15	U		1	WG1929120
Styrene	100-42-5	104	0.335	0.851	0.851	U		1	WG1929120
1,1,2,2-Tetrachloroethane	79-34-5	168	0.511	1.37	1.37	U		1	WG1929120
Tetrachloroethylene	127-18-4	166	0.553	1.36	1.36	2.91		1	WG1929120
Tetrahydrofuran	109-99-9	72.10	0.216	0.590	0.590	U		1	WG1929120
Toluene	108-88-3	92.10	0.328	1.88	1.88	U		1	WG1929120
1,2,4-Trichlorobenzene	120-82-1	181	1.10	4.66	4.66	U		1	WG1929120



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	SDL ug/m3	Unadj. MQL ug/m3	MQL ug/m3	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	1.09	1.09	U		1	WG1929120
1,1,2-Trichloroethane	79-00-5	133	0.422	1.09	1.09	U		1	WG1929120
Trichloroethylene	79-01-6	131	0.364	1.07	1.07	3.80		1	WG1929120
1,2,4-Trimethylbenzene	95-63-6	120	0.375	0.982	0.982	0.496	J	1	WG1929120
1,3,5-Trimethylbenzene	108-67-8	120	0.382	0.982	0.982	U		1	WG1929120
2,2,4-Trimethylpentane	540-84-1	114.22	0.621	0.934	0.934	U		1	WG1929120
Vinyl chloride	75-01-4	62.50	0.243	0.511	0.511	U		1	WG1929120
Vinyl Bromide	593-60-2	106.95	0.373	0.875	0.875	U	J4	1	WG1929120
Vinyl acetate	108-05-4	86.10	0.408	0.704	0.704	U		1	WG1929120
m&p-Xylene	1330-20-7	106	0.585	1.73	1.73	1.81		1	WG1929120
o-Xylene	95-47-6	106	0.359	0.867	0.867	0.616	J	1	WG1929120
(S) 1,4-Bromofluorobenzene	460-00-4	175				91.5		60.0-140	WG1929120

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	SDL ug/m3	Unadj. MQL ug/m3	MQL ug/m3	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.39	2.97	2.97	6.44		1	WG1929120
Allyl chloride	107-05-1	76.53	0.357	0.626	0.626	U		1	WG1929120
Benzene	71-43-2	78.10	0.228	0.639	0.639	2.54		1	WG1929120
Benzyl Chloride	100-44-7	127	0.311	1.04	1.04	U		1	WG1929120
Bromodichloromethane	75-27-4	164	0.471	1.34	1.34	U		1	WG1929120
Bromoform	75-25-2	253	0.757	6.21	6.21	U		1	WG1929120
Bromomethane	74-83-9	94.90	0.381	0.776	0.776	U		1	WG1929120
1,3-Butadiene	106-99-0	54.10	0.230	4.43	4.43	U		1	WG1929120
Carbon disulfide	75-15-0	76.10	0.317	0.622	0.622	3.36		1	WG1929120
Carbon tetrachloride	56-23-5	154	0.461	1.26	1.26	0.474	J	1	WG1929120
Chlorobenzene	108-90-7	113	0.385	0.924	0.924	U		1	WG1929120
Chloroethane	75-00-3	64.50	0.263	0.528	0.528	U	J4	1	WG1929120
Chloroform	67-66-3	119	0.349	0.973	0.973	U		1	WG1929120
Chloromethane	74-87-3	50.50	0.213	0.413	0.413	1.51		1	WG1929120
2-Chlorotoluene	95-49-8	126	0.427	1.03	1.03	U		1	WG1929120
Cyclohexane	110-82-7	84.20	0.259	0.689	0.689	2.47		1	WG1929120
Dibromochloromethane	124-48-1	208	0.618	1.70	1.70	U		1	WG1929120
1,2-Dibromoethane	106-93-4	188	0.554	1.54	1.54	U		1	WG1929120
1,2-Dichlorobenzene	95-50-1	147	0.770	1.20	1.20	U		1	WG1929120
1,3-Dichlorobenzene	541-73-1	147	1.09	1.20	1.20	1.47		1	WG1929120
1,4-Dichlorobenzene	106-46-7	147	0.335	1.20	1.20	U		1	WG1929120
1,2-Dichloroethane	107-06-2	99	0.283	0.810	0.810	U		1	WG1929120
1,1-Dichloroethane	75-34-3	98	0.290	0.802	0.802	U		1	WG1929120
1,1-Dichloroethene	75-35-4	96.90	0.302	0.793	0.793	U		1	WG1929120
cis-1,2-Dichloroethene	156-59-2	96.90	0.311	0.793	0.793	U		1	WG1929120
trans-1,2-Dichloroethene	156-60-5	96.90	0.267	0.793	0.793	U		1	WG1929120
1,2-Dichloropropane	78-87-5	113	0.351	0.924	0.924	U		1	WG1929120
cis-1,3-Dichloropropene	10061-01-5	111	0.313	0.908	0.908	U		1	WG1929120
trans-1,3-Dichloropropene	10061-02-6	111	0.331	0.908	0.908	U		1	WG1929120
1,4-Dioxane	123-91-1	88.10	0.300	0.721	0.721	U		1	WG1929120
Ethanol	64-17-5	46.10	0.500	2.36	2.36	16.8		1	WG1929120
Ethylbenzene	100-41-4	106	0.362	0.867	0.867	U		1	WG1929120
4-Ethyltoluene	622-96-8	120	0.384	0.982	0.982	U		1	WG1929120
Trichlorofluoromethane	75-69-4	137.40	0.460	1.12	1.12	2.08		1	WG1929120
Dichlorodifluoromethane	75-71-8	120.92	0.678	0.989	0.989	2.46		1	WG1929120
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.608	1.53	1.53	U		1	WG1929120
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.622	1.40	1.40	U		1	WG1929120
Heptane	142-82-5	100	0.425	0.818	0.818	U		1	WG1929120
Hexachloro-1,3-butadiene	87-68-3	261	1.12	6.73	6.73	U		1	WG1929120
n-Hexane	110-54-3	86.20	0.726	2.22	2.22	4.37		1	WG1929120
Isopropylbenzene	98-82-8	120.20	0.382	0.983	0.983	U		1	WG1929120
Methylene Chloride	75-09-2	84.90	0.340	0.694	0.694	U		1	WG1929120
Methyl Butyl Ketone	591-78-6	100	0.544	5.11	5.11	U		1	WG1929120
2-Butanone (MEK)	78-93-3	72.10	0.240	3.69	3.69	2.88	J	1	WG1929120
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	0.313	5.12	5.12	U		1	WG1929120
Methyl methacrylate	80-62-6	100.12	0.359	0.819	0.819	U		1	WG1929120
MTBE	1634-04-4	88.10	0.233	0.721	0.721	U		1	WG1929120
Naphthalene	91-20-3	128	1.83	3.30	3.30	U		1	WG1929120
2-Propanol	67-63-0	60.10	0.649	3.07	3.07	U		1	WG1929120
Propene	115-07-1	42.10	0.160	2.15	2.15	U		1	WG1929120
Styrene	100-42-5	104	0.335	0.851	0.851	U		1	WG1929120
1,1,2,2-Tetrachloroethane	79-34-5	168	0.511	1.37	1.37	U		1	WG1929120
Tetrachloroethylene	127-18-4	166	0.553	1.36	1.36	5.78		1	WG1929120
Tetrahydrofuran	109-99-9	72.10	0.216	0.590	0.590	U		1	WG1929120
Toluene	108-88-3	92.10	0.328	1.88	1.88	U		1	WG1929120
1,2,4-Trichlorobenzene	120-82-1	181	1.10	4.66	4.66	U		1	WG1929120

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	SDL ug/m3	Unadj. MQL ug/m3	MQL ug/m3	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	1.09	1.09	U		1	WG1929120
1,1,2-Trichloroethane	79-00-5	133	0.422	1.09	1.09	U		1	WG1929120
Trichloroethylene	79-01-6	131	0.364	1.07	1.07	U		1	WG1929120
1,2,4-Trimethylbenzene	95-63-6	120	0.375	0.982	0.982	U		1	WG1929120
1,3,5-Trimethylbenzene	108-67-8	120	0.382	0.982	0.982	U		1	WG1929120
2,2,4-Trimethylpentane	540-84-1	114.22	0.621	0.934	0.934	U		1	WG1929120
Vinyl chloride	75-01-4	62.50	0.243	0.511	0.511	U		1	WG1929120
Vinyl Bromide	593-60-2	106.95	0.373	0.875	0.875	U	J4	1	WG1929120
Vinyl acetate	108-05-4	86.10	0.408	0.704	0.704	U		1	WG1929120
m&p-Xylene	1330-20-7	106	0.585	1.73	1.73	0.949	J	1	WG1929120
o-Xylene	95-47-6	106	0.359	0.867	0.867	0.368	J	1	WG1929120
(S) 1,4-Bromofluorobenzene	460-00-4	175				91.1		60.0-140	WG1929120

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	SDL ug/m3	Unadj. MQL ug/m3	MQL ug/m3	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.39	2.97	2.97	11.5		1	WG1929120
Allyl chloride	107-05-1	76.53	0.357	0.626	0.626	U		1	WG1929120
Benzene	71-43-2	78.10	0.228	0.639	0.639	0.904		1	WG1929120
Benzyl Chloride	100-44-7	127	0.311	1.04	1.04	U		1	WG1929120
Bromodichloromethane	75-27-4	164	0.471	1.34	1.34	U		1	WG1929120
Bromoform	75-25-2	253	0.757	6.21	6.21	U		1	WG1929120
Bromomethane	74-83-9	94.90	0.381	0.776	0.776	U		1	WG1929120
1,3-Butadiene	106-99-0	54.10	0.230	4.43	4.43	U		1	WG1929120
Carbon disulfide	75-15-0	76.10	0.317	0.622	0.622	3.70		1	WG1929120
Carbon tetrachloride	56-23-5	154	0.461	1.26	1.26	U		1	WG1929120
Chlorobenzene	108-90-7	113	0.385	0.924	0.924	U		1	WG1929120
Chloroethane	75-00-3	64.50	0.263	0.528	0.528	4.27	J4	1	WG1929120
Chloroform	67-66-3	119	0.349	0.973	0.973	U		1	WG1929120
Chloromethane	74-87-3	50.50	0.213	0.413	0.413	1.09		1	WG1929120
2-Chlorotoluene	95-49-8	126	0.427	1.03	1.03	U		1	WG1929120
Cyclohexane	110-82-7	84.20	0.259	0.689	0.689	U		1	WG1929120
Dibromochloromethane	124-48-1	208	0.618	1.70	1.70	U		1	WG1929120
1,2-Dibromoethane	106-93-4	188	0.554	1.54	1.54	U		1	WG1929120
1,2-Dichlorobenzene	95-50-1	147	0.770	1.20	1.20	U		1	WG1929120
1,3-Dichlorobenzene	541-73-1	147	1.09	1.20	1.20	U		1	WG1929120
1,4-Dichlorobenzene	106-46-7	147	0.335	1.20	1.20	U		1	WG1929120
1,2-Dichloroethane	107-06-2	99	0.283	0.810	0.810	U		1	WG1929120
1,1-Dichloroethane	75-34-3	98	0.290	0.802	0.802	U		1	WG1929120
1,1-Dichloroethene	75-35-4	96.90	0.302	0.793	0.793	U		1	WG1929120
cis-1,2-Dichloroethene	156-59-2	96.90	0.311	0.793	0.793	U		1	WG1929120
trans-1,2-Dichloroethene	156-60-5	96.90	0.267	0.793	0.793	U		1	WG1929120
1,2-Dichloropropane	78-87-5	113	0.351	0.924	0.924	U		1	WG1929120
cis-1,3-Dichloropropene	10061-01-5	111	0.313	0.908	0.908	U		1	WG1929120
trans-1,3-Dichloropropene	10061-02-6	111	0.331	0.908	0.908	U		1	WG1929120
1,4-Dioxane	123-91-1	88.10	0.300	0.721	0.721	U		1	WG1929120
Ethanol	64-17-5	46.10	0.500	2.36	2.36	17.3		1	WG1929120
Ethylbenzene	100-41-4	106	0.362	0.867	0.867	U		1	WG1929120
4-Ethyltoluene	622-96-8	120	0.384	0.982	0.982	1.31		1	WG1929120
Trichlorofluoromethane	75-69-4	137.40	0.460	1.12	1.12	1.66		1	WG1929120
Dichlorodifluoromethane	75-71-8	120.92	0.678	0.989	0.989	2.08		1	WG1929120
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.608	1.53	1.53	U		1	WG1929120
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.622	1.40	1.40	U		1	WG1929120
Heptane	142-82-5	100	0.425	0.818	0.818	U		1	WG1929120
Hexachloro-1,3-butadiene	87-68-3	261	1.12	6.73	6.73	U		1	WG1929120
n-Hexane	110-54-3	86.20	0.726	2.22	2.22	1.54	J	1	WG1929120
Isopropylbenzene	98-82-8	120.20	0.382	0.983	0.983	U		1	WG1929120
Methylene Chloride	75-09-2	84.90	0.340	0.694	0.694	1.80	B	1	WG1929120
Methyl Butyl Ketone	591-78-6	100	0.544	5.11	5.11	U		1	WG1929120
2-Butanone (MEK)	78-93-3	72.10	0.240	3.69	3.69	2.53	J	1	WG1929120
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	0.313	5.12	5.12	U		1	WG1929120
Methyl methacrylate	80-62-6	100.12	0.359	0.819	0.819	U		1	WG1929120
MTBE	1634-04-4	88.10	0.233	0.721	0.721	U		1	WG1929120
Naphthalene	91-20-3	128	1.83	3.30	3.30	U		1	WG1929120
2-Propanol	67-63-0	60.10	0.649	3.07	3.07	10.1		1	WG1929120
Propene	115-07-1	42.10	0.160	2.15	2.15	U		1	WG1929120
Styrene	100-42-5	104	0.335	0.851	0.851	U		1	WG1929120
1,1,2,2-Tetrachloroethane	79-34-5	168	0.511	1.37	1.37	U		1	WG1929120
Tetrachloroethylene	127-18-4	166	0.553	1.36	1.36	1.22	J	1	WG1929120
Tetrahydrofuran	109-99-9	72.10	0.216	0.590	0.590	U		1	WG1929120
Toluene	108-88-3	92.10	0.328	1.88	1.88	U		1	WG1929120
1,2,4-Trichlorobenzene	120-82-1	181	1.10	4.66	4.66	U		1	WG1929120



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	SDL ug/m3	Unadj. MQL ug/m3	MQL ug/m3	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	1.09	1.09	U		1	WG1929120
1,1,2-Trichloroethane	79-00-5	133	0.422	1.09	1.09	U		1	WG1929120
Trichloroethylene	79-01-6	131	0.364	1.07	1.07	U		1	WG1929120
1,2,4-Trimethylbenzene	95-63-6	120	0.375	0.982	0.982	2.19		1	WG1929120
1,3,5-Trimethylbenzene	108-67-8	120	0.382	0.982	0.982	0.638	J	1	WG1929120
2,2,4-Trimethylpentane	540-84-1	114.22	0.621	0.934	0.934	U		1	WG1929120
Vinyl chloride	75-01-4	62.50	0.243	0.511	0.511	U		1	WG1929120
Vinyl Bromide	593-60-2	106.95	0.373	0.875	0.875	U	J4	1	WG1929120
Vinyl acetate	108-05-4	86.10	0.408	0.704	0.704	U		1	WG1929120
m&p-Xylene	1330-20-7	106	0.585	1.73	1.73	1.72	J	1	WG1929120
o-Xylene	95-47-6	106	0.359	0.867	0.867	0.512	J	1	WG1929120
(S) 1,4-Bromofluorobenzene	460-00-4	175				89.2		60.0-140	WG1929120

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	SDL ug/m3	Unadj. MQL ug/m3	MQL ug/m3	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.39	2.97	2.97	31.8		1	WG1929120
Allyl chloride	107-05-1	76.53	0.357	0.626	0.626	U		1	WG1929120
Benzene	71-43-2	78.10	0.228	0.639	0.639	8.85		1	WG1929120
Benzyl Chloride	100-44-7	127	0.311	1.04	1.04	U		1	WG1929120
Bromodichloromethane	75-27-4	164	0.471	1.34	1.34	U		1	WG1929120
Bromoform	75-25-2	253	0.757	6.21	6.21	U		1	WG1929120
Bromomethane	74-83-9	94.90	0.381	0.776	0.776	U		1	WG1929120
1,3-Butadiene	106-99-0	54.10	0.230	4.43	4.43	U		1	WG1929120
Carbon disulfide	75-15-0	76.10	0.317	0.622	0.622	3.14		1	WG1929120
Carbon tetrachloride	56-23-5	154	0.461	1.26	1.26	U		1	WG1929120
Chlorobenzene	108-90-7	113	0.385	0.924	0.924	U		1	WG1929120
Chloroethane	75-00-3	64.50	0.263	0.528	0.528	U	J4	1	WG1929120
Chloroform	67-66-3	119	0.349	0.973	0.973	U		1	WG1929120
Chloromethane	74-87-3	50.50	0.213	0.413	0.413	1.17		1	WG1929120
2-Chlorotoluene	95-49-8	126	0.427	1.03	1.03	U		1	WG1929120
Cyclohexane	110-82-7	84.20	0.259	0.689	0.689	6.13		1	WG1929120
Dibromochloromethane	124-48-1	208	0.618	1.70	1.70	U		1	WG1929120
1,2-Dibromoethane	106-93-4	188	0.554	1.54	1.54	U		1	WG1929120
1,2-Dichlorobenzene	95-50-1	147	0.770	1.20	1.20	U		1	WG1929120
1,3-Dichlorobenzene	541-73-1	147	1.09	1.20	1.20	U		1	WG1929120
1,4-Dichlorobenzene	106-46-7	147	0.335	1.20	1.20	0.439	B J	1	WG1929120
1,2-Dichloroethane	107-06-2	99	0.283	0.810	0.810	U		1	WG1929120
1,1-Dichloroethane	75-34-3	98	0.290	0.802	0.802	U		1	WG1929120
1,1-Dichloroethene	75-35-4	96.90	0.302	0.793	0.793	U		1	WG1929120
cis-1,2-Dichloroethene	156-59-2	96.90	0.311	0.793	0.793	U		1	WG1929120
trans-1,2-Dichloroethene	156-60-5	96.90	0.267	0.793	0.793	U		1	WG1929120
1,2-Dichloropropane	78-87-5	113	0.351	0.924	0.924	U		1	WG1929120
cis-1,3-Dichloropropene	10061-01-5	111	0.313	0.908	0.908	U		1	WG1929120
trans-1,3-Dichloropropene	10061-02-6	111	0.331	0.908	0.908	U		1	WG1929120
1,4-Dioxane	123-91-1	88.10	0.300	0.721	0.721	U		1	WG1929120
Ethanol	64-17-5	46.10	0.500	2.36	2.36	17.5		1	WG1929120
Ethylbenzene	100-41-4	106	0.362	0.867	0.867	0.681	J	1	WG1929120
4-Ethyltoluene	622-96-8	120	0.384	0.982	0.982	U		1	WG1929120
Trichlorofluoromethane	75-69-4	137.40	0.460	1.12	1.12	U		1	WG1929120
Dichlorodifluoromethane	75-71-8	120.92	0.678	0.989	0.989	2.33		1	WG1929120
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.608	1.53	1.53	U		1	WG1929120
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.622	1.40	1.40	U		1	WG1929120
Heptane	142-82-5	100	0.425	0.818	0.818	10.8		1	WG1929120
Hexachloro-1,3-butadiene	87-68-3	261	1.12	6.73	6.73	U		1	WG1929120
n-Hexane	110-54-3	86.20	0.726	2.22	2.22	26.4		1	WG1929120
Isopropylbenzene	98-82-8	120.20	0.382	0.983	0.983	U		1	WG1929120
Methylene Chloride	75-09-2	84.90	0.340	0.694	0.694	2.01	B	1	WG1929120
Methyl Butyl Ketone	591-78-6	100	0.544	5.11	5.11	1.20	J	1	WG1929120
2-Butanone (MEK)	78-93-3	72.10	0.240	3.69	3.69	8.29	J	1	WG1929120
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	0.313	5.12	5.12	1.73	J	1	WG1929120
Methyl methacrylate	80-62-6	100.12	0.359	0.819	0.819	U		1	WG1929120
MTBE	1634-04-4	88.10	0.233	0.721	0.721	U		1	WG1929120
Naphthalene	91-20-3	128	1.83	3.30	3.30	U		1	WG1929120
2-Propanol	67-63-0	60.10	0.649	3.07	3.07	U		1	WG1929120
Propene	115-07-1	42.10	1.60	2.15	21.5	716		10	WG1929772
Styrene	100-42-5	104	0.335	0.851	0.851	U		1	WG1929120
1,1,2,2-Tetrachloroethane	79-34-5	168	0.511	1.37	1.37	U		1	WG1929120
Tetrachloroethylene	127-18-4	166	0.553	1.36	1.36	2.40		1	WG1929120
Tetrahydrofuran	109-99-9	72.10	0.216	0.590	0.590	U		1	WG1929120
Toluene	108-88-3	92.10	0.328	1.88	1.88	U		1	WG1929120
1,2,4-Trichlorobenzene	120-82-1	181	1.10	4.66	4.66	U		1	WG1929120

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	SDL ug/m3	Unadj. MQL ug/m3	MQL ug/m3	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	1.09	1.09	U		1	WG1929120
1,1,2-Trichloroethane	79-00-5	133	0.422	1.09	1.09	U		1	WG1929120
Trichloroethylene	79-01-6	131	0.364	1.07	1.07	2.30		1	WG1929120
1,2,4-Trimethylbenzene	95-63-6	120	0.375	0.982	0.982	0.560	J	1	WG1929120
1,3,5-Trimethylbenzene	108-67-8	120	0.382	0.982	0.982	U		1	WG1929120
2,2,4-Trimethylpentane	540-84-1	114.22	0.621	0.934	0.934	U		1	WG1929120
Vinyl chloride	75-01-4	62.50	0.243	0.511	0.511	U		1	WG1929120
Vinyl Bromide	593-60-2	106.95	0.373	0.875	0.875	U	J4	1	WG1929120
Vinyl acetate	108-05-4	86.10	0.408	0.704	0.704	U		1	WG1929120
m&p-Xylene	1330-20-7	106	0.585	1.73	1.73	2.29		1	WG1929120
o-Xylene	95-47-6	106	0.359	0.867	0.867	1.10		1	WG1929120
(S) 1,4-Bromofluorobenzene	460-00-4	175				90.4		60.0-140	WG1929120
(S) 1,4-Bromofluorobenzene	460-00-4	175				90.6		60.0-140	WG1929772

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	SDL ug/m3	Unadj. MQL ug/m3	MQL ug/m3	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.39	2.97	2.97	11.1		1	WG1929120
Allyl chloride	107-05-1	76.53	0.357	0.626	0.626	U		1	WG1929120
Benzene	71-43-2	78.10	0.228	0.639	0.639	3.74		1	WG1929120
Benzyl Chloride	100-44-7	127	0.311	1.04	1.04	U		1	WG1929120
Bromodichloromethane	75-27-4	164	0.471	1.34	1.34	U		1	WG1929120
Bromoform	75-25-2	253	0.757	6.21	6.21	U		1	WG1929120
Bromomethane	74-83-9	94.90	0.381	0.776	0.776	U		1	WG1929120
1,3-Butadiene	106-99-0	54.10	0.230	4.43	4.43	U		1	WG1929120
Carbon disulfide	75-15-0	76.10	0.317	0.622	0.622	5.85		1	WG1929120
Carbon tetrachloride	56-23-5	154	0.461	1.26	1.26	0.491	J	1	WG1929120
Chlorobenzene	108-90-7	113	0.385	0.924	0.924	U		1	WG1929120
Chloroethane	75-00-3	64.50	0.263	0.528	0.528	U	J4	1	WG1929120
Chloroform	67-66-3	119	0.349	0.973	0.973	U		1	WG1929120
Chloromethane	74-87-3	50.50	0.213	0.413	0.413	1.57		1	WG1929120
2-Chlorotoluene	95-49-8	126	0.427	1.03	1.03	U		1	WG1929120
Cyclohexane	110-82-7	84.20	0.259	0.689	0.689	3.51		1	WG1929120
Dibromochloromethane	124-48-1	208	0.618	1.70	1.70	U		1	WG1929120
1,2-Dibromoethane	106-93-4	188	0.554	1.54	1.54	U		1	WG1929120
1,2-Dichlorobenzene	95-50-1	147	0.770	1.20	1.20	U		1	WG1929120
1,3-Dichlorobenzene	541-73-1	147	1.09	1.20	1.20	U		1	WG1929120
1,4-Dichlorobenzene	106-46-7	147	0.335	1.20	1.20	U		1	WG1929120
1,2-Dichloroethane	107-06-2	99	0.283	0.810	0.810	U		1	WG1929120
1,1-Dichloroethane	75-34-3	98	0.290	0.802	0.802	U		1	WG1929120
1,1-Dichloroethene	75-35-4	96.90	0.302	0.793	0.793	U		1	WG1929120
cis-1,2-Dichloroethene	156-59-2	96.90	0.311	0.793	0.793	U		1	WG1929120
trans-1,2-Dichloroethene	156-60-5	96.90	0.267	0.793	0.793	U		1	WG1929120
1,2-Dichloropropane	78-87-5	113	0.351	0.924	0.924	U		1	WG1929120
cis-1,3-Dichloropropene	10061-01-5	111	0.313	0.908	0.908	U		1	WG1929120
trans-1,3-Dichloropropene	10061-02-6	111	0.331	0.908	0.908	U		1	WG1929120
1,4-Dioxane	123-91-1	88.10	0.300	0.721	0.721	U		1	WG1929120
Ethanol	64-17-5	46.10	0.500	2.36	2.36	29.0		1	WG1929120
Ethylbenzene	100-41-4	106	0.362	0.867	0.867	0.620	J	1	WG1929120
4-Ethyltoluene	622-96-8	120	0.384	0.982	0.982	U		1	WG1929120
Trichlorofluoromethane	75-69-4	137.40	0.460	1.12	1.12	U		1	WG1929120
Dichlorodifluoromethane	75-71-8	120.92	0.678	0.989	0.989	2.48		1	WG1929120
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.608	1.53	1.53	U		1	WG1929120
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.622	1.40	1.40	U		1	WG1929120
Heptane	142-82-5	100	0.425	0.818	0.818	4.02		1	WG1929120
Hexachloro-1,3-butadiene	87-68-3	261	1.12	6.73	6.73	U		1	WG1929120
n-Hexane	110-54-3	86.20	0.726	2.22	2.22	7.72		1	WG1929120
Isopropylbenzene	98-82-8	120.20	0.382	0.983	0.983	U		1	WG1929120
Methylene Chloride	75-09-2	84.90	0.340	0.694	0.694	2.08	B	1	WG1929120
Methyl Butyl Ketone	591-78-6	100	0.544	5.11	5.11	1.46	J	1	WG1929120
2-Butanone (MEK)	78-93-3	72.10	0.240	3.69	3.69	4.75		1	WG1929120
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	0.313	5.12	5.12	U		1	WG1929120
Methyl methacrylate	80-62-6	100.12	0.359	0.819	0.819	U		1	WG1929120
MTBE	1634-04-4	88.10	0.233	0.721	0.721	U		1	WG1929120
Naphthalene	91-20-3	128	1.83	3.30	3.30	U		1	WG1929120
2-Propanol	67-63-0	60.10	0.649	3.07	3.07	U		1	WG1929120
Propene	115-07-1	42.10	0.160	2.15	2.15	52.0		1	WG1929120
Styrene	100-42-5	104	0.335	0.851	0.851	U		1	WG1929120
1,1,2,2-Tetrachloroethane	79-34-5	168	0.511	1.37	1.37	U		1	WG1929120
Tetrachloroethylene	127-18-4	166	0.553	1.36	1.36	1.28	J	1	WG1929120
Tetrahydrofuran	109-99-9	72.10	0.216	0.590	0.590	U		1	WG1929120
Toluene	108-88-3	92.10	0.328	1.88	1.88	U		1	WG1929120
1,2,4-Trichlorobenzene	120-82-1	181	1.10	4.66	4.66	U		1	WG1929120



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	SDL ug/m3	Unadj. MQL ug/m3	MQL ug/m3	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	1.09	1.09	U		1	WG1929120
1,1,2-Trichloroethane	79-00-5	133	0.422	1.09	1.09	U		1	WG1929120
Trichloroethylene	79-01-6	131	0.364	1.07	1.07	0.447	J	1	WG1929120
1,2,4-Trimethylbenzene	95-63-6	120	0.375	0.982	0.982	0.406	J	1	WG1929120
1,3,5-Trimethylbenzene	108-67-8	120	0.382	0.982	0.982	U		1	WG1929120
2,2,4-Trimethylpentane	540-84-1	114.22	0.621	0.934	0.934	1.08		1	WG1929120
Vinyl chloride	75-01-4	62.50	0.243	0.511	0.511	U		1	WG1929120
Vinyl Bromide	593-60-2	106.95	0.373	0.875	0.875	U	J4	1	WG1929120
Vinyl acetate	108-05-4	86.10	0.408	0.704	0.704	U		1	WG1929120
m&p-Xylene	1330-20-7	106	0.585	1.73	1.73	1.51	J	1	WG1929120
o-Xylene	95-47-6	106	0.359	0.867	0.867	0.689	J	1	WG1929120
(S) 1,4-Bromofluorobenzene	460-00-4	175				88.9		60.0-140	WG1929120



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	SDL ug/m3	Unadj. MQL ug/m3	MQL ug/m3	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.39	2.97	2.97	26.6		1	WG1929120
Allyl chloride	107-05-1	76.53	0.357	0.626	0.626	U		1	WG1929120
Benzene	71-43-2	78.10	0.228	0.639	0.639	2.90		1	WG1929120
Benzyl Chloride	100-44-7	127	0.311	1.04	1.04	U		1	WG1929120
Bromodichloromethane	75-27-4	164	0.471	1.34	1.34	U		1	WG1929120
Bromoform	75-25-2	253	0.757	6.21	6.21	U		1	WG1929120
Bromomethane	74-83-9	94.90	0.381	0.776	0.776	U		1	WG1929120
1,3-Butadiene	106-99-0	54.10	0.230	4.43	4.43	U		1	WG1929120
Carbon disulfide	75-15-0	76.10	0.317	0.622	0.622	2.93		1	WG1929120
Carbon tetrachloride	56-23-5	154	0.461	1.26	1.26	0.491	J	1	WG1929120
Chlorobenzene	108-90-7	113	0.385	0.924	0.924	U		1	WG1929120
Chloroethane	75-00-3	64.50	0.263	0.528	0.528	U	J4	1	WG1929120
Chloroform	67-66-3	119	0.349	0.973	0.973	U		1	WG1929120
Chloromethane	74-87-3	50.50	0.213	0.413	0.413	2.07		1	WG1929120
2-Chlorotoluene	95-49-8	126	0.427	1.03	1.03	U		1	WG1929120
Cyclohexane	110-82-7	84.20	0.259	0.689	0.689	35.5		1	WG1929120
Dibromochloromethane	124-48-1	208	0.618	1.70	1.70	U		1	WG1929120
1,2-Dibromoethane	106-93-4	188	0.554	1.54	1.54	U		1	WG1929120
1,2-Dichlorobenzene	95-50-1	147	0.770	1.20	1.20	U		1	WG1929120
1,3-Dichlorobenzene	541-73-1	147	1.09	1.20	1.20	U		1	WG1929120
1,4-Dichlorobenzene	106-46-7	147	0.335	1.20	1.20	U		1	WG1929120
1,2-Dichloroethane	107-06-2	99	0.283	0.810	0.810	U		1	WG1929120
1,1-Dichloroethane	75-34-3	98	0.290	0.802	0.802	U		1	WG1929120
1,1-Dichloroethene	75-35-4	96.90	0.302	0.793	0.793	U		1	WG1929120
cis-1,2-Dichloroethene	156-59-2	96.90	0.311	0.793	0.793	U		1	WG1929120
trans-1,2-Dichloroethene	156-60-5	96.90	0.267	0.793	0.793	U		1	WG1929120
1,2-Dichloropropane	78-87-5	113	0.351	0.924	0.924	U		1	WG1929120
cis-1,3-Dichloropropene	10061-01-5	111	0.313	0.908	0.908	U		1	WG1929120
trans-1,3-Dichloropropene	10061-02-6	111	0.331	0.908	0.908	U		1	WG1929120
1,4-Dioxane	123-91-1	88.10	0.300	0.721	0.721	0.490	J	1	WG1929120
Ethanol	64-17-5	46.10	0.500	2.36	2.36	75.4		1	WG1929120
Ethylbenzene	100-41-4	106	0.362	0.867	0.867	0.980		1	WG1929120
4-Ethyltoluene	622-96-8	120	0.384	0.982	0.982	U		1	WG1929120
Trichlorofluoromethane	75-69-4	137.40	0.460	1.12	1.12	U		1	WG1929120
Dichlorodifluoromethane	75-71-8	120.92	0.678	0.989	0.989	U		1	WG1929120
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.608	1.53	1.53	U		1	WG1929120
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.622	1.40	1.40	U		1	WG1929120
Heptane	142-82-5	100	0.425	0.818	0.818	1.61		1	WG1929120
Hexachloro-1,3-butadiene	87-68-3	261	1.12	6.73	6.73	U		1	WG1929120
n-Hexane	110-54-3	86.20	0.726	2.22	2.22	12.0		1	WG1929120
Isopropylbenzene	98-82-8	120.20	0.382	0.983	0.983	U		1	WG1929120
Methylene Chloride	75-09-2	84.90	0.340	0.694	0.694	3.68	B	1	WG1929120
Methyl Butyl Ketone	591-78-6	100	0.544	5.11	5.11	U		1	WG1929120
2-Butanone (MEK)	78-93-3	72.10	0.240	3.69	3.69	3.04	J	1	WG1929120
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	0.313	5.12	5.12	U		1	WG1929120
Methyl methacrylate	80-62-6	100.12	0.359	0.819	0.819	U		1	WG1929120
MTBE	1634-04-4	88.10	0.233	0.721	0.721	U		1	WG1929120
Naphthalene	91-20-3	128	1.83	3.30	3.30	U		1	WG1929120
2-Propanol	67-63-0	60.10	0.649	3.07	3.07	15.3		1	WG1929120
Propene	115-07-1	42.10	0.160	2.15	2.15	U		1	WG1929120
Styrene	100-42-5	104	0.335	0.851	0.851	0.422	J	1	WG1929120
1,1,2,2-Tetrachloroethane	79-34-5	168	0.511	1.37	1.37	U		1	WG1929120
Tetrachloroethylene	127-18-4	166	0.553	1.36	1.36	19.7		1	WG1929120
Tetrahydrofuran	109-99-9	72.10	0.216	0.590	0.590	U		1	WG1929120
Toluene	108-88-3	92.10	0.328	1.88	1.88	U		1	WG1929120
1,2,4-Trichlorobenzene	120-82-1	181	1.10	4.66	4.66	U		1	WG1929120

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	SDL ug/m3	Unadj. MQL ug/m3	MQL ug/m3	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	1.09	1.09	U		1	WG1929120
1,1,2-Trichloroethane	79-00-5	133	0.422	1.09	1.09	U		1	WG1929120
Trichloroethylene	79-01-6	131	0.364	1.07	1.07	1.22		1	WG1929120
1,2,4-Trimethylbenzene	95-63-6	120	0.375	0.982	0.982	0.810	J	1	WG1929120
1,3,5-Trimethylbenzene	108-67-8	120	0.382	0.982	0.982	U		1	WG1929120
2,2,4-Trimethylpentane	540-84-1	114.22	0.621	0.934	0.934	0.874	J	1	WG1929120
Vinyl chloride	75-01-4	62.50	0.243	0.511	0.511	U		1	WG1929120
Vinyl Bromide	593-60-2	106.95	0.373	0.875	0.875	U	J4	1	WG1929120
Vinyl acetate	108-05-4	86.10	0.408	0.704	0.704	U		1	WG1929120
m&p-Xylene	1330-20-7	106	0.585	1.73	1.73	2.80		1	WG1929120
o-Xylene	95-47-6	106	0.359	0.867	0.867	1.13		1	WG1929120
(S) 1,4-Bromofluorobenzene	460-00-4	175				89.9		60.0-140	WG1929120

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	SDL ug/m3	Unadj. MQL ug/m3	MQL ug/m3	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.39	2.97	2.97	14.3		1	WG1929120
Allyl chloride	107-05-1	76.53	0.357	0.626	0.626	U		1	WG1929120
Benzene	71-43-2	78.10	0.228	0.639	0.639	7.79		1	WG1929120
Benzyl Chloride	100-44-7	127	0.311	1.04	1.04	U		1	WG1929120
Bromodichloromethane	75-27-4	164	0.471	1.34	1.34	U		1	WG1929120
Bromoform	75-25-2	253	0.757	6.21	6.21	U		1	WG1929120
Bromomethane	74-83-9	94.90	0.381	0.776	0.776	U		1	WG1929120
1,3-Butadiene	106-99-0	54.10	0.230	4.43	4.43	U		1	WG1929120
Carbon disulfide	75-15-0	76.10	0.317	0.622	0.622	3.11		1	WG1929120
Carbon tetrachloride	56-23-5	154	0.461	1.26	1.26	U		1	WG1929120
Chlorobenzene	108-90-7	113	0.385	0.924	0.924	U		1	WG1929120
Chloroethane	75-00-3	64.50	0.263	0.528	0.528	U	J4	1	WG1929120
Chloroform	67-66-3	119	0.349	0.973	0.973	U		1	WG1929120
Chloromethane	74-87-3	50.50	0.213	0.413	0.413	2.40		1	WG1929120
2-Chlorotoluene	95-49-8	126	0.427	1.03	1.03	U		1	WG1929120
Cyclohexane	110-82-7	84.20	0.259	0.689	0.689	15.6		1	WG1929120
Dibromochloromethane	124-48-1	208	0.618	1.70	1.70	U		1	WG1929120
1,2-Dibromoethane	106-93-4	188	0.554	1.54	1.54	U		1	WG1929120
1,2-Dichlorobenzene	95-50-1	147	0.770	1.20	1.20	U		1	WG1929120
1,3-Dichlorobenzene	541-73-1	147	1.09	1.20	1.20	U		1	WG1929120
1,4-Dichlorobenzene	106-46-7	147	0.335	1.20	1.20	U		1	WG1929120
1,2-Dichloroethane	107-06-2	99	0.283	0.810	0.810	U		1	WG1929120
1,1-Dichloroethane	75-34-3	98	0.290	0.802	0.802	U		1	WG1929120
1,1-Dichloroethene	75-35-4	96.90	0.302	0.793	0.793	U		1	WG1929120
cis-1,2-Dichloroethene	156-59-2	96.90	0.311	0.793	0.793	U		1	WG1929120
trans-1,2-Dichloroethene	156-60-5	96.90	0.267	0.793	0.793	U		1	WG1929120
1,2-Dichloropropane	78-87-5	113	0.351	0.924	0.924	U		1	WG1929120
cis-1,3-Dichloropropene	10061-01-5	111	0.313	0.908	0.908	U		1	WG1929120
trans-1,3-Dichloropropene	10061-02-6	111	0.331	0.908	0.908	U		1	WG1929120
1,4-Dioxane	123-91-1	88.10	0.300	0.721	0.721	U		1	WG1929120
Ethanol	64-17-5	46.10	0.500	2.36	2.36	26.4		1	WG1929120
Ethylbenzene	100-41-4	106	0.362	0.867	0.867	2.87		1	WG1929120
4-Ethyltoluene	622-96-8	120	0.384	0.982	0.982	12.1		1	WG1929120
Trichlorofluoromethane	75-69-4	137.40	0.460	1.12	1.12	U		1	WG1929120
Dichlorodifluoromethane	75-71-8	120.92	0.678	0.989	0.989	U		1	WG1929120
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.608	1.53	1.53	U		1	WG1929120
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.622	1.40	1.40	U		1	WG1929120
Heptane	142-82-5	100	0.425	0.818	0.818	9.16		1	WG1929120
Hexachloro-1,3-butadiene	87-68-3	261	1.12	6.73	6.73	U		1	WG1929120
n-Hexane	110-54-3	86.20	0.726	2.22	2.22	33.7		1	WG1929120
Isopropylbenzene	98-82-8	120.20	0.382	0.983	0.983	U		1	WG1929120
Methylene Chloride	75-09-2	84.90	0.340	0.694	0.694	U		1	WG1929120
Methyl Butyl Ketone	591-78-6	100	0.544	5.11	5.11	U		1	WG1929120
2-Butanone (MEK)	78-93-3	72.10	0.240	3.69	3.69	5.63		1	WG1929120
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	0.313	5.12	5.12	U		1	WG1929120
Methyl methacrylate	80-62-6	100.12	0.359	0.819	0.819	U		1	WG1929120
MTBE	1634-04-4	88.10	0.233	0.721	0.721	U		1	WG1929120
Naphthalene	91-20-3	128	1.83	3.30	3.30	1.89	J	1	WG1929120
2-Propanol	67-63-0	60.10	0.649	3.07	3.07	U		1	WG1929120
Propene	115-07-1	42.10	1.60	2.15	21.5	1170		10	WG1929772
Styrene	100-42-5	104	0.335	0.851	0.851	U		1	WG1929120
1,1,2,2-Tetrachloroethane	79-34-5	168	0.511	1.37	1.37	U		1	WG1929120
Tetrachloroethylene	127-18-4	166	0.553	1.36	1.36	5.02		1	WG1929120
Tetrahydrofuran	109-99-9	72.10	0.216	0.590	0.590	U		1	WG1929120
Toluene	108-88-3	92.10	0.328	1.88	1.88	U		1	WG1929120
1,2,4-Trichlorobenzene	120-82-1	181	1.10	4.66	4.66	U		1	WG1929120

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	SDL ug/m3	Unadj. MQL ug/m3	MQL ug/m3	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	1.09	1.09	U		1	WG1929120
1,1,2-Trichloroethane	79-00-5	133	0.422	1.09	1.09	U		1	WG1929120
Trichloroethylene	79-01-6	131	0.364	1.07	1.07	U		1	WG1929120
1,2,4-Trimethylbenzene	95-63-6	120	0.375	0.982	0.982	12.7		1	WG1929120
1,3,5-Trimethylbenzene	108-67-8	120	0.382	0.982	0.982	5.15		1	WG1929120
2,2,4-Trimethylpentane	540-84-1	114.22	0.621	0.934	0.934	U		1	WG1929120
Vinyl chloride	75-01-4	62.50	0.243	0.511	0.511	U		1	WG1929120
Vinyl Bromide	593-60-2	106.95	0.373	0.875	0.875	U	J4	1	WG1929120
Vinyl acetate	108-05-4	86.10	0.408	0.704	0.704	U		1	WG1929120
m&p-Xylene	1330-20-7	106	0.585	1.73	1.73	31.2		1	WG1929120
o-Xylene	95-47-6	106	0.359	0.867	0.867	7.67		1	WG1929120
^(S) 1,4-Bromofluorobenzene	460-00-4	175				92.6		60.0-140	WG1929120
^(S) 1,4-Bromofluorobenzene	460-00-4	175				92.5		60.0-140	WG1929772

1
Cp2
Tc3
Ss4
Cn5
Tr6
Sr7
Qc8
Gl9
Al10
Sc

Method Blank (MB)

(MB) R3839242-3 09/20/22 10:32

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	0.0784	U	0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Cyclohexane	U		0.0753	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	0.0677	U	0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.200
Ethanol	0.490	U	0.265	1.25
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Heptane	U		0.104	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
n-Hexane	U		0.206	0.630

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Method Blank (MB)

(MB) R3839242-3 09/20/22 10:32

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Isopropylbenzene	U		0.0777	0.200
Methylene Chloride	0.112	U	0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	0.232	U	0.0932	1.25
Styrene	U		0.0788	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
Tetrachloroethylene	U		0.0814	0.200
Tetrahydrofuran	U		0.0734	0.200
Toluene	U		0.0870	0.500
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0736	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
Trichloroethylene	U		0.0680	0.200
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
2,2,4-Trimethylpentane	U		0.133	0.200
Vinyl chloride	U		0.0949	0.200
Vinyl Bromide	U		0.0852	0.200
Vinyl acetate	U		0.116	0.200
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
(S) 1,4-Bromofluorobenzene	88.6			60.0-140

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3839242-1 09/20/22 09:06 • (LCSD) R3839242-2 09/20/22 09:49

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	3.75	4.05	4.18	108	111	70.0-130			3.16	25
Allyl Chloride	3.75	4.01	4.28	107	114	70.0-130			6.51	25
Benzene	3.75	4.30	4.32	115	115	70.0-130			0.464	25
Benzyl Chloride	3.75	3.99	4.14	106	110	70.0-152			3.69	25
Bromodichloromethane	3.75	4.21	4.29	112	114	70.0-130			1.88	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3839242-1 09/20/22 09:06 • (LCSD) R3839242-2 09/20/22 09:49

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Bromoform	3.75	4.20	4.29	112	114	70.0-130			2.12	25
Bromomethane	3.75	4.85	4.80	129	128	70.0-130			1.04	25
1,3-Butadiene	3.75	4.43	4.61	118	123	70.0-130			3.98	25
Carbon disulfide	3.75	3.86	3.90	103	104	70.0-130			1.03	25
Carbon tetrachloride	3.75	4.00	4.07	107	109	70.0-130			1.73	25
Chlorobenzene	3.75	4.19	4.29	112	114	70.0-130			2.36	25
Chloroethane	3.75	4.96	4.93	132	131	70.0-130	J4	J4	0.607	25
Chloroform	3.75	4.12	4.20	110	112	70.0-130			1.92	25
Chloromethane	3.75	4.32	4.50	115	120	70.0-130			4.08	25
2-Chlorotoluene	3.75	4.43	4.46	118	119	70.0-130			0.675	25
Cyclohexane	3.75	4.03	4.10	107	109	70.0-130			1.72	25
Dibromochloromethane	3.75	4.14	4.19	110	112	70.0-130			1.20	25
1,2-Dibromoethane	3.75	4.10	4.14	109	110	70.0-130			0.971	25
1,2-Dichlorobenzene	3.75	4.45	4.50	119	120	70.0-130			1.12	25
1,3-Dichlorobenzene	3.75	4.40	4.52	117	121	70.0-130			2.69	25
1,4-Dichlorobenzene	3.75	4.63	4.74	123	126	70.0-130			2.35	25
1,2-Dichloroethane	3.75	4.04	4.20	108	112	70.0-130			3.88	25
1,1-Dichloroethane	3.75	4.21	4.29	112	114	70.0-130			1.88	25
1,1-Dichloroethene	3.75	4.25	4.33	113	115	70.0-130			1.86	25
cis-1,2-Dichloroethene	3.75	4.19	4.34	112	116	70.0-130			3.52	25
trans-1,2-Dichloroethene	3.75	4.14	4.24	110	113	70.0-130			2.39	25
1,2-Dichloropropane	3.75	4.33	4.48	115	119	70.0-130			3.41	25
cis-1,3-Dichloropropene	3.75	4.13	4.21	110	112	70.0-130			1.92	25
trans-1,3-Dichloropropene	3.75	4.07	4.08	109	109	70.0-130			0.245	25
1,4-Dioxane	3.75	3.91	3.95	104	105	70.0-140			1.02	25
Ethanol	3.75	4.18	4.30	111	115	55.0-148			2.83	25
Ethylbenzene	3.75	4.12	4.26	110	114	70.0-130			3.34	25
4-Ethyltoluene	3.75	4.22	4.38	113	117	70.0-130			3.72	25
Trichlorofluoromethane	3.75	4.76	4.84	127	129	70.0-130			1.67	25
Dichlorodifluoromethane	3.75	4.21	4.30	112	115	64.0-139			2.12	25
1,1,2-Trichlorotrifluoroethane	3.75	4.26	4.38	114	117	70.0-130			2.78	25
1,2-Dichlorotetrafluoroethane	3.75	4.30	4.41	115	118	70.0-130			2.53	25
Heptane	3.75	4.33	4.34	115	116	70.0-130			0.231	25
Hexachloro-1,3-butadiene	3.75	4.51	4.70	120	125	70.0-151			4.13	25
n-Hexane	3.75	4.11	4.13	110	110	70.0-130			0.485	25
Isopropylbenzene	3.75	4.07	4.12	109	110	70.0-130			1.22	25
Methylene Chloride	3.75	4.17	4.31	111	115	70.0-130			3.30	25
Methyl Butyl Ketone	3.75	4.48	4.41	119	118	70.0-149			1.57	25
Methyl Ethyl Ketone	3.75	4.12	4.26	110	114	70.0-130			3.34	25
4-Methyl-2-pentanone (MIBK)	3.75	4.41	4.43	118	118	70.0-139			0.452	25

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3839242-1 09/20/22 09:06 • (LCSD) R3839242-2 09/20/22 09:49

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methyl Methacrylate	3.75	4.12	4.13	110	110	70.0-130			0.242	25
MTBE	3.75	3.99	4.03	106	107	70.0-130			0.998	25
Naphthalene	3.75	3.68	3.81	98.1	102	70.0-159			3.47	25
2-Propanol	3.75	4.21	4.36	112	116	70.0-139			3.50	25
Propene	3.75	4.24	4.36	113	116	64.0-144			2.79	25
Styrene	3.75	4.11	4.33	110	115	70.0-130			5.21	25
1,1,2,2-Tetrachloroethane	3.75	4.32	4.43	115	118	70.0-130			2.51	25
Tetrachloroethylene	3.75	4.17	4.21	111	112	70.0-130			0.955	25
Tetrahydrofuran	3.75	4.18	4.31	111	115	70.0-137			3.06	25
Toluene	3.75	4.12	4.27	110	114	70.0-130			3.58	25
1,2,4-Trichlorobenzene	3.75	3.42	3.39	91.2	90.4	70.0-160			0.881	25
1,1,1-Trichloroethane	3.75	3.99	4.11	106	110	70.0-130			2.96	25
1,1,2-Trichloroethane	3.75	4.23	4.26	113	114	70.0-130			0.707	25
Trichloroethylene	3.75	4.12	4.17	110	111	70.0-130			1.21	25
1,2,4-Trimethylbenzene	3.75	4.21	4.24	112	113	70.0-130			0.710	25
1,3,5-Trimethylbenzene	3.75	4.37	4.33	117	115	70.0-130			0.920	25
2,2,4-Trimethylpentane	3.75	4.16	4.25	111	113	70.0-130			2.14	25
Vinyl chloride	3.75	4.65	4.84	124	129	70.0-130			4.00	25
Vinyl Bromide	3.75	4.99	5.12	133	137	70.0-130	J4	J4	2.57	25
Vinyl acetate	3.75	3.98	4.06	106	108	70.0-130			1.99	25
m&p-Xylene	7.50	8.26	8.54	110	114	70.0-130			3.33	25
o-Xylene	3.75	4.00	4.12	107	110	70.0-130			2.96	25
(S) 1,4-Bromofluorobenzene				95.1	95.8	60.0-140				

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Method Blank (MB)

(MB) R3839814-3 09/21/22 09:20

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Propene	0.163	⬇	0.0932	1.25
(S) 1,4-Bromofluorobenzene	94.1			60.0-140

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3839814-1 09/21/22 08:21 • (LCSD) R3839814-2 09/21/22 08:52

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Propene	ppbv	ppbv	ppbv	%	%	%			%	%
	3.75	4.85	4.87	129	130	64.0-144			0.412	25
(S) 1,4-Bromofluorobenzene				101	100	60.0-140				

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J4	The associated batch QC was outside the established quality control range for accuracy.



ACCREDITATIONS & LOCATIONS

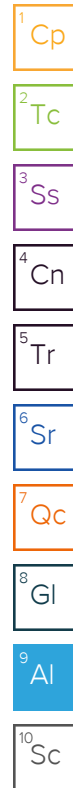
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey--NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio--VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA -- ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA -- ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA--Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.



Company Name/Address: TGE Resources, Inc. 8048 Northcourt Rpad Houston, TX 77040			Billing Information: Kim Pham 8048 Northcourt Road Houston, TX 77040			Analysis			Chain of Custody Page <u> </u> of <u> </u>				
Report To: Kristi Barnette			Email To: krbarnette@tgeresources.com			To-15 Summas			PEOPLE ADVANCING SCIENCE 12005 Lakewood Road NW, Duluth, GA 30092 Phone: 613-754-5818 (AZ) 800-767-5818 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/submit/pace-standard-terms.pdf				
Project Description: Federal Way OCED		City/State Collected: Federal Way, WA		Please Circle: ☐ PT ☐ MT ☐ CT ☐ ET									
Phone: 713-744-5815		Client Project # R13411.13		Lab Project # TGERESHTX-R1341113									
Collected by (print): K. Barnette		Site/Facility ID #		P.O. # 10002									
Collected by (signature): 		Rush? (Lab MUST Be Notified) Same Day ☐ Three Day ☐ Next Day ☒ Five Day ☐ Two Day ☐		Date Results Needed									
Collection			Canister Pressure/Vacuum										
Sample ID	Can #	Flow Cont. #	Date	Time	Initial	Final							
TVMP-3	21980	20946	9/14/22	1439	28.5	3	X						
TVMP-4	21873	21625	9/14/22	1429	29	3	X						
TVMP-5	21508	21834	9/14/22	1418	28	5	X						
TVMP-6	8949	21846	9/14/22	1415	26	3	X						
TVMP-7	22034	21825	9/14/22	1351	28	3	X						
TVMP-8	11866	21821	9/14/22	1343	28	3	X						
TVMP-9	11903	20845	9/14/22	1335	27.5	3	X						
TVMP-10	21613	20810	9/14/22	1328	28	3	X						
TVMP-11	10676	20751	9/14/22	1320	25	3	X						
TVMP-12	12545	20784	9/14/22	1312	28	3	X						
Remarks:													
Relinquished by: (Signature) 			Date: 9/14/22		Time: 1700		Samples returned via: UPS ☐ FedEx ☐ Courier ☐		Tracking #				
Relinquished by: (Signature) 			Date: 9/14/22		Time: 1700		Received by: (Signature) 		Date: Time:				
Relinquished by: (Signature) 			Date: 9/14/22		Time: 1700		Received by: (Signature) 		Date: Time:				
Relinquished by: (Signature) 			Date: 9/14/22		Time: 1700		Received for lab by: (Signature) 		Date: Time: 9/16/22 0900				
Sample Receipt Checklist CDC Seal Present/Intact: ☒ Y ☐ N If Applicable CDC Signed/Accurate: ☒ Y ☐ N VOA Zero Headspace: ☒ Y ☐ N Bottles arrive intact: ☒ Y ☐ N Pres. Correct/Check: ☒ Y ☐ N Correct bottles used: ☒ Y ☐ N Sufficient volume sent: ☒ Y ☐ N RAD Screen <0.5 mR/hr: ☒ Y ☐ N										Condition: (lab use only) 		CDC Seal Intact: ☒ Y ☐ N ☒ NA	
7-EMPTY										NCF:			

U536552

<u>Tracking Numbers</u>	<u>Temperature</u>
5349 7834 6276	Amb
5349 7834 6287	I
5349 7834 5203	
5349 7834 5412	
5349 7834 6287	



ANALYTICAL REPORT

September 26, 2022



TGE Resources

Sample Delivery Group: L1537776
Samples Received: 09/19/2022
Project Number: R13411.13
Description: Off-Campus Emergency Department - Federal Way

Report To: Kristi Barnette
8048 Northcourt Road
Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

TABLE OF CONTENTS

Cp: Cover Page	1	¹ Cp
Tc: Table of Contents	2	
Ss: Sample Summary	3	² Tc
Cn: Case Narrative	4	
Tr: TRRP Summary	5	³ Ss
TRRP form R	6	
TRRP form S	7	⁴ Cn
TRRP Exception Reports	8	⁵ Tr
Sr: Sample Results	9	
INTERIOR-STAFF HALLWAY L1537776-01	9	⁶ Sr
EXTERIOR-UPWIND L1537776-02	11	
EXTERIOR-DOWNWIND L1537776-03	13	⁷ Qc
Qc: Quality Control Summary	15	⁸ Gl
Volatile Organic Compounds (MS) by Method TO-15	15	
Gl: Glossary of Terms	24	⁹ Al
Al: Accreditations & Locations	25	
Sc: Sample Chain of Custody	26	¹⁰ Sc

SAMPLE SUMMARY

INTERIOR-STAFF HALLWAY L1537776-01 Air

Collected by
K. Barnette

Collected date/time
09/15/22 16:11

Received date/time
09/19/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1930540	1	09/23/22 00:05	09/23/22 00:05	DAH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1931806	1	09/24/22 13:50	09/24/22 13:50	FKG	Mt. Juliet, TN

EXTERIOR-UPWIND L1537776-02 Air

Collected by
K. Barnette

Collected date/time
09/15/22 16:00

Received date/time
09/19/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1931283	1	09/24/22 01:13	09/24/22 01:13	DAH	Mt. Juliet, TN

EXTERIOR-DOWNWIND L1537776-03 Air

Collected by
K. Barnette

Collected date/time
09/15/22 16:00

Received date/time
09/19/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1930540	1	09/23/22 01:32	09/23/22 01:32	DAH	Mt. Juliet, TN



CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Mark W. Beasley
Project Manager

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Tr

⁶ Sr

⁷ Qc

⁸ Gl

⁹ Al

¹⁰ Sc

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

- R1 - Field chain-of-custody documentation;
- R2 - Sample identification cross-reference;
- R3 - Test reports (analytical data sheets) for each environmental sample that includes:
 - a. Items consistent with NELAC Chapter 5,
 - b. dilution factors,
 - c. preparation methods,
 - d. cleanup methods, and
 - e. if required for the project, tentatively identified compounds (TICs).
- R4 - Surrogate recovery data including:
 - a. Calculated recovery (%R), and
 - b. The laboratory's surrogate QC limits.
- R5 - Test reports/summary forms for blank samples;
- R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
 - a. LCS spiking amounts,
 - b. Calculated %R for each analyte, and
 - c. The laboratory's LCS QC limits.
- R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
 - a. Samples associated with the MS/MSD clearly identified,
 - b. MS/MSD spiking amounts,
 - c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
 - d. Calculated %Rs and relative percent differences (RPDs), and
 - e. The laboratory's MS/MSD QC limits
- R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
 - a. The amount of analyte measured in the duplicate,
 - b. The calculated RPD, and
 - c. The laboratory's QC limits for analytical duplicates.
- R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.



Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National			LRC Date: 09/26/2022 14:55				
Project Name: Off-Campus Emergency Department - Federal Way			Laboratory Job Number: L1537776-01, 02 and 03				
Reviewer Name: Mark W. Beasley			Prep Batch Number(s): WG1930540, WG1931283 and WG1931806				
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?		X			1
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?		X			2
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?			X		
		Were MS/MSD analyzed at the appropriate frequency?			X		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			X		
		Were MS/MSD RPDs within laboratory QC limits?			X		
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National		LRC Date: 09/26/2022 14:55					
Project Name: Off-Campus Emergency Department - Federal Way		Laboratory Job Number: L1537776-01, 02 and 03					
Reviewer Name: Mark W. Beasley		Prep Batch Number(s): WG1930540, WG1931283 and WG1931806					
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X		
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?			X		
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				
1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period. 2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable); 3. NA = Not applicable; 4. NR = Not reviewed; 5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).							

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National		LRC Date: 09/26/2022 14:55	
Project Name: Off-Campus Emergency Department - Federal Way		Laboratory Job Number: L1537776-01, 02 and 03	
Reviewer Name: Mark W. Beasley		Prep Batch Number(s): WG1930540, WG1931283 and WG1931806	
ER #¹	Description		
1	TO-15 WG1930540 L1537776-03 and 01: The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).		
2	TO-15 WG1931283 Naphthalene: Percent Recovery is outside of established control limits.		
1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period. 2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable); 3. NA = Not applicable; 4. NR = Not reviewed; 5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).			

INTERIOR-STAFF HALLWAY

SAMPLE RESULTS - 01

Collected date/time: 09/15/22 16:11

L1537776

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	SDL ug/m3	Unadj. MQL ug/m3	MQL ug/m3	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.39	2.97	2.97	45.6		1	WG1930540
Allyl chloride	107-05-1	76.53	0.357	0.626	0.626	U		1	WG1930540
Benzene	71-43-2	78.10	0.228	0.639	0.639	0.524	J	1	WG1930540
Benzyl Chloride	100-44-7	127	0.311	1.04	1.04	U		1	WG1930540
Bromodichloromethane	75-27-4	164	0.471	1.34	1.34	U		1	WG1930540
Bromoform	75-25-2	253	0.757	6.21	6.21	U		1	WG1930540
Bromomethane	74-83-9	94.90	0.381	0.776	0.776	U		1	WG1930540
1,3-Butadiene	106-99-0	54.10	0.230	4.43	4.43	U		1	WG1930540
Carbon disulfide	75-15-0	76.10	0.317	0.622	0.622	U		1	WG1930540
Carbon tetrachloride	56-23-5	154	0.461	1.26	1.26	2.18		1	WG1930540
Chlorobenzene	108-90-7	113	0.385	0.924	0.924	U		1	WG1930540
Chloroethane	75-00-3	64.50	0.263	0.528	0.528	U		1	WG1930540
Chloroform	67-66-3	119	0.349	0.973	0.973	U		1	WG1930540
Chloromethane	74-87-3	50.50	0.213	0.413	0.413	1.07		1	WG1930540
2-Chlorotoluene	95-49-8	126	0.427	1.03	1.03	U		1	WG1930540
Cyclohexane	110-82-7	84.20	0.259	0.689	0.689	U		1	WG1930540
Dibromochloromethane	124-48-1	208	0.618	1.70	1.70	U		1	WG1930540
1,2-Dibromoethane	106-93-4	188	0.554	1.54	1.54	U		1	WG1930540
1,2-Dichlorobenzene	95-50-1	147	0.770	1.20	1.20	U		1	WG1930540
1,3-Dichlorobenzene	541-73-1	147	1.09	1.20	1.20	U		1	WG1930540
1,4-Dichlorobenzene	106-46-7	147	0.335	1.20	1.20	U		1	WG1930540
1,2-Dichloroethane	107-06-2	99	0.283	0.810	0.810	U		1	WG1930540
1,1-Dichloroethane	75-34-3	98	0.290	0.802	0.802	U		1	WG1930540
1,1-Dichloroethene	75-35-4	96.90	0.302	0.793	0.793	U		1	WG1930540
cis-1,2-Dichloroethene	156-59-2	96.90	0.311	0.793	0.793	U		1	WG1930540
trans-1,2-Dichloroethene	156-60-5	96.90	0.267	0.793	0.793	U		1	WG1930540
1,2-Dichloropropane	78-87-5	113	0.351	0.924	0.924	U		1	WG1930540
cis-1,3-Dichloropropene	10061-01-5	111	0.313	0.908	0.908	U		1	WG1930540
trans-1,3-Dichloropropene	10061-02-6	111	0.331	0.908	0.908	U		1	WG1930540
1,4-Dioxane	123-91-1	88.10	0.300	0.721	0.721	U		1	WG1930540
Ethanol	64-17-5	46.10	0.500	2.36	2.36	1870	E	1	WG1930540
Ethylbenzene	100-41-4	106	0.362	0.867	0.867	0.819	J	1	WG1930540
4-Ethyltoluene	622-96-8	120	0.384	0.982	0.982	U		1	WG1931806
Trichlorofluoromethane	75-69-4	137.40	0.460	1.12	1.12	1.25		1	WG1930540
Dichlorodifluoromethane	75-71-8	120.92	0.678	0.989	0.989	1.81		1	WG1930540
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.608	1.53	1.53	U		1	WG1930540
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.622	1.40	1.40	U		1	WG1930540
Heptane	142-82-5	100	0.425	0.818	0.818	U		1	WG1930540
Hexachloro-1,3-butadiene	87-68-3	261	1.12	6.73	6.73	U		1	WG1930540
n-Hexane	110-54-3	86.20	0.726	2.22	2.22	U		1	WG1930540
Isopropylbenzene	98-82-8	120.20	0.382	0.983	0.983	U		1	WG1930540
Methylene Chloride	75-09-2	84.90	0.340	0.694	0.694	0.510	J	1	WG1930540
Methyl Butyl Ketone	591-78-6	100	0.544	5.11	5.11	U		1	WG1930540
2-Butanone (MEK)	78-93-3	72.10	0.240	3.69	3.69	1.19	J	1	WG1930540
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	0.313	5.12	5.12	U		1	WG1930540
Methyl methacrylate	80-62-6	100.12	0.359	0.819	0.819	U		1	WG1930540
MTBE	1634-04-4	88.10	0.233	0.721	0.721	U		1	WG1930540
Naphthalene	91-20-3	128	1.83	3.30	3.30	U		1	WG1930540
2-Propanol	67-63-0	60.10	0.649	3.07	3.07	4520	E	1	WG1930540
Propene	115-07-1	42.10	0.160	2.15	2.15	U		1	WG1930540
Styrene	100-42-5	104	0.335	0.851	0.851	U		1	WG1930540
1,1,2,2-Tetrachloroethane	79-34-5	168	0.511	1.37	1.37	U		1	WG1930540
Tetrachloroethylene	127-18-4	166	0.553	1.36	1.36	0.937	J	1	WG1930540
Tetrahydrofuran	109-99-9	72.10	0.216	0.590	0.590	U		1	WG1930540
Toluene	108-88-3	92.10	0.328	1.88	1.88	3.10		1	WG1930540
1,2,4-Trichlorobenzene	120-82-1	181	1.10	4.66	4.66	U		1	WG1930540



INTERIOR-STAFF HALLWAY

SAMPLE RESULTS - 01

Collected date/time: 09/15/22 16:11

L1537776

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	SDL ug/m3	Unadj. MQL ug/m3	MQL ug/m3	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	1.09	1.09	U		1	WG1930540
1,1,2-Trichloroethane	79-00-5	133	0.422	1.09	1.09	U		1	WG1930540
Trichloroethylene	79-01-6	131	0.364	1.07	1.07	0.927	J	1	WG1930540
1,2,4-Trimethylbenzene	95-63-6	120	0.375	0.982	0.982	U		1	WG1931806
1,3,5-Trimethylbenzene	108-67-8	120	0.382	0.982	0.982	U		1	WG1931806
2,2,4-Trimethylpentane	540-84-1	114.22	0.621	0.934	0.934	U		1	WG1930540
Vinyl chloride	75-01-4	62.50	0.243	0.511	0.511	U		1	WG1930540
Vinyl Bromide	593-60-2	106.95	0.373	0.875	0.875	U		1	WG1930540
Vinyl acetate	108-05-4	86.10	0.408	0.704	0.704	U		1	WG1930540
m&p-Xylene	1330-20-7	106	0.585	1.73	1.73	0.698	J	1	WG1931806
o-Xylene	95-47-6	106	0.359	0.867	0.867	U		1	WG1931806
(S) 1,4-Bromofluorobenzene	460-00-4	175				93.7		60.0-140	WG1930540
(S) 1,4-Bromofluorobenzene	460-00-4	175				84.1		60.0-140	WG1931806

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

EXTERIOR-UPWIND

Collected date/time: 09/15/22 16:00

SAMPLE RESULTS - 02

L1537776

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	SDL ug/m3	Unadj. MQL ug/m3	MQL ug/m3	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.39	2.97	2.97	6.44		1	WG1931283
Allyl chloride	107-05-1	76.53	0.357	0.626	0.626	U		1	WG1931283
Benzene	71-43-2	78.10	0.228	0.639	0.639	0.460	J	1	WG1931283
Benzyl Chloride	100-44-7	127	0.311	1.04	1.04	U		1	WG1931283
Bromodichloromethane	75-27-4	164	0.471	1.34	1.34	U		1	WG1931283
Bromoform	75-25-2	253	0.757	6.21	6.21	U		1	WG1931283
Bromomethane	74-83-9	94.90	0.381	0.776	0.776	U		1	WG1931283
1,3-Butadiene	106-99-0	54.10	0.230	4.43	4.43	U		1	WG1931283
Carbon disulfide	75-15-0	76.10	0.317	0.622	0.622	U		1	WG1931283
Carbon tetrachloride	56-23-5	154	0.461	1.26	1.26	2.48		1	WG1931283
Chlorobenzene	108-90-7	113	0.385	0.924	0.924	U		1	WG1931283
Chloroethane	75-00-3	64.50	0.263	0.528	0.528	U		1	WG1931283
Chloroform	67-66-3	119	0.349	0.973	0.973	U		1	WG1931283
Chloromethane	74-87-3	50.50	0.213	0.413	0.413	1.18		1	WG1931283
2-Chlorotoluene	95-49-8	126	0.427	1.03	1.03	U		1	WG1931283
Cyclohexane	110-82-7	84.20	0.259	0.689	0.689	U		1	WG1931283
Dibromochloromethane	124-48-1	208	0.618	1.70	1.70	U		1	WG1931283
1,2-Dibromoethane	106-93-4	188	0.554	1.54	1.54	U		1	WG1931283
1,2-Dichlorobenzene	95-50-1	147	0.770	1.20	1.20	U		1	WG1931283
1,3-Dichlorobenzene	541-73-1	147	1.09	1.20	1.20	U		1	WG1931283
1,4-Dichlorobenzene	106-46-7	147	0.335	1.20	1.20	U		1	WG1931283
1,2-Dichloroethane	107-06-2	99	0.283	0.810	0.810	U		1	WG1931283
1,1-Dichloroethane	75-34-3	98	0.290	0.802	0.802	U		1	WG1931283
1,1-Dichloroethene	75-35-4	96.90	0.302	0.793	0.793	U		1	WG1931283
cis-1,2-Dichloroethene	156-59-2	96.90	0.311	0.793	0.793	U		1	WG1931283
trans-1,2-Dichloroethene	156-60-5	96.90	0.267	0.793	0.793	U		1	WG1931283
1,2-Dichloropropane	78-87-5	113	0.351	0.924	0.924	U		1	WG1931283
cis-1,3-Dichloropropene	10061-01-5	111	0.313	0.908	0.908	U		1	WG1931283
trans-1,3-Dichloropropene	10061-02-6	111	0.331	0.908	0.908	U		1	WG1931283
1,4-Dioxane	123-91-1	88.10	0.300	0.721	0.721	U		1	WG1931283
Ethanol	64-17-5	46.10	0.500	2.36	2.36	14.7		1	WG1931283
Ethylbenzene	100-41-4	106	0.362	0.867	0.867	U		1	WG1931283
4-Ethyltoluene	622-96-8	120	0.384	0.982	0.982	U		1	WG1931283
Trichlorofluoromethane	75-69-4	137.40	0.460	1.12	1.12	1.37		1	WG1931283
Dichlorodifluoromethane	75-71-8	120.92	0.678	0.989	0.989	2.61		1	WG1931283
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.608	1.53	1.53	U		1	WG1931283
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.622	1.40	1.40	U		1	WG1931283
Heptane	142-82-5	100	0.425	0.818	0.818	U		1	WG1931283
Hexachloro-1,3-butadiene	87-68-3	261	1.12	6.73	6.73	U		1	WG1931283
n-Hexane	110-54-3	86.20	0.726	2.22	2.22	U		1	WG1931283
Isopropylbenzene	98-82-8	120.20	0.382	0.983	0.983	U		1	WG1931283
Methylene Chloride	75-09-2	84.90	0.340	0.694	0.694	0.688	J	1	WG1931283
Methyl Butyl Ketone	591-78-6	100	0.544	5.11	5.11	U		1	WG1931283
2-Butanone (MEK)	78-93-3	72.10	0.240	3.69	3.69	1.21	J	1	WG1931283
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	0.313	5.12	5.12	U		1	WG1931283
Methyl methacrylate	80-62-6	100.12	0.359	0.819	0.819	U		1	WG1931283
MTBE	1634-04-4	88.10	0.233	0.721	0.721	U		1	WG1931283
Naphthalene	91-20-3	128	1.83	3.30	3.30	U	J4	1	WG1931283
2-Propanol	67-63-0	60.10	0.649	3.07	3.07	4.35		1	WG1931283
Propene	115-07-1	42.10	0.160	2.15	2.15	U		1	WG1931283
Styrene	100-42-5	104	0.335	0.851	0.851	U		1	WG1931283
1,1,2,2-Tetrachloroethane	79-34-5	168	0.511	1.37	1.37	U		1	WG1931283
Tetrachloroethylene	127-18-4	166	0.553	1.36	1.36	2.07		1	WG1931283
Tetrahydrofuran	109-99-9	72.10	0.216	0.590	0.590	U		1	WG1931283
Toluene	108-88-3	92.10	0.328	1.88	1.88	1.83	J	1	WG1931283
1,2,4-Trichlorobenzene	120-82-1	181	1.10	4.66	4.66	U		1	WG1931283



EXTERIOR-UPWIND

Collected date/time: 09/15/22 16:00

SAMPLE RESULTS - 02

L1537776

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	SDL ug/m3	Unadj. MQL ug/m3	MQL ug/m3	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	1.09	1.09	U		1	WG1931283
1,1,2-Trichloroethane	79-00-5	133	0.422	1.09	1.09	U		1	WG1931283
Trichloroethylene	79-01-6	131	0.364	1.07	1.07	U		1	WG1931283
1,2,4-Trimethylbenzene	95-63-6	120	0.375	0.982	0.982	U		1	WG1931283
1,3,5-Trimethylbenzene	108-67-8	120	0.382	0.982	0.982	U		1	WG1931283
2,2,4-Trimethylpentane	540-84-1	114.22	0.621	0.934	0.934	U		1	WG1931283
Vinyl chloride	75-01-4	62.50	0.243	0.511	0.511	U		1	WG1931283
Vinyl Bromide	593-60-2	106.95	0.373	0.875	0.875	U		1	WG1931283
Vinyl acetate	108-05-4	86.10	0.408	0.704	0.704	U		1	WG1931283
m&p-Xylene	1330-20-7	106	0.585	1.73	1.73	0.724	J	1	WG1931283
o-Xylene	95-47-6	106	0.359	0.867	0.867	U		1	WG1931283
(S) 1,4-Bromofluorobenzene	460-00-4	175				96.0		60.0-140	WG1931283

¹ Cp² Tc³ Ss⁴ Cn⁵ Tr⁶ Sr⁷ Qc⁸ Gl⁹ Al¹⁰ Sc

EXTERIOR-DOWNWIND

Collected date/time: 09/15/22 16:00

SAMPLE RESULTS - 03

L1537776

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	SDL ug/m3	Unadj. MQL ug/m3	MQL ug/m3	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.39	2.97	2.97	14.8		1	WG1930540
Allyl chloride	107-05-1	76.53	0.357	0.626	0.626	U		1	WG1930540
Benzene	71-43-2	78.10	0.228	0.639	0.639	1.34		1	WG1930540
Benzyl Chloride	100-44-7	127	0.311	1.04	1.04	U		1	WG1930540
Bromodichloromethane	75-27-4	164	0.471	1.34	1.34	U		1	WG1930540
Bromoform	75-25-2	253	0.757	6.21	6.21	U		1	WG1930540
Bromomethane	74-83-9	94.90	0.381	0.776	0.776	U		1	WG1930540
1,3-Butadiene	106-99-0	54.10	0.230	4.43	4.43	U		1	WG1930540
Carbon disulfide	75-15-0	76.10	0.317	0.622	0.622	U		1	WG1930540
Carbon tetrachloride	56-23-5	154	0.461	1.26	1.26	U		1	WG1930540
Chlorobenzene	108-90-7	113	0.385	0.924	0.924	U		1	WG1930540
Chloroethane	75-00-3	64.50	0.263	0.528	0.528	U		1	WG1930540
Chloroform	67-66-3	119	0.349	0.973	0.973	U		1	WG1930540
Chloromethane	74-87-3	50.50	0.213	0.413	0.413	1.17		1	WG1930540
2-Chlorotoluene	95-49-8	126	0.427	1.03	1.03	U		1	WG1930540
Cyclohexane	110-82-7	84.20	0.259	0.689	0.689	21.5		1	WG1930540
Dibromochloromethane	124-48-1	208	0.618	1.70	1.70	U		1	WG1930540
1,2-Dibromoethane	106-93-4	188	0.554	1.54	1.54	U		1	WG1930540
1,2-Dichlorobenzene	95-50-1	147	0.770	1.20	1.20	U		1	WG1930540
1,3-Dichlorobenzene	541-73-1	147	1.09	1.20	1.20	U		1	WG1930540
1,4-Dichlorobenzene	106-46-7	147	0.335	1.20	1.20	U		1	WG1930540
1,2-Dichloroethane	107-06-2	99	0.283	0.810	0.810	U		1	WG1930540
1,1-Dichloroethane	75-34-3	98	0.290	0.802	0.802	U		1	WG1930540
1,1-Dichloroethene	75-35-4	96.90	0.302	0.793	0.793	U		1	WG1930540
cis-1,2-Dichloroethene	156-59-2	96.90	0.311	0.793	0.793	U		1	WG1930540
trans-1,2-Dichloroethene	156-60-5	96.90	0.267	0.793	0.793	U		1	WG1930540
1,2-Dichloropropane	78-87-5	113	0.351	0.924	0.924	U		1	WG1930540
cis-1,3-Dichloropropene	10061-01-5	111	0.313	0.908	0.908	U		1	WG1930540
trans-1,3-Dichloropropene	10061-02-6	111	0.331	0.908	0.908	U		1	WG1930540
1,4-Dioxane	123-91-1	88.10	0.300	0.721	0.721	U		1	WG1930540
Ethanol	64-17-5	46.10	0.500	2.36	2.36	339	E	1	WG1930540
Ethylbenzene	100-41-4	106	0.362	0.867	0.867	1.79		1	WG1930540
4-Ethyltoluene	622-96-8	120	0.384	0.982	0.982	1.58		1	WG1930540
Trichlorofluoromethane	75-69-4	137.40	0.460	1.12	1.12	1.18		1	WG1930540
Dichlorodifluoromethane	75-71-8	120.92	0.678	0.989	0.989	1.76		1	WG1930540
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.608	1.53	1.53	U		1	WG1930540
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.622	1.40	1.40	U		1	WG1930540
Heptane	142-82-5	100	0.425	0.818	0.818	8.92		1	WG1930540
Hexachloro-1,3-butadiene	87-68-3	261	1.12	6.73	6.73	U		1	WG1930540
n-Hexane	110-54-3	86.20	0.726	2.22	2.22	5.99		1	WG1930540
Isopropylbenzene	98-82-8	120.20	0.382	0.983	0.983	U		1	WG1930540
Methylene Chloride	75-09-2	84.90	0.340	0.694	0.694	4.83		1	WG1930540
Methyl Butyl Ketone	591-78-6	100	0.544	5.11	5.11	U		1	WG1930540
2-Butanone (MEK)	78-93-3	72.10	0.240	3.69	3.69	70.8		1	WG1930540
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	0.313	5.12	5.12	U		1	WG1930540
Methyl methacrylate	80-62-6	100.12	0.359	0.819	0.819	4.91		1	WG1930540
MTBE	1634-04-4	88.10	0.233	0.721	0.721	U		1	WG1930540
Naphthalene	91-20-3	128	1.83	3.30	3.30	U		1	WG1930540
2-Propanol	67-63-0	60.10	0.649	3.07	3.07	179		1	WG1930540
Propene	115-07-1	42.10	0.160	2.15	2.15	U		1	WG1930540
Styrene	100-42-5	104	0.335	0.851	0.851	2.00		1	WG1930540
1,1,2,2-Tetrachloroethane	79-34-5	168	0.511	1.37	1.37	U		1	WG1930540
Tetrachloroethylene	127-18-4	166	0.553	1.36	1.36	0.634	J	1	WG1930540
Tetrahydrofuran	109-99-9	72.10	0.216	0.590	0.590	U		1	WG1930540
Toluene	108-88-3	92.10	0.328	1.88	1.88	116		1	WG1930540
1,2,4-Trichlorobenzene	120-82-1	181	1.10	4.66	4.66	U		1	WG1930540

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

ACCOUNT:

TGE Resources

PROJECT:

R13411.13

SDG:

L1537776

DATE/TIME:

09/26/22 14:55

PAGE:

13 of 26

EXTERIOR-DOWNWIND

Collected date/time: 09/15/22 16:00

SAMPLE RESULTS - 03

L1537776

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	SDL ug/m3	Unadj. MQL ug/m3	MQL ug/m3	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	1.09	1.09	U		1	WG1930540
1,1,2-Trichloroethane	79-00-5	133	0.422	1.09	1.09	U		1	WG1930540
Trichloroethylene	79-01-6	131	0.364	1.07	1.07	U		1	WG1930540
1,2,4-Trimethylbenzene	95-63-6	120	0.375	0.982	0.982	1.60		1	WG1930540
1,3,5-Trimethylbenzene	108-67-8	120	0.382	0.982	0.982	0.653	J	1	WG1930540
2,2,4-Trimethylpentane	540-84-1	114.22	0.621	0.934	0.934	U		1	WG1930540
Vinyl chloride	75-01-4	62.50	0.243	0.511	0.511	U		1	WG1930540
Vinyl Bromide	593-60-2	106.95	0.373	0.875	0.875	U		1	WG1930540
Vinyl acetate	108-05-4	86.10	0.408	0.704	0.704	1.98		1	WG1930540
m&p-Xylene	1330-20-7	106	0.585	1.73	1.73	6.59		1	WG1930540
o-Xylene	95-47-6	106	0.359	0.867	0.867	2.64		1	WG1930540
(S) 1,4-Bromofluorobenzene	460-00-4	175				95.5		60.0-140	WG1930540

¹ Cp² Tc³ Ss⁴ Cn⁵ Tr⁶ Sr⁷ Qc⁸ Gl⁹ Al¹⁰ Sc

Method Blank (MB)

(MB) R3840284-3 09/22/22 11:41

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Cyclohexane	U		0.0753	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.200
Ethanol	U		0.265	1.25
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Heptane	U		0.104	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
n-Hexane	U		0.206	0.630

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Method Blank (MB)

(MB) R3840284-3 09/22/22 11:41

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Isopropylbenzene	U		0.0777	0.200
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	0.234	U	0.0932	1.25
Styrene	U		0.0788	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
Tetrachloroethylene	U		0.0814	0.200
Tetrahydrofuran	U		0.0734	0.200
Toluene	U		0.0870	0.500
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0736	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
Trichloroethylene	U		0.0680	0.200
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
2,2,4-Trimethylpentane	U		0.133	0.200
Vinyl chloride	U		0.0949	0.200
Vinyl Bromide	U		0.0852	0.200
Vinyl acetate	U		0.116	0.200
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
(S) 1,4-Bromofluorobenzene	98.5			60.0-140

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3840284-1 09/22/22 08:42 • (LCSD) R3840284-2 09/22/22 09:26

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	3.75	4.08	4.01	109	107	70.0-130			1.73	25
Allyl Chloride	3.75	4.16	3.93	111	105	70.0-130			5.69	25
Benzene	3.75	3.92	3.88	105	103	70.0-130			1.03	25
Benzyl Chloride	3.75	4.07	4.05	109	108	70.0-152			0.493	25
Bromodichloromethane	3.75	4.02	4.00	107	107	70.0-130			0.499	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3840284-1 09/22/22 08:42 • (LCSD) R3840284-2 09/22/22 09:26

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromoform	3.75	4.06	3.94	108	105	70.0-130			3.00	25
Bromomethane	3.75	3.94	3.88	105	103	70.0-130			1.53	25
1,3-Butadiene	3.75	4.06	3.98	108	106	70.0-130			1.99	25
Carbon disulfide	3.75	3.99	3.93	106	105	70.0-130			1.52	25
Carbon tetrachloride	3.75	4.01	3.94	107	105	70.0-130			1.76	25
Chlorobenzene	3.75	3.91	3.96	104	106	70.0-130			1.27	25
Chloroethane	3.75	4.02	3.90	107	104	70.0-130			3.03	25
Chloroform	3.75	4.01	4.03	107	107	70.0-130			0.498	25
Chloromethane	3.75	3.96	3.95	106	105	70.0-130			0.253	25
2-Chlorotoluene	3.75	3.92	3.81	105	102	70.0-130			2.85	25
Cyclohexane	3.75	3.98	3.93	106	105	70.0-130			1.26	25
Dibromochloromethane	3.75	4.06	4.01	108	107	70.0-130			1.24	25
1,2-Dibromoethane	3.75	4.05	4.04	108	108	70.0-130			0.247	25
1,2-Dichlorobenzene	3.75	3.90	3.85	104	103	70.0-130			1.29	25
1,3-Dichlorobenzene	3.75	3.92	3.89	105	104	70.0-130			0.768	25
1,4-Dichlorobenzene	3.75	3.87	3.82	103	102	70.0-130			1.30	25
1,2-Dichloroethane	3.75	4.00	3.94	107	105	70.0-130			1.51	25
1,1-Dichloroethane	3.75	4.03	4.00	107	107	70.0-130			0.747	25
1,1-Dichloroethene	3.75	4.08	4.04	109	108	70.0-130			0.985	25
cis-1,2-Dichloroethene	3.75	4.02	3.95	107	105	70.0-130			1.76	25
trans-1,2-Dichloroethene	3.75	4.07	3.98	109	106	70.0-130			2.24	25
1,2-Dichloropropane	3.75	4.01	3.96	107	106	70.0-130			1.25	25
cis-1,3-Dichloropropene	3.75	4.01	4.00	107	107	70.0-130			0.250	25
trans-1,3-Dichloropropene	3.75	4.01	4.02	107	107	70.0-130			0.249	25
1,4-Dioxane	3.75	3.94	4.01	105	107	70.0-140			1.76	25
Ethanol	3.75	4.09	3.96	109	106	55.0-148			3.23	25
Ethylbenzene	3.75	3.97	3.91	106	104	70.0-130			1.52	25
4-Ethyltoluene	3.75	3.96	3.93	106	105	70.0-130			0.760	25
Trichlorofluoromethane	3.75	4.06	3.96	108	106	70.0-130			2.49	25
Dichlorodifluoromethane	3.75	3.25	3.25	86.7	86.7	64.0-139			0.000	25
1,1,2-Trichlorotrifluoroethane	3.75	3.97	3.91	106	104	70.0-130			1.52	25
1,2-Dichlorotetrafluoroethane	3.75	4.03	4.09	107	109	70.0-130			1.48	25
Heptane	3.75	3.70	3.69	98.7	98.4	70.0-130			0.271	25
Hexachloro-1,3-butadiene	3.75	3.97	3.95	106	105	70.0-151			0.505	25
n-Hexane	3.75	3.99	3.97	106	106	70.0-130			0.503	25
Isopropylbenzene	3.75	3.92	3.85	105	103	70.0-130			1.80	25
Methylene Chloride	3.75	3.94	3.91	105	104	70.0-130			0.764	25
Methyl Butyl Ketone	3.75	3.92	3.89	105	104	70.0-149			0.768	25
Methyl Ethyl Ketone	3.75	4.01	4.03	107	107	70.0-130			0.498	25
4-Methyl-2-pentanone (MIBK)	3.75	4.14	4.16	110	111	70.0-139			0.482	25

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3840284-1 09/22/22 08:42 • (LCSD) R3840284-2 09/22/22 09:26

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Methyl Methacrylate	3.75	4.02	4.09	107	109	70.0-130			1.73	25
MTBE	3.75	4.07	4.07	109	109	70.0-130			0.000	25
Naphthalene	3.75	4.03	3.87	107	103	70.0-159			4.05	25
2-Propanol	3.75	4.17	4.09	111	109	70.0-139			1.94	25
Propene	3.75	4.03	4.04	107	108	64.0-144			0.248	25
Styrene	3.75	3.97	3.90	106	104	70.0-130			1.78	25
1,1,2,2-Tetrachloroethane	3.75	3.97	3.95	106	105	70.0-130			0.505	25
Tetrachloroethylene	3.75	3.98	3.95	106	105	70.0-130			0.757	25
Tetrahydrofuran	3.75	4.10	4.15	109	111	70.0-137			1.21	25
Toluene	3.75	4.00	3.96	107	106	70.0-130			1.01	25
1,2,4-Trichlorobenzene	3.75	4.10	3.99	109	106	70.0-160			2.72	25
1,1,1-Trichloroethane	3.75	4.07	3.99	109	106	70.0-130			1.99	25
1,1,2-Trichloroethane	3.75	4.02	4.01	107	107	70.0-130			0.249	25
Trichloroethylene	3.75	3.97	3.97	106	106	70.0-130			0.000	25
1,2,4-Trimethylbenzene	3.75	4.03	3.99	107	106	70.0-130			0.998	25
1,3,5-Trimethylbenzene	3.75	4.00	3.99	107	106	70.0-130			0.250	25
2,2,4-Trimethylpentane	3.75	4.06	3.98	108	106	70.0-130			1.99	25
Vinyl chloride	3.75	3.96	3.94	106	105	70.0-130			0.506	25
Vinyl Bromide	3.75	4.12	3.97	110	106	70.0-130			3.71	25
Vinyl acetate	3.75	4.12	4.15	110	111	70.0-130			0.726	25
m&p-Xylene	7.50	7.96	7.86	106	105	70.0-130			1.26	25
o-Xylene	3.75	3.92	3.84	105	102	70.0-130			2.06	25
(S) 1,4-Bromofluorobenzene				100	99.3	60.0-140				

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Method Blank (MB)

(MB) R3840667-3 09/23/22 09:57

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Cyclohexane	U		0.0753	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.200
Ethanol	U		0.265	1.25
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Heptane	U		0.104	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
n-Hexane	U		0.206	0.630

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Method Blank (MB)

(MB) R3840667-3 09/23/22 09:57

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Isopropylbenzene	U		0.0777	0.200
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	0.101	U	0.0932	1.25
Styrene	U		0.0788	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
Tetrachloroethylene	U		0.0814	0.200
Tetrahydrofuran	U		0.0734	0.200
Toluene	U		0.0870	0.500
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0736	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
Trichloroethylene	U		0.0680	0.200
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
2,2,4-Trimethylpentane	U		0.133	0.200
Vinyl chloride	U		0.0949	0.200
Vinyl Bromide	U		0.0852	0.200
Vinyl acetate	U		0.116	0.200
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
(S) 1,4-Bromofluorobenzene	96.5			60.0-140

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3840667-1 09/23/22 08:38 • (LCSD) R3840667-2 09/23/22 09:18

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	3.75	4.21	4.18	112	111	70.0-130			0.715	25
Allyl Chloride	3.75	3.99	4.17	106	111	70.0-130			4.41	25
Benzene	3.75	4.20	4.22	112	113	70.0-130			0.475	25
Benzyl Chloride	3.75	3.58	3.72	95.5	99.2	70.0-152			3.84	25
Bromodichloromethane	3.75	4.09	4.08	109	109	70.0-130			0.245	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3840667-1 09/23/22 08:38 • (LCSD) R3840667-2 09/23/22 09:18

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromoform	3.75	3.92	3.91	105	104	70.0-130			0.255	25
Bromomethane	3.75	4.52	4.42	121	118	70.0-130			2.24	25
1,3-Butadiene	3.75	4.08	4.07	109	109	70.0-130			0.245	25
Carbon disulfide	3.75	4.23	4.25	113	113	70.0-130			0.472	25
Carbon tetrachloride	3.75	4.18	4.06	111	108	70.0-130			2.91	25
Chlorobenzene	3.75	4.11	4.11	110	110	70.0-130			0.000	25
Chloroethane	3.75	4.52	4.50	121	120	70.0-130			0.443	25
Chloroform	3.75	4.19	4.17	112	111	70.0-130			0.478	25
Chloromethane	3.75	3.82	3.89	102	104	70.0-130			1.82	25
2-Chlorotoluene	3.75	4.22	4.23	113	113	70.0-130			0.237	25
Cyclohexane	3.75	4.30	4.21	115	112	70.0-130			2.12	25
Dibromochloromethane	3.75	4.03	3.96	107	106	70.0-130			1.75	25
1,2-Dibromoethane	3.75	4.11	4.09	110	109	70.0-130			0.488	25
1,2-Dichlorobenzene	3.75	4.11	4.17	110	111	70.0-130			1.45	25
1,3-Dichlorobenzene	3.75	4.09	4.18	109	111	70.0-130			2.18	25
1,4-Dichlorobenzene	3.75	4.03	4.09	107	109	70.0-130			1.48	25
1,2-Dichloroethane	3.75	4.07	4.07	109	109	70.0-130			0.000	25
1,1-Dichloroethane	3.75	4.18	4.16	111	111	70.0-130			0.480	25
1,1-Dichloroethene	3.75	4.09	4.09	109	109	70.0-130			0.000	25
cis-1,2-Dichloroethene	3.75	4.15	4.13	111	110	70.0-130			0.483	25
trans-1,2-Dichloroethene	3.75	4.15	4.09	111	109	70.0-130			1.46	25
1,2-Dichloropropane	3.75	4.09	4.06	109	108	70.0-130			0.736	25
cis-1,3-Dichloropropene	3.75	4.17	4.14	111	110	70.0-130			0.722	25
trans-1,3-Dichloropropene	3.75	4.04	4.02	108	107	70.0-130			0.496	25
1,4-Dioxane	3.75	3.98	3.99	106	106	70.0-140			0.251	25
Ethanol	3.75	3.80	3.79	101	101	55.0-148			0.264	25
Ethylbenzene	3.75	4.21	4.18	112	111	70.0-130			0.715	25
4-Ethyltoluene	3.75	4.34	4.31	116	115	70.0-130			0.694	25
Trichlorofluoromethane	3.75	4.14	4.06	110	108	70.0-130			1.95	25
Dichlorodifluoromethane	3.75	4.26	4.19	114	112	64.0-139			1.66	25
1,1,2-Trichlorotrifluoroethane	3.75	4.22	4.18	113	111	70.0-130			0.952	25
1,2-Dichlorotetrafluoroethane	3.75	4.25	4.20	113	112	70.0-130			1.18	25
Heptane	3.75	3.93	3.92	105	105	70.0-130			0.255	25
Hexachloro-1,3-butadiene	3.75	4.24	4.32	113	115	70.0-151			1.87	25
n-Hexane	3.75	4.05	4.02	108	107	70.0-130			0.743	25
Isopropylbenzene	3.75	4.27	4.22	114	113	70.0-130			1.18	25
Methylene Chloride	3.75	3.74	3.72	99.7	99.2	70.0-130			0.536	25
Methyl Butyl Ketone	3.75	3.61	3.68	96.3	98.1	70.0-149			1.92	25
Methyl Ethyl Ketone	3.75	4.05	4.07	108	109	70.0-130			0.493	25
4-Methyl-2-pentanone (MIBK)	3.75	3.81	3.79	102	101	70.0-139			0.526	25

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3840667-1 09/23/22 08:38 • (LCSD) R3840667-2 09/23/22 09:18

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methyl Methacrylate	3.75	3.85	3.95	103	105	70.0-130			2.56	25
MTBE	3.75	4.23	4.22	113	113	70.0-130			0.237	25
Naphthalene	3.75	2.53	2.63	67.5	70.1	70.0-159	J4		3.88	25
2-Propanol	3.75	3.90	3.88	104	103	70.0-139			0.514	25
Propene	3.75	3.88	3.88	103	103	64.0-144			0.000	25
Styrene	3.75	4.11	4.11	110	110	70.0-130			0.000	25
1,1,2,2-Tetrachloroethane	3.75	4.29	4.29	114	114	70.0-130			0.000	25
Tetrachloroethylene	3.75	4.17	4.16	111	111	70.0-130			0.240	25
Tetrahydrofuran	3.75	3.79	3.77	101	101	70.0-137			0.529	25
Toluene	3.75	4.27	4.23	114	113	70.0-130			0.941	25
1,2,4-Trichlorobenzene	3.75	3.49	3.58	93.1	95.5	70.0-160			2.55	25
1,1,1-Trichloroethane	3.75	4.23	4.15	113	111	70.0-130			1.91	25
1,1,2-Trichloroethane	3.75	4.12	4.07	110	109	70.0-130			1.22	25
Trichloroethylene	3.75	4.15	4.10	111	109	70.0-130			1.21	25
1,2,4-Trimethylbenzene	3.75	4.26	4.23	114	113	70.0-130			0.707	25
1,3,5-Trimethylbenzene	3.75	4.24	4.24	113	113	70.0-130			0.000	25
2,2,4-Trimethylpentane	3.75	4.10	4.07	109	109	70.0-130			0.734	25
Vinyl chloride	3.75	4.47	4.49	119	120	70.0-130			0.446	25
Vinyl Bromide	3.75	4.45	4.36	119	116	70.0-130			2.04	25
Vinyl acetate	3.75	3.75	3.82	100	102	70.0-130			1.85	25
m&p-Xylene	7.50	8.45	8.43	113	112	70.0-130			0.237	25
o-Xylene	3.75	4.19	4.16	112	111	70.0-130			0.719	25
(S) 1,4-Bromofluorobenzene				96.4	97.4	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Method Blank (MB)

(MB) R3841079-2 09/24/22 08:10

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
4-Ethyltoluene	U		0.0783	0.200
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
(S) 1,4-Bromofluorobenzene	83.3			60.0-140

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3841079-1 09/24/22 07:28 • (LCSD) R3841079-3 09/24/22 10:11

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
4-Ethyltoluene	3.75	3.31	3.12	88.3	83.2	70.0-130			5.91	25
1,2,4-Trimethylbenzene	3.75	3.20	3.18	85.3	84.8	70.0-130			0.627	25
1,3,5-Trimethylbenzene	3.75	3.40	3.33	90.7	88.8	70.0-130			2.08	25
m&p-Xylene	7.50	6.76	6.55	90.1	87.3	70.0-130			3.16	25
o-Xylene	3.75	3.26	3.12	86.9	83.2	70.0-130			4.39	25
(S) 1,4-Bromofluorobenzene				93.5	92.6	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J4	The associated batch QC was outside the established quality control range for accuracy.



ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey--NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio--VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA -- ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA -- ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA--Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.



ATTACHMENT 2

Robin D. Franks, P.G. - President

Ms. Franks holds dual BS degrees in Geology and Biology; and a MS in Geology. She is a TX- Licensed PG (TX 875), a CHMM (3725) with multiple other credentials and qualifications all in good standing. Her experience spans more than twenty-five years in assessment of commercial real estate; as well as characterization, clean-up and closure within the commercial, industrial, oil and gas and healthcare industries, to name a few. Her experience encompasses compliance auditing, oil and gas real estate assessment and remediation, underground storage tank project management, asbestos consulting, lead-based paint management and industrial hygiene/indoor environmental quality consulting including mold/fungus assessment, testing and remediation. Additional expertise includes litigation support and client representation with regard to environmental matters.

Tim E Crump, CPG, P.G. – Senior Project Manager

Mr. Crump holds BS degree in Geological Sciences and a MS in Environmental Management. He is a WA- Licensed PG (WA 3210) with multiple other credentials and qualifications all in good standing. His experience spans more than twenty years in assessment of commercial real estate; as well as characterization, clean-up and closure within the commercial, industrial, oil and gas and healthcare industries, to name a few. His experience encompasses compliance auditing, oil and gas real estate assessment and remediation, underground storage tank project management, asbestos consulting, lead-based paint management and industrial hygiene/indoor environmental quality consulting including mold/fungus assessment, testing and remediation.